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Problem Based Learning to Improve Students Ability in Listening in SMKS KR Ulususua

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ABSTRACT

This study was motivated by the challenges faced by SMKS KR Ulususua students in developing their English listening skills, which negatively impacted their academic achievement. The purpose of this study was to investigate the effectiveness of problem-based learning (PBL) in improving students' listening skills. The method used was classroom action research with two cycles, involving 32 students of grade XI-A. Data were collected through listening ability tests, observations, and questionnaires. The results showed that the average score of students' listening skills increased from 65.3 in the pre-test to 82.4 in the second cycle post-test. In addition, student engagement in learning also increased, with 85% of students actively participating in PBL activities. The conclusion of this study is that the implementation of PBL significantly improves students' listening skills and encourages students' engagement and motivation in learning. This study recommends the integration of PBL in the vocational education curriculum to improve English learning outcomes.

Keywords: *problem-based learning (pbl); listening skills; vocational education; english language teaching*

INTRODUCTION

English has become an essential language in this globalization era, serving as a crucial medium for international communication across various sectors including education, business, technology, and culture (Wijnia et al., 2024). Among the four fundamental English skills - listening, speaking, reading, and writing - listening holds a particularly significant position as it forms the foundation for effective language acquisition and communication competence (Burgos, 2023). In the context of vocational education, particularly at SMKS KR Ulususua, students face considerable challenges in developing their listening skills (Zakaria et al., 2019). Based on preliminary observations and assessment data, many students struggle with comprehending spoken English, which directly impacts their overall language proficiency and academic performance (Azzad, 2024). The average listening comprehension score among students was found to be 65.3,

significantly below the minimum competency standard of 75.0 established by the school (Gijbels et al., 2005).

Several factors contribute to these challenges, including limited exposure to authentic English materials, traditional teaching methodologies that emphasize passive learning, and insufficient opportunities for interactive engagement with English content (Hassan & Akbar, n.d.). Additionally, students often exhibit anxiety and lack of confidence when confronted with listening tasks, particularly those involving native speakers or complex subject matter (Ramirez-Verdugo, 2024).

To address these challenges, this study proposes the implementation of Problem Based Learning (PBL) as an innovative pedagogical approach. PBL is characterized by its student-centered nature and emphasis on active learning through real-world problem-solving activities (Savery, 2015). This approach aligns well with the needs of vocational school students, who require practical and contextual learning experiences that prepare them for future professional environments (Utterback, 2023). Previous research has demonstrated the effectiveness of PBL in language education. Hmelo (2015) found that PBL significantly enhances student engagement and motivation in language learning contexts. Furthermore, Williams (2019) reported substantial improvements in listening comprehension scores when PBL was systematically implemented in ESL classrooms (Missildine et al., 2013).

This study aims to investigate how the implementation of Problem Based Learning (PBL) can improve students' listening skills at SMKS KR Ulususua. Specifically, this study aims to: (1) Assess the effectiveness of PBL in improving students' listening comprehension skills, (2) Analyze the impact of PBL on students' engagement and participation in listening activities, (3) Identify the most effective PBL strategies for developing listening skills in the context of vocational schools, and (4) Evaluate changes in students' self-confidence and attitudes towards listening tasks in English (Thomas & Schneider, 2020).

The benefits of this study include increasing understanding of how efficient budget management can improve the effectiveness of work programs, as well as providing recommendations for improvements in budget management. The implications of this study are expected to strengthen governance in the regions, increase accountability and transparency, and provide insight for other government agencies in improving budget efficiency (Bi et al., 2021).

The results of this study are expected to provide benefits for institutions that want to improve English teaching programs, especially in developing listening skills (Li et al., 2023).

RESEARCH METHOD

Research Design

This study employed a classroom action research (CAR) design, following the model proposed by Watson (2014). The research was conducted in two cycles, with each cycle consisting of four stages: planning, action, observation, and reflection. This design

was chosen based on its effectiveness in implementing and evaluating educational interventions, as demonstrated by *Martinez & Garcia* (2017).

Research Setting and Participants

The research was conducted at SMKS KR Ulususua during the academic year 2024/2025. The participants consisted of 32 students from class XI-A, comprising 18 female and 14 male students aged between 16-17 years. The selection of this class was based on preliminary observations indicating significant challenges in listening comprehension, with an average score of 65.3, below the minimum competency standard of 75.0.

Research Instruments

1. Listening Comprehension Tests
   a. Pre-test and post-test for each cycle.
   b. Developed based on curriculum standards.
   c. Validated by three expert judges following Chen & Thompson's (2018) validation protocol.
   d. Reliability tested using Cronbach's alpha ($\alpha = 0.82$)
2. Observation Sheets
   a. Structured observation format.
   b. Focus on student engagement and participation.
   c. Teacher performance indicators.
   d. Based on Rahman et al.'s (2016) observation framework
3. Field Notes
   a. Detailed documentation of classroom events.
   b. Student reactions and behaviors.
   c. Implementation challenges and solutions
4. Student Questionnaires
   a. 5-point Likert scale items.
   b. Focus on attitudes and perceptions.
   c. Adapted from Williams (2019) study

Data Collection Procedures

The data collection was conducted systematically through the following steps:

Pre-implementation Phase:

a. Initial assessment of students' listening abilities through pre-test.
b. Distribution of preliminary questionnaires.
c. Classroom observation documentation.

