

Teaching at the Right Level Approach in Problem-Based Learning Design

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Abstract: Community Service (known with PkM) activities were carried out by providing training to teachers in North West Seram District, Central Maluku Regency. This activity aims to provide insight into the development of teacher professionalism, more specifically how deep the application of Teaching at the Right Level (TaRL) in learning activities in schools. The activity was carried out through direct face-to-face meetings with teachers. The results of this service are known that teachers gain a lot of knowledge about strategies for connecting learning with a cultural background and referring to the level of student ability. In addition, more than 100 teachers were satisfied with the activities carried out, which were based on the level of student knowledge with the TaRL approach using the problem-based learning model. The teachers hope that the PkM Team can continue to provide assistance so that the implementation of learning activities in the classroom can run well. This is because TaRL is a new method for teachers in remote areas so that it requires adjustments in implementation in learning.

Keywords: TaRL; PBL; 21st Century Skills; Innovative Teachers

Introduction

Evidence shows that if a child does not learn basic literacy and numeracy skills in primary school, they will fall behind academically. In turn, literacy and numeracy difficulties hinder children's ability to learn and engage with the wider academic environment, with profound and lasting consequences into adulthood. Children who do not have these skills in primary school are more likely to drop out of school, experience unemployment, live in poverty, be incarcerated, and have poorer mental and physical health later in life (Conica et al., 2023). In elementary school through high school, most curricula fall short of building foundational skills, leaving children unable to master essential 21st century skills (Lynch et al., 2023). In many countries around the world, primary school failure is a widespread and systemic problem. The highest rates of failure are in Sub-Saharan

Africa, where in 2015, 88% of children (202 million) of primary and lower secondary school age were unable to read, and 84% (193 million) were unable to read in mathematics (UN, 2021). Central and Southern Asia is not much better: 81% of children (241 million) are unable to read, and 76% (228 million) lack basic mathematics skills (UN, 2021). These grim statistics are significant because a lack of basic literacy and numeracy skills hinders the development of all the further academic skills needed to progress through the education system. Simply put, a large number of children never continue their education. In the early 2000s, Pratham, one of India's largest education NGOs, developed what is now known as Teaching at the Right Level (TaRL) in response to the failure of the education system to ensure that children acquire a solid understanding of basic literacy and numeracy skills before they graduate. The TaRL model assesses children's learning levels using simple

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one-to-one tests. Children are then grouped according to their learning levels, rather than their grade or age. In this model, regardless of age or grade, teaching takes place at the child's level (Lipovsek et al, 2023).

Teachers are trained to use interactive techniques to teach at the level of each group, rather than classroom style teaching. As children improve in their learning abilities, they can be moved to more advanced groups that match their skills. The TaRL model has been developed in several countries around the world, for example in Nepal. In general, mentors and teachers were satisfied with the program and believed that the TaRL method can substantially improve the learning abilities of children, especially those with weak learning levels. The main concern reported by most teachers and mentors was the irregularity of children's attendance at school which would hamper their learning. Timely availability of teaching manuals and training, increasing the duration of training, and allocating more time for teaching each day were some of the suggestions given by teachers for better and effective implementation of TaRL (Radhakrishnan et al., 2019).

In addition, TaRL has also been adapted by countries in Africa, namely Nigeria. The level of fraud and diminishing literacy skills among teachers and students is alarming across Borno Adamawa Yobe (Bay) state in Nigeria. This is an emergency situation that requires urgent intervention, because the same products go to secondary schools and eventually tertiary institutions in Nigeria. TaRL is a program that trains teachers on the urgency of learning basic literacy and numeracy for children, and how to teach basic literacy (Nachandiya et al., 2022). It has also been adapted in Indonesia. Where the education system has undergone significant reform and transformation, challenges in the field continue to occur. TaRL has emerged as a promising approach to address learning gaps in the classroom that are still conventional. The TaRL approach, developed in India, has gained global recognition as an innovative and evidence-based strategy aimed at addressing learning deficits (Banerji & Chavan, 2016).

In Indonesia, where educational disparities are prevalent across regions and socioeconomic strata, TaRL is an approach with significant promise. Many students in schools face challenges in mastering basic skills such as mathematics (Sydänmaanlakka et al., 2024) and language (Azubuike et al., 2023), which can hinder their ability to progress academically. Mathematical competence is not a completely abstract computational skill, but relies at least in part on verbal abilities. Language skills are essential when learning and exchanging ideas about mathematics in and out of school (Greisen et al., 2021). The results of a survey conducted on 141 teachers in 11 districts or cities in a

province in Indonesia showed that the integration of 21st century skills was unsatisfactory, because the frequency of integration was only between 1-3 times per month on average. Although half of the teachers had good knowledge of 21st century skills, 40% had never received training on this topic (Daflizar & Alfian, 2023).

