

Learning Outcomes of Mandarin Language Education Program Study Universitas Negeri Semarang Graduates: Alignment with Educational Workforce Needs

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Abstract: The Universitas Negeri Semarang (UNNES) Mandarin Language Education Program Study is designed to train graduates for educator careers. However, it also responds to the significant need for graduates proficient in Mandarin within the industrial field. This response is further shaped by the new curriculum policy established by the Indonesian Minister of Education, which mandates that students must be prepared to enter the workforce before graduation. The Mandarin Language Education Program Study at UNNES is adaptable and responsive, developing learning outcomes that correspond with the requirements of the educational workforce. This study aims to describe learning outcomes, focusing on attitude, general skills, special skills, and knowledge for educational workforce needs. The research methodology employed is a robust and reliable descriptive qualitative approach, which includes practical data sources such as alumni, stakeholders, and job vacancy information. The results were derived from analyzing questionnaire responses from alumni employed in the education sector, stakeholders, and job vacancy data from Jobstreet.com. The data is processed according to the results of the four criteria for learning outcomes.

Keywords: Learning Outcomes; Graduate; Mandarin Language Education Program Study UNNES; Educational Workforce Needs

Capaian Pembelajaran Lulusan Program Studi Pendidikan Bahasa Mandarin Universitas Negeri Semarang: Keselarasan dengan Kebutuhan Tenaga Kerja Dunia Pendidikan

Abstract: Program Studi Pendidikan Bahasa Mandarin Universitas Negeri Semarang (UNNES) dirancang untuk menyiapkan lulusan untuk berkarir sebagai pendidik. Namun, program studi ini juga memenuhi kebutuhan yang sangat banyak akan lulusan yang mahir berbahasa Mandarin di dunia industri. Hal ini semakin didukung oleh kebijakan kurikulum baru yang ditetapkan oleh Menteri Pendidikan Indonesia, yang menyatakan bahwa siswa harus siap memasuki dunia kerja sebelum lulus. Program Studi Pendidikan Bahasa Mandarin UNNES bersifat adaptif dan responsif, mengembangkan capaian pembelajaran yang sesuai dengan kebutuhan tenaga kependidikan. Penelitian ini bertujuan untuk mendeskripsikan capaian pembelajaran, berfokus pada sikap, keterampilan umum, keterampilan

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khusus, dan pengetahuan untuk kebutuhan tenaga kependidikan. Metodologi penelitian yang digunakan adalah pendekatan kualitatif deskriptif yang kuat dan andal. Sumber data meliputi alumni, pemangku kepentingan, dan informasi lowongan kerja. Hasil penelitian diperoleh dari analisis respons kuesioner dari alumni yang bekerja di sektor pendidikan, pemangku kepentingan, dan data lowongan kerja dari Jobstreet.com. Data diolah sesuai dengan hasil dari empat kriteria capaian pembelajaran.

Keywords: Capaian Pembelajaran Lulusan; Alumni; Prodi Pendidikan Bahasa Mandarin UNNES; Kebutuhan Tenaga Kependidikan.

1. INTRODUCTION

In 2020, the Indonesian Minister of Education implemented a new curriculum policy, the Independence Curriculum. The Independence Curriculum aims to prepare students to face rapid social, cultural, work, and technological advances; student competencies must be prepared to be more in line with the needs of the times. Link and match not only with the industrial world and the world of work but also the rapidly changing future. Universities must be able to design and implement innovative learning processes so that students can optimally achieve learning outcomes that cover aspects of attitudes, general skills, special skills, and knowledge.

The Mandarin Language Education Study Program at Semarang State University (UNNES) began in 2011. It has so far generated more than 150 graduates. The graduates work in various industries, including education as Mandarin teachers, industry as Mandarin translators, and as self-employed individuals. The Mandarin Language Education Study Program graduates are in high demand in the workforce. However, this opportunity is only available to mature students ready to enter the workforce. When it comes to entering the workforce, not all students are prepared for the obligations and obstacles that come with it.

According to interviews with several alumni of the UNNES Mandarin Language Education Study Program who have worked in the education sector, several things must be prepared when entering the workforce, including mastering four Mandarin language skills, knowledge of the work that will be done in the education sector, self-confidence, and the courage to speak with others. The alignment of educational outcomes with workforce needs is essential in promoting individual socioeconomic mobility and competitiveness (Finley, 2021).

