Optimising the Role of Learning Communities through Merdeka Mengajar Platform in Improving Teacher Competence in Schools

Nova Virdamahaputra Ruchmayano¹ Ade Syarifudin² Universitas Pendidikan Indonesia Bandung, Indonesia <u>novaruchmayano90@upi.edu</u>, adesyarifudin17@upi.edu

Abstract-- This study aims to analyse the role of learning communities in improving teacher competence through the use of Merdeka Mengajar Platform. Using a qualitative approach, this study explores the experiences and views of teachers in several schools who are active in the learning community. Data were collected through indepth interviews, observations, and documentation to understand how this platform facilitates interaction, collaboration, and continuous learning among teachers. The research findings show that the Merdeka Mengajar platform contributes to expanding teachers' access to learning resources, allowing teachers to share good practices as well as receive constructive feedback from fellow educators. In addition, the learning community plays an important role in creating a collaborative environment that supports the improvement of teachers' pedagogical competence and professionalism. The results of this study are expected to serve as a guide for schools and educational institutions in optimising the utilisation of technology-based learning communities to support teachers' professional development.

Keywords- Learning Community; Merdeka Mengajar Platform; Teacher Competence

I. INTRODUCTION

Teacher competence plays an important role in determining the quality of education in schools. Highly competent teachers can create learning experiences that are meaningful, innovative and in line with the needs of students in the digital era. As the main facilitator in the teaching-learning process, competent teachers not only master the subject matter, but are also able to design, deliver and evaluate learning effectively. These competencies include pedagogical knowledge, classroom managerial skills, interpersonal skills and the ability to utilise technology and learning media relevant to the needs of students in the digital era. Competent teachers have the ability to inspire students, foster curiosity and help students develop their potential optimally. However, many teachers still face challenges in developing their competencies on an ongoing basis, especially regarding relevant learning methods and the utilisation of technology in the teaching and learning process. [1]

The rapid development of digital technology in the world of education brings new challenges for teachers, especially in terms of digital literacy and technological skills such as the implementation of the Merdeka Curriculum, the challenges in improving teacher competence are increasingly complex. Teachers are now expected not only to be able to teach material conventionally, but also to integrate technology and projectbased learning approaches that are more collaborative and student-centred. The need for increased digital literacy, adaptability to innovative teaching methods and collaboration skills demands continuous improvement in teacher capacity. [2]

In this era, teachers are not only required to master teaching materials, but also be able to use various digital platforms and technologies to support a more interactive and relevant learning process. The increasing need for digital literacy among educators is an important reason to optimise through a collaborative approach based on learning communities.

The Ministry of Education and Culture's policy in Merdeka Belajar Episode 15 is about Merdeka Curriculum and Merdeka Teaching Platform In line with technological developments and the implementation of Merdeka Belajar, the government has provided Merdeka Teaching Platform as a means for teachers to improve their competence and creativity through learning communities both online and offline. [3]

The Merdeka Mengajar platform was built in order to assist teachers in getting references, inspiration and understanding of the Merdeka Curriculum. This platform is also provided for teachers and principals in teaching, learning, and working in implementing the Merdeka Curriculum. With a variety of innovative features, Merdeka Mengajar Platform offers access to diverse educational resources, including teaching tools, selftraining, practice ideas and communities. Teachers and principals can share experiences and effective teaching strategies with each other and get guidance from experts in the field of education. This is expected to improve the quality of learning in the classroom and spur creativity in creating more interesting and relevant teaching methods for students. Thus, Merdeka Mengajar Platform becomes an important tool in transforming education to be more inclusive and adaptive to changing times. [4]

The community on the Merdeka Mengajar platform is a space for teachers to share best practices, learning resources,

and discuss with fellow teachers from all over Indonesia. The learning communities registered on this platform have been selected by the Kemendikbudristek team. Teachers can follow the online activities of the communities they choose, both from the same region and from other regions. Through this Community feature, teachers can connect with other educators across Indonesia in a Learning network. They can share good practices, become learning buddies and discuss new things. In addition, there are opportunities to learn directly from resource persons who can be invited to schools or communities, to support the Merdeka Curriculum implementation process. [5]

With this community, educators not only gain inspiration and new ideas, but also build a strong professional network. This exchange of experience and knowledge is expected to improve the quality of learning in the classroom. In addition, this community also provides emotional support and motivation for teachers who face challenges in the daily teaching process. The platform serves as an important platform for collaboration and innovation in Indonesian education, encouraging teachers to continue learning and developing for a better future for students.

