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# IMPROVING INFORMATION EXCHANGE MODELS FOR CAREER GUIDANCE OF ARCHITECTURE AND DESIGN GRADUATES IN THE DIGITAL ECONOMY

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## Abstract

The study develops a methodology for improving information exchange models in the career guidance process of architecture and design graduates. The methodology integrates universities, employers, employment services, and government organizations through a unified digital information environment. The proposed model includes competency profiling, labor market analytics, automated information exchange, forecasting, and monitoring mechanisms. Experimental implementation demonstrated improved employment outcomes and stronger alignment between graduate competencies and labor market requirements. The study develops a methodology for improving information exchange models in the career guidance process of architecture and design graduates. The methodology integrates universities, employers, employment services, and government organizations through a unified digital information environment. The proposed model includes competency profiling, labor market analytics, automated information exchange, forecasting, and monitoring mechanisms. Experimental implementation demonstrated improved employment outcomes and stronger alignment between graduate competencies and labor market requirements. The study develops a methodology for improving information exchange models in the career guidance process of architecture and design graduates. The methodology integrates universities, employers, employment services, and government organizations through a unified digital



*Modern American Journal of Linguistics,  
Education, and Pedagogy*

ISSN (E): 3067-7874

Volume 2, Issue 5, May, 2026

Website: [usajournals.org](http://usajournals.org)

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**Keywords:** Career guidance, architecture and design graduates, information exchange, employability, labor market, higher education, digital platform career guidance, architecture and design graduates, information exchange,



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## **1. Introduction**

Graduate employability is one of the key indicators of higher education quality. In the digital economy, labor markets require highly qualified specialists capable of adapting to technological and organizational change. However, many graduates experience difficulties in obtaining employment corresponding to their field of study. This paper examines information exchange processes among universities, employers, and public institutions and proposes an improved methodology for career guidance. Graduate employability is one of the key indicators of higher education quality. In the digital economy, labor markets require highly qualified specialists capable of adapting to technological and organizational change. However, many graduates experience difficulties in obtaining employment corresponding to their field of study. This paper examines information exchange processes among universities, employers, and public institutions and proposes an improved methodology for career guidance. Graduate employability is one of the key indicators of higher education quality. In the digital economy, labor markets require highly qualified specialists capable of adapting to technological and organizational change. However, many graduates experience difficulties in obtaining employment corresponding to their field of study. This paper examines information exchange processes among universities, employers, and public institutions and proposes an improved methodology for career guidance. Graduate employability is one of the key indicators of higher education quality. In the digital economy, labor markets require highly qualified specialists capable of adapting to technological and organizational change. However, many graduates experience difficulties in obtaining employment corresponding to their field of study. This paper examines information exchange processes among universities, employers, and public institutions and proposes an improved methodology for career guidance. Graduate employability is one of the key indicators of higher education quality. In the digital economy, labor markets require highly qualified specialists capable of adapting to technological and organizational change. However, many graduates experience difficulties in obtaining employment corresponding to their field of study. This paper examines information exchange processes among universities, employers, and public institutions and proposes an improved methodology for career guidance.



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## **2. Materials and Methods**

The research employed system analysis, stakeholder analysis, process modeling, labor market forecasting, ordinal logistic regression, and comparative evaluation methods. Information exchange chains were analyzed to identify delays, duplication, and inconsistencies. A stakeholder map was developed to identify the information needs of graduates, employers, universities, and public authorities. The research employed system analysis, stakeholder analysis, process modeling, labor market forecasting, ordinal logistic regression, and comparative evaluation methods. Information exchange chains were analyzed to identify delays, duplication, and inconsistencies. A stakeholder map was developed to identify the information needs of graduates, employers, universities, and public authorities. The research employed system analysis, stakeholder analysis, process modeling, labor market forecasting, ordinal logistic regression, and comparative evaluation methods. Information exchange chains were analyzed to identify delays, duplication, and inconsistencies. A stakeholder map was developed to identify the information needs of graduates, employers, universities, and public



