Research Article

Skill Differences of Teacher Leaders Compared to Regular Teachers

Sulastri¹, Nurkolis¹*, and Widya Kusumaningsih²

¹Educational Management, Universitas PGRI Semarang, 50125, Indonenesia

ORCID

Nurkolis: https://orcid.org/0000-0002-6322-0372

Abstract.

Not all the teacher leader graduates have been appointed as educational leaders because their value is not yet known. To find out the value of a teacher leader, we can use their skills in digital literacy and their roles at school and outside school. This research uses a qualitative phenomenological approach through interviews and observations in Kendal Regency, Central Java Province, Indonesia. The research results show that the digital literacy skills of teacher leaders were more advanced than those of regular teachers, and that their roles were broader and more varied. Based on these results, it is recommended that the teacher leader program be disseminated and continue to be developed. Regional heads are recommended to appoint teacher leaders as school principals and supervisors.

Keywords: digital literacy, role of teacher leaders, guru penggerak, program guru penggerak

Corresponding Author: Nurkolis; email: nurkolis@upgris.ac.id

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1. Introduction

Since 2020, the Ministry of Education, Culture, Research and Technology Republic of Indonesia has created a teacher leader education program (*Program Guru Penggerak*) which is a leadership education program for teachers to become learning leaders for 6 months. Starting in 2021, the Indonesian government requires that school principals and school supervisors must have a teacher leader certificate. According to the report of Ministry of Education and Culture, as of March 2024 there were 11,852 graduates of teacher leader (*Guru Penggerak*) who have been appointed as school principals and school supervisors out of a total of 61,256 graduates or 19%. When compared with the total number of teachers in Indonesia, namely 3,379,268 people (https://dapo.kemdikbud.go.id/guru) those who graduate as off 61,256 became teacher leaders or only 1.81% of them. Of the total who have graduated to become teacher

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²Mathematics Educational, Universitas PGRI Semarang, 50125, Indonenesia

leaders until March 2024, there were 11,852 who have been appointed as school principals and school supervisors or only 19%. This shows that local governments are hesitant to appoint graduates of teacher leaders to become school principals or school supervisors. The local government may not understand the characteristics of teacher leaders who have graduate from teacher leadership program.

Research on teacher leadership in Indonesia focuses more on informal leadership in the classroom. More specifically focused on teaching leadership skills, for example research [1] states that teachers who are involved in developing reflective practice models show improvements in managing learning and classes. Other research [2] concluded that teacher leadership influences the character formation of students. Teacher leadership in the classroom indicated to impress students if the teacher has direct experience in the job they dream of. Likewise, the results of other research [3] state that in the Covid-19 pandemic era, additional teaching leadership competencies such as reflective opportunities, improving relationships between teachers and students, maintaining habits of curiosity, build productive communication, habits of initiative, also listen more to others. Teacher leadership has a significant effect on professionalism [4]. There is a significant influence of teacher leadership to motivation of students [5]. The formation of the character of early childhood students is influenced by the teacher's leadership role in learning [6]. Research on teacher leadership with a broader perspective [7] states that teacher leadership is the teacher's ability to influence, move, encourage, direct and guide others. The results state, teacher leadership has an effect on student motivation and has an impact on improving student learning outcomes.

This research uses a broader teacher leader and teacher leadership context, namely within the school itself and outside the school. Therefore, this research aims to determine the characteristics of teacher leaders related to digital literacy and the role of teacher leaders. This article will answer two important questions, namely: (a) what are the characteristics of teacher leaders' digital literacy, and (b) what are the teacher leaders' roles in developing the quality of education?

2. Method

This research used phenomenological qualitative approach with observations and interviews with 30 teacher leaders and 30 regular teachers. The research was carried out in Kendal Regency Central Java Province, semester 1 of the 2024-2025 school year with informants of elementary school teachers and middle school teachers. The data

analysis process uses the model of Miles and Huberman with steps of (a) data collection, (b) data display, (c) data condensation, and (d) verification & conclusions (see Figure 1). Processing qualitative data done manually also uses the NVivo 12+ program.

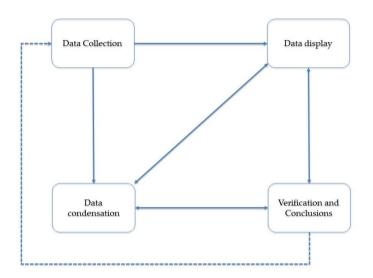


Figure 1: Data Analysis Iterative Model of Miles and Huberman.

