



Analysis of the Use of Artificial Intelligence (AI) in Learning Development Assessments Based on the Seven Characters at Undhira

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Abstract: The research was conducted to find out how artificial intelligence (AI) technology can be used to evaluate the development of seven characters in Undhira students. The seven characters in question are Integrity, Self-Confidence, Diversity, Entrepreneurship, Professionalism, Servant Leaders, Global Insight. In the research conducted, the main variables were learning motivation and the use of artificial intelligence designed by prioritizing the seven Undhira characters. The analysis obtained was that the artificial intelligence used for learning assessment obtained the following analysis: 1) arousing interest, 2) determining common goals, 3) building self-confidence, and 4) creating a positive learning environment.

Keywords AI for Education, Seven Character at Undhira, Learning Decelopment

1. INTRODUCTION

The research was conducted to find out how artificial intelligence (AI) technology can be used to evaluate the development of seven characters in Undhira students. The seven characters in question are Integrity, Self-Confidence, Diversity, Entrepreneurship, Professionalism, Servant Leaders, Global Insight. Some gaps that may be found in this study include:

- Measurement Standardization: Measuring and defining objectively between the learning process and the implementation of the seven characters that are the basis for the learning activities carried out? Using valid and reliable measuring instruments?
- Data Quality: analyzing the artificial intelligence (AI) model used is easy to understand and use and developed using learning knowledge and the seven characters of Undhira? so that biased data can be ignored so that it does not enter the analysis process.
- Interpretation of Results: the existence of an artificial intelligence (AI) model makes it easy to process and interpret the data obtained. With the results obtained using the help of artificial intelligence (AI), it can help the decision-making process by prioritizing the results of data processed and concluded by artificial intelligence (AI) which are then wisely decided by lecturers regarding student learning.
- Technology Acceptance: How can artificial intelligence (AI) help the assessment process? And are there other considerations in making decisions by lecturers who are assisted by using artificial intelligence?

Ethics of AI Use: With the presence of artificial intelligence (AI), it has an influence or impact that must be emphasized on the understanding of the seven Undhira characters that have been understood by lecturers and students. With a good understanding of the seven characters, the use of artificial intelligence can provide good and targeted assistance. The main objectives of the study are:

Improving Assessment Effectiveness: Knowing the extent to which AI can help in identifying students' strengths and weaknesses in developing the seven characters. • Personalization of Learning: Allowing lecturers to provide learning that is more in accordance with the needs of individual students.

- Process Automation: Reducing the workload of lecturers in conducting manual assessments.
- Scientific Contribution: Developing an AI model that can be applied in the context of higher education, especially in the field of learning assessment. This research is driven by several motivations, including:
- Development of AI Technology: The rapid development of AI technology opens up new opportunities in various fields, including education.
- Importance of Character Development: In addition to academic skills, student character development is also an important concern.
- Challenges in Traditional Assessment: Traditional assessments are often limited and cannot measure all aspects of student development.
- Improving the Quality of Graduates: By using AI, it is expected to produce graduates who have better competencies, not only academically but also in terms of character.

2. LITERATURE REVIEW

The implementation of distance education (Ahmad et. al, 2020) during the spread of the Covid-19 pandemic raises various problems, especially about the process of student learning assessment. Therefore there is a need for alternative assessment models that support good and effective distance learning processes, both for teachers and students. This paper seeks to provide an overview of alternative forms of assessment and evaluation, which can be used as a reference for educators in assessing and evaluating the learning outcomes of distance learners in the Corona pandemic that is sweeping Indonesia. This research is a type of library research. Researchers obtain data from the results of the study of literature from a variety of books, journals, scientific works, and also other documents that examine the assessment and evaluation of learning, both in general and specifically examine the assessment and evaluation of distance learning. The results of this study are several forms of assessment models that can be applied in the distance learning process, including online-based assessment, portfolio assessment, and self-assessment.

