



Indonesian Language Learning Model Using User Personas for Class X4 High School Students

H Halimah^{1*}, Rizaldi Malik², Y Yulianeta³ ^{1,2,3}Universitas Pendidikan Indonesia, Bandung, Indonesia**ARTICLE INFO****Article history:**

Received April 29, 2024

Accepted May 13, 2024

Available online June 25, 2024

Kata Kunci:*Analisis Kebutuhan, Model Pembelajaran Bahasa Indonesia, User Persona.***Keywords:***Needs Analysis, Indonesian Language Learning Model, User Persona.**This is an open access article under the [CC BY-SA](#) license.**Copyright ©2024 by Author. Published by Universitas Pendidikan Ganesha.***ABSTRAK**

Analisis kebutuhan sangat penting dilakukan untuk membantu siswa dalam proses pembelajaran. Namun, kebanyakan guru tidak melakukan analisis kebutuhan terlebih dahulu karena tidak mengetahui cara atau prosedur untuk menganalisis kebutuhan siswa. Maka dari itu, tujuan penelitian ini dilakukan untuk memberikan cara atau prosedur yang efektif dalam memahami kebutuhan siswa pada penggunaan model pembelajaran Bahasa Indonesia menggunakan User Persona. Penelitian ini menggunakan metode kualitatif deskriptif dengan User Persona sebagai pisau analisis. Metode pengumpulan data yang digunakan adalah angket. Selanjutnya data yang berhasil terkumpul akan dianalisis oleh peneliti. Hasil analisis menunjukkan bahwa siswa kelas X4 memiliki kebutuhan model pembelajaran yang beragam dalam pembelajaran Bahasa Indonesia. Melalui hasil User Persona ini peneliti dapat memberikan rekomendasi model-model pembelajaran yang sesuai dengan kebutuhan siswa kelas X4. Selain itu, penelitian ini dapat meningkatkan keterlibatan siswa dalam proses pembelajaran, membantu guru dalam merancang model pembelajaran yang sesuai, dan membantu guru untuk lebih memahami siswa, serta dapat menjadi acuan bagi sekolah lainnya untuk memahami kebutuhan siswa dalam penerapan model pembelajaran Bahasa Indonesia.

ABSTRACT

Needs analysis is very important to help students in the learning process. But, most teachers don't do needs analysis first because they don't know the way or procedure to analyze students' needs. Therefore, the purpose of this research is conducted to provide an effective way or procedure in understanding students' needs in the use of Indonesian language learning models using User Persona. This research uses descriptive qualitative method with User Persona as the analysis knife. The data collection method used is questionnaire. Furthermore, the data collected will be analyzed by the researcher. The results of the analysis show that students in class X4 have diverse learning model needs in learning Indonesian language. Through the results of this User Persona, researchers can provide recommendations for learning models that are in accordance with the needs of class X4 students. In addition, this research can increase student involvement in the learning process, assist teachers in designing appropriate learning models, and help teachers to better understand students, and can be a reference for other schools to understand student needs in implementing Indonesian language learning models.

1. INTRODUCTION

Times continue to develop, as well as the curriculum in Indonesia, which continues to experience dynamics as an effort to adapt to the times (Abdillah & Hamami, 2021; Asy'ari & Hamami, 2020). The existence of a virus pandemic in 2019 makes the world have to do something very different from usual, all fields are turning their brains so that the spread of the virus pandemic can be suppressed (Muhammedi, 2016; Sari, 2022). Likewise, the field of education is the driving force of culture and habits as stated in the 1945 Constitution in the fourth paragraph, with the hopeful meaning of educating the nation's life. Apart from the pandemic, the change of education minister made the education sector in Indonesia formulate a new curriculum. The curriculum is known as the Merdeka Curriculum. This curriculum is expected to be able to handle the impact of the pandemic, one of which is learning loss, some very significant changes are the implementation of the distance / online learning model (Ariga, 2022; Jojor & Sihotang, 2022). The

*Corresponding author

E-mail addresses: halimah_81@upi.edu (H Halimah)

Merdeka Curriculum has a flexible concept, this can be seen from the term "merdeka" (Arnes et al., 2023; Priantini et al., 2022). The true concept of the Merdeka Curriculum is to bring the direction of education in Indonesia that is able to contribute well and is able to prepare a free or independent learning environment. The meaning of the word "Merdeka" is that everyone involved in the educational environment has freedom of thought. Educators can determine how they educate, according to the situation, conditions of the learning environment, and respond to each student's needs during the learning process. Learners also have the freedom to choose subjects that suit their interests and talents.

As it is understood that in the field of education there are two very important elements, namely students and educators (Anggraini & Hudaiddah, 2021; Sulindawati, 2018). Especially educators who are the spearhead in education both in Indonesia and around the world. Educators must have adequate competence in carrying out their noble task of teaching students. It can be said that educators are the main factor determining the quality of education (Elvira, 2021; Rahmah, 2018). As explained earlier, educators have the right to independence in thinking so that this concept is slightly different from the previous curriculum. The previous curriculum tended towards educators who were observers and facilitators and students looking for problems or teaching materials themselves in the learning process (Alek et al., 2021; Kristiani et al., 2023). The concept of Merdeka Curriculum can even create the possibility for educators to carry out the learning process outside the classroom, so that the atmosphere created is not monotonous and more dynamic (Efendi & Suastra, 2023; Indarta et al., 2022). In addition, the learning process in the Merdeka Curriculum emphasises the character building of students by means of educators and students creating an atmosphere of good communication in the teaching and learning process. Educators can create this atmosphere with discussion methods that do not make students' psychology feel afraid, depressed, or anxious. The desired innovation of the Merdeka Curriculum is to create a relatively happy teaching and learning atmosphere without any burden, both students and educators. The Merdeka Curriculum is designed to catch up with literacy and numeracy as well as character building in accordance with Pancasila (Arnes et al., 2023; Priantini et al., 2022). Therefore, the Merdeka Curriculum is very synonymous with how educators can distribute teaching materials while shaping the character of students so that they can obtain high and accurate learning achievements.