3. Result and Discussion

3.1. Presenting the Results

1. Characteristics of digital literacy abilities of teacher leaders

Based on the descriptions of the teacher leaders on open questions regarding their digital literacy skills, it can be seen that the digital literacy skills of teacher leaders compared to regular teachers in using more words and being more varied than regular teachers. Based on an analysis of the frequency of words used, of the 90 meaningful words with a minimum number of letters of 8, the teacher leaders used them 2,648 times. Meanwhile, under the same conditions, regular teachers only used it 2,056 times. There are three words that are closely related to teacher digital literacy, namely "innovation", "relevance", and "meaningful" used by teacher leaders but not used by regular teachers. The 10 words most frequently used by teacher leaders are similar to those used by regular teachers. Analysis of word use from the two groups of teachers as on Figure 2.

The skills of teacher leaders in using information and communication technology to shape the effectiveness of the learning process and daily work operations are already at a skilled level, while regular teachers are only at the competent or capable level. Teacher

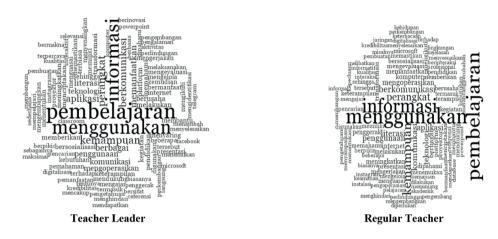


Figure 2: The 90 most frequently used meaningful words related to digital literacy.

leaders are already at the level of creating learning content, while regular teachers are at the level of searching for learning content and utilizing it. Teacher leaders are at the level of helping other teachers, while regular teachers are still at their own level (see Table 1).

2. The role of teacher leaders in developing the quality of education

Based on an analysis of the frequency of words used, of the 90 meaningful words with a minimum number of letters of 8, the teacher leader used them 1,398 times. Meanwhile, under the same conditions, regular teacher only used it 951 times. There are 10 words that are often used by teacher leaders but are not used by regular teachers, namely the word "community". Words that are widely used by teacher leaders but not used by regular teachers are "leader", collaborate", "collaboration", "coordinator", "practitioner", "resource", "inspire", "facilitate", and " dissemination". This shows that teacher leaders have a broader and more varied role compared to the role of regular teachers, as in Figure 3.

a. Internal roles within the school

Based on the informant's answers, it can be concluded that the role or duties of the teacher leader were designed by the school principal to carry out more varied tasks or play a greater role in developing the school. Meanwhile, regular teachers do not yet have a clear design from the principal so that the teacher's duties or roles are still more in the learning process (Table 2).

b. External roles outside school

TABLE 1: Comparison of Information and Communication Technology Technical Skills.

No	Teacher Leaders	Regular Teachers
1	Hardware operations: teacher leaders are skilled in using devices such as laptops, projectors, and smartboards to deliver learning material effectively. They are also able to perform basic troubleshooting to ensure the device functions properly during the learning process.	1. Hardware operation: teachers are able to operate various hardware such as computers, laptops, and projectors, including installation and maintenance of hardware such as monitors, keyboards, mice, and printers.
2	Software use: teacher leaders master various digital applications and platforms, including Google Workspace (Google Classroom, Google Docs, Google Slides), Canva, and other multimedia applications. They often use this application to create interesting and interactive teaching materials, such as learning videos and presentations.	2. Use of software: teachers are able to use important applications in education, such as Microsoft Office (Word, Excel, PowerPoint), video editing applications, and other learning applications. You can also use digital classroom management applications and tools to create interesting learning media.
3	Creation of learning content: teacher leaders are able to create interesting learning content, including educational games and learning media using applications such as Canva and Quizizz. They also use video editing applications such as Filmora to create interesting learning videos.	using platforms such as Google Classroom and interactive learning applications. Utilization of multi- media: teachers use audio and video media in learning, which
4	Digital resource management: teacher leaders are skilled in searching, evaluating, and integrating digital resources into learning materials. They utilize social media and online platforms to increase student interaction and engagement in learning.	4. Digital resource management: teachers are able to manage various digital resources, including ebooks, learning videos and online materials. This helps in providing varied and interesting teaching materials for students.
5	Training and guidance: there are teachers who act as Google Certified Trainers, stating that they not only use technology for personal needs, but also train and guide colleagues in using ICT effectively in learning. The teacher leaders are committed to continuing to develop their competencies and support the development of the competencies of other teachers in the school.	5. There are no regular teachers who act as trainers.

