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Tracer Study Analysis of Graduates of SMK Karsa Mulya Palangkaraya for Talent Mapping Adaptive to the Needs of Business and Industry

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Abstract: The purpose of the study was to analyze the results of the tracer study of graduates of SMK Karsa Mulya Palangkaraya, which became the basis for mapping talents associated with the needs of business and industry. The existence of a match between the competencies of graduates of SMK Karsa Mulya Palangkaraya and the demands of business and industry (Dudi) is one of the indicators of success in vocational education. This study used a Mixed Methods approach with a Sequential Explanatory design, which is a quantitative approach followed by qualitative to provide an in-depth understanding of the preliminary results. This approach was chosen because the purpose of the study was not only to measure the level of absorption of SMK Karsa Mulya Palangkaraya graduates in the world of work, but also to map the potential and talents of graduates based on the needs of the business and industrial world (DUDI). The data collected included graduate employment, curriculum relevance, skills used in the workplace, and waiting time in getting a first job. The results show that most graduates work according to their expertise but there are still gaps in some technical and non-technical skills needed in the industrial world. The study recommends increased collaboration between SMK Karsa Mulya Palangkaraya and industry partners, as well as continuous evaluation of the curriculum and apprenticeship program.

Keyword: Tracer Study, SMK, Talent Mapping, World of Work, Vocational Education

INTRODUCTION

Vocational High Schools (SMK) have an important role in preparing graduates who are ready to work, competitive and able to meet the needs of the business world and the industrial world (DUDI). In facing the challenges of the digital era and industrial transformation, the connection and equivalence between the competencies of SMK graduates and the real needs of the industry is the key to the success of vocational education.

SMK Karsa Mulya Palangkaraya, as one of the leading vocational schools in Central Kalimantan, provides vocational education in four specialty programs, namely Light Vehicle Engineering (TKR), Motorcycle Engineering (TSM), Visual Communication Design (DKV)

and Marketing (Digital Business). The four majors are designed to answer the needs of the workforce in the automotive sector, creative industry, and the rapidly growing digital business field. However, to ensure the relevance and effectiveness of the education provided, continuous evaluation of educational outcomes is needed, one of which is through a tracer study.

Tracer study is an important instrument to determine the extent to which graduates are absorbed in the world of work, in the field of work they are engaged in, and the suitability of the skills acquired while at school with the demands of the job market. Through the implementation of the tracer study at SMK Karsa Mulya Palangkaraya, the talents of the graduates can be mapped based on their interests, potentials and fields of work that they pursue after graduation. This talent mapping is the basis for curriculum adjustments, strengthening soft skills, preparing targeted internship programs, and developing closer cooperation with business partners. This is important, considering that each major has different characteristics and challenges, for example the need for technical skills in the automotive sector, design and visualization capabilities in the DKV major, and proficiency in digital marketing technology in the Digital Business major.

METHOD

This study used a Mixed Methods approach with a Sequential Explanatory design, a quantitative approach followed by a qualitative approach to provide a deeper understanding of the preliminary results. This approach was chosen because the purpose of the study was not only to measure the level of absorption of SMK Karsa Mulya Palangkaraya graduates in the world of work, but also to map the potential and talents of graduates based on the needs of the business and industrial world (DUDI). The research was conducted at SMK Karsa Mulya Palangkaraya, Central Kalimantan. The research was conducted in February and June 2025.

The research subjects were alumni of SMK Karsa Mulya Palangkaraya (2022 graduates) productive teachers, counseling teachers and industry partners. While the object of research includes the implementation of tracer studies, graduate tracing data, talent mapping, and linkages with the world of work.

The data collection techniques used were: Questionnaires, used to capture quantitative data related to the footprint of SMK Karsa Mulya Palangkaraya graduates (employment, competency relevance, etc.). These questionnaires were distributed online to alumni. In-depth Interviews, conducted with teachers, alumni and industry partners. Aimed to explore perceptions of the adaptivity of SMK Karsa Mulya Palangkaraya graduates and challenges in the field. Focus Group Discussions (FGDs) involving teachers and school administrators to explore talent mapping strategies. Documentation, including MOU documents, tracer study reports, employment data and curriculum.

Research instruments included a tracer study questionnaire and interview guidelines for SMK Karsa Mulya alumni and DUDI.kuesioner tracer study

RESULTS AND DISCUSSION

Result

Year of Implementation: 2024
Graduates tracked: Year 2022
Number of Respondents: 235 Alumni
Methods: Online questionnaire, limited interviews and industry partner documentation.