In the field of education in Indonesia, educators must have four competency standards. The competencies in question are pedagogic competence, personality competence, professional competence, and social competence. With these competencies, it is hoped that educators will be able to adapt to curriculum changes and be more creative in determining learning models, especially Indonesian language learning that suits the needs of students. Speaking of choosing an Indonesian language learning model, some educators do not conduct in-depth surveys and observations of students, especially in one class, to determine the right, effective, and appropriate learning model for students' needs (Czerniawski et al., 2017; MacPhail et al., 2019). Educators tend to follow the learning model recommended by the curriculum. In addition, educators tend to use models that are already comfortable in practice but do not look at the conditions of the learners. This is a problem that is considered important, because basically there is no best learning model. However, a good learning model is a learning model that is appropriate and effective when applied to students (Rahmah, 2018; Ubogu, 2024).

Learners or what we can call students certainly feel how the atmosphere of the use of learning models used by educators. Each learning model certainly has advantages and disadvantages, the choice of model depends on the learning objectives, student characteristics, the material being taught, and the learning context (Abdullah, 2017; Fischer & Hänze, 2019). One of the indicators to measure the effectiveness of the learning process can be seen in the ability of educators to manage the class or learning itself. Previous research also explained that the role of teachers in the classroom is very important in supporting the success of student learning (Guess & Bowling, 2014; Jordan, 2018). Some important things that affect learning success that are rarely considered by teachers are student characteristics and their needs (Alfatonah et al., 2023; Kubat, 2018). Therefore, it is important for teachers to choose the right learning model and modify the model if necessary. However, because each student has a unique character, so teachers are a little difficult in determining how to determine the appropriate learning model that suits the needs of all students. In determining the appropriate learning model, a teacher must conduct a needs analysis of the class being taught (Beijaard, 2019; Pennington & Richards, 2016).

Because the Merdeka Curriculum gives teachers the right to independence to determine the most appropriate learning model that suits the conditions and needs of students (Efendi & Suastra, 2023; Indarta et al., 2022). Therefore, this study aims to provide solutions to educators in an effort to determine the Indonesian language learning model that suits the needs of students. This research will be conducted at the UPI Pilot Laboratory High School for class X4 students, the selection of the research site is based on the researcher's curiosity about the effectiveness of the selection of learning models in schools that are basically under the auspices of the Indonesian Education University which of course already has a good

education management system. However, the essence of this research can be done anywhere and can be adjusted based on the needs of each school and educational institution. The first step of this research began by analysing the needs of students which then resulted in recommendations for Indonesian language learning models that are in accordance with the needs of class X4 students. Previous research shows that fulfilling appropriate and appropriate needs will greatly help students in carrying out various educational activities, especially in learning activities ([Farid et al., 2022; Maulidia & Prafitasari, 2023](#)). A good understanding of these needs includes physical needs, security, affection, self-esteem, and self-actualisation, or the desire to achieve success. If these needs are well met, then teachers can deliver lessons appropriately and realise effective and efficient learning to achieve learning objectives. This research shows the importance of conducting a needs analysis on students in implementing the learning process. Therefore, the needs analysis that will be carried out in this research will use User Persona.

User Persona is one of the tools commonly used by UI/UX designers to better understand users, the tool in question is a fictional character created from empathy data and various interview or questionnaire results ([Ferreira et al., 2018; Schäfer et al., 2019](#)). User Persona is used in the product design and product development process to help the development team understand users' needs, preferences, and expectations of the product being developed. A User Persona consists of several elements, including demographic characteristics, behaviours, habits, needs, and challenges. Each of these elements is described in detail in the User Persona profile. Creating a User Persona involves collecting data about users, either through interviews, questionnaires, or observations. This data is then analysed to identify common patterns and trends in user behaviour and needs. From there, developers can create User Persona profiles that describe user characteristics and preferences in detail. User personas are essential in product development, with a good understanding of user needs, preferences, and challenges. The development team can design products that are more relevant and fulfil user needs better.

There are several studies that use the User Persona approach to analyse needs. Previously, research on User Persona discussed the use of the empathy map (EM) method to describe personas. The purpose of this method is to create a higher level of empathy between the product development team and the user, so that they can better understand the user's needs. Other research states that using a survey-based personas method for end users is an important factor in research ([Ferreira et al., 2018; Schäfer et al., 2019](#)). The objective of another study was to estimate whether electric vehicle (EV) charging is a factor inhibiting adoption by users, thus using the persona method to ensure that the user needs of charging can be widely adopted by users in the future. The results of using the persona method show that individual mobility should be tailored to the level of knowledge and the level of inconvenience felt by various users ([Ensslen et al., 2016; Rezvani et al., 2015](#)). Several studies have established a strong basis for placing User Persona as a sharp and precise needs analysis knife. The novelty of this research is the application of the concept of User Persona, which is usually used in technology design and business research, into the field of education. The purpose of this research is to identify the needs of students; supporting educators in learning planning; increasing the effectiveness of Indonesian language learning. By using user personas, the results of this research are expected to improve the understanding of educator needs, preferences, and challenges faced by students in learning Indonesian in a more in-depth and specific way. The data and fictional characters generated from user personas are expected to be a reference for educators to design more relevant and effective learning models according to student needs.