This learning community serves as a forum for collaboration and discussion for teachers, allowing them to share knowledge, skills and practical experiences as well as access a range of educational resources that support professional development. This research focuses on optimising the role of learning communities through the independent teaching platform in the hope of accelerating the improvement of teachers' pedagogical and professional competencies. [6]

The rapid development of digital technology in education brings new challenges for teachers, especially in terms of digital literacy and technological skills. In this era, teachers are not only required to master teaching materials, but also to be able to use various digital platforms and technology to support a more interactive and relevant learning process. The increasing need for digital literacy among educators is an important reason to optimize it through a collaborative approach based on learning communities.

However, the effectiveness of learning communities in improving teacher competence still requires further study, especially in the context of their use in Indonesia. Some teachers find it helpful in the teaching-learning process through community support, while others may face constraints, such as limited digital infrastructure or low digital literacy. These constraints hinder the potential of learning communities to have an optimal impact on improving teacher competence. [7]

The purpose of this study is to understand the dynamics, effectiveness, and challenges faced by several learning communities in utilising community features through the Merdeka Mengajar platform and provide recommendations regarding optimisation strategies relevant to teachers and education stakeholders.

II. RESEARCH METHODOLOGY

This research methodology uses a qualitative approach with the aim of deeply understanding the role of learning communities through the Merdeka Mengajar Platform in improving teacher competence in schools. The research location was carried out in several schools and educational organisations that actively use Merdeka Mengajar Platform in Bogor Regency with the aim of obtaining representative data from diverse learning communities. The research time lasted for four months, starting from 2 May 2024 to 25 September 2024.

The research sample involved the head of the learning community and teachers who actively participated in community activities as the main informants. The sample selection was purposive with the criteria that informants have been actively involved in the learning community for at least six months to gain in-depth insights into the development of competencies and the role of the community in supporting their professional development. In-depth interviews were used as the main method of data collection with an interview guide designed to explore the experiences, benefits and challenges experienced by teachers in the learning community. Participatory observation was also used to regularly monitor the learning community activities to see the patterns of interaction and collaboration among the teachers. Documentation in the form of community activity reports was also used to strengthen the analysis.

To support data analysis, researchers used qualitative data analysis software such as NVivo, which allows for more systematic coding, clustering and analysis of themes. Audio recording devices were used during the interviews to ensure accuracy of data transcription and transcription software was used to speed up the data processing process. Analyses were conducted using a thematic approach, identifying key themes that emerged from the data to provide a comprehensive understanding of the role of learning communities in improving teacher competence in schools..

III. RESULTS AND DISCUSSION

A. Results

Based on the research conducted, data obtained through interviews with several learning community leaders and representatives show that there are several types of learning communities. These include school-based learning communities as well as communities rooted in educational organisations such as subject teachers' meetings (Musyawarah Guru Mata Pelajaran or MGMP) and independent practitioner communities.

School-based learning communities are generally initiated by teachers in a school who have a vision to support each other and develop teaching skills. This type of community often receives direct support from the school, either in the form of meeting times or space facilities provided for community activities. The main focus of school-based learning communities is the improvement of teaching competencies that



are relevant to the curriculum context and the needs of students in the school, including the improvement of digital and pedagogical skills. [8]



Meanwhile, learning communities originating from educational organisations have more diverse members, consisting of teachers from different schools or educational institutions. Communities initiated by these organisations usually aim to create a wider network for teachers so that they can exchange best practices from different school backgrounds. Communities from education organisations often work with external agencies, such as the government or private institutions that provide support in the form of training, modules or digitalbased teaching materials. The governance of these communities is more structured with a board or facilitator who organises the activities and ensures the sustainability of the programme.



