ENHANCING STUDENTS' ENGLISH LEARNING MOTIVATION THROUGH DIFFERENTIATED INSTRUCTION WITH FUN GAME ACTIVITIES

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Abstract

Motivation has been considered as one factor determining students' meaningful learning. The Classroom Action Research (CAR) integrating fun game-based learning activities into Differentiated Instruction is aiming at enhancing students' English learning motivation. This CAR will recruit 32 seventh graders of a public junior high school in Central Java. Observation will be data collection methods. This study is cyclical in which each cycle follows such stages as planning, action, observation, and reflection. The focused aspects of Differentiated instruction will be content and process. Regarding the content aspect, instructional materials will be designed aligning with students' characteristics such as motivation, competence, and learning styles. In terms of the process aspect, different game-based learning activities will be provided to help students be more engaged in the classroom. Qualitative methods will be used for the data analysis. The results of the pre-cycle study indicated that the average student motivation was 35.63% which means it needs to be increased. However, in Cycle 1, this percentage increased to 75.63%, which means it is good, and further improved to 82.50% in Cycle 2, which means it is very good. Therefore, it can be concluded that integration of fun game-based learning into Differentiated Instruction will be able to boost students' English learning motivation.

Keywords – Learning Motivation, Differentiated Instruction, Fun Game Activity

Introduction

Motivation has been considered as one factor determining students' meaningful learning. By having learning motivation, students can know or understand the concepts of the material being studied and apply the knowledge they have acquired. During the learning process, students will also show good enthusiasm by being actively involved in achieving learning objectives. Wardani A.D. et al. (2020) explained that in learning activities, learning motivation functions as an overall driving force for a student to achieve the expected learning goals. Motivation aligns with the learning results. If there is good motivation in the learning process, the results will also be good. Therefore, the intensity of students' motivation will greatly determine their achievement motivation in learning (Rahman, S., 2022). Without any motivation for learning, it becomes impossible for the students to engage in learning activities.

Thoifuri (as cited in Oktiani, I., 2017) explains that in education, motivation is oriented towards achieving psychological conditions that encourage a person to be passionate about learning. However, each student has different characteristics and conditions, including learning motivation. In teaching practice at school, the teacher finds that many students are not enthusiastic about learning English. Students are like only objects that accommodate what the teacher conveys. Therefore, it is not uncommon for them to look bored, reluctant to get involved in various activities, and become passive. The lack of motivation among students indicates that their need for a safe and enjoyable learning environment needs to be met. Papilaya & Huliselan (2016), explain that

the learning process may be hindered for students who are frequently compelled to use inapropriate methods or techniques that the do not enjoy

Every student has a different learning style which is a crucial role in the learning process. According to De Porter (cited in Magdalena, I., & Affifah, A. N. ,2020) A person's learning style is a combination of how they absorb and then organize and process information. Some students are visual learners, while others are auditory or kinesthetic learners. Hamzah (cited in Magdalena, I., & Affifah, A. N., 2020) explains that the visual learning style involves relying more on sight. Students with a visual learning style tend to observe or imagine what is being discussed, sensitive to colors and find it easier to remember specific concepts or materials by optimizing their visual abilities. On the other hand, De Porter (cited in Magdalena, I., & Affifah, A. N. , 2020) describe auditory learning style as relying on the sense of hearing to facilitate the learning process. Students with an auditory learning style prefer to receive information orally, find it easier to remember materials through listening to lectures or discussions and comprehend instructions better when delivered verbally rather than through reading. Lastly, regarding the kinesthetic learning style, students with this style easily absorb information through movement, action, and touch. According to De Porter (cited in Magdalena, I., & Affifah, A. N., 2020) kinesthetic learners remember information by actively participating in their learning activities. They cannot sit still for extended periods and find it easier to memorize by walking around and observing. With this background, teachers should adapt their teaching and activities to suit students' learning styles. When teachers have adjusted their teaching to match students' learning styles, the result is students will feel comfortable and happy while learning English because the teacher pays attention to their individual needs.

