Using AI in Banjar Language Learning for UPK Students as an Effort to Preserve the Banjar Language

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Abstract. Preserving the Banjar language aims to maintain the continuity and preservation of the Banjar language so that it does not become extinct. Various strategies are implemented to ensure that the Banjar language remains in use, is passed on to the younger generation, and becomes an integral part of the cultural identity of the Banjar people. The use of artificial intelligence (AI) in learning the Banjar language is a response to the problems faced by the Banjar language. The aim of this research is to describe 1) the facts about the use of the Banjar language among UPK students), 2) what are the obstacles to preserving the Banjar language among UPK students, and 3) how to apply AI in learning Banjar language for UPK students. This research uses a descriptive approach and qualitative methods. Data sources are PBSI 1st semester students in 2024 and teaching lecturers. Data collection techniques are documentation, observation, questionnaires and interviews. The results of the research illustrate 1) the fact that the use of Banjar language is that some UPK students in their daily lives are dominated by Indonesian language due to urbanization and lack of resources, 2) the obstacles to preservation are that Banjar language speakers are decreasing in use, it is difficult to find lecturers who are experts in Banjar language, and there is a lack of learning resources. , 3) the application of AI in Banjarese language learning for UPK students can take the form of Banjarese virtual assistants, machine translation, educational games, text and voice analysis, and online learning.
Key words: use of AI, learning, preservation, Banjar language

1. Introduction

Banjar language is a regional language predominantly used in the province of South Kalimantan. This language has its own uniqueness, both in grammar and vocabulary, and reflects the history and culture of the Banjar people. The Banjar language contains wisdom that needs to be preserved.

The Banjar language is also a valuable cultural heritage for the people of South Kalimantan. Various efforts for its preservation are expected to keep the Banjar language alive and make it an integral part of Indonesia's national identity. Preservation efforts will involve many parties, including families, communities, and the government (Muhammad, 2020).

The Banjar language plays a significant role in society, serving multiple functions. First, it functions as a means of daily communication. Second, it serves as a cultural identity. Third, it functions as a subject of teaching in schools to preserve it. Fourth, it is used in oral literature.

In practice, the use of the Banjar language has decreased due to modernization. Furthermore, the material for learning the Banjar language is limited, especially in text form. There is also a lack of qualified teachers and lecturers to teach the Banjar language. These factors greatly affect the preservation of the Banjar language.

Given this, the preservation of the Banjar language is necessary to prevent it from becoming extinct. The preservation of the Banjar language is crucial because it is a cultural identity. Preserving it means safeguarding the heritage of ancestors and the local wisdom of the Banjar people. The Banjar language also represents cultural diversity. It reflects Indonesia's cultural diversity, and by preserving it, we can maintain the nation's cultural wealth. The Banjar language often contains unique local knowledge, such as the names of plants, animals, and cultural concepts that are not found in other languages. The Banjar language also strengthens character and reinforces the national identity.

The preservation of regional languages is an effort to maintain the continuity and sustainability of a regional language to prevent it from disappearing. This involves various actions to ensure the language remains in use, is passed down to the younger generation, and becomes an integral part of the cultural identity of a community (Bozkurt, 2021).Various strategies are being implemented to ensure the Banjar language remains preserved.

2. Results and Discussion

Given the importance of the Banjar language, various preservation efforts continue to be made, including: 1) **Educational Institutions**, by making the Banjar language a local content subject in schools and using the regional language in daily learning activities, as well as developing engaging and relevant learning materials; 2) **Mass Media**, by using the Banjar language in mass media such as local radio and television, and broadcasting programs that use the Banjar language; 3) **Cultural Activities**, by organizing cultural events that use the Banjar language, such as banter contests, rhyming, theater, and music performances that incorporate the Banjar language; 4) **Research**, by conducting research on the Banjar language with the aim of documenting and developing it; 5) **Family**, by encouraging parents to speak to their children in Banjar at home and creating an environment conducive to the use of the regional language; 6) **Community**, by organizing activities that use the regional language, such as art performances, competitions, and discussions, and forming communities of Banjar language enthusiasts; 7) **Government**, by creating policies that support the preservation of the Banjar language and providing financial support for Banjar language preservation programs; 8) **Technology**, by developing applications and digital platforms for Banjar language learning, and using social media to promote the use of regional languages.

In facing the challenges of preserving the Banjar language, the use of Artificial Intelligence (AI) is a response in teaching the Banjar language (Muhammad, 2020).AI, which stands for Artificial Intelligence, refers to technology that enables computers and machines to simulate learning, understanding, problem-solving, decision-making, creativity, and human autonomy (Wilson, 2024).

