The Role of Parents in the Application of Speaking and Writing Skills for Elementary Students

Muhammad Edi Susilo and Fitri Puji Rahmawati(✉)

Faculty of Teacher Training and Education, Universitas Muhammdiyah Surakarta, Surakarta, Indonesia
fpr223@ums.ac.id

Abstract. Background: Education development cannot be separated from the role of parents, who always provide assistance, guidance, and student learning evaluation. The relationship between parents influences students' speaking and writing skills.

Method: The authors used a qualitative descriptive study with a case study design. The subjects were the teachers of fifth-grade Bolosingo Public Elementary School (BPES) and the parents/guardians of the fifth-grade students of BPES. The authors used observation and interviews for data collection and triangulation for data validity.

Result: The results to be obtained in this study were (1) the role of the teacher to teach speaking and writing skills, as well as providing examples for parents on how to provide teaching related to speaking and writing skills. (2) the role of parents in providing assistance, guidance, and evaluation for students. (3) parents' knowledge of the importance of speaking and writing skills.

Implications: The implications of this study were: first, the principal enriches the knowledge and insight of teachers to understand speaking and writing skills in the language. Both teachers provided parents with insight to strengthen children's knowledge of speaking and writing skills.

Novelty: Previous studies related to the role of parents in the application of speaking and writing skills are still limited. The findings of this study would be significant in the future for parents and education in Indonesia. This study would be essential to create the role of parents who can assist, guide, and evaluate children's speaking and writing skills.

Keywords: Parent's Role · Speaking Skill · Writing Skill

1 Introduction

Education cannot be separated from human life. It starts from early childhood education to college. Education is essential to be given starting from an early age, either through formal education or provided by parents at home. According to Among et al., (2022), education is closely related to everyday human life. Education is an effort to humanize

humans and is a process of self-development to achieve the desired goal. According to Heidjrachman & Husnah in Novita Sari & Armanto (2022), education is an activity to increase one's general knowledge, including increasing mastery of theory and skills, deciding and finding solutions to problems related to activities in achieving goals. It can be concluded that education is an activity to humanize humans and increase knowledge, mastery of theories, and skills that are useful in daily life.

The importance of education will make students understand several abilities in education, ranging from language skills to Mathematics. Students are expected to improve their critical thinking ability by carrying out appropriate learning activities. [3], explained essential thinking skills as a person's ability to solve problems, analyze, evaluate, and make decisions from the results of the investigations. According to this opinion, education becomes interesting when the learning provided is by what students expect so that it can foster critical thinking skills; necessary thinking skills play an essential role in children's language skills. The importance of critical thinking in language skills cannot be separated from the focus of skills in language, namely speaking, writing, listening and reading.

This study focuses on the speaking and writing skills of fifth graders at BPES. [4] mentioned that speaking skill is "actively productive" regarding the use and processing of language. Speaking skills must be honed early, so children are accustomed to conveying, using, and managing appropriate language. Writing skills are also one crucial thing later for students. Writing is a process of pouring ideas or ideas into a written language (Rinawati et al., 2020). In practice, the writing process is manifested into several stages which form a more complete system. With good writing skills, students can understand and understand a problem that is around them. Writing activities may be familiar to elementary school children, especially for fifth graders because at that age, most children can write and understand writing well, but not all of them, of course. Sometimes some children have problems with writing. These problems often arise after the Covid-19 pandemic.

The problems that arise need the direct role of parents to supervise and take action to deal with the issues. Wirsita (2022) explained the role of parents in supporting children's success, especially in supporting the learning process. Thus, the part of parents is essential to help students succeed in learning, as well as the role of parents to become teachers during online education. It is hoped that there will be no lag in achieving understanding for students and that no problems will arise. This study focused on the role of parents in providing and supporting student learning. This study focused on aspects of students' speaking and writing skills that involve the part of parents directly to be able to understand how to overcome these problems. The purpose of this study was to determine the role of parents in the application of blended learning in the speaking and writing skills of fifth graders at BPES. The authors found out the role of parents in overcoming problems in blended learning, which focuses on children's speaking and writing skills. This study can be an insight for parents to overcome children's issues, especially in the case of children's speaking and writing skills.