The diversity of students' conditions in the classroom, especially their learning motivation and learning style, requires specific handling and attention from teachers. Teachers cannot treat or assign tasks equally to all students. Therefore, teachers need to implement differentiated instruction. Differentiation is a teaching philosophy emphasizing respect for students, acknowledging their differences, and aiming to help all students thrive (Tomlinson et al., as cited in Smale-Jacobse et al., 2019). Whereas, Differentiated instruction (DI) is a well-known and proven approach that effectively responds to the diverse needs of students (Pozas, Letzel, & Schneider, 2020). Based on these two explanations, it can be understood that teachers can modify the learning process according to the individual learning needs of each student.

There are at least four elements of Differentiated Instruction: content, process, product, and affect/learning environment. This study focuses on differentiating content and process. According to Tomlinson (cited in Unal, A., et.al., 2022) content refers to the knowledge, understanding, and skills (KUD) students need to learn. In terms of enhancing learning motivation, the content or learning materials will be designed to align with students' characteristics, such as learning styles. On the other hand, Tomlinson (cited in Unal, A., et.al., 2022) define the process as "how students come to understand and make sense of the content." From that definition, a differentiated process is related to learning activities that help students comprehend something. Regarding the process aspect, various game-based learning activities will be

provided to enhance students' engagement in the classroom.

According to Rahman, S. (2022), the development of learning motivation can arise from intrinsic and extrinsic factors. E. Prayitno cited on Wardani A.D. et al. (2020) explained that Intrinsic motivation is the desire to act which is caused by an internal driving factor. Therefore, intrinsic factors are related to the student's drive or desire, while extrinsic factors emerge due to rewards, conducive environments, and enjoyable and interesting activities. When sttudents have intrinsic motivation they will show high involvement and activity in learning. In another hands, Sardiman (cited on Wardani A.D. et al. 2020) state that Extrinsic motivation is defined as motives that are active and function because of external stimuli. Based on that definition, the teacher can create conditions and learning environment that are favorable to offer extrinsic motivation. Teachers can implement media in teaching to create enjoyable and interesting learning activities. One alternative media for enhancing students' learning motivation is through games.

Games have always been a topic of interest among the younger generations (Mohanty A. et al., 2021). Byusa E. et al. (2022) also explains that educational games can enhance students' conceptual understanding while increasing their motivation to learn and allowing them to have fun while making sense of the learned content. Game-based learning environments allow learners to take action, experience consequences, and learn from mistakes. In a gaming environment, learners can view failure as a challenge and be encouraged to seek appropriate solutions.

According to Susilo, Y. (2013), the characteristics of students with high learning motivation are: a) Being interested in and curious about the subjects. b) Paying full attention to the lessons. c) Actively engaging in learning activities. d) Being involved in classroom group activities. e) Being driven to complete tasks. f) Enjoying problem-solving. g) Striving to deepen their knowledge in the studied field. These characteristics of students with high learning motivation can serve as criteria for success in formulating observation indicators for learning motivation in observation sheets when collecting data.

Based on the above description, the researcher conduct a study in the classroom using Classroom Action Research (CAR) to enhance students' learning motivation. Guided by the above background, the research question can be formulated: "What is the influence of implementing Differentiated Instruction with fun game activities on students' English learning motivation?" To answer this research question, the Classroom Action Research (CAR) integrating fun game-based learning activities into Differentiated Instruction aims to enhance students' English learning motivation.

Methodology

This research will use Classroom Action Research (CAR) and recruits 32 seventh-grade students from a public junior high school in Central Java. Kusuma, as cited in Arifin, M., & Abduh, M. (2021), explains that classroom action research is a research conducted when a group of students identifies their problems, and then the researcher or teacher determines an action as a solution to address those issues. In CAR, the research study follows a cyclical process consisting of planning, action, observation, and reflection as well as by using the spiral model as stated by Kurt Lewin (cited on Arifin, M., & Abduh, M., 2021).

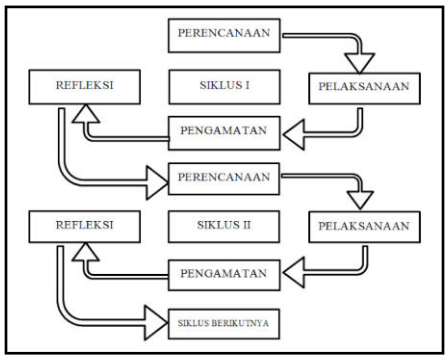

Figure 1. Spiral Model Chart by Kurt Lewin

In the planning stage, the researchers identify an issue or problem to study. After that, the researcher informs the English teacher and the supervising lecturer about the research and prepares a learning plan based on student profiling results, materials, media, and student names for assessment. The researcher also provides instruments such as observation sheets and a handphone to document the learning process.