In an effort to improve student learning outcomes, teachers are often faced with major challenges due to the wide variation in ability within the classroom. Students with different backgrounds and ability levels are often required to learn from the same material, which can result in a less effective learning experience for some students. One proposed approach to address this problem is TaRL, a method that aims to adapt instruction to students' achievement levels to improve overall learning outcomes. This approach focuses on dividing students into groups based on their achievement levels (high, medium, and low) and presenting teaching materials and questions that are appropriate to the level of difficulty of each group (Adhiya, 2024).

Based on the above problems, problem-based learning (PBL) with TaRL needs to be applied in the classroom. This is a person-centered teaching and learning method to acquire knowledge, skills, and attitudes through real-life situations (Thorndahl & Stentoft, 2020). This methodology aims to train people who are able to reason and deal with problems as they might do in their future professional activities (Bae et al., 2021). This is an active method whose advantages include the development of competencies and skills (Gallagher & Savage, 2023) as self-directed learning, lifelong learning, problem solving, practical thinking, innovation, collaboration, and communication (Li et al., 2019). These findings suggest that PBL methodology can be a valuable tool for universities in developing initiatives to enhance graduate employability (Baena-Luna et al., 2024). Therefore, problem-based learning is in line with the TaRL approach, which is a learning approach that refers to the cognitive level of students. TaRL is a learning approach that provides flexibility in learning according to the capacity of students, level of ability, and needs of students so that this approach does not refer to the class level, but to the similarity of student abilities (Suharyani et al., 2023). In the classroom, teachers find students who learn faster and slower, this happens due to several factors, one of which is that the cognitive level of the student is not in accordance with the achievements they have achieved. Therefore, the TaRL approach is needed because it can accommodate the needs of students who have diverse cognitive levels so that diagnostic assessments are needed to determine the characteristics, cognitive levels, and needs of students so that teachers know to what extent their development phase is.

Method

Based on the partner's problems, learning is still largely centered on teachers. In addition, it was still found that teachers have not used leveled abilities in the learning process so that students' abilities have not been classified. Training in the TaRL approach is important to prepare teachers, instructors, and educators to be able to implement this method effectively in the learning environment. The TaRL training which was held on August 14-16, 2024, took place in North West Seram and was attended by 50 people, namely elementary and junior high school teachers. The distance to the location of the community service activity is 125 km where Pattimura University is in Ambon and the location of the activity is on Seram Island, namely having to cross using sea transportation by ferry through Liang Village to Waipirit Village and continuing the journey by car for several hours to North West Seram. The flow of the implementation of PKM activities with the material presented can be seen in Figure 1.

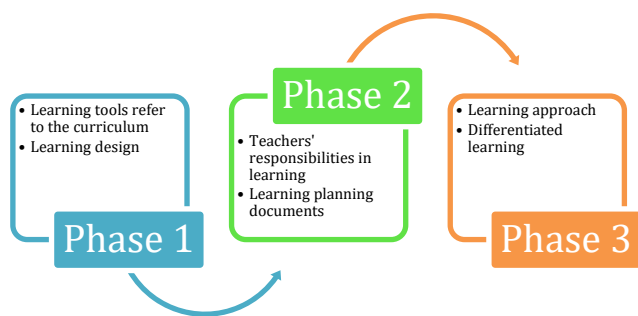


Figure 1. The flow of implementation of community service activities for 15 teaching hours.

In the preparation stage of the PkM project, the proposing team and partners conducted initial coordination with the North West Seram Regional Coordinator, namely Asrif Tomagola, S.Pd., M.Pd. The initial meeting discussed the situation analysis, preparation of infrastructure, and the parties who would be involved. Furthermore, the PkM Team socialized the PkM activities to teachers. The materials presented in the training activities are as in Figure 1. The learning process, planning of learning activities, and the learning process that pays attention to the progress of the level of achievement and basic abilities of students. Pre-test and post-test are used to measure the effectiveness of TaRL implementation.

Results and Discussion

TaRL is interpreted as teaching that is in accordance with the abilities of students. This teaching concept can also be called student centered. Students are supported to learn according to their level of understanding and ability holistically, exploratively, and able to solve problems. It is understandable that with this learning model, teachers will apply problem-based learning (PBL) or project-based learning (PjBL).

TaRL is a teaching method that refers to the level of achievement and ability of the students themselves, not the overall/general learning achievement. Overall, there are three core stages in implementing TaRL. The stages start from conducting an assessment on students. From there, teachers can find out or assess their abilities (potential), readiness, and learning needs. Then, teachers make plans as a reference in implementing the learning process. Furthermore, they carry out learning based on the TaRL approach.



