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Implementing TaRL in physical education: Mastering specific skills in soccer games for junior high school students

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ABSTRACT

Teaching at the Right Level (TaRL) is one of the unique approaches adopted by the independent curriculum and has been widely applied in various countries, including Indonesia. This study aimed to determine the implementation of the TaRL approach in physical education, especially in teaching specific soccer skills in soccer games. The method used in this research is quantitative descriptive design, and the sample included 50 junior high school physical education teachers and 50 seventh-grade students. Data collection techniques included distributing questionnaires, conducting observations, and interviewing participants. The study concluded that, based on observations of PE lessons,76% of teachers had implemented the TaRL approach, and 72,80% of teachers responded positively to its application in achieving phase D learning objectives. Additionally, 88% of students responded positively to using TaRL in learning specific soccer skills. Interviews with several teachers and students supported these findings. The interviews revealed that TaRL enabled teachers to divide and organize class groups more effectively based on the needs and abilities of each student. Several students, particularly female students, reported feeling more comfortable and enjoying the process of learning specific skills and practices through the TaRL approach.

Keywords: implementation, physical education, soccer, TaRL

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INTRODUCTION

The Merdeka curriculum is a comprehensive framework that prioritizes intracurricular learning, facilitating more effective content delivery to ensure students have adequate time to comprehend concepts and enhance their skills (Ndari et al., 2023; Januarita et al., 2023; Yulianti et al., 2023; Fauzi et al., 2023). The educator can use diverse pedagogical approaches to customize courses according to each student's learning preferences and requirements (Sivarajah et al., 2019; Vreuls et al., 2022; Ouyang & Ye, 2023).

In 2022/2023 and 2023/2024, the Merdeka curriculum was one of the options available for educational institutions in Indonesia. The Merdeka curriculum provides flexibility, enabling educators to implement deeper learning tailored to student needs, emphasising character development. It also emphasizes critical thinking skills and encourages students to be independent learners (Marlina et al., 2023; Yulianti et al., 2023; Ndari et al., 2023). Additionally, the Merdeka curriculum strongly emphasises the real-world application of knowledge, encouraging students to think creatively and problem-solve (Sibuea et al., 2023; Cristiana et al., 2023).

On prioritizing character development, critical thinking, and independence, students are better equipped to succeed in a rapidly changing world (Southworth, 2022; Fauzi et al., 2023). The curriculum's adaptability facilitates a personalized and engaging learning experience, ensuring that each student achieves their maximum potential (Pon-Barry et al., 2019; Agus et al.,

2023; Zhanqiang, 2023). The focus on creativity and the cultivation of problem-solving skills enhances students' capacity to adapt and succeed in various circumstances (Khalid et al., 2020; Sengupta et al., 2020).

Teaching at the Right Level (TaRL) represents a solution for teachers to ensure that they can teach all their students based on their respective competencies (Sukarso et al., 2022; Smith et al., 2023; Hadiawati et al., 2024). This approach enhances the learning experience, facilitating greater engagement and personalization, improving long-term knowledge retention and skill proficiency (Indartiningsih et al., 2023; Dahnial et al., 2023; Low, 2023).

This targeted teaching approach can assist students in improving their technique, strategy, and overall performance on the field in the context of physical education, such as in sports like soccer (Zhang, 2022; Du et al., 2022; Rahman, 2023). Teachers can ensure that students receive instruction at an appropriate level for their current ability in physical education by implementing the Teaching at the Right Level (TaRL) approach. This will assist students in developing their abilities and self-assurance.

To illustrate, in a soccer lesson, the instructor could divide the class into groups based on skill level and provide each student with individualized attention, thus facilitating their advancement in their respective skills (Suryaman, 2019; Merchan-Osorio et al., 2019; Santos et al., 2020). Students can advance their soccer skills more successfully and confidently by concentrating on their needs and capabilities (Gunawan et al., 2023; Li et al., 2018; Dumont & Ready, 2023).

A more customized approach to instruction may result in improved overall performance and increased love of the sport. However, students in lower skill-level groups might experience fewer challenges and less motivation compared to those in higher-level groups, potentially undermining the effectiveness of this method (Bahadir, 2018; Smart & Wahl-Alexander, 2020; Levenberg et al., 2020; Lachner et al., 2021).

Some students may not improve, and the group may feel unfairly treated or discouraged. While some students may benefit from tailored training, others in lower-skill groups may feel excluded and discouraged as a result. Ultimately, this can result in a decline in the group's general motivation and output.