CANVA LOVERS NUSANTARA

25840 Pengikut 🛛 🛛 Jawa Barat

🗾 SD, SMP, SMA, SMK, RA, MI, MTS, MA, TKLB, SDLB, SMPLB, SMALB, PAUD

Canva Lovers Nusantara adalah komunitas kreatif beranggotakan pendidik yang terus mengembangkan kompetensi dan literasi digitalnya dengan menghasilkan karya media pembelajaran dalam upaya mendukung implementasi kurikulum merdeka di plaform merdeka mengajar

In terms of governance, the learning community leaders stated that they run the communities in a flexible yet organised model. School-based communities are generally managed informally with meeting schedules tailored to members' availability, while communities from educational organisations have more planned schedules and programmes. The community leaders explained that each member plays an active role in the activities, from sharing knowledge, compiling materials to becoming a facilitator in certain training sessions. This structure is considered effective as it allows all members the opportunity to contribute and learn actively. [9]

The scope of learning community activities includes various activities that support the development of teacher competencies. The main activities are technology and digital literacy skills training such as training in the use of learning apps, online evaluation platforms and digital presentation tools. In addition, learning communities also provide discussion sessions that discuss learning strategies, classroom management, and how to deal with challenges in the teaching

process. Some communities also organise joint projects such as the creation of digital teaching materials and mentoring programmes between members to share teaching experiences.

Some community leaders observed that this scope of activities had a positive impact on members. Through these communities, teachers find it more helpful in developing skills relevant to Merdeka Curriculum, while building networks and collaborations that enrich their professional experiences. The results of these interviews suggest that both learning communities from schools and education organisations play an important role in improving teachers' competencies through activities that are diverse, structured and oriented towards collaboration and continuous improvement. [10]

In other interview activities, the main reason for the leaders to establish learning communities was the need to provide a collaborative platform that could support the development of teachers' overall competencies. The community leaders revealed that many teachers feel overwhelmed by the increasingly complex demands of the profession, including the need to understand the new curriculum and digital learning technologies. This learning community was formed in response to teachers' need to share experiences, gain support from peers and collectively improve professional skills.

The community leaders also stated that they saw a gap in access to formal professional training, especially in areas where access is limited. In this situation, learning communities are a practical and effective solution where teachers can exchange knowledge without relying entirely on external training. Discussions within the community are considered to enrich teachers' insights into new teaching methods and inspire them to be more creative in designing lessons.

Another reason is the community leaders' desire to improve digital literacy among teachers. They realise that technology plays an important role in education today, but many teachers still lack the confidence to use digital devices in the classroom. With the learning community, the community leaders hope to encourage their members to be more open to adopting technology through simple trainings and sharing first-hand



experiences. Some community leaders mentioned that this community has helped many of their members to learn how to create digital learning materials and optimise the use of technology gradually. [11]

According to the head of the Canva Lovers Nusantara learning community, the community has made a significant contribution in developing the teaching skills of its members. Through various structured activities such as sharing best practices, the learning community helps teachers to understand and implement more innovative and student-centred learning methods.

The chairperson also observed that many members find it helpful in implementing active learning approaches such as project-based learning and collaboration, which engage students more and improve learning outcomes.

According to the head of the Canva Lovers Nusantara learning community, the community has made a significant contribution in developing the teaching skills of its members. Through various structured activities such as sharing best practices, the learning community helps teachers to understand and implement more innovative and student-centred learning methods. The chairperson also observed that many members find it helpful in implementing active learning approaches such as project-based learning and collaboration, which engage students more and improve learning outcomes.

In addition, the learning community provides a space for teachers to support each other in evaluating and improving their learning methods. Sharing good practices on a rotational basis is an effective means for teachers to receive peer feedback on the challenges they face in the classroom. This allows teachers to find solutions together and implement new strategies that are more adaptive to students' needs. For example, some community members were inspired to integrate differentiation strategies and provide more support to students with special needs through the feedback received within the community. [12]

For the learning community at SMAN 1 Tenjolaya, the sharing of good practices helped teachers to hone their reflection skills on their teaching practices. One of the community leaders explained that through the community forum, teachers are encouraged to reflect on their teaching, identify strengths and areas for improvement and share strategies they have tried with other members. This process helps raise teachers' professional awareness and encourages teachers to continuously improve their teaching practice.

Overall, the learning community leaders argue that the learning community through the Merdeka Mengajar Platform has an important role in developing teachers' teaching skills. Learning communities not only provide collaborative support but also encourage teachers to apply innovative learning approaches that are relevant to the needs of today's students, thus creating a more effective learning environment in the classroom.

Learning communities play an important role in promoting digital literacy and technology skills among teachers. One of the main ways this is done is by organising regular technology application training, where community members are invited to learn the use of various digital applications that can support teaching and learning activities such as interactive learning applications, classroom management platforms and digital media for presentations.