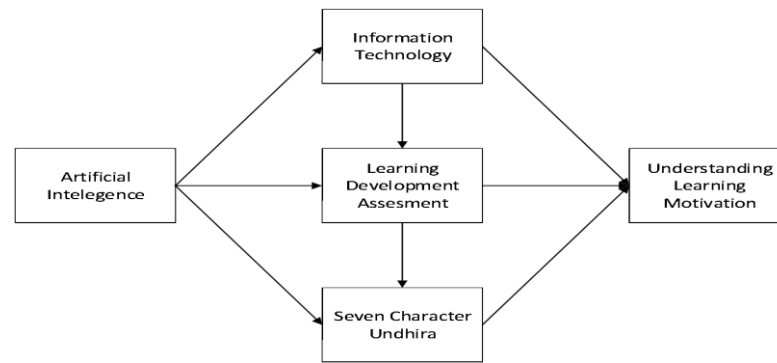
Improving the effectiveness of learning assessments (Legi, et. al, 2024) is essential in modern education. Therefore, the use of rubrics as an assessment tool has become crucial. This research aims to develop a web application that facilitates the learning assessment process using rubrics. The main issues faced in conventional assessment processes are inefficiency, especially in providing accurate and prompt feedback to learners, and the time-consuming process of creating rubrics. Hence, a solution is needed to enhance the assessment process by

leveraging technology. The system development method used is the System Development Life Cycle (SDLC) with an Agile approach. The web application is built using the Flask framework, with integration of OpenAI's ChatGPT to support automated assessment using rubrics. This application is designed to assist teachers in creating, saving, and managing rubrics efficiently. The research involves stages of needs analysis, design, development, testing, and evaluation. The developed web application successfully provides a solution to enhance the learning assessment process. Features such as automatic rubric creation and automated assessment improve assessment efficiency. This research makes a positive contribution to the development of technology in the context of learning and assessment.

National character building (Mukhilisin, et. al, 2024) can be done through individual character development. However, because humans live in a certain social and cultural environment, the development of an individual's character can only be done in the relevant social and cultural environment. The research used is *ex post facto*, where researchers connect causes and effects that are not manipulated or handled (designed and implemented) by researchers. Islamic Religious Education learning has a significant effect on student character, because the p value = 0.000 is less than 5%. The correlation criteria are very strong ($r_{y1,2} = 0.886$). Thus, school culture and Islamic Religious Education learning have an independent or indirect relationship with the character of students at Palopo State Islamic Senior High School. The most dominant variable influencing student character is the Islamic Religious Education learning variable. Based on the hypothesis test, it is concluded that school culture and Islamic Religious Education learning together have a positive effect on the character of Madrasah students. There is a positive influence between school culture and Islamic Religious Education learning with student character, this shows that student character will increase if school culture and Islamic Religious Education learning at Palopo State Islamic Senior High School.

3. METHODS

Artificial Intelligence (AI) is increasingly dominating various sectors, including education. With its ability to process large and complex data, AI offers great potential to revolutionize the way we learn and teach. AI in education refers to the use of artificial intelligence technology to enhance the learning process. It involves using algorithms and software to analyze data, make predictions, and make decisions that can be tailored to the individual needs of students. can be explained as follows;



4. RESULTS

Artificial Intelligence (AI) has brought a breath of fresh air to the world of education, including in the assessment process. With its ability to process large and complex data, AI is able to provide more efficient and accurate solutions in evaluating student learning. Here are some uses of AI in educational assessment:

1. Personalization of Assessment
 - Question Adjustment: AI can generate questions that are appropriate to the level of understanding and learning style of each student.
 - Curriculum Development: Based on the assessment results, AI can help teachers and curriculum developers to create more relevant learning materials.
2. Assessment Automation
 - Routine Tasks: Objective assessment tasks, such as multiple-choice or short-answer questions, can be automated by AI.
 - Time Savings: Teachers can save time that would have been spent manually checking students' answers.
3. Deep Data Analysis
 - Pattern Identification: AI can identify patterns in assessment data, such as students' learning difficulties in a particular topic.
 - Performance Prediction: By analyzing historical data, AI can predict students' future performance.
4. Better Quality Feedback
 - Specific: AI can provide more specific and relevant feedback on student errors.
 - Timely: Feedback can be provided in real-time or immediately after students complete the task.
5. Better Question Development
 - Question Analysis: AI can analyze the quality of questions, such as difficulty level and discrimination power.
 - Quality Improvement: Thus, the questions created can be better and more valid.
6. Learning Adaptation
 - Material Adjustment: Based on the assessment results, AI can recommend additional materials or repetition of materials for students who need them.
 - More Effective Learning: Thus, learning can be tailored to the needs of individual students.