It is important for coaches and educators to consider the individual needs and abilities of all students when implementing training programs By providing personalized attention and support to each student, regardless of their skill level, coaches can create an inclusive and supportive environment that fosters growth and improvement for all participants (Reber et al., 2018; Andini et al., 2020; Katitaş & Coşkun, 2020; Zhang et al., 2020; Muñoz-Martínez et al., 2021).

This approach can assist in preventing feelings of exclusion and discouragement, ultimately contributing to a more positive and successful experience for all parties involved.

The TaRL mechanism is an approach that addresses learning gaps by adjusting the level of instruction based on the student's ability. TaRL aims to identify students' levels of understanding and provide learning materials appropriate for their abilities rather than just their age or grade (Banerjee et al., 2015). This is accomplished through a battery of diagnostic tests designed to assess students' comprehension, after which they are classified based on similar abilities rather than grade level. Banerjee et al. (2015) contend that this approach can significantly improve students' learning outcomes because the materials are more relevant and appropriate to their abilities.

According to Pritchett (2013), TaRL implementation yields superior long-term results because it helps students who frequently feel left behind in learning that is inappropriate for their ability. Additionally, this method enhances game-based learning, which can help students grasp concepts through more engaging and interactive activities. With this more individualized and flexible approach, students engage in more contextual learning and learn at their own pace (Pritchett, 2013).

This personalized approach can also assist students in identifying areas for improvement and establishing specific goals for themselves, thereby facilitating a more focused and intentional practice. Furthermore, by offering individualized feedback and assistance, teachers can assist

students in overcoming any obstacles they may encounter and facilitate their continued growth and development of skills (Baghurst et al., 2015; Vargas-Madriz & Nocente, 2023). In other words, this approach to physical education can enhance students' performance on the field and foster a love for the sport and a lifelong commitment to staying active and healthy.

METHOD

A descriptive quantitative research methodology was used in this study. In doing research on populations and samples, the positivist ideology serves as the foundation for the quantitative research approach (Ley, 2020; Zhang & Hu, 2020; Miksza et al., 2023). Research that displays data as numbers to present its findings is known as quantitative research. The descriptive research method involves studying the state of a group of people, objects, situations, ideas, or current events. Descriptive techniques create factual, accurate pictures of phenomena. Quantitative descriptive research uses real-world data to describe variables.

Questionnaires, interviews, and observations were used to collect data for this study. Purposive sampling is the method employed. Purposive sampling is a kind of non-random sampling in which a certain set of characteristics is intended to be present in the sample group (Campbell et al., 2020; Loso, 2022). The sample consisted of 100 respondents, 50 certified teachers working in junior high schools and 50 seventh-grade junior high school students with physical education learning successes at phase D, meaning they had mastered game and sports skills. The number of samples in this study was determined using the Partial Least Squares (PLS) method, which applies the formula of 25 times the number of independent variables.

This study has two independent variables: certified teachers and teaching for more than 5 years, so 50 teacher samples were used. In addition, Semarang City has 45 State Junior High Schools and 90 physical education teachers. Based on the team's interpretation and criteria, 50 out of 90 teachers were selected as research samples. The data can be seen in Table 1.

A Likert scale is used as the measurement scale, and quantitative and descriptive data analysis methodologies were employed in this investigation.

Table 1. Characteristic of participants

Participants	Gender	Average of Age	Average of Teaching Experience
50 PE Teachers	25 Man 25 Woman	35 years old	7 years (Certified)
50 Students	25 Boys 25 Girls	Grade 7th (13 years old)	-

Three aspects of observation are used to observe PE teachers while conducting lessons. The data are combined with the results of a questionnaire containing five statements by teachers about how they responded to the TaRL approach used to help teach the material on mastering basic soccer techniques for 7th-grade junior high school students. In addition, the results of the questionnaire, consisting of five statements given to students, also support the consistency of the study's findings.

FINDINGS AND DISCUSSION

Findings

This research was conducted utilizing the implementation tool of the Teaching at the Right Level (TaRL) approach, specifically designed for the content of fundamental football games and sportsmanship. The TaRL implementation assessment tool comprises three principal elements: diagnostic assessment, planning, and learning. Subsequently, the three elements were distilled into four indicators, which served as the basis for observing the 50 physical education instructors who participated in the study. The following guidelines were employed to observe data during the investigative process.