The community leaders also explained that in the training sessions, members are given the opportunity to practice the use of technology directly and share experiences on how to utilise it in the classroom. For example, some community members who are already familiar with using technology share tips and techniques for integrating platforms such as Google Work For Education, Canva, Microsoft, edugame apps or interactive quiz apps with other members who may still feel unfamiliar with these tools.



These discussions make it easier for members to learn from each other and provide practical support. [13] Learning communities also actively encourage members to try out new digital tools through technology-enabled technical assistance activities. Community leaders reported that the communities often organise digital-based teaching projects that involve members in creating learning videos, infographics and other digital content relevant for teaching. Through these projects, teachers gain hands-on experience in producing and editing digital materials, improving their digital literacy.

Community leaders also emphasised the importance of support from Merdeka Mengajar Platform itself, which provides materials and guidance on digital literacy. The platform is seen as a very helpful additional resource, as it provides easily accessible tutorials related to the use of



technology in learning on the self-training feature. With this support, community members feel more confident in utilising technology, both for the preparation of teaching materials and in interaction with students. [14]



Some of the challenges faced by community mobilisers in managing learning communities are the biggest challenge that is often mentioned is the limited time of members to actively participate in learning community activities. As teachers who have busy schedules with teaching and administrative responsibilities, members often find it difficult to make time to join additional activities outside of teaching hours. Community leaders reported that this has an impact on members' participation and consistency in attending trainings and group discussions.

In addition, limited resources and technological infrastructure are also significant challenges. Community leaders stated that not all members have adequate access to digital devices or stable internet connections. These limitations hamper the learning process, especially in activities that require the use of certain technologies or digital platforms. Some community leaders mentioned that they were forced to find alternative solutions, such as offline training or providing shared devices to improve accessibility for technically challenged members. [15]

Lack of external support, both from schools and the government, is also a challenge faced by learning communities. Community leaders revealed that despite the community's passion for improving teachers' competencies, limitations in funding and facilities prevented activities from running optimally. Financial support as well as formal recognition from the school or government, such as providing incentives or recognising training hours as part of professional development, is considered to be needed for these communities to operate more optimally.

Another challenge mentioned was the variation in technology skill levels among community members. Some

members who are new to technology often find it difficult to follow more complex training materials. This requires a special approach from the community leader, such as providing individualised mentoring, but this requires additional time and energy. The community leader recognises that this challenge requires special attention so that all members can develop according to their individual abilities without feeling left behind. [16]

They made several recommendations that they see as important to optimise the role of learning communities in improving teachers' competencies. Firstly, they emphasised the need for greater support from the school and government, especially in the form of facilities and resources. The community leaders revealed that financial support for organising activities and the provision of digital infrastructure, such as computer equipment and adequate internet access, would greatly help the smooth running of community programmes. Some community leaders also suggested that there should be some form of official recognition or certification for active members, to incentivise and recognise their efforts in developing their competencies.



Community leaders felt that a more flexible schedule for community activities could increase member participation. Given the busy schedules of teachers, communities need to organise meeting times that suit the needs of their members such as holding activities outside of school hours, through online meetings or special times that are integrated into the school agenda. This time flexibility is expected to increase members' access to and involvement in various trainings organised by the school learning community. [17]

In other cases, community leaders also suggested the importance of mentors or facilitators who are experts in educational technology and pedagogics. With competent facilitators, the communities will have easier access to more indepth and relevant training materials that focus not only on technological skills but also on the application of innovative learning methods in accordance with Merdeka Curriculum.



Some community leaders proposed collaborating with higher education institutions or professional training providers to improve the quality of materials provided in the community.

Finally, the community leaders emphasised the importance of establishing a sustainable mentoring system among members. They see that teachers will develop more easily if there is a mentoring structure that allows members with higher skills to support other members. This approach is thought to accelerate knowledge transfer and increase members' confidence in practising new skills.



Overall, these interviews suggest that to further optimise the role of learning communities in improving teachers' competencies, strategic measures are needed that include institutional support, flexible schedule management, the presence of expert facilitators, and a sustainable mentoring system. With this optimisation, learning communities are expected to make a greater contribution in supporting teachers' professional development in an effective and sustainable manner.