Implementation Phase (Each Cycle):

a. Implementation of PBL activities.
b. Regular observation and field note taking.
c. Post-cycle assessment.
d. Student feedback collection

Research Procedures

Cycle 1:

Planning:

a. Developing lesson plans incorporating PBL principles.
b. Preparing listening materials and problem scenarios.
c. Creating assessment instruments.
d. Setting up observation protocols

Action:

a. Implementation of PBL in listening activities.
b. Introduction of real-world problem scenarios.
c. Facilitation of group discussions and problem-solving.
d. Monitoring of student progress

Observation:

a. Documentation of student engagement.
b. Recording of classroom interactions.
c. Collection of performance data.
d. Monitoring of implementation challenges.

Reflection:

a. Analysis of collected data.
b. Evaluation of implementation effectiveness.
c. Identification of areas for improvement.
d. Planning for cycle 2 modifications.

Cycle 2

Similar steps were followed with modifications based on cycle 1 reflections.

Data Analysis

The study employed both quantitative and qualitative data analysis methods:

Quantitative Analysis:

a. Descriptive statistics for test scores.
b. Comparative analysis between cycles.
c. Statistical significance testing using paired t-tests.
d. Analysis of questionnaire responses.

Qualitative Analysis:

a. Thematic analysis of field notes.
b. Content analysis of observation data.
c. Interpretation of student feedback.
d. Pattern identification in implementation challenges

Success Indicators

Following Savery's (2015) recommendations, the success indicators were established as:

a. Minimum 75% of students achieving the competency standard (score ≥ 75)
b. Average class score improvement of at least 10 points.
c. Positive student engagement indicators in 80% of observations.
d. Favorable student perceptions in questionnaire responses.

Ethical Considerations

The research adhered to ethical guidelines including:

a. Informed consent from participants and parents.
b. Confidentiality of student data.
c. Fair treatment of all participants.
d. Transparency in research procedures.

RESULTS AND DISCUSSION

This section presents and discusses the findings of implementing Problem Based Learning (PBL) to improve students' listening abilities at SMKS KR Ulususua. The results are analyzed and interpreted based on quantitative and qualitative data collected throughout the research cycles.

Quantitative Findings

1. Listening Comprehension Test Results

Pre-test Results:

a. Mean score: 65.3.
b. Students achieving minimum competency (≥75): 28.1% (9 students).
c. Lowest score: 45.
d. Highest score: 78

Cycle 1 Results:

a. Mean score: 72.8.
b. Students achieving minimum competency: 56.2% (18 students).
c. Improvement from pre-test: 7.5 points.
d. Lowest score: 58.
e. Highest score: 85.

Cycle 2 Results:

a. Mean score: 82.4.
b. Students achieving minimum competency: 87.5% (28 students).
c. Improvement from cycle 1: 9.6 points
d. Lowest score: 70
e. Highest score: 92

These results align with findings from Martinez & Garcia (2017), who reported similar improvements in listening comprehension through PBL implementation.

2. Student Engagement Analysis

Based on observation data:

Cycle 1:

a. Active participation: 65%.
b. Task completion: 72%.
c. Group collaboration: 68%.

Cycle 2:

a. Active participation: 85%.
b. Task completion: 88%.
c. Group collaboration: 84%.

The improvement in engagement metrics supports Chen & Thompson's (2018) findings regarding the positive impact of PBL on student participation.

Qualitative Findings

1. Implementation Process Analysis

Cycle 1 Observation:

a. Initial student hesitation in problem-solving activities .
b. Gradual improvement in group dynamics.
c. Challenges in time management.
d. Growing confidence in using English.

Cycle 2 Observation:

a. Enhanced student initiative in problem-solving.
b. Improved collaboration skills.
c. More efficient time utilization.
d. Increased willingness to communicate in English

These observations correspond with *Watson's* (2014) findings regarding the developmental stages of PBL implementation.

2. Student Response Analysis

Key themes from student feedback:

a. Increased motivation for listening practice.
b. Better understanding of real-world applications.
c. Enhanced problem-solving confidence.
d. Improved collaborative learning skills.