Based on the three aspects in Table 2, the researcher can display the field data results from observations of 50 physical education teachers, as in Table 3 and Figure 1.

Table 2. Observation guidelines

Aspect	Detail	Indicator
Assessment Diagnostic	Dividing into groups based on similar levels of achievement and ability	Observe students' competences Provide simple activities about basic game and/or sports techniques (football) Give students the opportunity to pass the ball to their friends in a group play situation. divide into several groups and provide different basic soccer technique practice activities for each group, adjusted to the student's abilities.
Planning	Designing various learning activities using various teaching tools	Compile teaching materials adapt all teaching tools to the characteristics of students Providing diverse learning resources to students Designing mini soccer-like game activities in each different group
Implementation	Pay attention to the progress of the level of achievement and basic abilities of student	Provide records of student ability development Conduct periodic assessments through individual and periodic performance Provide opportunities for students to practice basic soccer techniques in simple game situations provide feedback to students

Table 3. Data from observation results of TaRL implementation on the material on mastering basic game and sports techniques (soccer)

Indicator Aspect I				Indicator Aspect II				Indicator Aspect III			
1	2	3	4	1	2	3	4	1	2	3	4
Number of Schools				Number of Schools				Number of Schools			
2	4	4	40	4	4	4	38	4	3	7	36
4%	8%	8%	80%	8%	8%	8%	76%	8%	6%	14%	72%
Total percentage: 76%											

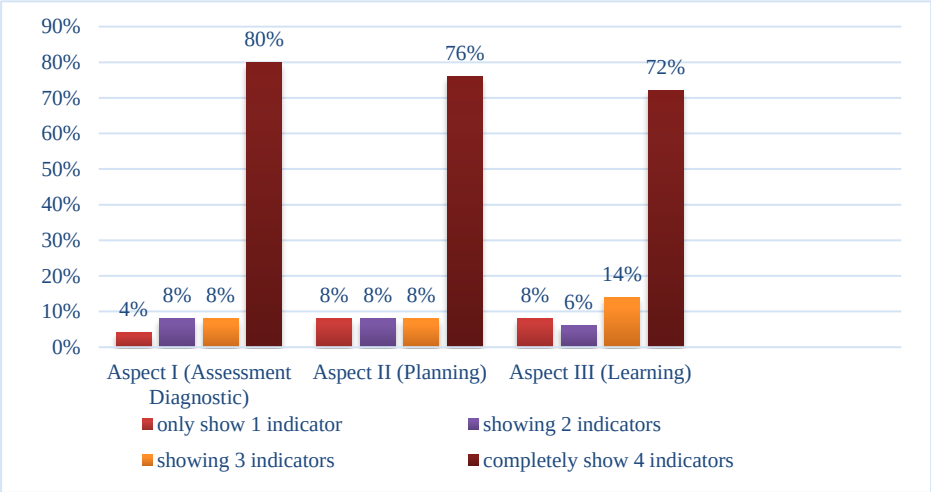

Figure 1. Bar chart result of field observation implementation TaRL

The data from the 50 physical education teachers indicate that 80% of the total number of teachers have demonstrated all the indicators associated with conducting diagnostic assessments. For aspect II, 76% of PE teachers have completed the planning stage. For aspect III, data indicates that 72% of PE teachers have addressed all indicators in the learning implementation stage. The results of the observations conducted on teacher practice in the field show that 76% of teachers have implemented TaRL, particularly in teaching the material on mastering basic soccer

techniques. To ensure the accuracy and validity of the data in this study, the questionnaire instrument used to assess teachers' and students' attitudes toward the Teaching at the Right Level (TaRL) method was combined with other data collection methods, such as direct observation.

Combining these data collection methods strengthens and improves the reliability of the research results because the data obtained from each method complements the other. Direct observation can provide a clear picture of how the TaRL method is implemented in the field. This approach enhances the findings while reducing bias and increasing the overall credibility of the research results. Furthermore, the instrument was prepared by competent experts in this field to ensure that it is appropriate for the research context and can accurately measure the intended variables.

The following section presents the questionnaire results completed by 50 junior high school physical education teachers. It included five statements regarding their responses to the TaRL approach in learning the material on mastering basic soccer techniques. Table 4 and the bar chart in Figure 2 show the questionnaire instrument and results.