Figure 2. The opening of PkM was opened directly by Asrif Tomagola, S.Pd., M.Pd.

The Community Service activities carried out for teachers on August 14-16, 2024 went well. This can be seen from the high enthusiasm of teachers to participate in training activities. Teachers welcomed the activities that had been carried out positively. In accordance with

the hopes of the schools, they really hope that there will be activities that are refreshing for teachers in this area, both related to deepening the subject matter and related to innovative learning models with technology collaboration. The principal and teachers

enthusiastically welcomed the implementation of this activity and hoped that the implementation of the

activity could be carried out continuously to help improve the quality of teachers who serve in the area.



Figure 3. Some training activity materials

The application of differentiated learning with the TaRL approach is carried out in class by grouping students into study groups with a learning design that refers to their level of ability. The TaRL approach groups students based on the characteristics of the level of ability possessed by the students. The application of TaRL is one form of application that is in line with the educational philosophy of Ki Hadjar Dewantara, namely by paying attention to the achievement of levels/levels of ability, as well as student learning needs as a benchmark in compiling teaching and learning activities so that they are student-centered. The application of the TaRL approach has the advantage of being able to make students more active and use student-oriented learning according to their level, so that it can improve cognitive

abilities. Based on the results of the initial assessment that has been carried out, students will then be grouped based on 3 levels or levels that are the same in terms of achievement and ability and student learning outcomes (Aryanti & Muthamainah, 2024). The next stage, after mapping the student level through the assessment given, the next step is to plan the implementation of learning that is adjusted to the needs of the students, such as preparing the teaching tools used, namely; teaching modules that apply the PBL model and group discussion and question and answer methods, LKPDP, PowerPoint and post-test questions used to obtain comparative results from the application of the TaRL approach in the experimental class (Kiromiah et al., 2021).



Figure 4. Q&A with training participants

Teaching at the Right Level (TaRL) has emerged as a promising pedagogical approach to address the educational challenges faced in secondary schools. This methodology emphasizes tailoring instruction to students' current learning levels rather than relying solely on age- or grade-level-based curriculum. By assessing students' proficiency and grouping them according to their competency levels, TaRL aims to provide targeted instruction that meets the unique needs

of each student. Implementing TaRL involves several key steps: (1) conducting periodic assessments to determine students' current learning levels, (2) reorganizing classrooms into temporary skill-based groups, and (3) providing targeted instruction using appropriate learning materials and teaching strategies. Numerous studies have demonstrated the efficacy of TaRL in improving student achievement, particularly among low-achieving and disadvantaged students. By

meeting the diverse needs of secondary school students through personalized instruction, TaRL promises to be a transformative approach to narrowing achievement gaps and ensuring equitable access to quality education. As education systems seek to improve their pedagogical practices, TaRL presents an attractive solution for fostering inclusive and effective learning environments, empowering every student to reach their full potential.

Another area for future inquiry could be to examine the impact of TaRL on teacher professional development and pedagogical practices. While this systematic review has highlighted the importance of teacher training and support, further research is needed to understand how TaRL impacts instructional strategies, assessment practices, and overall teacher effectiveness in meeting diverse student needs. Finally, as Indonesia continues to implement and refine its education reforms, future research could explore the synergies and potential integration of TaRL with other initiatives, such as the Merdeka Curriculum and the Teacher Professional Education program. By aligning and coordinating these efforts, researchers and policymakers can develop a more cohesive and comprehensive approach to improving the quality and equity of education in Indonesia. In conclusion, this systematic review of the literature on Teaching at the Right Level in secondary education in Indonesia has provided valuable insights, identified key success factors, and highlighted the potential of this approach to address learning gaps, promote equity, and complement ongoing education reforms. Despite challenges, the findings of this review offer a roadmap for effective implementation and contribute to the broader discourse on achieving inclusive and equitable education for all students in Indonesia (Ismail, 2024).

Conclusion

Community service activities carried out for teachers in North West Seram by implementing the TaRL approach in the learning process can provide knowledge and learning experience based on ability levels well and improve the learning process. This Community Service activity with a model and method of technical assistance in compiling learning with the TaRL approach. Preparing teaching materials that will be made as learning development, so that teachers are expected to be able to prepare these materials in advance so as not to hinder training time. Understanding of the TaRL approach has increased, this is evidenced by the enthusiasm of teachers in asking questions related to the implementation of TaRL in subjects. Teachers hope that the Community Service Team can continue to provide assistance so that the implementation of learning activities in the classroom can run well. This is because

TaRL is a new method for teachers in remote areas so that it requires adjustments in implementation in learning.

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