The Mandarin Language Education Program Study at UNNES must develop learning outcomes that correspond with the requirements of the educational workforce to guarantee that graduates are sufficiently equipped to fulfill industry expectations. Learning outcomes are obtained after completing the learning process (Harefa et al., 2023). Based on The Independence Curriculum, learning outcomes are formulated by referring to the Indonesian National Qualifications Framework (KKNI) and National Standard for Higher Education (SN-Dikti) qualification levels, consisting of elements of attitude, general skills, special skills, and knowledge (Junaidi et al., 2020).

According to the background above, this study aims to describe learning outcomes by focusing on attitude, general skills, special skills, and knowledge for educational workforce needs based on questionnaire responses from alumni employed in the education sector, stakeholders, and job vacancy data from Jobstreet.com.

2. LITERATURE REVIEW

In their study, Milaningrum & Rahmawaty (2020) are based on analyzing the relevance of Politeknik Negeri Balikpapan (Poltekba) graduate competencies with the main competencies needed by Business and Industrial Partners World. It can be concluded that there is still a mismatch between the output of Poltekba graduates and the primary competency model needed by Business and Industrial Partners World, so Poltekba needs to improve the quality of graduates both in terms of hard skills and soft skills, which are critical points when they face the world of work. There needs to be curriculum alignment so that the competencies produced can be more up-to-date following the needs of Business and Industrial Partners World, as well as more encouragement from institutions to produce graduates with qualified hard skills and good character, which will undoubtedly affect the quality of Poltekba graduates' soft skills. In this case, it is critical to emphasize that in the world of work, not only

are hard skills prioritized, but also solid and soft skills and character so that Poltekba graduates can compete with graduates from other vocational colleges in the Business and Industrial World recruitment test, but also survive and continue to work innovatively in the world of work later. The similarity of this study with the research of Milaningrum & Rahmawaty (2020) is the competence of graduates, while the novelty of this study is the improvement of the competence of prospective graduates of the Mandarin Language Education study program.

Sutami (2021), in her study titled "Mandarin in the Industrial Era 4.0 and the Era of Society 5.0: Implementation of the Independent Learning Curriculum," elaborated on the various components of higher education involved in the Industrial Era 4.0, including lecturers, students, curriculum, and administrative staff. Administrative staff in higher education have received training in operating equipment that employs technology with a computerized system and internet connectivity. These four elements must be present in a cyber-physical system to avoid surpassing other higher education institutions. The three components are interconnected: lecturers, students, and curriculum. The curriculum showcases students' accomplishments with expertise in specific areas, ensuring that graduates are prepared to enter the workforce. The two elements mentioned will be realized with the support of lecturers who possess genuine knowledge that can be effectively conveyed to their students, aligning with the demands of the professional world. Furthermore, it was clarified that the execution of the Independent Learning Curriculum established by the government addresses the advancements in information technology. Disruption occurs in higher education, yet it is not perceived as a fatal threat; instead, it is viewed as a challenge to be confronted, fostering change and enhancing existing shortcomings. For this to be accomplished, all components of higher education need to collaborate and be resolute in progressing alongside advancements in the realm of international education. The similarity between the study by Sutami (2021) and this study is in the discussion of research, namely preparing the competency of Mandarin Language Education study program graduates. Meanwhile, the differences between this research and previous research are in the research subjects, data analysis methods, and research results.