Table 4. Response of PE teachers toward TaRL

	Statement	Scale			
		1	2	3	4
S1	TaRL is relevant for use in physical education learning	0 (0%)	3 (6%)	14 (28%)	33 (66%)
S2	TaRL makes it easier for PE Teachers to provide activities based on students' needs and abilities.	2 (4%)	6 (12%)	9 (18%)	33 (66%)
S3	TaRL is suitable for teaching basic technical skills of a game or sport	0 (0%)	0 (0%)	9 (18%)	41 (82%)
S4	Grouping according to ability in TaRL is appropriate for helping male and female students to do equalising activities according to their learning objectives.	0 (0%)	4 (8%)	6 (12%)	40 (80%)
S5	Through TaRL, physical education teachers can more easily monitor the development of their students' skills.	2 (4%)	2 (4%)	12 (24%)	34 (64%)
	Total Percentage :			72,80%	

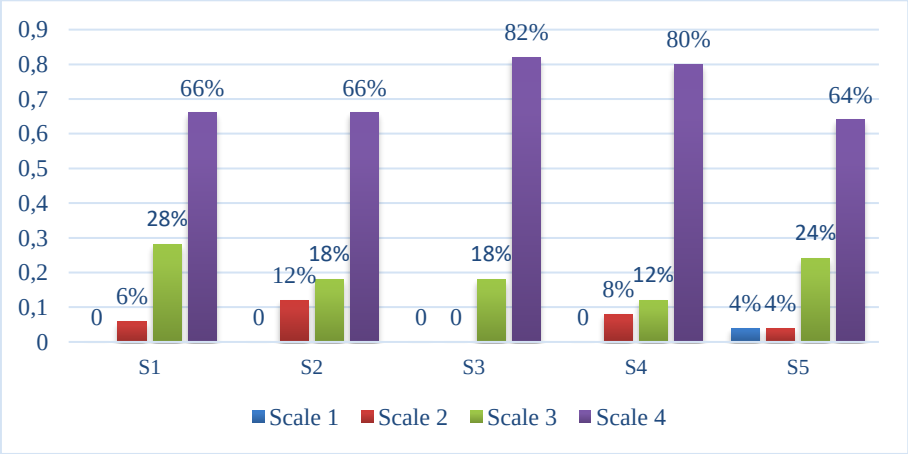

Figure 2. Bar chart result of PE teacher's questionnaire responses

Table 5 shows the results of the inferential statistical analysis of the questionnaire used to assess PE teachers' responses to the TaRL method. The first column displays the questionnaire questions, while the second column displays the significance value (Sig.) calculated using a two-tailed test to explain the relationship between measured variables and the desired outcomes. The significance values (0.007, 0.018, 0.005, 0.027, and 0.001) show a significant correlation between each question and the teachers' perception of TaRL. The third column displays the Cronbach's

Alpha value for each item, which indicates the questionnaire's internal consistency. A very high Cronbach's Alpha value (with an average close to 0.99) indicates that the questionnaire items are highly reliable, implying that this instrument can be trusted to measure what is intended.

Table 5. Inferential statistical analysis of the PJOK teacher response questionnaire to TaRL

Statement	Sig. (2-tailed)	Cronbach's Alpha Item
1	0.007	0.991
2	0.018	0.990
3	0.005	0.990
4	0.027	0.990
5	0.001	0.989

The subsequent result pertains to students' response to the instructor's implementation of the TaRL model in the learning material about the fundamental football techniques. The statements and results from 50 junior high school students are presented in Table 6.

Table 6. Response of students towards TaRL

	Statement	Scale			
		1	2	3	4
S1	The TaRL model makes me more confident in doing activities in physical education class.	0 (0%)	0 (0%)	6 (12%)	44 (88%)
S2	Through TaRL, I have more opportunities to practice the basic techniques I learned with friends in groups.	0 (0%)	0 (0%)	8 (16%)	42 (84%)
S3	TaRL, which the teacher implemented, helped me to be braver in trying according to my abilities.	0 (0%)	0 (0%)	8 (16%)	42 (84%)
S4	TaRL gives me the opportunity to interact more with friends while playing	0 (0%)	0 (0%)	4 (8%)	46 (92%
S5	Learning to practice basic football techniques with the TaRL model is more fun and not boring	0 (0%)	0 (0%)	4 (8%)	46 (92%)
	Total Percentage:			88%	