Several studies have been done on parents' role in speaking and writing learning. [7] explained the role of parents in motivating student learning. [8] described parents' role in fulfilling children's education rights. [9] explained the role of parents in developing

children's language. [10] described the collaboration of parents in stimulating children's literacy. [11] explained the role of parents in assisting at home. [12] described the child's language skills. Yara & Taufik (2021) demonstrated the speaking skills of elementary school students. [14] described the importance of speaking skills to students' abilities. [15] explained how to improve students' writing skills. [16] revealed elementary school students' writing skill assessment instruments.

The difference between this study and previous studies is the role of parents in the application of speaking and writing skills for fifth-grade students. Previous studies have not combined the part of parents with speaking and writing skills. Most previous studies only discussed one of them. The authors wished to find and explore the emergence of the decline in children's speaking and writing skills. The author's involved parents because they are the spearheads when the pandemic strikes. The role of parents was significant in improving speaking and writing skills during the Covid-19 pandemic. For this reason, this study aims to reveal parents' part in the application of speaking and writing skills for fifth-grade students of BPES.

2 Method

2.1 Type and Design

This type of study was a descriptive qualitative study. [17] revealed that a qualitative study is a study that has the aim of understanding events about what is experienced by the study subject holistically. The qualitative method is based on the philosophy to be used as a study in scientific conditions with the authors as an instrument. Data collection techniques and analysis emphasize a meaning.

The design of this study was a case study. According to Nur'aini (2020), a case study is an empirical investigation that investigates contemporary phenomena in real-life contexts. The case study method is the right strategy for studies that use how and why study questions. The case study design is a design to search for or investigate phenomena in real life that uses the subject matter of the study of how and why.

2.2 Data and Data Source

The object of this study was BPES. The subject of this study focused on fifth-grade teachers and parents. The type of data in this study was qualitative data. This data was taken from interviews, observations, and documentation. The data in this study were taken from sources, namely the parents of students (13 informants) and teachers at BPES. The data source was accepted because it can strengthen the information so that the expected data can be found and can be used as reinforcement for the data taken (Table 1).

2.3 Data Collection Techniques

This study used direct observation. The authors directly observed what happened and teachers and parents applying students' speaking and writing skills.

Table 1. Source data

No	Initial	Gender	Old	Role
1	WW	female	35	Teacher
2	OT 1	Male	40	Parent
3	OT 2	Male	37	Parent
4	OT 3	Male	38	Parent
5	OT 4	female	39	Parent
6	OT 5	female	36	Parent
7	OT 6	Male	42	Parent
8	OT 7	Male	45	Parent
9	OT 8	female	40	Parent
10	OT 9	female	36	Parent

Notes:
OT: Parents

The aspects observed by the informants (Teachers and Parents) were as follows: (1) classroom literacy (2) learning designs, (3) teacher evaluations of students (4) literacy at home.

This study used a semi-structured interview. Fauzi (2021) revealed that interviews are a way to get information from sources by conducting question-and-answer activities. It will bring up the validity of the information obtained. The authors have prepared drafts of questions to be submitted to the informants. The authors conducted several thorough interviews with all informants. The following were the questions:

Teachers
How are speaking and writing skills applied in class?
How is the development of students speaking and writing skills?
Are there problems or obstacles in students' speaking skills?
Are there problems with students' writing skills?
How to solve this problem?
Is the role of parents in providing home learning assistance essential?
Is the role of parents in providing tutoring and evaluation of learning at home important?
How important is the role of parents in applying the speaking and writing skills of fifth graders at BPES?
Parents
How did you teach speaking and writing skills at home?
Do you know the development of children's skills?
Did you assist when studying at home?
What assistance did you provide for your child?
Did you provide tutoring for your child?
What kind of guidance did you give to child when studying at home?

Did you provide an evaluation when the teaching materials were studied?
What kind of evaluation did you give the child when studying at home?
Are there any problems with your child's speaking and writing skills?
What did you do when your child had this problem?

2.4 Data Validity

The authors used two types of triangulation, source and technical triangulation, to check the validity of the data. According [20], triangulation is a way to get valid data using a multiple-method approach [21]. Triangulation is a technique of checking data validity by using or utilizing something else. Triangulation of sources is used by collecting data from various parties, namely teachers and parents of students. The triangulation technique is used by re-checking the interview data with direct observation data.