Based on the informants' answers, it can be concluded that the duties or roles of teacher leaders outside of school include various activities aimed at improving the quality of education and empowering the community. Meanwhile, the task or role of

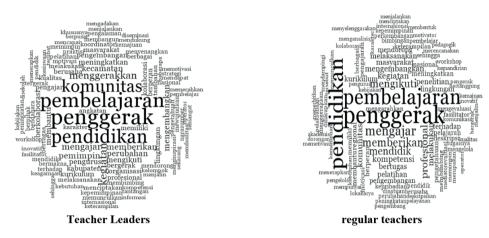


Figure 3: The 90 most frequently used words related to the role of the teacher.

regular teachers is not a driving force in society, which is still related to strengthening students and does not have a role as a resource person in seminars, workshops or training. More details can be seen in Table 3.

3.2. Create a Discussion

The characteristics of teacher leaders on digital literacy. Teacher leaders in technical skill on ITC on the level of "skilled" while regular teachers are only at the level of "capable". The characteristics of teacher leaders able to creat learning content while regular teachers only searching and utilizing the learning content. The teacher leaders on the level of "helping other" while regular teachers are still at their "own level".

The digital literacy skills of teacher leaders appear to be better when compared to regular teachers. Therefore, the teacher leader program as a way to improve the education quality needs to continue to be expanded and developed regarding their digital literacy. This condition is needed in order to develop students' digital competencies to face the digital era. This is in line with the results of the following research.

Teacher leaders in Indonesia, they are in border areas, have used various digital technology facilities in the learning process, but have not fully used digital technology in evaluations [8]. This is different from the digital literacy abilities of regular teachers located in urban areas who show their abilities only at the intermediate level [9], Likewise, other city teachers, not all teachers have digital literacy skills [10].

The digitalization of education used by teacher leaders makes the learning process more effective and enjoyable, more interesting and more innovative. Therefore, teacher leaders must master digital technology [11]. A teacher leader as a description of the ideal

TABLE 2: The Roles of Teacher Leaders Compared to Regular Teachers in Schools.

No	Teacher Leaders	Regular Teachers
1	Learning leader: facilitates student-centered learning, develops relevant curriculum, and creates a conducive learning environment.	 Applying appropriate classroom learning: ✓ teach according to the applicable curriculum ✓ apply innovative learning methods ✓ provide guidance and direction to students during the teaching and learning process ✓ plan, implement, and analyze learning evaluation results ✓ Become a role model for students in the learning process
2	Inspirator and motivator: providing encouragement and motivation to fellow teachers and students to continue learning and innovating, as well as being role models in good learning practices.	
3	Driving learning communities: initiating and facilitating collaborative activities between teachers, such as study groups or workshops, to learn from each other and share knowledge.	
4	Mentor and coach: guide and train fellow teachers in implementing innovative and effec- tive learning methods, and assist them in professional development.	
5	Agent of change: encouraging positive changes in schools, both in terms of culture and learning systems, and playing an active role in implementing better education policies.	2. Supporting the principal: assisting the principal in implementing learning communities and school programs.
6	Collaborator: Working together with all school members and stakeholders for educational progress, as well as sharing good practices with fellow teachers.	3. Collaborating with colleagues: collaborating with colleagues at school to develop the school for the better.
7	Activities coordinator: coordinates and is involved in various school activities, including extracurricular activities and personal development programs.	
8	Reflector: reflect on learning practices and share experiences to improve the quality of teaching in schools.	
9	Performance manager: involved in managing school performance and quality development, as well as contributing to the planning and evaluation of educational programs.	
10	Positive atmosphere creator: creates a positive learning atmosphere in the school environment by providing examples of positive actions to students and colleagues.	
11	Education and training: holding training and sharing good practice activities among teachers to improve their competence.	

teacher is a teacher who provides knowledge, develops critical skills, problem solving abilities, and strong digital literacy skills. Teacher leaders as ideal teachers are able to inspire, motivate and guide students to be successful in the digital era [12].

TABLE 3: The Roles of Teacher Leader Compared to Regular Teachers Outside of School.