B. Discussion

In various literature studies, learning communities for teachers are seen as a strategic response to the challenges in the increasingly complex and dynamic world of education. Educators establish learning communities as a collective effort to improve professional capacity through collaboration and knowledge sharing. For example, research conducted by Steyn (2013) shows that community-based learning is an effective tool in improving teacher professionalism through a process of mutual reflection, where teachers share experiences and successful teaching techniques. This model creates a culture of continuous learning, which not only benefits individual teachers, but also contributes to the overall improvement of teaching practices. [18] Lord and Lomicka (2004) highlighted that collaborative online learning communities play an important role in developing teacher candidates' competencies, especially in learning activities. In these communities, prospective teachers collaborate, share experiences and receive feedback that enriches their pedagogical understanding and reflective skills. Online communities can also facilitate the mastery of technologies relevant to modern teaching practices, preparing teachers to use digital tools in learning. Lord and Lomicka emphasise that through virtual collaboration, prospective teachers learn to apply learning theories in real situations with peer support. As such, these learning communities serve as effective platforms for shaping the professional competencies that prospective teachers need in dynamic classrooms. [19]

Learning communities provide a supportive environment to improve teachers' digital literacy and technology skills, especially in the face of modern education challenges that increasingly rely on technology. According to Trust and Horrocks (2017), digital learning communities allow teachers to learn to use digital tools and platforms directly through training, practical guidance and discussion among members. Teachers involved in digital learning communities gain access to a range of technology-based training and materials designed to improve their digital skills, such as training on managing digital classrooms, using interactive media, and integrating technology in the curriculum. [20]

Vescio, Ross and Adams (2008) also suggest that sustainability is a key factor in successful learning communities. key factor in successful learning communities. Long-term involvement in this community encourages teachers to integrate new knowledge into their practice gradually and consistently. their practice gradually and consistently. One way to optimise this sustainability is by providing regularly scheduled learning sessions, where teachers can collaborate and review new learning sessions, where teachers can collaborate and review the application of concepts they have learnt previously. concepts they have learnt previously. In addition, learning communities can adopt a continuous evaluation mechanism that allows members to measure their progress and adjust learning objectives according to practical needs. [21]

IV. SUGGESTIONS AND RECOMMENDATIONS

This research underlines the important role of learning communities to further optimise the function of learning communities, here are some suggestions and recommendations that can be used as a reference for the development of learning communities in schools and educational organisations by increasing accessibility and teacher participation. Strategic steps are needed to ensure that learning communities are accessible to all teachers, without being constrained by time or location limitations, strengthening the role of mentors and community leaders, implementing problem-based learning curriculum that includes real case studies. Training modules focussed on classroom problem-solving will help teachers design strategies that are adaptive to the learning contexts they face, sustainability support and regular evaluationsustainability is key in the development of effective learning communities, collaboration with external parties is recommended. It is also recommended that learning communities collaborate with external parties, such as universities, educational organisations, and technology companies. Intensive digital literacy development, digital literacy is a competency that is needed by teachers to maximise the use of Merdeka Mengajar platform and various other digital tools.

REFERENSI

- [1] A. Aldo Ajisoka, A. Rizqi Fadhillah and I. Fauzi Rachman. "Peran Guru Dan Pendidik Dalam Mendorong Literasi Digital Untuk Pembangunan Berkelanjutan." Jurnal Ilmiah Multidisiplin, Vol. 1, No. 5, pp. 55-60 (2024)
- [2] D. Nastiti , I. Ayu Permana. "Peran Guru Dalam Pengembangan Literasi Digital." Pandawa : Pusat Publikasi Hasil Pengabdian Masyarakat Vol. 1, No. 3 pp. 143-155 (2023)
- [3] B. Giyanto, P. Kurnia, K. Julizar, D. Kartika Sari and D. Hartono "Implementasi Kebijakan Komunitas Belajar Dalam Kurikulum Merdeka Belajar Di Indonesia" Jurnal Pembangunan dan Administrasi Publik Vol.5 No.2 pp. 39-53, (2023)
- [4] R.Meutia, "Strategi Pendampingan Komunitas Belajar dalam Pemanfaatan Platform Merdeka Mengajar terhadap Implementasi Kurikulum Merdeka." Prosiding Seminar Nasional Pendidikan Dasar, pp. 614-639, (2023)
- [5] Hasmawaty, Muliati dan M. Yusri Bachtiar "Optimalisasi Aplikasi Platform Merdeka Mengajar (PMM) Melalui Komunitas Belajar Gugus PAUD" Madaniya, Vol. 4, No. 2, pp. 574-581 (2023)
- [6] R. Yunita Sekar dan N. Kamarubiani "Komunitas Belajar Sebagai Sarana Pengembangan Diri" Indonesian Journal Of Adult and Community EducationVol 2, No. 1 (2020)
- [7] R. Khusna dan N. Priyanti "Pengaruh Komunitas Belajar Terhadap Kemampuan Pedagogik Guru Di Ikatan NSIN TK Bekasi" Jurnal Ilmiah Potensia, Vol. 8 (2) pp. 252-260. (2023)
- [8] S. Titihalawa, T. Prihatin and S. E.Pramono. "Peran Kepala Sekolah dan Komunitas Belajar dalam Meningkatkan Kompetensi Pedagogik Pendidik." In *Prosiding Seminar Nasional Pascasarjana (PROSNAMPAS)* Vol. 6, No. 1, pp. 716-720 (2023).
- [9] A. Lanz Andderson, M. Lundin and N Selwyn "Twenty years of online teacher communities: A systematic review of formally-organized and informally-developed professional learning groups." Teaching and Teacher Education 75 pp. 302-315 (2018)