2.5 Data Analysis

This study used a qualitative data analysis process that included data reduction, data presentation, and conclusion drawing. According to Junaid (2018), data analysis techniques qualitative data analysis is the interpretation of the concept of all existing data using analytical strategies that aim to change or translate raw data into a description and explanation of the phenomenon being studied. Initially, the authors transcribed interviews with all informants; then categorized the verbs obtained into the assessment dimension. In that section, the author used several category tables, then analyzed the words brought based on the desired theme. After that, the author formulates a pattern between the implementation of the assessment, and then the data obtained can be concluded.

3 Result

3.1 The Role of Teachers and Parents

Parents at the forefront of learning since the Covid-19 pandemic struck. The involvement of parents in providing learning during the pandemic cannot be underestimated. Parents accompanied and guided students, they also overcame learning obstacles during the pandemic. After the pandemic ends, parental involvement was still the spearhead for learning progress. One of the roles of parents is to provide assistance, guidance, and evaluation of students' speaking and writing skills. Parents' role in applying children's speaking and writing skills has its influence.

Speaking and writing skills are essential skills for students' language skills. However, not many parents understand the importance of speaking and writing skills for their children. Not many parents understand the impact on their child's language knowledge continuity. According to parents, speaking skills are nothing more than the skills to pronounce words or sentences. Likewise, with writing skills, parents only know that writing is just understanding the pattern of collecting letters into words.

The importance of the continuity of students' speaking and writing skills makes parental involvement more prioritized. Parents' knowledge in providing appropriate

assistance, guidance, and evaluation need to be studied more clearly. Most of the parents' answers expressed their lack of understanding of how to assist, guide, and evaluate learning to determine their child's speaking and writing skills. According to parents, helping children is just seeing the child facing the book or watching the child go to private lessons. Likewise, with the provision of guidance, according to parents, the condition of recommendation is only when the child has serious problems, or even the parents do not know the problem that is being received by the child.

4 Discussion

In the next stage, the authors asked questions about students' speaking and writing skills. According to Hikmah (2021), speaking skills are language skills that require students' self-confidence to express every thought that is obtained orally. According to [24], writing skills are a series of thinking activities by saying ideas to produce a written form. The two studies can be used as a benchmark for speaking and writing skills, which explains that speaking and writing skills play an essential role for students because with these skills, students can have high confidence to express what they want, and with these skills, students can express themselves. This is what makes the authors interested in whether the role of parents can affect students' speaking and writing skills. The teacher revealed that students' writing skills were not having problems. According to the teacher, the student's writing skills did not experience a decline, as seen from the learning activities where students were able to correctly write down words and letters. This is inseparable from the program given to students about literacy. They offer five minutes before learning starts to strengthen student literacy so students can have time to enhance their speaking and writing skills. According to the teacher, they provided literacy before learning can improve communication between students and teachers to hone students' communication skills.

In this case, the role of parents is significant. [8] argued that parents play a role in providing learning assistance, the necessary facilities and infrastructure, and motivating children's learning. In that role, parents also act to provide help, guidance, and conduct evaluations. According to Adelita & Widodo (2021), parents have several roles. First, parents act as teachers who teach and provide guidance to children. Second, become facilitators who are willing and provide for all children's learning needs. Third, parents act as motivators to increase children's interest and enthusiasm for learning. Parents also play an essential role in influencing children's learning. The importance of the role of parents is in line with the arguments given in the previous studies.

According to Minsih (2015), guidance is a process of providing continuous and systematic assistance to achieve independence. Megawanti et al. (2022) mentioned that a student who gets excellent and sustainable guidance will have high confidence in the learning environment. It can be concluded that the importance of parental guidance in providing direction significantly affects students. Mentoring and evaluation are also essential for parents to understand. The following is data on parental responses regarding the role of parents in the application of speaking and writing skills for the students of BPES:

From the data in Table 2, it can be concluded that the most parental form for students is mentoring by accompanying learning and helping them understand the material. This

Table 2. Description of providing parental assistance on students' speaking and writing skills

No	Forms of Parental Assistance	Explanation	Data
1	Accompany learning	The form of parental assistance is only to accompany the child's learning or only to supervise the child's education, not paying attention to the child's material.	OT 1, OT 3, OT 5, OT 11
2	Accompany learning and help understand the material	The form of parental assistance is to provide wholehearted aid to children, as well as help give a teaching on learning materials.	OT 2, OT 4, OT 6, OT 7, OT 8, OT 10, OT 12
3	Supervise children's daily activities	The form of assistance in children's daily activities is more for children's social activities and does not provide children's learning assistance.	OT 4
4	No assistance	Parents do not assist at all, but parents provide learning facilities in private places.	OT 10 and OT 13

is in line with [8] stated that the role of parents in providing the rights children need to get reasonable learning assistance. This finding also in line with [11] that stated that parents role are provide learning assistance.