Latipah et al. (2023), in their study titled "Curriculum Reconstruction: Alignment of Profile, Body of Knowledge, and Learning Outcomes of the Indonesian Islamic Education Study Program," examine the necessity for comprehensive curriculum alignment within the PAI (Pendidikan Agama Islam) Study Program in Indonesia. The research highlights notable discrepancies among the program's graduate profiles, the Body of Knowledge (BoK), and the specified learning outcomes. This study delineates six critical profiles for PAI graduates, encompassing roles such as teachers, educational consultants, and Da'i/muballigh. The profiles are based on a comprehensive analysis of field needs rather than individual preferences. The PAI's BoK is divided into four scientific families, which include the content of instruction, pedagogical methods, disciplinary approaches, and knowledge production processes. This systematic method seeks to elucidate the curriculum content and guarantee its alignment with educational objectives. The research highlights the necessity of establishing precise learning outcomes demonstrating mastery of PAI science, effective instructional strategies, and pedagogical competencies. The alignment is essential for equipping graduates to perform their roles effectively. This research employed qualitative methods such as surveys, interviews, and documentation to collect data from PAI Study Program managers in different regions of Indonesia. This approach facilitated a detailed understanding of the existing curriculum challenges. The research supports employing tracer studies to guide curriculum development, creating a defined Body of Knowledge (BoK), and incorporating practical skills into the curriculum. Ongoing assessment and stakeholder input are advised to maintain the curriculum's relevance and efficacy. The similarity between Latipah et al. (2023) and this

study is the importance of learning outcomes. Compared to the previous study, The novelty of this study is in the field of research that examines the factors related to improving the competency of prospective graduates in the Mandarin Language Education program at Universitas Negeri Semarang.

3. METHOD

3.1 Type of Research

This research uses qualitative research. Bogdan and Taylor stated that qualitative methodology is a research procedure that produces descriptive data in verbal form and data expressed without using statistical techniques in the form of written or spoken words from people and observed behavior (Arikunto, 2010).

3.2 Data and Research Data Sources

The research data sources are (1) alumni of the Mandarin Language Education study program at UNNES, (2) stakeholders, and (3) job vacancy information on Jobstreet.com.

3.3 Data Collection Techniques

Data collection techniques use non-test techniques. Non-test techniques include questionnaire techniques and documentation. The steps taken to collect this data are as follows.

- a. Creating a questionnaire with open and closed questions for alumni and stakeholders.
- b. Creating a documentation checklist. Documentation data is based on job vacancies on Jobstreet.com.

3.4 Data Validity Checking Technique

The study used triangulation to analyze the data. The evaluation process of triangulation is primarily characterized by its practicality as a method or tool that increases the credibility of the research work eliminates bias, and illustrates differences between results to establish valid and reasonable propositions. The concept of triangulation is implemented through four different processes: a) data triangulation, including time, space, and people; b) researcher triangulation; c) theoretical triangulation; d) method triangulation (Ghrayeb et al., 2011). Data triangulation was used in this study. This triangulation was carried out by involving research subjects from groups (1) alumni of the UNNES Mandarin Language Education study program who have experience working as educators, (2) stakeholders, and (3) information on job vacancies in the education sector that requires graduates with Mandarin language education skills on Jobstreet.com.

3.5 Data Analysis Technique

The data analysis used was in the form of three interrelated data analysis processes, namely data reduction, data presentation, and concluding/verification, as follows:

- a. Data reduction, through data selection and condensation, then coded and grouped, is carried out by sorting data from written notes in the field.
- b. Data presentation (data display). Data that has been reduced is presented in a systematic report that is easy to read and understand and in the form of a combination of information and structured summaries to draw conclusions.
- c. Conclusion drawing (verification). Data that has been processed is then concluded using the inductive method, namely the process of concluding specific things to general things to obtain objective conclusions. The following process concludes and

verifies data, including interpretation, meaning, and testing.

4. RESULT AND DISCUSSION

The study's findings were derived from three data sources: (1) a questionnaire administered to alumni of the Mandarin Language Education program at UNNES with educator work experience, (2) a questionnaire directed at education stakeholders seeking graduates proficient in Mandarin language education, and (3) data on job vacancies in the education sector requiring Mandarin language education graduates sourced from Jobstreet.com. The questionnaire yielded responses from 20 Mandarin Language Education program study alumni, seven respondents from stakeholders, and documentation from Jobstreet.com indicated 27 job vacancies.

The questionnaire and documentation indicators are predicated on four criteria of learning outcomes: attitude, general skills, knowledge, and special skills. The attitude criteria of learning outcomes involve identifying the anticipated attitudes that must be cultivated before entering the educational workforce. The general skills criteria of learning outcomes are identifying additional general skills that students must acquire apart from the Mandarin language. The knowledge criteria of learning outcomes pertain to identifying the requisite proficiency in Mandarin language education and other competencies that students must acquire before graduation. The special skills criteria of learning outcome is to determine the extent of mastery in Mandarin language education.