2. METHOD

This research uses a qualitative approach. A qualitative approach is research that can clearly explain the process or description of a situation without the object being seen. Qualitative approaches do not need to use data in the form of numbers or data processing (statistics), but can be in the form of words or descriptions of something under study. Research using qualitative methods begins with ideas expressed in research questions. Qualitative research is used to answer questions about "what", "how", or "why" of a phenomenon under study ([Kapoor, 2016; McCusker & Gunaydin, 2015](#)). The research question will linearly determine what kind of data collection methods and how to analyse them. The qualitative approach has a dynamic nature, which means that this approach is always open to changes, additions, and replacements in the research process. Furthermore, this research uses descriptive qualitative methods with User Persona. User Personas are generally used in the world of technology, namely application development. The basic purpose of a User Persona is to identify or analyze the needs of application users. By using User Personas, application developers can understand user problems or abilities and shortcomings. The data collection process is the process of searching for sources of data and information from respondents. Data collection will be carried out through interviews, questionnaires and questionnaires as instruments. Once the data is collected, it is time to identify behavioral variables.

Behavioral variables refer to factors that can influence or describe the behavior of a person or group in a situation. The data is then used to form recommendations for student needs which can be used by teachers as a reference in using appropriate Indonesian language learning models in the teaching and learning process. Population refers to all subjects who are the focus of research and are the source of research data. If a researcher wants to examine all the elements in his research area, then his research is classified as population research. Population research is carried out if the researcher wants to see all aspects of the population.

3. RESULT AND DISCUSSION

Result

The results of the study used several stages of the user persona approach to analyse student needs. The following is an analysis of the needs of class X4 students using user personas. The purpose of this stage is to find out who is involved in the problem raised. [Table 1](#) that has been presented is the results of hypotheses related to the respondents involved.

Table 1. Hypothesis

Hypothesis	Personal	Description
1	Students	The variation and suitability of students' needs in the application of the Indonesian language learning model can increase the motivation and competence of class X4 students in learning Indonesian.
2	Teacher	The use of User Persona in the needs analysis of Indonesian learning model can help understand the needs and preferences of students in class X4 more specifically, so as to design a more effective and appropriate learning model.

The data collection process has been carried out to find data sources and information from respondents. The data has been collected through the User Persona questionnaire for class X4 students with 23 students as respondents. After the data is collected, it's time to identify behavioural variables. Behavioural variables refer to factors that can influence or describe the behaviour of a person or group in a situation. The following are the identification results based on the facts from the respondents' answers.