Graduate Profile of SMK Karsa Mulya Palangkaraya Based on Tracer Study Results

Category	Total	Percentage
Number of Alumni Traced	235 people	100%
Already working	145 people	61.7%
Entrepreneurship	25 people	10.6%
Continuing their studies	35 people	14.9%

Unemployed	30 people	12,8%

Employment rate for majors
Light Vehicle Engineering
Number of Respondents: 80 people
Alumni Status:

Category	Total	Percentage
Already working	52	65%
Entrepreneurship	8	10%
college	10	12,5%
Unemployed	10	12,5%

Details of Findings:

1) Most work in car repair shops and dealerships (Mitsubishi, Suzuki, etc.)
2) 75% work according to their skill competencies
3) Starting salary IDR 2.5 million - IDR 3 million
4) Need for training in diagnostic tools and modern car electrics

Motorcycle Enginering
Number of Respondents: 60 people

Category	Total	Percentage
Already working	38	63%
Entrepreneurship	12	20%
college	5	8%
Unemployed	5	8%

Details of Findings:

1) Many open small workshops or work at AHASS, Yamaha etc.
2) 80% stated that practical skills are very relevant
3) Challenge: adaptation to electric motors and digital injection

Visual communication design
Number of Respondents: 45 people

Category	Total	Percentage
Already working	25	55,6%
Entrepreneurship	10	22%
college	5	11%
Unemployed	5	11%

Details of Findings:

1) Graduates work in creative agencies, shops, printing, design freelance
2) Popular tools: Adobe Photoshop, Illustrator, Canva
3) Challenge: lack of training in animation and motion graphics

Marketers (digital business)
Number of Respondents: 50 people

Category	Total	Percentage
Already working	30	60%

Entrepreneurship	7	14%
college	8	16%
Unemployed	5	10%

Details of Findings:

1) Graduates work as online store admins, cashiers, retail sales, and content creators.
2) 40% stated that digital marketing skills are still lacking.
3) Popular platforms: Shopee, Tokopedia, Instagram

Discussion of Tracer Study Results and Evaluation of Graduate Employability of SMK Karsa Mulya Palangkaraya Palangkaraya

Based on the results of the tracer study of SMK Karsa Mulya Palangkaraya, the employment rate of graduates is quite high, reaching 72.3%, including graduates who chose the entrepreneurial path. This shows that most graduates are able to enter the workforce within a relatively short period of time, namely 2-4 months after graduation. The majority of them have also worked in accordance with their respective majors or competencies, such as Light Vehicle Engineering (TKR), Motorcycle Engineering (TSM), Visual Communication Design (DKV), and Digital Marketing/Business.

However, there are still a number of graduates who work outside their field of expertise, and have difficulty adapting to the work environment due to limited mastery of soft skills such as communication, teamwork, and digital literacy. This reflects the need for strengthening in non-technical aspects and 21st century skills to improve the competitiveness of graduates. In addition, the development of an increasingly digital industry and vehicle technology that is shifting to electric motors has not been fully followed by the readiness of graduates, especially from the TSM and TKR majors. DKV and Marketing majors also still face challenges in mastering digital tools, online marketing strategies, and creative content skills that are relevant to current industry needs.

Industrial Work Practices (Prakerin) and partnerships with the World of Business and Industry (DUDI) have proven to be effective tools for talent mapping and improving student work readiness. Direct interaction during internships provides real feedback to students and teachers on industry demands.

The existence of DUDI partners from various sectors, such as PT Mitsubishi Borneo Motor, Astra Daihatsu, AHASS Astra Motor, Alfamart, and Digital Agency Grafis Kalteng.ID, is a major strength in equipping students with practical experience and real job opportunities. However, the collaboration needs to be improved not only in the form of internships, but also in curriculum formulation, training in the latest technology, and competency certification.

Rekomendastion Strategic:

1. Strengthen industry cooperation, especially for internship programs, direct recruitment, and curriculum development based on industry needs.
2. Increase training in digital skills and new technologies, particularly in electric vehicles, digital visuals, and online platform-based marketing.
3. Activate alumni programs through advanced training, entrepreneurial coaching, and regular provision of information on job opportunities.
4. Optimize the role of BKK (Special Employment Exchange) as a school career unit that conducts systematic tracer studies and more structured job distribution.
5. Conduct early talent mapping through interest and aptitude assessment, and practical competency evaluation since grade X.
6. Embed soft skills and adaptive competencies such as critical thinking, teamwork, initiative, and digital literacy as part of daily learning.

With the implementation of these strategies, SMK Karsa Mulya Palangkaraya is expected to be able to produce graduates who are not only work-ready, but also adaptive, innovative, and able to face the challenges of the changing world of work.

CONCLUSION

Based on the results of a tracer study of 2022 graduates of SMK Karsa Mulya Palangkaraya, a number of findings can be concluded: The employment rate of graduates is 72.3%, including graduates who work as employees and entrepreneurs. This shows that most graduates have been able to enter the world of work, both formal and informal. The majority of graduates work in accordance with their respective fields of expertise, especially in the Light Vehicle Engineering (TKR) and Motorcycle Engineering (TSM) majors. This indicates that the learning system and vocational practices have led to the needs of basic industrial competencies.