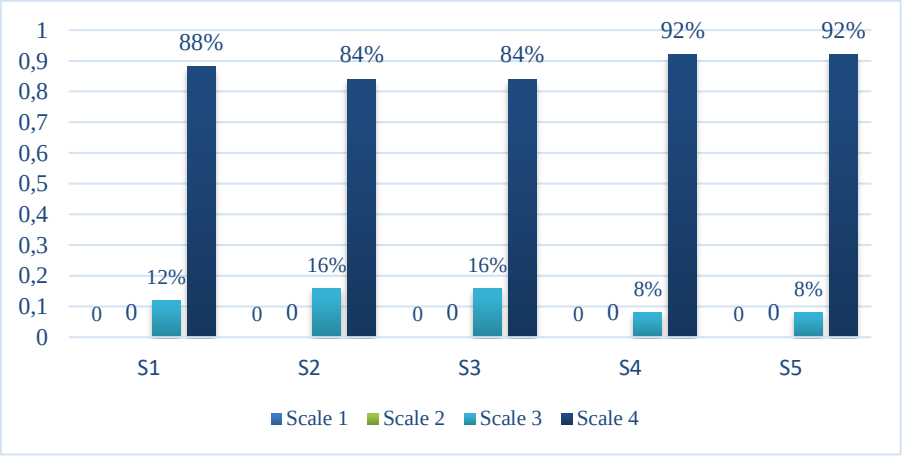

Figure 3. Bar chart result of student's questionnaire responses

The results of this study indicate a general sense of harmony regarding implementing the TaRL approach in physical education learning in junior high schools in the Central Java province. This is evidenced by the positive responses from teachers as respondents and the corroboration of these findings through observations made by researchers in the field. Furthermore, the students surveyed expressed a favourable opinion of the TaRL approach, particularly regarding the material on mastering basic techniques in sports, which they identified as a significant learning

achievement in physical education at the junior high school level. The study's overall results can be presented as a bar chart, as illustrated in Figure 3.

Table 7. Inferential statistical analysis of student response questionnaires for TaRL

Statement	Sig. (2-tailed)	Cronbach's Alpha Item
1	0.001	0.998
2	0.006	0.999
3	0.005	0.999
4	0.000	0.999
5	0.000	0.999

Table 9 displays the results of the questionnaire's inferential statistical analysis, which measures students' responses to the TaRL method. The first column displays the questionnaire question numbers, while the second column displays the significance value (Sig.) from a two-tailed test. Each question has a significant relationship with students' perceptions of TaRL, as indicated by significance values less than 0.05 (0.001, 0.006, 0.005, 0.000, and 0.000, respectively).

The third column displays the Cronbach's Alpha value for each item, which measures the instrument's reliability. A very high Cronbach's Alpha value (ranging from 0.998 to 0.999) indicates good internal consistency, implying that this questionnaire is reliable in assessing students' attitudes toward the TaRL method. These findings show that the instrument used has excellent measuring power and is reliable for assessing student responses.

Discussion

A limited amount of research focuses on teaching using the Right Level (TaRL) learning approach. Whereas TaRL focuses on providing students with opportunities to practice and master basic techniques through actual game situations, which can lead to a more engaging and effective learning experience.

TaRL helps teachers develop students' soccer techniques and provide feedback to improve learning (Li et al., 2018; Syamsuar et al., 2020; Sierra-Ríos et al., 2020). Implementing TaRL in physical education can enhance learning outcomes while increasing both enjoyment and effectiveness (Chang et al., 2019; Syamsuar et al., 2020; Yu & Ha, 2021; Yao et al., 2021).

Furthermore, integrating TaRL into physical education curricula can facilitate the development of essential social and teamwork competencies (Wright et al., 2019; Yao et al., 2021; Burki et al., 2021; Yu & Ha, 2021). By working together with their peers to practise and master techniques, students can learn to communicate effectively, collaborate, and support each other in achieving common goals (Scott et al., 2020; Liu & Lipowski, 2021; Nicolosi & Ancona, 2020; Yang et al., 2021). This collaborative approach to learning has the potential to enhance students' physical abilities while also fostering a sense of camaraderie and sportsmanship among them (Montoya et al., 2020; Nicolosi & Ancona, 2020; Desanti & Juliantine, 2023; Cipriano et al., 2024). In this manner, TaRL can facilitate the comprehensive growth of students, equipping them with the skills necessary for success in both their academic and extracurricular pursuits.

The results of this study prove some of the statements above. The first relates to real practices in the field by physical education teachers; the results obtained show that 76% of TaRL approach practices are implemented in junior high school physical education in Central Java province, Indonesia. Although some teachers are not perfect in applying TaRL, in general, it can be said that physical education teachers know the existence of the approach and how it is useful.