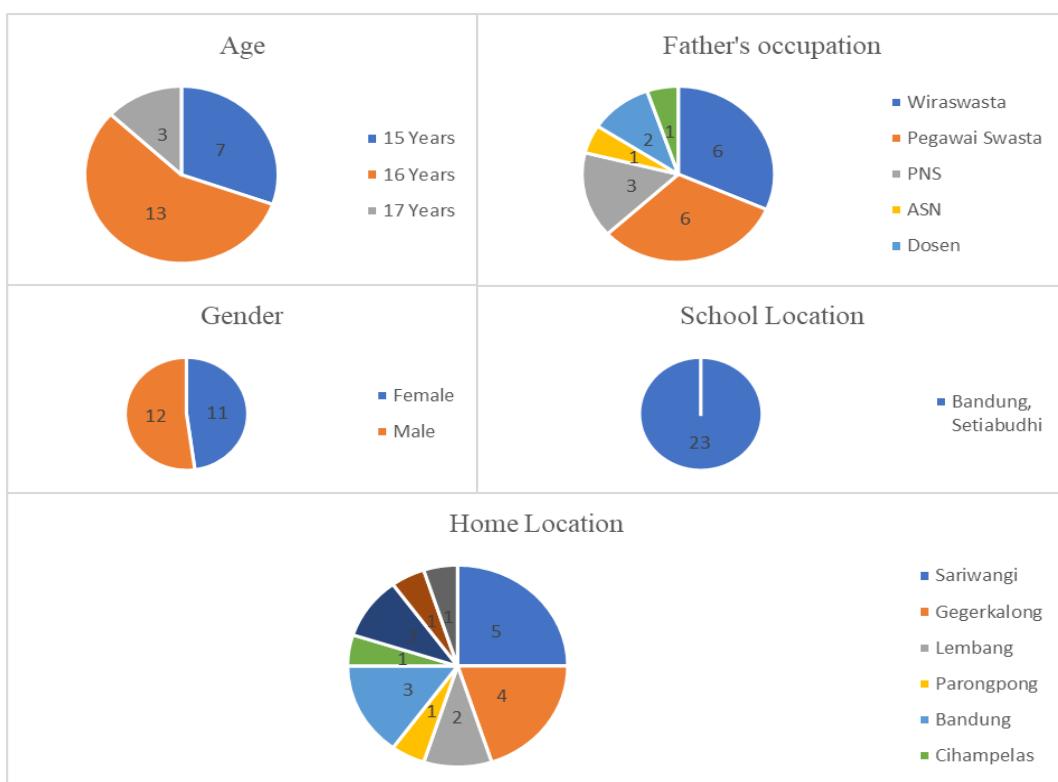
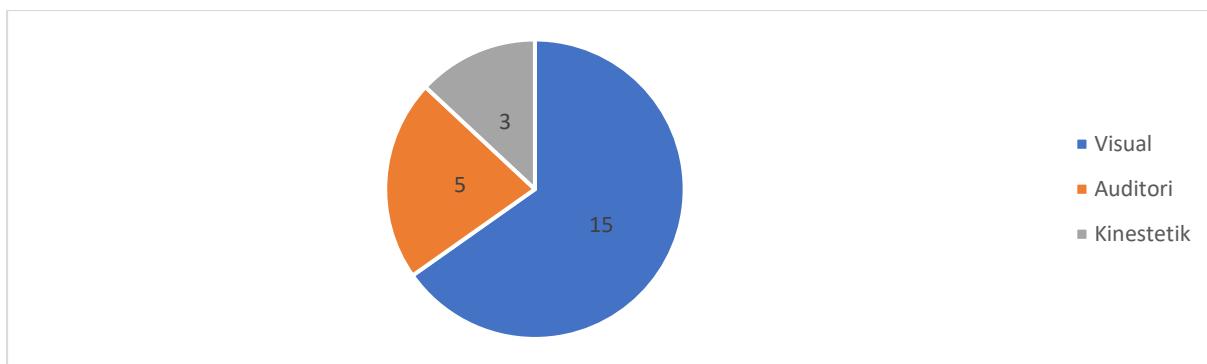
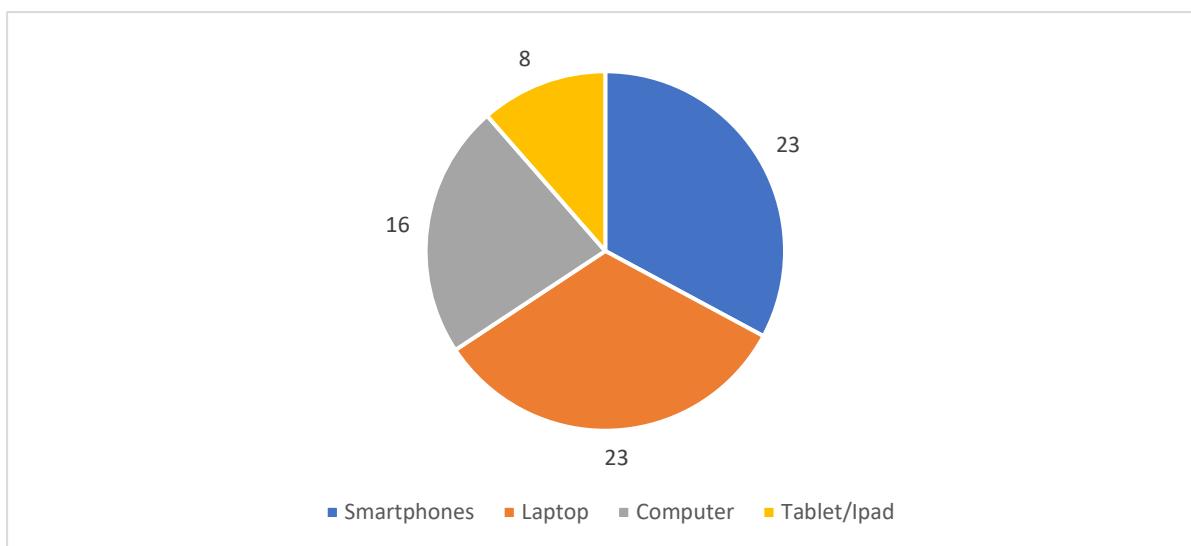


Figure 1. Demographics

**Figure 2.** Learning Preferences**Table 2.** Challenge and Desire to Learn

Challenge	Total	Desire	Total
Difficult to understand the material	8	Quiet learning atmosphere	11
Difficult to maintain consistency or enthusiasm for learning	8	Teachers who do not give many assignments	11
Get bored quickly	7	Group study	21
Difficult to maintain learning focus	10	Relaxed learning atmosphere	9
Difficult to learn by reading	1	The teacher's explanation is easy to understand	8
Lazy Learning	8	Interactive and dynamic learning atmosphere	3
Don't like a lot of tasks	8	A strict yet fun teacher	8
Low learning spirit	3	Teachers who are creative in teaching	4
Difficult to remember the material	4		
Difficult to organise study time	1		
Group Learning Difficulties	2		

**Figure 3.** Important Notes

Mapping Interview Subjects to Behavioural Variables

The data results from the respondents that have been presented in [Figure 1](#), [Figure 2](#), [Table 2](#), [Figure 3](#) are then mapped in the form of tables presented in [Table 3](#), [Table 4](#), [Table 5](#), [Table 6](#) and [Table 7](#). The mapping aims to find behavioral variables that are relevant and more dominant than other variables (prioritizing the most variables).