Examples of AI Applications in Assessment

- **Online Learning Platforms:** Many online learning platforms are using AI to provide adaptive quizzes and personalized feedback.
- **Essay Checking:** AI can be used to check for plagiarism and provide an initial score on student essays, before manual grading by teachers.
- **Project Analysis:** AI can be used to analyze student projects, such as presentations or reports, and provide more objective assessments.

Challenges to Overcome:

- **Data Quality:** The quality of the data used to train AI is critical to obtaining accurate results.
- **Cost:** Implementing AI in education requires significant investment.
- **Ethics:** The use of AI in assessment must take into account aspects of student data privacy and security.

Challenges of Using AI in Character Building Although AI offers a lot of potential in the world of education, including in character building, there are several challenges that need to be overcome:

1. **Lack of Emotional Intelligence:**
 - **Context Understanding:** AI still has difficulty understanding the complex social and emotional context in human interactions. This makes it difficult for AI to recognize the nuances of students' emotions and provide appropriate responses in character building.
 - **Moral Values:** AI is designed based on existing data. If the data is biased or does not represent diverse moral values, then AI will also produce biased output.
2. **Too Much Dependence:**
 - **Human Interaction:** Excessive use of AI can reduce direct interaction between students and teachers. Human interaction is very important in character building because it involves empathy, guidance, and real examples.
 - **Creativity:** AI can limit student creativity if it relies too much on solutions that have been determined by algorithms.
3. **Data Privacy:**
 - **Data Collection:** The use of AI in education involves the collection of large amounts of student data. This raises concerns about student data privacy and its potential for misuse.
 - **Security:** Sensitive student data must be protected from unauthorized access.
4. **Cost and Infrastructure:**
 - **Access:** Not all schools have the resources to implement AI technology. This can widen the educational gap.
 - **Maintenance:** It costs a lot of money to maintain and develop AI systems.
5. **Teacher Role:**
 - **Role Shift:** The use of AI can significantly change the role of teachers. Teachers need to adapt to new technologies and have the right skills to manage AI-powered learning.

- **Critical Skills:** Teachers remain key to character building. They need to teach students critical thinking, creativity, and problem-solving skills that cannot be completely replaced by AI.

5. DISCUSSION

The application of AI in learning assessment has enormous potential to improve the quality of education. However, it is important to consider the challenges and develop appropriate solutions. With a careful and collaborative approach, we can use AI to create a better future for education. In general, the application of AI for educational assessment in several countries has been carried out well and continues to be improved. Several countries that use artificial intelligence such as; the United States, China, Singapore and even Indonesia have used it with the rules that have been set. To support artificial intelligence in educational assessment, character learning is needed which is designed using the seven undhira characters. Where the seven undhira characters become a basis and development in the learning process carried out.

6. CONCLUSION

In the analysis research conducted, it is indeed not easy to describe and combine with the assessment of learning developed using artificial intelligence as a tool for processing instruments and processing data that is expected to provide a real picture and in accordance with the development carried out by Undhira. as a university that applies the seven characters of Undhira to its students. So as to gain an understanding of the seven characters of Undhira, it was found that with a good understanding of character, it can provide convenience in using artificial intelligence simply and help the assessment process that is designed. Indeed, the analysis research stage is still very long because it must carry out various tests on the process of using artificial intelligence, learning the seven characters of Undhira, and learning assessments that are developed according to the use by each university.

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