In the action stage, the researcher divides the students into three groups based on their learning styles: auditory, visual, and kinesthetic. In one class, there are ten students in the auditory group, six in the kinesthetic group, and 16 in the visual group. To implement content differentiation, the teacher presents the same topic in different forms based on their learning styles as a concept-building stage of knowledge. The visual group receives a module with attractive and colorful illustrations. The auditory group is provided with barcodes that link them to explanatory videos on YouTube. Meanwhile, the kinesthetic group is given a module with various stimulating activities. For example, in understanding the concepts of cardinal and ordinal numbers, the students will directly practice counting blocks and arranging them on paper in order of their seat numbers, from largest to smallest. Each group will engage in discussions to understand the material and answer questions posed by the researcher about the conclusions they draw after discussing the concepts.

After understanding the material, the students will proceed to complete worksheets. They will still be in their respective groups, organized according to their learning styles. The teacher provides games that suit their learning styles as a form of process differentiation. The visual group receives a flashcard game where they compete to pick ten cards (e.g., numbers) and write them on their worksheets. The auditory group plays the "whisper word" game, where each student takes turns whispering a word to their friends responsible for guessing the word. They compete to complete the provided worksheet quickly. Lastly, the kinesthetic group plays the Puzzle game, where the puzzles are attached to the blackboard, and the students stand and work on them. This rule prevents restlessness by having the students sit at their desks continuously. They compete to solve the given puzzles.

Each group has a winner who completes the worksheet provided by the teacher the fastest. The winners receive rewards as incentives. Although the winners are determined individually, the worksheet completion process still emphasizes teamwork. This way, each student can assist one another during the activity.

During the observation stage, the activities involve observing the learning process, starting from the opening, students' activities during concept-building discussions, completing worksheets through games, and closing. The researcher records progress and challenges encountered during the implementation of actions as self-reflection in a daily journal. The researcher also uses observation sheets in the form of a behavioral checklist. The teacher can observe the presence or absence of students' learning motivation behaviors through the observation sheets by marking checkboxes on the prepared

table. Additionally, the teacher records the learning activities. The researcher's notes and the observation sheets are used as materials for reflection. Video documentation is utilized to review the implemented activities more thoroughly. This action aims to minimize the teacher's distraction during classroom observations due to limited time.

Finally, in the reflection stage, as described by Mertler (as cited in Pardede and Parlindungan, 2019), the researchers critically explore their actions, the reasons for their decisions, and the effects of those actions. In this stage, analysis and discussion of the data are conducted to make sense of the findings. In this stage, the results obtained by the researcher during the observation phase are collected and analyzed. Reflection is carried out in each cycle to continually improve any shortcomings identified in the previous cycle, thus leading to better outcomes. In other words, the data analysis results obtained in each cycle are used as a reference for planning the subsequent cycle.

Observation is used as data collection methods. Observation is a data collection technique where behaviors are observed in natural settings. C. Y. Younge (cited in Pandey and Pandey 2021), describes observation as a thorough study based on visual observation. During the observation process, group behaviors and problems related to social institutions are evaluated. The researcher prepares a behavioral checklist as an observation sheet to evaluate students' engangement during the learning process. Herdiansyah (cited in Netriwati, N., et.al., 2023) explain that there are five observation methods. That methods are anecdotal record, behavioral checklist, participant chart, rating scale dan behavioral tallying and charting. In this study the researcher utilized the behavioral checklist. This method involves marking checkboxes on a predefined table containng behavior indicators the observee might display.

Qualitative methods will be used for data analysis. Qualitative data analysis involves the classification and interpretation of linguistic (or visual) material to make statements about the implicit and explicit dimensions and structures of meaning-making within the material and what is represented in it (Mezmir, 2020). This analysis aims to explain the differences that occur when the researcher implements fun game-based learning activities into Differentiated Instruction during the learning process and its influence on enhancing students' English learning motivation.