Table 3. Demographics

Age	Gender	School Location	Home Location	Father's occupation
16 Years	Male	Setiabudi, Bandung City	Kota Bandung	Self-employed

Table 4. Learning Preferences

Learning Preferences
Visual

Table 5. Challenges in Learning

No	Challenges in Learning
1	Difficult to maintain learning focus
2	Don't like a lot of tasks
3	Difficult to maintain consistency / enthusiasm for learning
4	Lazy Learning
5	Difficult to understand the material

Table 6. Desire to Learn

No	Desire to Learn
1	Group study
2	Teachers who do not give many assignments
3	Quiet learning atmosphere
4	A strict but pleasant teacher
5	The teacher's explanation is easy to understand

Table 7. Device Ownership

No	Device Ownership
1	Smartphones
2	Laptop

Creating Persona

The last stage is a description of the data results presented in [Figure 1](#) through the patterns that have been formed. This is the process of filling out the persona document. Some documents differ in their components, but some components that must be present in the formation of a User Persona are basic information, photos, behaviour, goals/motivation, and barriers/difficulties.

**Figure 1.** Persona Kelas X4

Table 8. Indonesian Language Learning Model Recommendations

No	CP Phase E (class X)	Learning Model	Material	Description
1	Reading and Viewing Elements	Storytelling Learning Model	Recognising and understanding poetry through stories. 16 votes (69.5%) Recognise and understand discussion texts through stories. 15 Voice (65.2%) Critically read and analyse the elements of poetry 15 Votes (65.2%)	Some students get bored easily, so try to keep the story interesting.
2	Reading and Viewing Elements	Problem Based Learning	Understand the pro and con arguments. 13 Votes (56.5%) Understand the structure of the discussion text with group mates 16 Votes (69.5%)	Two students are struggling with group learning, give them both more attention and explanation.
3	Elements of Listening	E-Learning	Learning with Online Educational Games and Youtube Apps. 12 Votes (52.2%) Freely discover things and ideas in the poetry material with group mates. 12 Votes (52.2%)	It can be implemented effectively, as all students have devices and good internet access.
4	Speaking and Presenting	Discovery Learning	Freely discover things and ideas in the discussion material with group mates. 13 Votes (56.5%)	Two students are struggling with group learning, give them both more attention and explanation.
5	Speaking and Presenting	Model Think, Pair, Share	Learning the discussion text material with my peers. 14 Votes (60.8%)	Teachers should be smart in selecting study partners. Pair students who are already familiar to prevent awkwardness.
6	Speaking and Presenting	Jigsaw	Understand the definition of a discussion text and its structure with peers. 12 Votes (52.2%)	Teachers need to be smart in selecting study partners. Pair students who are already familiar to prevent awkwardness.

Discussion

Based on the persona profile presented in [Figure 1](#) and questionnaire results. The researcher can make recommendations for an Indonesian language learning model that suits the needs of students in class X4. This recommendation is based on the results of the questionnaire analysis of the needs of the Indonesian language learning model, which is then adjusted or synchronised with the persona profile that has been made previously. The purpose of this adjustment is to validate and strengthen the recommended Indonesian learning model. In this adjustment process, the persona profiles of students in class X4 were considered, which included demographic information, learning challenges, learning desires and learning styles. By combining the information from the questionnaire and the persona profile and considering the criteria, researchers or teachers can develop recommendations that are more specific to the needs of the students. From [Table 8](#), it can be seen that the Storytelling Learning Model, Problem Based Learning, and Think, Pair, Share models are the most dominant models needed by students in class X4 with a selection presentation above 60%. The three models are highly recommended to be used by teachers who will teach in class X4. In addition, Jigsaw, E-Learning, and Discovery Learning models can also be used with a

selection presentation of 52%. Based on the initial conditions of using the learning model in class X4 using a project-based learning model. From the results of the questionnaire and User Persona it can be seen that the PjBL model is not liked and not needed by class X4 students with a selection presentation below 40%, some even touching 17%. This happens because the majority of students in class X4 have a visual learning preference or style. The learning outcomes of students who have kinesthetic learning preferences show a more significant increase compared to groups of students who tend to learn visually or auditory in the application of the PjBL model ([Solihatin & Syahrial, 2019](#); [Sukmawati et al., 2019](#)). The match or mismatch between individual learning styles and teaching styles implemented in a structured manner has a significant impact on student learning processes and outcomes. Therefore, PjBL is not recommended to be used because it does not suit the needs of students in class X4.

In this last section, the research findings will be discussed in depth. This discussion will provide greater insight into the importance of understanding students' needs in designing effective and contextually appropriate learning models. After analysing the research results, the following are some of the findings and implications that the researcher thinks are important to discuss. Findings: User Persona showed that students in class X4 disliked the assignment of many tasks and the use of project-based learning model. Implication: In designing Indonesian language learning models, it is important to provide relief and more attention to the conditions of developing students. Therefore, the process of providing assistance, guidance, and fulfilment of needs needs to get special attention in order to provide motivation to develop their potential as optimally as possible ([Bararah, 2017](#); [Shofiyah, 2018](#)). Maximise the scheduled learning time and avoid using project-based learning models that require students to create assignments or projects as much as possible. Try to provide varied and interesting tasks, so that students do not feel bored or saturated. For example, giving students exploration tasks, collaborative tasks, and creative tasks that are then correlated with their interests, preferences, or hobbies based on the personas that have been formed.