4.1 Attitude Criteria of Learning Outcomes

The outcomes of workforce needs, informed by the attitudes criteria of learning outcomes, are derived from responses to the attitude/ethics questionnaire regarding expectations when engaging with alumni and stakeholders and the details provided in job vacancy information. The subsequent results pertain to the questionnaire responses and job vacancy information from Jobstreet.com.

Table 4.1 Workforce Needs of Attitude Criteria of Learning Outcomes

Alumni	Stakeholders	Job Vacancy Jobstreet.com
1. Professional, organized, and dedicated to teaching	1. Honest, hardworking, proactive, and creative	1. Eager to Learn, Loves to Teach
2. Respectful, open to learning, and not arrogant	2. Works responsibly and honestly	2. Diligent, Hardworking, and Conscientious
3. Polite in speech, behavior, and has good manners	3. Polite, disciplined, attentive, friendly, asks questions when unclear, and responsible for tasks	3. Responsible and Honest
4. Willing to follow instructions from superiors	4. Follows rules	4. Able to Work in a Team and Independently
5. Friendly, patient, firm, and approachable (7S: smile, greet, polite, respectful)	5. Polite and able to manage a classroom well	5. Leadership Skills
6. Disciplined and ethical in communication	6. Works well with colleagues, polite, and respectful of elders	6. Patients, especially with Children
	7. Responsible	7. Likes and Enjoys Working with Children
		8. Communicative, Energetic, and Cheerful
		9. Ready to Handle Various Student Characters
		10. Strong Communication Skills (Verbal and Written)

<p>7. Responsible, honest, and able to meet targets</p> <p>8. Respects colleagues, students, and parents</p> <p>9. Attentive to student needs, teaches at the appropriate level, and is firm but fun</p> <p>10. A good role model, disciplined, careful in actions, and open to feedback</p>		<p>11. Maintains Positive Relationships with Students, Parents, and Staff</p> <p>12. Self-motivated and Committed Team Player</p> <p>13. Professional and Dedicated</p> <p>14. Creative and Fun in Teaching</p> <p>15. Able to Work Under Pressure and Manage Time Well</p> <p>16. Emotionally Intelligent with Good Stress Control</p> <p>17. Adaptable, Flexible, and Quick to Learn</p> <p>18. Physically and Mentally Healthy</p>
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Based on the tables, the summarize the workforce needs for attitude criteria of learning outcomes are professionalism, respect and humility, politeness and good manners, responsibility and honesty, patience and friendliness, discipline and time management, communication skills, teamwork and independence, adaptability and creativity, emotional intelligence, hard work, and proactivity, physical and mental health.

4.2 General Skills Criteria of Learning Outcomes

The results of workforce needs based on the general skills criteria of learning outcomes are obtained from the answers to the general skills questionnaire, such as what students are expected to master and information on job vacancy needs on Jobstreet.com.

Table 4.2 Workforce Needs of General Skills Criteria of Learning Outcomes

Alumni	Stakeholders	Job Vacancy Jobstreet.com
<p>1. English Proficiency</p> <p>2. Basic Computer Skills (Word, Excel, PowerPoint)</p>	<p>1. English Proficiency</p> <p>2. Basic Computer Skills (Word, Excel, PowerPoint)</p> <p>3. Familiarity with Google Classroom, Google Docs, Google Slides</p> <p>4. Proficiency with Online Platforms (Zoom, Google Meet)</p>	<p>1. English Proficiency (oral and written)</p> <p>2. Bahasa Indonesia Proficiency</p> <p>3. Basic Computer Skills (Word, Excel, PowerPoint)</p> <p>4. Strong Technology Skills</p> <p>5. Proficiency with Online Platforms (Zoom, Google Meet)</p>

According to the tables, the workforce needs general skills criteria of learning outcomes, including English proficiency, basic computer skills, Bahasa Indonesia proficiency, and strong technology skills, including Google Classroom, Google Docs, Google Slides, Google Meet, and Zoom Meeting.

4.3 Knowledge Criteria of Learning Outcomes

The outcomes of workforce needs concerning the knowledge criteria of learning outcomes were derived from a questionnaire regarding the necessary Mandarin language education proficiency for employment and job vacancy data from Jobstreet.com.