In the data collection phase, the researchers analyze the findings using percentages to identify the state of student learning motivation for each indicator in the observation sheet and the average condition of student learning motivation in the class. Subsequently, the result are elaborated in a description of the development of learning motivation in each cycle. The identification of the student's learning motivation form observation sheet is calculated using the following formula:

$$P = \frac{f}{N} \text{ X } 100\%$$

Note:

P: Percentage of student learning motivation in every indicator of observational sheet

F: The frequency of students meeting the indicators

N: Number of total students in the classroom

Sasrawangi A. et al. (2021) explain that to measure the success of observed learning motivation; the researchers can calculate the percentage for each indicator on the observation sheet and the overall motivation percentage in one class. The criteria that can be used as benchmarks are as follows:

1) Compatibility Criteria (%): 0-20 = Too low
2) Compatibility Criteria (%): 21-40 = Insufficient
3) Suitability Criteria (%): 41-60 = Adequate
4) Compatibility Criteria (%): 61-80 = Good
5) Compatibility Criteria (%): 81-100 = Very Good

Finding and Discussion

This research was conducted in two cycles, based on the conducted learning, students' learning motivation experienced a significant improvement. Before moving to cycle 1, the researcher carried out a pre-cycle action to measure the learning motivation obtained from the observation sheets. The following is the researcher's observation results regarding English learning motivation, starting from the pre-cycle, cycle 1 to cycle 2:

Table 1. The observation result of students' learning motivation

No	Observation components	% Pre-cycle	% Cycle 1	% Cycle 2
1	Student pay attention and study the material given by the teacher through differentiated content that matches their learning styles.	59.38	81.25	87.50
2	Student focus on their tasks and responsibilities, not fooling around with their friends during lessons.	53.13	78.13	84.38
3	Student actively engage in discussions to build the concepts of knowledge through differentiated content provided by the teacher.	21.88	75.00	81.25
4	Student asks the teacher when they need help to understand the taught material.	15.63	65.63	71.88
5	Student answer questions posed by the teacher.	25.00	71.88	75.00
6	Student actively participate in completing worksheets through games as a form of differentiated process provided by the teacher.	25.00	78.13	84.38
7	Student helps classmates who need help in understanding the material or doing the student's worksheet during group discussions.	18.75	71.88	78.13
8	Student completes all tasks from the teacher, starting from discussing material and completing the worksheet.	75.00	84.38	87.50

9	Student is on time in completing and submitting tasks.	40.63	65.63	87.50
10	Student enjoys and enthusiastically work on worksheets presented through games as a form of process differentiation.	21.88	84.38	87.50
The average percentage of student's learning motivation		**35.63**	**75.63**	**82.50**
Criteria		**Insufficient**	**Good**	**Very Good**

From the table above, it can be observed that the learning motivation of the students in the pre-cycle is insufficient with the learning motivation percentage being only 35.63%. Therefore, to enhance the students' learning motivation, the researcher then conducted a Classroom Action Research (CAR) by integrating fun game-based learning activities into Differentiated Instruction. As the result student's learning motivation is increased to 75.63% in Cycle 1 which is the criteria is good and improved to 82.50% in Cycle 2 which is the criteria is very good. The following is a discussion regarding the improvement in each indicator:

1. **Student pay attention and study the material given by the teacher through differentiated content that matches their learning styles.**

There was a significant increase in students' attention and engagement with the differentiated content that matches their learning styles. The percentage increased from the pre-cycle (59.38%), cycle 1 (81.25%) to cycle 2 (87.50%). This motivation has developed from being sufficient to very good. Many students should have paid more attention to the learning process in the pre-cycle stage. The Student did not enjoy learning the material because the teacher presented the material using only one method: lecturing. Students were directed to listen for a long time, eventually becoming bored. To address this condition, in Cycle 1, the researcher implemented differentiated content. Differentiated content was done based on the results of learning style profiling. The teacher grouped the students according to their learning styles during the learning process. Each group was given the same material but presented in different formats. Students with a visual learning style were engaged with colorful and illustrated modules provided by the teacher. Students with an auditory learning style were interested in watching instructional videos on YouTube. Meanwhile, students with a kinesthetic learning style were engaged in hands-on activities such as arranging blocks to learn about cardinal numbers, creating rankings within their groups to study ordinal numbers, or even drawing clocks to understand the concept of time. After the discussion, the students were asked to answer questions to express their understanding of the material.