Findings: User Persona shows that class X4 students have a visual learning preference/style. Implication: In designing teaching materials or materials, you should increase the visualisation of teaching materials, so that students will more easily understand the material presented. Visualisation helps students understand complex concepts in a clearer and more concrete way, by using pictures, diagrams, or graphs, students can visualise the relationship between the concepts being taught. Visualisation can be in the form of PowerPoint, graphics, pictures, and diagrams ([Bhagat & Chang, 2015](#); [Nurdin et al., 2019](#)). Findings: User Persona revealed that students in class X4 have challenges in maintaining enthusiasm (getting bored quickly) and learning focus. Implication: In the Indonesian language learning model, it is necessary to use the creativity of a teacher in choosing a learning model that is fun and not monotonous, so that students will be eager to learn and focus more on listening to the material presented. The model is Storytelling Learning Model and E-Learning Learning ([Al Rawashdeh et al., 2021](#); [Asad et al., 2021](#); [Wisudariani & Wiraningsih, 2023](#)).

Findings: User Persona shows that students in class X4 have a desire for student-centred learning, which allows them to actively participate and collaborate in groups. Implication: In the Indonesian language learning model, use the learning models in the table of recommendations for Indonesian language learning models. These models are Problem Based Learning, Discovery Learning, Think, Pair, Share, and Jigsaw models. Teachers can also develop the model and choose other learning models that are also student-centred ([McCabe & O'Connor, 2014](#); [Santyasa et al., 2014](#)). The recommendation for further research is to expand the population. This research was conducted in one class only, but it is highly recommended to expand the needs analysis of the Indonesian language learning model using User Persona to a wider population, such as one class or even all classes at school. By expanding this population, the benefits generated in creating a more effective learning process will increase. In addition, by involving a larger population, we can see general patterns and trends in Indonesian language learning needs in a wider school environment. This can provide deeper insights into effective teaching practices and learning models that can be applied across schools.

4. CONCLUSION

In conclusion, the research underscores the significance of employing User Persona in the needs analysis of the Indonesian language learning model for class X4 students at Laboratorium Percontohan UPI High School. The study successfully delves into the intricate aspects of students' interests, talents, learning needs, challenges, demographics, and preferences. Through the systematic application of User Persona, educators gain a comprehensive understanding of individual student characteristics, enabling the customization of teaching methods, strategies, and learning materials. This tailored approach not only enhances motivation and engagement but also addresses students' unique learning requirements.

Ultimately, the research contributes valuable insights that can guide the development of effective Indonesian language learning models, fostering improved outcomes and laying the groundwork for future innovative approaches in education.

5. REFERENCES

- Abdillah, K., & Hamami, T. (2021). Pengembangan Kurikulum Menghadapi Tuntutan Kompetensi Abad ke 21 di Indonesia. *Jurnal Pendidikan Islam Al-Ilmi*, 4(1), 1–20. <https://doi.org/10.32529/al-ilmi.v4i1.895>.
- Abdullah, A. (2017). Pendekatan dan Model Pembelajaran yang Mengaktifkan Siswa. *EDURELIGIA: Jurnal Pendidikan Agama Islam*, 1(1), 45–62. <https://doi.org/10.24256/jpmipa.v2i1.105>.
- Al Rawashdeh, A. Z., Mohammed, E. Y., Al Arab, A. R., Alara, M., & Al-Rawashdeh, B. (2021). Advantages and Disadvantages of Using e-Learning in University Education: Analyzing Students' Perspectives. *Electronic Journal of E-Learning*, 19(3), 107–117. <https://doi.org/10.34190/ejel.19.3.2168>.
- Alek, R., Fitria, H., & Eddy, S. (2021). The role of teachers in implementing curriculum 13 in primary schools. *Jurnal Pendidikan Tambusai*, 5(1), 2270–2274. <https://doi.org/10.31004/jptam.v5i2.1661>.
- Alfatonah, I. N. A., Kisda, Y. V., Septarina, A., Ravika, A., & Jadidah, I. T. (2023). Kesulitan Belajar Peserta Didik pada Mata Pelajaran IPAS Kurikulum Merdeka Kelas IV. *Jurnal Basicedu*, 7(6), 3397–3405. <https://doi.org/10.31004/basicedu.v7i6.6372>.
- Anggraini, W., & Hudaidah, H. (2021). Reformasi Pendidikan Menghadapi Tantangan Abad 21. *Journal on Education*, 3(3), 208–215. <https://doi.org/10.31004/joe.v3i3.363>.
- Ariga, S. (2022). Implementasi Kurikulum Merdeka Pasca Pandemi Covid-19. *Edu Society: Jurnal Pendidikan, Ilmu Sosial Dan Pengabdian Kepada Masyarakat*, 2(2), 662–670. <https://doi.org/10.56832/edu.v2i2.225>.
- Arnes, A., Muspardi, M., & Yusmanila, Y. (2023). Analisis Pemanfaatan Platform Merdeka Mengajar Oleh Guru PPKn untuk Akselerasi Implementasi Kurikulum Merdeka. *Edukatif: Jurnal Ilmu Pendidikan*, 5(1), 60–70. <https://doi.org/10.31004/edukatif.v5i1.4647>.
- Asad, M. M., Hussain, N., Wadho, M., Khand, Z. H., & Churi, P. P. (2021). Integration of e-learning technologies for interactive teaching and learning process: an empirical study on higher education institutes of Pakistan. *Journal of Applied Research in Higher Education*, 13(3), 649–663. <https://doi.org/10.1108/JARHE-04-2020-0103>.
- Asy'ari, A., & Hamami, T. (2020). Strategi Pengembangan Kurikulum Menghadapi Tuntutan Kompetensi Abad 21. *IQ (Ilmu Al-Qur'an): Jurnal Pendidikan Islam*, 3(1), 19–34. <https://doi.org/10.37542/iq.v3i01.52>.
- Bararah, I. (2017). Efektifitas Perencanaan Pembelajaran dalam Pembelajaran Pendidikan Agama Islam di Sekolah. *Jurnal MUDARRISUNA: Media Kajian Pendidikan Agama Islam*, 7(1), 131–147. <https://doi.org/10.22373/jm.v7i1.1913>.
- Beijaard, D. (2019). Teacher learning as identity learning: Models, practices, and topics. *Teachers and Teaching*, 25(1), 1–6. <https://doi.org/10.1080/13540602.2019.1542871>.
- Bhagat, K. K., & Chang, C. Y. (2015). Incorporating GeoGebra into Geometry Learning-A lesson from India. *Eurasia Journal of Mathematics, Science and Technology Education*, 11(1), 77–86. <https://doi.org/10.12973/eurasia.2015.1307a>.
- Czerniawski, G., Guberman, A., & MacPhail, A. (2017). The professional developmental needs of higher education-based teacher educators: an international comparative needs analysis. *European Journal of Teacher Education*, 40(1), 127–140. <https://doi.org/10.1080/02619768.2016.1246528>.
- Efendi, F. K., & Suastra, I. W. (2023). Implementation of The Independent Curriculum in Elementary Schools. *International Journal of Contemporary Studies in Education (IJ-CSE)*, 2(2), 149–153. <https://doi.org/10.56855/ijcse.v2i2.363>.
- Elvira, E. (2021). Faktor Penyebab Rendahnya Kualitas Pendidikan dan Cara Mengatasinya (Studi pada : Sekolah Dasar di Desa Tonggolobibi). *Iqra: Jurnal Ilmu Kependidikan Dan Keislaman*, 16(2), 93–98. <https://doi.org/10.56338/iqra.v16i2.1602>.
- Ensslen, A., Kuehl, N., Stryja, C., & Jochem, P. (2016). Methods to identify user needs and decision mechanisms for the adoption of electric vehicles. *World Electric Vehicle Journal*, 8(3), 673–684. <https://doi.org/10.3390/wevj8030673>.
- Farid, I., Yulianti, R., Hasan, A., & Hilaiyah, T. (2022). Strategi Pembelajaran Diferensiasi Dalam Memenuhi Kebutuhan Belajar Peserta Didik di Sekolah Dasar. *Jurnal Pendidikan Dan Konseling (JPDK)*, 4(6), 11177–11182. <https://doi.org/10.31004/jpdk.v4i6.10212>.