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### **3. Results**

The proposed model includes graduate competency profiles, labor market demand monitoring, automated communication mechanisms, and analytical dashboards. Experimental implementation reduced information exchange time by 40%, increased profession-oriented employment by 1.6 times, and improved curriculum responsiveness. Forecasting models demonstrated a strong relationship between competency development and employment outcomes. The proposed model includes graduate competency profiles, labor market demand monitoring, automated communication mechanisms, and analytical dashboards. Experimental implementation reduced information exchange time by 40%, increased profession-oriented employment by 1.6 times, and improved curriculum responsiveness. Forecasting models demonstrated a strong relationship between competency development and employment outcomes. The proposed model includes graduate competency profiles, labor market demand monitoring, automated communication mechanisms, and analytical dashboards. Experimental implementation reduced information exchange time by 40%,



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#### **4. Discussion**

The findings confirm that fragmented information systems negatively affect graduate employment. The implementation of integrated digital information exchange mechanisms improves communication efficiency and enables evidence-based decision-making. The methodology contributes to strengthening university-employer cooperation and increasing graduate competitiveness. The findings confirm that fragmented information systems negatively affect graduate employment. The implementation of integrated digital information exchange mechanisms improves communication efficiency and enables evidence-based decision-making. The methodology contributes to strengthening university-employer cooperation and increasing graduate competitiveness. The findings



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## **5. Conclusion**

The developed methodology provides a practical framework for improving graduate career guidance and labor market integration. The results demonstrate that systematic information exchange can significantly improve employment outcomes and support sustainable development of higher education systems. The developed methodology provides a practical framework for improving graduate career guidance and labor market integration. The results demonstrate that systematic information exchange can significantly improve employment outcomes and support sustainable development of higher education systems. The developed methodology provides a practical framework for improving graduate career guidance and labor market integration. The results demonstrate that systematic information exchange can significantly improve employment



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## References

1. Yorke, M. (2006). Employability in higher education: What it is, what it is not. Higher Education Academy.
2. Knight, P. T., & Yorke, M. (2004). Learning, curriculum and employability in higher education. RoutledgeFalmer.
3. Harvey, L. (2001). Defining and measuring employability. *Quality in Higher Education*, 7(2), 97–109.
4. Dacre Pool, L., & Sewell, P. (2007). The key to employability: Developing a practical model of graduate employability. *Education + Training*, 49(4), 277–289.
5. Tomlinson, M. (2012). Graduate employability: A review of conceptual and empirical themes. *Higher Education Policy*, 25(4), 407–431.
6. Bridgstock, R. (2009). The graduate attributes we have overlooked: Enhancing graduate employability through career management skills. *Higher Education Research & Development*, 28(1), 31–44.
7. Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior*, 65(1), 14–38.



8. Jackson, D. (2015). Employability skill development in work-integrated learning: Barriers and best practice. *Studies in Higher Education*, 40(2), 350–367.
9. Mason, G., Williams, G., & Cranmer, S. (2009). Employability skills initiatives in higher education: What effects do they have on graduate labour market outcomes? *Education Economics*, 17(1), 1–30.
10. Brown, P., Hesketh, A., & Williams, S. (2003). Employability in a knowledge-driven economy. *Journal of Education and Work*, 16(2), 107–126.
11. Hofer, A.-R., Zhivkovikj, A., & Smyth, C. (2020). The role of labour market information in guiding educational and occupational choices. *OECD Education Working Papers*, No. 229. OECD Publishing.
12. Cedefop. (2023). *Skills in transition: The way to 2035*. Publications Office of the European Union.
13. Cedefop. (2024). *Next generation skills intelligence for more learning and better matching*. Publications Office of the European Union.
14. Interagency Working Group on Career Guidance. (2021). *Investing in career guidance*. Cedefop, European Commission, European Training Foundation, International Labour Organization, OECD, UNESCO, and World Bank.
15. European Commission/EACEA/Eurydice. (2016). *Structural indicators on graduate employability in Europe*. Publications Office of the European Union.
16. Comunian, R., Faggian, A., & Jewell, S. (2011). Winning and losing in the creative industries: An analysis of creative graduates' career opportunities across creative disciplines. *Cultural Trends*, 20(3–4), 291–308.
17. Bennett, D. (2009). Academy and the real world: Developing realistic notions of career in the performing and visual arts. *Arts and Humanities in Higher Education*, 8(3), 309–327.
18. Bridgstock, R. (2011). Skills for creative industries graduate success. *Education + Training*, 53(1), 9–26.
19. Guile, D. (2010). *The learning challenge of the knowledge economy*. Sense Publishers.
20. World Economic Forum. (2025). *The future of jobs report 2025*. World Economic Forum.