In Cycle 1, some students had indeed shown an improvement in motivation. However, some still couldn't pay proper attention. This condition was evident through their passive attitude or other activities during the learning process. Therefore, in Cycle 2, the researcher appointed group leaders in each group to ensure that all students contributed and learned the material effectively. By doing this, the first indicator showed improvement again in the second cycle.

2. **Student focus on their tasks and responsibilities, not fooling around with their friends during lessons**

The data from the second indicator indicates a significant improvement in students' learning motivation, especially regarding their focus during lessons. In the pre-cycle, only 53.13% of students were observed to be focused during the learning process. Many other students in the class could have been more attentive, engaging in individual activities and causing disturbances. Students were also sitting in groups with their playmates, making it easy for them to interact and joke around during lessons. They should have paid more attention to the teacher as well.

To address this issue, in Cycle 1 and Cycle 2, the teacher grouped students based on their learning styles. Arranging the group according to learning style prevented students from choosing to sit and caused disturbances with their playmates again. The teacher's efforts in conducting ice-breaking activities, providing rewards, and implementing consequences also helped keep the students focused during the learning process. As a result, students were less likely to create disruptions independently and were more engaged in the learning activities. This approach fostered a more focused and attentive learning environment for the students. In the end, the learning motivation of the students for the second indicator showed an improvement compared to the pre-cycle. In Cycle 1, the learning motivation of the students was already good, reaching 78.13%. However, in Cycle 2, the learning motivation of the students increased significantly to a very good level, with a percentage of 84.38%.

3. Student actively engage in discussions to build the concepts of knowledge through differentiated content provided by the teacher.

In the pre-cycle, the level of student engagement in discussions to build knowledge was only 21.88%. Only a few students actively participated in discussions and assisted each other in understanding the material. This condition was due to the teacher's lecture-based teaching method, where students were mainly tasked with listening to the presented material. Consequently, the teacher was the sole source of information, and students needed the opportunity to brainstorm and develop their concepts, limiting their critical thinking skills.

To address this issue, the researcher implemented differentiated content in Cycle 1 and Cycle 2. Students were encouraged to explore and construct their knowledge about a particular subject through differentiated content. Moreover, the content was tailored to match the student's learning styles. This approach allowed students to actively engage in learning and develop a deeper understanding of the material. In Cycle 1, the student's learning motivation increased to 75.00%. In Cycle 2, the researcher appointed a group leader in each group to maximize student participation further and emphasized that students would be chosen to present their understanding of the material. As a result, the student's learning motivation increased to 81.25%. These improvements indicate that implementing differentiated content and empowering students in learning have positively impacted their motivation to learn and actively participate in discussions.

4. Student asks the teacher when they need help to understand the taught material

In the pre-cycle, the motivation of students to ask questions could have been higher, with only 15.63% actively participating in asking questions. Students tended to be passive during the learning process or hyperactive, leading to disturbances in the classroom. The researcher implemented differentiated content to address this issue that encouraged students to ask questions. By

providing a stimulating learning environment, students felt more confident to inquire about what they needed to do, the meaning of certain concepts, or specific materials.

Through the process of differentiated content, students showed a willingness to be guided and started asking questions about various topics. The researcher also incorporated differentiated learning activities with different games for each group, introducing group competition and motivating students to perform well in their tasks. As a result, students spontaneously began asking questions about concepts, word meanings, or how to play the assigned games. This approach effectively increased the students' motivation to ask questions.

In Cycle 1, the motivation of students to ask questions increased to 65.63%, and in Cycle 2, it further improved to 71.88%. During Cycle 2, more students were eager to know and dared to ask questions. Through that result, the researchers conclude that implementing differentiated content and process enhanced the students' motivation to inquire and fostered a sense of curiosity and active engagement in the learning process.

5. **Student answer questions posed by the teacher.**

In the pre-cycle, only 25.00% of students actively participated in answering questions. However, after implementing differentiated content and process in Cycle 1, the motivation to answer questions increased significantly to 71.88%. In Cycle 2, the motivation remained high at 75.00%, indicating a continued active and participative learning environment. The data suggest that the differentiated approach positively impacted students' motivation, fostering inclusivity and higher engagement.

6. **Student actively participate in completing worksheets through games as a form of differentiated process provided by the teacher.**

Before implementation of differentated process (pre-cycle), only 25.00% of students actively participated in completing worksheet. The rest of them are keep passive along the learning time. If not, students will rely only on the work of others to copy.