- Ferreira, B., Silva, W., Barbosa, S. D., & Conte, T. (2018). Technique for representing requirements using personas: a controlled experiment. *IET Software*, 12(3), 280–290. <https://doi.org/10.1049/iet-sen.2017.0313>.
- Fischer, E., & Hänze, M. (2019). Back from “guide on the side” to “sage on the stage”? Effects of teacher-guided and student-activating teaching methods on student learning in higher education. *International Journal of Educational Research*, 95, 26–35. <https://doi.org/10.1016/j.ijer.2019.03.001>.
- Guess, P., & Bowling, S. (2014). Students’ Perceptions of Teachers: Implications for Classroom Practices for Supporting Students’ Success. *Preventing School Failure: Alternative Education for Children and Youth*, 58(4), 201–206. <https://doi.org/10.1080/1045988X.2013.792764>.
- Indarta, Y., Jalinus, N., Waskito, W., Samala, A. D., Riyanda, A. R., & Adi, N. H. (2022). Relevansi kurikulum merdeka belajar dengan model pembelajaran abad 21 dalam perkembangan era society 5.0. *Edukatif: Jurnal Ilmu Pendidikan*, 4(2), 3011–3024. <https://doi.org/10.31004/edukatif.v4i2.2589>.
- Jojor, A., & Sihotang, H. (2022). Analisis Kurikulum Merdeka dalam Mengatasi Learning Loss di Masa Pandemi Covid-19 (Analisis Studi Kasus Kebijakan Pendidikan). *Edukatif: Jurnal Ilmu Pendidikan*, 4(4), 5150–5161. <https://doi.org/10.31004/edukatif.v4i4.3106>.
- Jordan, A. (2018). The Supporting Effective Teaching Project: 1. Factors Influencing Student Success in Inclusive Elementary Classrooms. *Exceptionality Education International*, 28(3), 10–27. <https://doi.org/10.5206/eei.v28i3.7769>.
- Kapoor, M. C. (2016). Types of studies and research design. *Indian Journal of Anaesthesia*, 60(9), 626–630. <https://doi.org/10.4103/0019-5049.190616>.
- Kristiani, E., Andrianti, P., Enjelie, E., Norjanah, N., & Bulandari, B. (2023). Komparatif Epistemologi-Aksiologis Kurikulum K13 dengan Kurikulum Merdeka. *Jurnal Pengajaran Sekolah Dasar*, 2(1), 76–92. <https://doi.org/10.56855/jpsd.v2i1.337>.
- Kubat, U. (2018). Identifying the individual differences among students during learning and teaching process by science teachers. *International Journal of Research in Education and Science*, 4(1). <https://doi.org/10.21890/ijres.369746>.
- MacPhail, A., Ulvik, M., Guberman, A., Czerniawski, G., Oolbekkink-Marchand, H., & Bain, Y. (2019). The professional development of higher education-based teacher educators: needs and realities. *Professional Development in Education*, 45(5), 848–861. <https://doi.org/10.1080/19415257.2018.1529610>.
- Maulidia, F. R., & Prafitasari, A. N. (2023). Strategi pembelajaran berdiferensiasi dalam memenuhi kebutuhan belajar peserta didik. *ScienceEdu*, 6(1), 55–63. <https://doi.org/10.19184/se.v6i1.40019>.
- McCabe, A., & O’Connor, U. (2014). Student-centred learning: The role and responsibility of the lecturer. *Teaching in Higher Education*, 19(4), 350–359. <https://doi.org/10.1080/13562517.2013.860111>.
- McCusker, K., & Gunaydin, S. (2015). Research using qualitative, quantitative or mixed methods and choice based on the research. *Perfusion*, 30(7), 537–542. <https://doi.org/10.1177/0267659114559116>.
- Muhammedi, M. (2016). Perubahan Kurikulum Di Indonesia: Studi kritis tentang upaya menemukan Kurikulum Pendidikan islam yang ideal. *Jurnal Raudhah*, 4(1), 49–70. <https://doi.org/10.30829/raudhah.v4i1.61>.
- Nurdin, E., Ma’aruf, A., Amir, Z., Risnawati, R., Noviarni, N., & Azmi, M. P. (2019). Pemanfaatan video pembelajaran berbasis Geogebra untuk meningkatkan kemampuan pemahaman konsep matematis siswa SMK. *Jurnal Riset Pendidikan Matematika*, 6(1), 87–98. <https://doi.org/10.21831/jrpm.v6i1.18421>.
- Pennington, M. C., & Richards, J. C. (2016). Teacher Identity in Language Teaching: Integrating Personal, Contextual, and Professional Factors. *RELC Journal*, 47(1), 5–23. <https://doi.org/10.1177/0033688216631219>.
- Priantini, D. A. M. M. O., Suarni, N. K., & Adnyana, I. K. S. (2022). Analisis Kurikulum Merdeka dan Platform Merdeka Belajar untuk Mewujudkan Pendidikan yang Berkualitas. *Jurnal Penjaminan Mutu*, 8(2), 238–244. <https://doi.org/10.25078/jpm.v8i02.1386>.
- Rahmah, S. (2018). Pengawas sekolah penentu kualitas pendidikan. *Jurnal Tarbiyah*, 25(2), 174–193. <https://doi.org/10.30829/tar.v25i2.378>.
- Rezvani, Z., Jansson, J., & Bodin, J. (2015). Advances in consumer electric vehicle adoption research: A review and research agenda. *Transportation Research Part D: Transport and Environment*, 34, 122–136. <https://doi.org/10.1016/j.trd.2014.10.010>.
- Santyasa, I. W., Warphala, I. W. S., & Tegeh, I. M. (2014). Analisis Kebutuhan Pengembangan Model-Model Student-Centered Learning untuk Meningkatkan Penalaran dan Karakter Siswa SMA. *JPI (Jurnal Pendidikan Indonesia)*, 3(1), 299–312. <https://doi.org/10.23887/jpi-undiksha.v3i1.2913>.