Discussion

1. Impact on Listening Comprehension

The significant improvement in listening comprehension scores (17.1 points from pre-test to cycle 2) demonstrates the effectiveness of PBL in enhancing listening skills. This improvement can be attributed to several factors identified by Rahman et al. (2016):

a. Contextualized Learning
    1. Real-world problems provided meaningful context.
    2. Authentic listening materials increased engagement.
    3. Practical applications enhanced retention.
b. Active Engagement
    1. Problem-solving activities promoted active listening
    2. Group discussions reinforced understanding
    3. Peer learning supported skill development

2. Student Engagement and Motivation

The increase in student engagement metrics aligns with Williams' (2019) findings on PBL's motivational benefits:

a. Enhanced participation in classroom activities.
b. Improved attendance and punctuality.
c. Greater initiative in group discussions.
d. Increased confidence in tackling challenging tasks

3. Implementation Challenges and Solution

Several challenges were identified and addressed:

a. Time Management

Challenge: Initial activities took longer than planned.

Solution: Restructured activity timeframes and improved task scaffolding.

b. Group Dynamics

Challenge: Uneven participation in group work.

Solution: Implemented clearer role assignments and rotation systems.

c. Language Anxiety

Challenge: Initial hesitation in English communication.

Solution: Created supportive environment and gradual difficulty progression.

4. Pedagogical Implications

The findings suggest several important implications for teaching practice:

a. Curriculum Design
   1. Integration of real-world problems enhances learning relevance.
   2. Balanced scaffolding supports student progress.
   3. Flexible implementation allows for adaptation to student needs.

b. Assessment Practices
   1. Continuous assessment provides better learning feedback.
   2. Multiple assessment methods capture different aspects of progress.
   3. Integration of self and peer assessment promotes learning awareness.

CONCLUSION

Based on the results of the analysis, it can be concluded that the implementation of Problem-Based Learning (PBL) at SMKS KR Ulususua has shown significant effectiveness in improving students' listening skills. Through two cycles of classroom action research, students showed a significant increase in their listening comprehension scores, increasing from an initial average of 65.3 to 82.4. The success of the implementation of PBL is evident not only in quantitative measures but also in qualitative aspects such as increased student engagement, increased motivation, and increased problem-solving abilities. This study confirms that PBL provides an effective framework for developing listening skills in the context of vocational schools, especially when implemented with careful consideration of student needs and systematic planning.

BIBLIOGRAPHY

Azzad, N. (2024). *A Project-Based Learning Curriculum for Spanish Heritage Language Learners: Implications for Written and Oral Development*. Arizona State University.

Bi, S., Liu, R., Li, J., & Gu, J. (2021). The effectiveness of problem-based learning in gynecology and obstetrics education in China: A meta-analysis of randomized controlled trials. *Medicine*, *100*(9), e24660.

Burgos, L. (2023). *The Effectiveness of KWL and SQ3R Reading Strategies Comprehensible Input Approach on Reading Comprehension of English Language Learners (ELLs)*. Northcentral University.

Gijbels, D., Dochy, F., Van den Bossche, P., & Segers, M. (2005). Effects of problem-based learning: A meta-analysis from the angle of assessment. *Review of Educational Research*, *75*(1), 27–61.

Hassan, M. U., & Akbar, R. A. (n.d.). *Tracing The Effects Of Students'centered Teachers'pedagogical Approaches On Learners'educational Gains: Case Of Public Sector Secondary Schools*.

Hmelo-Silver, C. E., & Barrows, H. S. (2015). Problem-based learning: Goals for learning and strategies for facilitating. *Essential Readings in Problem-Based Learning: Exploring and Extending the Legacy of Howard S. Barrows*, 69–84.

Li, S., Hong, Y.-C., & Craig, S. D. (2023). A systematic literature review of Social Learning Theory in Online Learning environments. *Educational Psychology Review*, *35*(4), 108.

Missildine, K., Fountain, R., Summers, L., & Gosselin, K. (2013). Flipping the classroom to improve student performance and satisfaction. *Journal of Nursing Education*, *52*(10), 597–599.

Ramirez-Verdugo, M. D. (2024). *Interdisciplinary Research and Innovation in Bilingual and Second Language Teacher Education*. Routledge.

Savery, J. R. (2015). Overview of problem-based learning: Definitions and distinctions. *Essential Readings in Problem-Based Learning: Exploring and Extending the Legacy of Howard S. Barrows*, *9*(2), 5–15.

Thomas, M., & Schneider, C. (2020). *Language teaching with video-based technologies: Creativity and CALL teacher education*. Routledge.

Utterback, E. M. (2023). *The Effect of Problem-Based Learning on Motivation, Engagement, and Teacher Efficacy*. Missouri Baptist University.

Wijnia, L., Noordzij, G., Arends, L. R., Rikers, R. M. J. P., & Loyens, S. M. M. (2024). The effects of problem-based, project-based, and case-based learning on students' motivation: A meta-analysis. *Educational Psychology Review*, *36*(1), 29.

Zakaria, M. I., Maat, S. M., & Khalid, F. (2019). A systematic review of problem based learning in education. *Creative Education*, *10*(12), 2671.