Table 4.3 Workforce Needs of Knowledge Criteria of Learning Outcomes

Alumni	Stakeholders	Job Vacancy Jobstreet.com
<ol style="list-style-type: none"> 1. Chinese Grammar 2. Chinese Culture 3. Syllabus and Lesson Plan 4. Teaching Materials and Presentations 5. Classroom Management Skills 6. Learning Media and Educational Games 	<ol style="list-style-type: none"> 1. Chinese Grammar 2. Chinese Culture 3. Syllabus and Lesson Plan 4. Teaching Materials and Presentations 	<ol style="list-style-type: none"> 1. Lesson Plan and Teaching Materials 2. Classroom Management Skills 3. Teaching Mandarin Experience 4. Teaching Analytical Skills 5. Teaching Method and Technology 6. Chinese Culture

Based on the tables, the workforce needs knowledge criteria for learning outcomes: Chinese grammar, Chinese culture, syllables and lesson plans, teaching materials and presentations, classroom management skills, teaching methods and technology, learning media, and educational games.

4.4 Special Skills Criteria of Learning Outcomes

The results of workforce needs based on special skills criteria of learning outcomes are obtained from the answers to the Mandarin language skills questionnaire; the questions in the questionnaire are detailed for each language skill, namely listening, speaking, reading, writing, and HSK level.

Table 4.4 Workforce Needs of Special Skills Criteria of Learning Outcomes

Alumni	Stakeholders	Job Vacancy Jobstreet.com
<ol style="list-style-type: none"> 1. HSK Level 4 2. Comprehending 75-90% of the interlocutor's spoken sentences 3. Articulating fluently in extended sentences. 4. 90-100% accurate Mandarin pronunciation and intonation. 5. Comprehends 70-80% of a lengthy paragraph in written form. 6. Can write Hanzi manually and use a computer or mobile device. 7. Capable of composing essential texts. 	<ol style="list-style-type: none"> 1. HSK Intermediate Level 2. Comprehending 90-100% of the interlocutor's spoken sentences 3. Articulating fluently in extended sentences. 4. 90-100% accurate Mandarin pronunciation and intonation. 5. Comprehend a lengthy paragraph in written form without using a dictionary 6. Can write Hanzi 	<ol style="list-style-type: none"> 1. HSK Level 4, 5, 6 2. Excellent and fluent in spoken, listening, written, and reading Mandarin

8. Capable of composing uncomplicated sentences.	manually and use a computer or mobile device. 7. Capable of composing essential texts. 8. Capable of composing uncomplicated sentences. 9. Master both traditional and simplified Hanzi	
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Based on the table, the summarized workforce needs for special skills criteria of learning outcomes are HSK intermediate level, excellent fluency in listening and speaking, accurate Mandarin pronunciation and intonation, comprehension in writing and reading, capable of writing Hanzi manually and typing, capable of composing introductory text and simple sentences, mastering both traditional and simplified Hanzi.

5. CONCLUSION

According to the results of a questionnaire for alumni of the Mandarin Language Education program at UNNES and stakeholders, as well as data on job vacancies in the education sector requiring Mandarin language education graduates sourced from Jobstreet.com, the summary is below.

The workforce needs for attitude criteria of learning outcomes are professionalism, respect and humility, politeness and good manners, responsibility and honesty, patience and friendliness, discipline and time management, communication skills, teamwork and independence, adaptability and creativity, emotional intelligence, hard work, and proactivity, physical and mental health.

The workforce needs general skills criteria of learning outcomes, including English proficiency, basic computer skills, Bahasa Indonesia proficiency, and strong technology skills (Google Apps, al. Meeting, etc.).

The workforce needs knowledge criteria for learning outcomes: Chinese grammar and culture, teaching syllables, lesson plans, materials, method and technology, and classroom management skills.

The workforce needs for special skills criteria of learning outcomes are HSK intermediate level, excellent fluency in listening and speaking, accurate Mandarin pronunciation and intonation, comprehension in writing and reading, capable of writing Hanzi manually and typing, capable of composing introductory text and simple sentences, mastering both traditional and simplified Hanzi.

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