The mapping of student talents is still general, not systematically differentiated. This causes some graduates to not be fully optimal in pursuing careers according to their potential and interests. Graduates' adaptation to the needs of the world of work is considered quite good in technical aspects, but still requires strengthening in soft skills aspects, such as communication, teamwork, initiative, and digital literacy. Graduates from Visual Communication Design and Marketing (Digita Business) show potential for adaptation in the creative and digital industries, but still need further coaching related to digital platforms, content industry trends, and online marketing. Partnerships with the World of Business and Industry (DUDI) have made a positive contribution to the distribution of graduates, increasing student competence, and becoming the basis for developing curriculum based on industry needs. However, the involvement of DUDI in direct talent mapping still needs to be improved.

Based on the above conclusions, the proposed recommendations are: First, schools need to develop a Talent Mapping system for students since the beginning of school entry, by utilizing the assessment of interests, talents, and practical performance as the basis for student career development. Furthermore, it is necessary to integrate an adaptive curriculum that actively involves DUDI in the preparation of teaching materials and training, especially in the field of new technologies such as electric vehicles, digital marketing, and contemporary digital design. Increased training in soft skills and digital literacy must be provided as part of the provision of final grade students, so that they are able to compete in an increasingly dynamic world of work. Continuous support for alumni through the Specialized Job Exchange Unit (BKK), post-graduation training, entrepreneurial mentoring, and industrial cooperation network mapping need to be improved. Evaluation of the tracer study needs to be carried out regularly (at least every two years) as a basis for strategic decision making in developing the quality of graduates and increasing the relevance of the curriculum.

REFERENCES

Badan Nasional Sertifikasi Profesi. (2022). Standar Kompetensi Kerja Nasional Indonesia (SKKNI) Bidang Otomotif dan Desain Komunikasi Visual. Jakarta: BNSP.

Direktorat Jenderal Pendidikan Vokasi, Kementerian Pendidikan dan Kebudayaan Republik Indonesia. (2020). Tracer Study Pendidikan Vokasi. Jakarta: Kemendikbud.

Direktorat SMK. (2020). Panduan Pelaksanaan Tracer Study SMK. Jakarta: Direktorat Jenderal Pendidikan Vokasi, Kemendikbud.

Farianda. (2013). Manajemen Sumber Daya Manusia.Yogyakarta: Graha Ilmu

Ghozali, I. (2018). Aplikasi Analisis Multivariate dengan Program IBM SPSS 25. Semarang: Universitas Diponegoro.

Hudari. N. (2005) Perencanaan SDM. Yogyakarta: Gadjah Mada University Press.

Inayati. D.A. (2020) Talent Management. Jakarta: PT Gramedia Pustaka Utama.

Jackson.Schuler.Werner. (2011). Pengelolaan Sumber Daya Manusia. Jakarta.: Salemba Empat.

Kemendikbud Ristek. (2022). Kurikulum Merdeka untuk SMK: Konsep dan Implementasi. Jakarta: Direktorat Jenderal Pendidikan Vokasi.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). Qualitative Data Analysis: A Methods Sourcebook (3rd ed.). California: Sage Publications.

Paryono. (2019). The role of TVET in the era of Industry 4.0. In Journal of Technical Education and Training, 11(1), 1–11. [https://doi.org/10.30880/jtet.2019.11.01.001] (https://doi.org/10.30880/jtet.2019.11.01.001)

Peraturan Presiden Republik Indonesia Nomor 68 Tahun 2022 tentang Revitalisasi Pendidikan dan Pelatihan Vokasi.

Suparlan, S., & Hartati, S. (2021). Tracer Study untuk Evaluasi dan Pengembangan Kurikulum Sekolah Menengah Kejuruan (SMK). Jurnal Pendidikan Vokasi, 11(3), 301–309.[https://doi.org/10.21831/jpv.v11i3.41099] (https://doi.org/10.21831/jpv.v11i3.41099)

Sutrisno, E. (2016). Manajemen Sumber Daya Manusia. Jakarta: Kencana Prenada Media Group.

Schomburg, H. (2003). Handbook for Graduate Tracer Studies. Kassel: Centre for Research on Higher Education and Work, University of Kassel.

Schumann. M. S. (2010. *Brand For Talent.* Jakarta: PPM.

Siagian. (2015). *Manajemen Sumber Daya Manusia.* Jakarta: PT Bumi Aksara.

Silzer, R., & Dowell, B. E. (2010). Strategy-Driven Talent Management: A Leadership Imperative. San Francisco: Jossey-Bass.

World Bank. (2019). Indonesia Skills Report: Trends in Demand, Gaps, and Supply. Washington DC: World Bank Publications. [https://documents.worldbank.org/] (https://documents.worldbank.org/)

World Economic Forum. (2020). The Future of Jobs Report 2020*. Geneva: World Economic Forum. [https://www.weforum.org/reports/the-future-of-jobs-report-2020] (https://www.weforum.org/reports/the-future-of-jobs-report-2020)