No	Teacher Leaders	Regular Teachers
1	Learning community facilitator: the teacher leader acts as a facilitator in the learning community, helping fellow teachers to share good practices and innovate in learning.	1. Become a social companion for student and parent activities in the community such as: ✓ teach the Koran and get used to good behavior ✓ motivator and facilitator in helping students develop their potential outside the school environment, such as sports and the arts ✓ provide advice and consultation to parents regarding children's education at school and continuation of education ✓ supervise and develop children in good behavior in society, and provide good role models such as youth activities
2	Mentor fellow teachers: mentor other teachers, providing guidance and support in their professional development.	
3	Educational program development: initiating and developing educational programs that can be implemented in the community, such as literacy, numeracy or character education.	
4	Educational consultant: provides consultations to schools in the area regarding effective learning strategies that suit local needs.	
5	Active in professional organizations: involved in professional organizations such as PGRI, KKG, MGMP, or other teacher communities to support educational development at local and regional levels.	2. Participation in community activities: being involved in community activities, such as social service and programs that support education in the community.
6	Become a resource person: act as a resource person in seminars, workshops or training activities held outside the school.	3. Curriculum development: participate in curriculum development and adjustment at regional or national level.
7	Participation in social activities: active in social activities and community organizations, such as religious activities or community development, to provide a positive impact on the surrounding environment.	4. Learning innovation: encouraging innovation in learning and education, and sharing best practice with colleagues outside the school.
8	Driving educational innovation: inviting other teachers to innovate in learning through collaboration and discussions online and offline.	5. Training and workshops: organizing or participating in training and workshops to improve teacher competency in various regions.

Since 2021 the OECD have issued policies regarding the digitalization of education. Teachers and students must continue to improve their digital competencies from a lifelong learning perspective [13]. Digitalization of educators n has become more important component of school. The reality, most of in-service teachers lack of digital competence. Only small number of teachers ready to use digital technology in online teaching. In Hong Kong (36%), the European Union (39%), and the United States (38%) [14]. This condition is also experienced in Indonesia according to one study whose results show that as many as 53% of teachers already use digital devices every time they teach, unfortunately there are still 16% who never use them [15].

Mostly in-service teachers have not received the necessary formal training in digital education, they lack the qualifications and confidence in teaching with digital devices [16]. Digital competency must be a core competency for all teachers right know, including elementary teacher [17]. This global advocacy is evidenced in Europe, Australia, and Hong Kong education policy papers [13].

The roles of teacher leaders within schools and out site schools. Teacher leaders have broader and more varied roles compares to regular teachers. One of the roles of teacher leaders that never happen on regular teachers is as resource person. Teacher leaders in Indonesia not only play formal roles carrying out tasks within the school, but also carry out informal roles outside the school. This is in accordance with research results in many countries. Some researcher defines teacher leaders only in formal leadership within the school, while others associate it with wider roles on the reform of educational [18].

The role of teacher leaders is important to facilitate school effectiveness and school improvement [19]. Teacher leadership is a construct that has received high attention among educators and policy makers, especially in Western countries [20]. According to [21] teacher leadership shows the capacity of educators to assume leadership responsibilities beyond their traditional role in the classroom, thereby having a positive impact on student learning, teaching strategies, and school improvement efforts [22]; [18], [23]. This requires teachers to proactively lead, collaborate with others, and actively contribute to the processes of decision-making [24].

The spectrum of teacher leadership encompasses a wide variety of activities, including mentoring, coaching fellow teachers, implementing professional learning communities, designing curriculum, designing assessment procedures, advocating policies, and engaging in research and innovation efforts [25], [26]; and [27]. Through the lens of teacher leadership, teachers assume an important role in shaping educational quality, encouraging professional development, and improving student outcomes [28]. This empowers teachers to channel their skills, knowledge, and experience beyond the classroom, creating a broader impact to the broader educational landscape [19].

Collaborative leadership models [29], one of which is teacher leadership, related to teacher leaders lead with position or without position in helping colleagues [30]. So, it was agreed that teacher leadership as the process by which teachers, influence colleagues and other members of the school community to improve teaching and learning practices with the final goal to improve student achievement.

4. Conclusion

The characteristics of teacher leaders on digital literacy more advance than regular teachers. The roles of teacher leaders have broader and more varied role compared to the role of regular teachers in developing the quality of education. School leadership which has been centered on the principal needs to be changed by involving teacher leaders. Teacher leader programs that are successful in making teacher leaders more advanced in digital literacy and have broader and more varied roles need to be disseminated and developed. Based on the results of this research, regional heads no longer need to hesitate to appoint teacher leaders to become educational leaders such as school principals and school supervisors.

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