- [10] Harlita, I., & Ramadan, Z. H.. "Peran Komunitas Belajar di Sekolah Dasar dalam Mengembangkan Kompetensi Guru." *Didaktika: Jurnal Kependidikan*, Vol. 13 No. 3, pp. 2907-2920. (2024)
- [11] S. Rahayuningsih, A, Andriyati Mardliyah and A, Rijanto. Peningkatan Kompetensi Guru Dan Membangun Budaya Belajar Berkelanjutan Melalui Pembentukan Komunitas Belajar. *AMMA: Jurnal Pengabdian Masyarakat*, Vol. 2 No. 8, pp. 934-940. (2023).
- [12] L. Darling-Hammond and N. Richardson. "Research review/teacher learning: What matters." *Educational leadership* Vol. 66.No.5, pp. 46-53 (2009).
- [13] A. Danaryanti, E. Kusumawati, S. Mawaddah, and T. A. Rahardi. 'Bimbingan Mengembangkan Komunitas Belajar (Learning Community) Melalui Lesson Study Berbasis Musyawarah Guru Mata Pelajaran (MGMP). Bubungan Tinggi: Jurnal Pengabdian Masyarakat, Vol. 1 No. 2, 73-78 (2019).
- [14] A. Ebyatiswara PutraPutra, M. Taufiqur Rohman, Linawati and N. Hidayat. "Pengaruh Literasi Digital terhadap Kompetensi Pedagogik Guru." *Murhum: Jurnal Pendidikan Anak Usia Dini*, Vol. 4, No. 1, pp. 201-211. (2023).
- [15] L Judijanto, "Analisis Pengaruh Tingkat Literasi Digital Guru dan Siswa terhadap Kualitas Pembelajaran di Era Digital di Indonesia." Sanskara Pendidikan dan Pengajaran, Vol. 2 No. 02, pp. 50-60. (2024).
- [16] W. Cayeni and A. Silvia Utari. Penggunaan Teknologi Dalam Pendidikan: Tantangan Guru Pada Era Revolusi Industri 4.0. In *Prosiding Seminar Nasional Program Pascasarjana Universitas Pgri Palembang*. pp. 658-667 (2019).
- [17] U. S. Supardi, & H. Herdiana. "Efektivitas Komunitas Belajar dalam Meningkatkan Kualitas Guru di Sekolah." *Algoritma: Jurnal Matematika, Ilmu pengetahuan Alam, Kebumian dan Angkasa*, Vol. 2 No. 6, pp. 146-153. (2024).
- [18] G. M. Steyn, "Building professional learning communities to enhance continuing professional development in South African schools." *The anthropologist*, Vol. 15 No. (3), pp. 277-289. (2013).
- [19] G. Lord & L. Lomicka. Developing collaborative cyber communities to prepare tomorrow's teachers. *Foreign Language Annals*, Vol. *37 No.* 3, 401-408. (2004).
- [20] T. Trust, and B. Horrocks, 'I never feel alone in my classroom': teacher professional growth within a blended community of practice. *Professional development in education*, Vol 43 No. 4, pp. 645-665. (2017).
- [21] V.Vescio, D. Ross, A. Adams. "A Review Of Research On The Impact Of Professional Learning communities On Teaching Practice And Student Learning." Teaching and Teacher Education 24, pp. 80–91, (2008)