Currently, the advancement of technology and the expectations of students (skills required to secure employment) are forcing higher education institutions to support teaching and learning processes with advanced technology (Fulton, 2019).

The use of AI in education has spread to several developed countries in recent years and continues to experience rapid development. The use of AI in the educational context has been identified in several countries. For example, in Australia, an Intelligent Tutoring System has been developed to help address the imbalance between the number of educators and students (Luckin, 2016).

AI has the ability to execute various tasks that generally require human intelligence, such as speaking, listening, seeing, learning, thinking, and problem-solving (Lukman, 2022).AI then provides a learning experience tailored to the individual needs of each student (Maufidhoh, 2023).

AI, or Artificial Intelligence, holds different meanings for different people. However, everyone agrees that AI will have a significant impact on human work, education, and social life in the future (Littman, 2021).The use of Artificial Intelligence in education serves as a medium and support for learning. As a result, learning can take place effectively and optimally, with AI serving as an educational tool that helps teachers, educators, and mentors deliver lessons to students, making it easier for students to understand the material (Putri, 2023).

With AI, the learning process becomes more adaptive and responsive to the individual needs of students, allowing for better learning outcomes (Sitorus, 2024).

AI has various applications, such as:
- Web search systems (Google Search)
- Recommendation systems (YouTube, Amazon, Netflix)
- Virtual assistants (Google Assistant, Siri, Alexa)
- Autonomous vehicles (Waymo)
- Generative and creative tools (ChatGPT, AI art)

AI also has various research subfields, such as:
- Knowledge and reasoning

- Machine learning
- Natural language processing
- Computer vision
- Robotics

With the rapid development of AI technology, it is hoped that AI can assist humans in various aspects of life, such as healthcare, education, and the environment (Abdollahpour, 2006).AI offers innovative solutions to address these challenges in several ways, including:

- Personalized Learning: AI enables learning that is tailored to the needs and skill levels of individuals.
- Accessibility: AI-based learning materials can be accessed anytime and anywhere through digital devices.
- Interactivity: AI can create more engaging and interactive learning experiences through features such as games, quizzes, and conversation simulations.
- Instant Feedback: AI can provide instant feedback on student mistakes, making the learning process more effective.
- Cultural Preservation: AI can help preserve cultures and traditions related to regional languages through features like voice recognition, translation, and text analysis.

It is also important to emphasize that the use of AI in higher education should be grounded in good ethics and safe governance. Ethical guidelines and governance regulations are necessary to ensure that the use of AI technology is conducted in an ethical, reliable, and fair manner.

 A. Facts about the Use of the Banjar Language

- Dominance of Indonesian: As the national language, Indonesian is often more dominant in various aspects of life.
- Modernization: The advancement of technology and globalization has led to the marginalization of the Banjar language.
- Urbanization: The migration of people to urban areas has contributed to the decline in the use of the Banjar language.
- Lack of Resources: There is a limited availability of books, learning materials, and qualified teachers for regional languages.

Obstacles in Regional Language Learning in Schools. The obstacles to learning regional languages in schools are diverse and complex. Below are some of the main challenges often faced:

Lack of Resources

- Textbooks and Learning Materials: The limited availability of quality textbooks and learning materials that align with the curriculum.
- Learning Media: The shortage of engaging and interactive learning media, such as videos, audio, or educational games.
- Software: The lack of software that effectively supports the learning of regional languages.

Lack of Competent Teachers

- Limited Competence: Not all teachers possess adequate competence in teaching regional languages, both in terms of language proficiency and teaching methods.
- Lack of Motivation: There is a lack of motivation among teachers to teach regional languages, especially if it is not a mandatory subject.

Negative Attitudes Toward Regional Languages

- Dominance of Indonesian: The dominance of the Indonesian language in daily life often leads to regional languages being perceived as less important.
- Negative Stigma: There is a belief that regional languages are associated with less educated or backward communities.

Lack of Learning Time

- Curriculum Load: The dense curriculum makes the time available for regional language learning limited.
- Subject Prioritization: Regional languages are often considered less important than core subjects.

Lack of Support from the Environment
- Parents: Not all parents support the learning of regional languages in schools.
- Community: There is a lack of community awareness about the importance of preserving regional languages.

Sociocultural Changes
- Modernization: Modernization and globalization have led to the marginalization of regional languages.
- Urbanization: The migration of people to urban areas has resulted in a decline in the use of regional languages.

Lack of Research and Development
- Lack of Research: There is a lack of research on effective methods for teaching regional languages.
- Lack of Curriculum Development: The curriculum for regional language learning is often not relevant to the needs of students.