However, in cycle 1, after the researchers implemented differentited process through fun game activity based on their learning style, the motivation to actively participate in completing worksheets increased to 78.13%. In Cycle 2, the motivation to actively participate in completing worksheets through games further improved to 84.38%. This indicates that the differentiated approach continued to enhance students' motivation and enthusiasm for learning through interactive activities.

7. **Student helps classmates who need help in understanding the material or doing student's worksheet during group discussions.**

In the pre-cycle, only 18.75% students actively helped their classmates during the activity in the classroom. This low percentage indicate that student were not actively enganged in supportng their peers because of lack of motivation and traditional learning environment that did not prioritize collaboration. Therefore, in cycle 1, the researcher implement differentiated content and process which can enhance student motivation to help classmate. The percentage of motivation also increased significantly to 71.88%. Then, in cycle 2, the motivation to help one and another remained high, at 78.13%. This improve that the positive

learning environment motivated student to be more engaged to support their friends during learning process.

8. **Student completes all tasks from the teacher, starting from discussing material and completing the worksheet**

   In the pre-cycle, 75.00% of students completed all tasks form the teacher. This criteria has already good for the student motivation. However, in cycle 1, after the implementation of differentiated process, the motivation to complete all tasks increased to 84.38%. This is indicate that fun game-based learning, served as a trigger for students to be more enthusiastic and motivated to finish all assigned tasks. In cycle 2, the motivation to complete all the tasks remained high, that is 87.50%. For that condition, enjoyable and tailored learning activities apparently make the students becine nire eager to participate in the learning process.

9. **Student is on time in completing and submitting tasks.**

   In the pre-cycle, only 40.63% of students completed and submitted tasks on time. This percentage indicates that many students needed to be punctual in their task completion, which could have been due to various reasons such as lack of interest, unclear instructions, or disengagement. Therefore the researchers implement a differentiated process through fun game activity. As a result, the motivation to complete and submit tasks on time increased to 65.63% in Cycle 1 and improved to 87.50% in Cycle 2. This result shows that creating a more engaging and enjoyable learning environment for example by tailoring the tasks according to students' learning styles and preferences. As a result, more students were motivated to complete and submit their tasks on time.

10. **Student enjoys and enthusiastically work on worksheets presented through games as a form of process differentiation.**

    In the pre-cycle, only 21.88% of students enjoyed and enthusiastically worked on worksheets presented through the traditional methods, for example, googling the material and spontaneously making the dialog with their friends. It indicates a need for more engagement and motivation in the traditional teaching approach. However, after implementing differentiated processes with fun game-based activities tailored to students' learning styles, the motivation significantly increased to 84.38% in Cycle 1 and 87.50% in Cycle 2. That is prove that ifferentiated processes and interactive games positively impacted students' enjoyment and enthusiasm for completing worksheets, fostering active participation and learning eagerness. Furthermore in differentiated processes the researchers conducted the learning with fun competitions within groups and give rewards for the winners It is also to stimulate students' motivation and enthusiasm for completing the worksheets.

Conclusion

Motivation plays a crucial role in students' meaningful learning. When motivated, students understand the concepts taught and can apply their knowledge effectively. Motivation drives students to participate in the learning process actively. In contrast, lacking motivation can lead to disengagement and a passive learning attitude. This research

shows that each student has unique characteristics, including learning style, that influence their learning process. The researcher used student learning styles to conduct differentiated instruction. Therefore in the teaching-learning process, the researcher provides the student the differentiated content and process based on their learning style.

Differentiated content and process significantly increased students' motivation in various aspects, such as active engagement in discussions, completion of tasks, answering questions, and helping classmates. Fun game-based activities tailored to learning styles proved that they can enhance students' enjoyment and enthusiasm for completing worksheets and participating in group discussions. The use of competitions and rewards further stimulated motivation. As discussed before, teachers can create a more engaging and enjoyable atmosphere according to the extrinsic factors of motivation. Therefore, students are more motivated to learn and actively participate in the learning process. The results of the pre-cycle study indicated that the average student motivation was 35.63% which means it needs to be increased. However, in Cycle 1, this percentage increased to 75.63%, which means it is good, and further improved to 82.50% in Cycle 2, which means it is very good. Therefore, it can be concluded that integration of fun game-based learning into Differentiated Instruction will be able to boost students' English learning motivation.

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