In the autonomous framework, the physical education curriculum for junior high school students incorporates learning outcomes in phase D (Zhang, 2019; Mingzhou, 2020; Nugraheny et al., 2023). During this phase, students can exhibit proficiency in specific movement skills through accurate knowledge analysis, engage in physical activity and fitness exercises for health in alignment with exercise principles, demonstrate personal and social responsibility, and independently monitor their behavior, while upholding the values of physical activity. This

challenges physical education instructors in determining strategies to optimize these learning outcomes.

Giving students the opportunity to demonstrate their skills according to their abilities and providing them with opportunities to learn in small groups can create a more enjoyable and engaging learning environment (Mentari et al., 2020; Tisza & Markopoulos, 2021). the TaRL approach presents itself as a potential solution.

The TaRL (Teaching at the Right Level) approach focuses on assessing students' current skill levels and providing individualized instruction to help them progress at their own pace. By employing this method in physical education programs, educators can tailor their lessons to meet the unique needs of each student, fostering personal and social responsibility while upholding the principles of physical exercise. This method optimizes educational results while fostering a more stimulating and pleasurable student learning atmosphere. In their TaRL study, Banerjee et al. (2015) suggested that grouping students based on ability level rather than age or grade can help them achieve basic skills faster. This is consistent with the Independent Curriculum's objectives, which allow for flexible and adaptive learning so that students can learn based on their abilities and needs.

The study's results showed the teachers' responses to applying TaRL in achieving phase D learning, with 72.80% of teachers giving the highest possible assessment. This means that physical education teachers at Junior high schools in the Central Java province have used TaRL in physical education learning at school.

The implementation of TaRL can not only be seen from whether it is implemented or not, whether the teacher understands it or not, but also requires feedback from the students who are the primary participants. Prior studies indicated that TaRL offers students the greatest opportunity to learn according to their abilities (Ningrum et al., 2023). Additional research indicates that the TaRL strategy enhances students' confidence in engaging in learning activities (Ahyar et al., 2022). The subsequent research findings indicate that the TaRL technique enhances the enjoyment of the learning environment.

The study’s findings support the statement, which shows that 84% of students agreed that TaRL provides them more opportunities to showcase their skills. The next result showed 88% agreement with the statement that TaRL makes students more confident when demonstrating their skills. In comparison, 92% of students agreed that the TaRL approach is more enjoyable and engaging for mastering basic skills or techniques in a game or sport, and in this study, football.

Based on the research conducted, the results indicated that the implementation of the TaRL approach in physical education subjects, especially in phase D material focusing on mastering the basic techniques of a game or sport (soccer), has been conducted at a good level (76%), supported by the responses of junior high school physical education teachers with 72.80% rating the implementation as good. Additionally, student feedback indicated that 88% of students rated their experience with the TaRl approach in the very good category.

TaRL implementation can reduce student confusion and increase their involvement in learning by tailoring the material to their abilities (Pritchett, 2013). This approach also encourages more meaningful and engaging learning through game-based activities, which aligns with the Independent Curriculum's principles of promoting enjoyable and meaningful learning.

TaRL prioritizes tailoring learning to students' abilities. By identifying and grouping them based on their abilities using diagnostic tests, TaRL enables more relevant learning materials that are appropriate for students' levels of understanding. This is consistent with the principles of the Independent Curriculum, which allow teachers to differentiate learning by tailoring materials to the speed and needs of individual students.

Using the TaRL (Teaching at the Right Level) methodology in physical education curricula can improve learning outcomes and a more engaging and effective educational experience for students. The TaRL approach enables physical education teachers to create a learning environment tailored to their students' needs and abilities by offering personalized instruction, promoting collaborative learning, and prioritizing the development of fundamental physical, social, and personal skills.

CONCLUSION

The study results revealed that 84% of students agreed that TaRL provides them with more opportunities to demonstrate their skills. 88% of students agreed that using TaRL made them more confident when demonstrating their skills, and 92% of students stated that the TaRL approach made learning basic techniques in football more enjoyable and engaging.

The research showed that the TaRL approach in physical education, particularly in phase D material involving the mastery of basic football techniques, was implemented, with 76% rated in the good category. This was supported by junior high school physical education teachers, with 72.80% also rating the implementation as good. Additionally, students' responses to the TaRL were very positive, with 88% rating their experience in the very good category.

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