- Sari, E. C. (2022). Kurikulum di Indonesia: Tinjauan Perkembangan Kurikulum Pendidikan. *Inculco Journal of Christian Education*, 2(2), 93–109. <https://doi.org/10.59404/ijce.v2i2.54>.
- Schäfer, K., Rasche, P., Bröhl, C., Theis, S., Barton, L., Brandl, C., & Mertens, A. (2019). Survey-based personas for a target-group-specific consideration of elderly end users of information and communication systems in the German health-care sector. *International Journal of Medical Informatics*, 132. <https://doi.org/10.1016/j.ijmedinf.2019.07.003>.
- Shofiyah, S. (2018). Prinsip – Prinsip Pengembangan Kurikulum dalam Upaya Meningkatkan Kualitas Pembelajaran. *EDURELIGIA: Jurnal Pendidikan Agama Islam*, 2(2), 122–130. <https://doi.org/10.33650/edureligia.v2i2.464>.
- Solihatin, E., & Syahrial, Z. (2019). The Effects of Brain-Based Learning and Project-Based Learning Strategies on Student Group Mathematics Learning Outcomes Student Visual Learning Styles. *Pedagogical Research*, 4(4), 1–8. <https://doi.org/10.29333/pr/5949>.
- Sukmawati, F., Setyosari, P., Sulton, S., & Purnomo, P. (2019). The Effect of Project-based Collaborative Learning and Social Skills on Learning Outcomes in Biology Learning. *Journal for the Education of Gifted Young Scientists*, 7(4), 1325–1344. <https://doi.org/10.17478/jegys.630693>.
- Sulindawati, N. L. G. E. (2018). Analisis Unsur-Unsur Pendidikan Masa Lalu Sebagai Dasar Penentuan Arah Kebijakan Pembelajaran Pada Era Globalisasi. *Jurnal Ilmiah Ilmu Sosial*, 4(1), 51–60. <https://doi.org/10.23887/jiis.v4i1.14363>.
- Ubogu, R. (2024). Supervision of instruction: a strategy for strengthening teacher quality in secondary school education. *International Journal of Leadership in Education*, 27(1), 99–116. <https://doi.org/10.1080/13603124.2020.1829711>.
- Wisudariani, M. R., & Wiraningsih, P. (2023). The Practicality and Effectiveness of Poetry Text Learning Kit in E-Learning. *JPI Jurnal Pendidikan Indonesia*, 12(1), 1–9. <https://doi.org/10.23887/jpiundiiksha.v12i1.43770>.