B. Efforts to Overcome Barriers

To address these barriers, comprehensive efforts are needed (Trisna, 2018),including:

- Improvement of Resources: Providing quality textbooks, learning media, and software.
- Enhancement of Teacher Competence: Through training and professional development.
- Socialization of the Importance of Regional Languages: Through campaigns and activities that involve the community.
- Integration of Regional Languages into the Curriculum: Allocating sufficient time for regional language learning.
- Support from the Government and Community: Providing financial support and policies that support the preservation of regional languages.

C. Application of AI in Regional Language Learning

AI has paved the way for new approaches in language learning, including regional languages. Here are some of the most common applications:

- Regional Language Virtual Assistants:
  - Personal Tutor: AI can serve as a personal tutor that provides explanations on grammar, vocabulary, and cultural aspects related to the regional language.
  - Conversation Practice: Through conversation simulations, students can practice speaking with AI in various situations.
  - Real-time Correction: AI can provide instant feedback on pronunciation or grammar mistakes made by students.
- Machine Translation:
  - Text Translation: AI can translate text from a regional language to Indonesian or other international languages, and vice versa.
  - Voice Translation: Speech recognition technology enables AI to translate spoken conversations in real-time.
- Educational Games:
  - Gamified Learning: AI can create engaging and interactive games to learn vocabulary, grammar, and cultural aspects of the regional language.
  - Difficulty Level Adaptation: The games can adjust the difficulty level according to the student's abilities.
- Text and Voice Analysis:
  - Language Pattern Identification: AI can analyze text and voice to identify unique language patterns, such as dialects or specific speaking styles.
  - Progress Evaluation: AI can track student progress and provide regular progress reports.
- Online Learning Platforms:

- o Personalized Learning Materials: AI can create learning materials tailored to each student's interests and learning styles.
- o Discussion Forums: AI can facilitate discussions between students and tutors, as well as provide recommendations for additional learning resources.

Case Example of Use
- Javanese Language Learning App: This app uses AI to recognize students' speech, provide feedback on pronunciation, and suggest appropriate exercises.
- Online Sundanese Language Learning Platform: This platform offers various AI-based features, such as machine translation, educational games, and discussion forums.

D. Challenges and Opportunities

Opportunities
- Democratization of Education: AI can provide wider access to regional language education, especially for communities in remote areas.
- Innovation in Learning: AI can drive innovation in methods of regional language learning.
- Global Collaboration: AI can facilitate collaboration between researchers, educators, and developers from around the world to develop better solutions.

Benefits of AI Application in Regional Language Learning
- Accessibility: Learning materials can be accessed anytime and anywhere.
- Personalization: Learning can be tailored to individual needs.
- Interactivity: Learning becomes more engaging and enjoyable.
- Efficiency: The learning process becomes more effective and efficient.
- Cultural Preservation: AI can help preserve regional languages and cultures.

Challenges Faced
- Data Quality: The availability of high-quality data to train AI models is still limited.
- Cost: The development and implementation of AI solutions can be quite costly.
- Technical Skills: Expertise in AI is needed to manage and develop these technologies.
- Cultural Immersion: This technology allows students to interact with virtual environments that speak the regional language, providing them with a direct experience of the culture and daily life of the language community.

Implementation Examples
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Challenges and Solutions
- Data Quality: High-quality data is needed to train AI models. Solution: Collaborate with regional language communities to gather relevant data.
- Cost: Developing AI solutions requires significant investment. Solution: Seek support from the government, NGOs, and technology companies.
- Technical Skills: Skilled professionals in AI are required. Solution: Build partnerships with universities and research institutions.
- Text Translation: AI can translate text from Banjar language to Indonesian or other languages, and vice versa.
- Voice Translation: Speech recognition technology allows AI to translate spoken conversations in real-time.
- Personalized Learning Materials: AI can create learning materials tailored to each student's interests and learning styles.
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Benefits of Using AI in Banjar Language Learning:
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Challenges and Solutions:

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3. Conclusion

The use of AI in Banjar language learning at Universitas PGRI Kalimantan has great potential to improve the quality of learning and accelerate efforts to preserve this regional language. With proper utilization, AI can be a highly effective tool in preserving the cultural richness of South Kalimantan.

AI has significant potential to revolutionize regional language learning. With the right application, AI can help preserve local languages and cultures, as well as improve the quality of education. Students at UPK play a crucial role in the preservation of the Banjar language. By mastering AI technology and applying it in their studies, students can become agents of change who inspire the broader community to participate in the preservation of regional languages.

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