According to Table 3, the provision of parental guidance to students is mostly by providing direction and motivation as well. According [7] importance of the role of parents to motivate to increase children's enthusiasm for learning and provide an enjoyable learning atmosphere and no pressure.

According to Table 4, most students got evaluations by reviewing the material discussed. However, many parents did not provide an assessment as many as four parents. The importance of delivering evaluations is to improve students' ability in line with the opinions [16]. The instrument used to evaluate the material that has been taught can affect students' writing ability.

From the data of Table 5, there were mostly no obstacles. Some parents who experience problems in speaking and writing skills are not fatal. Only minor shortcomings such as writing that is not neat and does not dare to have an opinion. This study is in line with [9], which explained that the importance of the role of parents in assisting in children's language skills, including speaking and writing skills. In addition, the need for collaboration such as the opinion of [10] between students and parents to improve

Table 3. Description of providing parental guidance on students' speaking and writing skills

No	Forms of Parental Guidance	Explanation	Data
1	Giving direction and motivation	Form of parental guidance by giving positive advice and providing motivation to encourage children's learning	OT 2, OT 5, OT 6, OT 8, OT 9, OT 10, OT 12, OT 13
2	Submit tutoring in a private place	A form of parental guidance that entrusts the direction of their children to a private place	OCT 3
3	Guiding the work	The form of parental guidance in helping teach material that students do not understand	OT 4 and OT 7
4	It does not provide guidance	Parents do not guide at all.	OT 1 and OT 11

Table 4. Description of the evaluation of parents on students' speaking and writing skills

No	Parent Evaluation Form	Explanation	Data
1	Give or review the material that has been discussed	Form of parental guidance by giving positive advice and providing motivation to encourage children's learning	OT 2, OT 5, OT 7, OT 10, OT 13
2	Submit a child's learning evaluation in a private place	A form of parental guidance that entrusts the direction of their children to a secret place	OT 3, OT 9, OT 11
3	There is no evaluation either from parents or from a private place	The form of parental guidance in helping teach material that students do not understand	OT 1, OT 4, OT 6, OT 8

the child's literacy. [12] stated that the importance of children's language always being supervised by parents. Yara & Taufik (2021) explained that the importance of speaking skills in children to improve their language. According to [14], the importance of speaking skills also increases students' abilities such as increased self-confidence.

Table 5. Parents' opinions regarding speaking and writing skills

No	Skill form	Speaking and writing problems	No problems with speaking and writing skills
1	Speaking Skills	OT 3 OT 5	OT 1, OT 2, OT 4, OT 6, OT 7, O8, OT 9, OT 10, OT 11, OT 12, OT 13
2	Writing skills	OT 6 OT 8	OT 1, OT 2, OT 3, OT 4, OT 5, OT 7, OT 9, OT 10, OT 11, OT 12, OT 13
3	No opinion	There aren't any	There aren't any

The role of parents is also essential for children's writing skills. The presence of parents can improve students' writing skills. This is in line with the opinions of [15] which describe the writing ability of children.

After the three data were obtained, it can be concluded that the role of parents is significant in influencing children, providing assistance, guidance, and evaluation to produce students who can speak and write well. Indeed not all are good at speaking and writing skills, but the data listed revealed that the speaking and writing skills of the fifth graders of BPES did not experience problems.

5   Conclusion

Previous studies on parents' role in the application of speaking and writing skills are still limited. The findings of this study would be significant in the future not only for parents but also for education in Indonesia. This study would be essential to create the role of parents who can assist, guide, and evaluate children's speaking and writing skills.

This study has many shortcomings. First, the diversity of sources that the authors chose was only selected from one school, which made the diversity of the data taken less diverse. Second, the length of the study is less than a year, so the data are not clear. Subsequent studies related to the role of parents in the application of students' speaking and writing skills can develop with a variety of new and more flexible sources, not only around the village of Bolosingo but maybe even outside the island. The implementation time may be carried out for one full year to fulfill accurate data from sources.

This study has several suggestions. The first is for elementary school teachers, maybe they pay more attention to children's reading literacy, the books used for reading can be changed every week so that children don't get bored. Secondly, for parents, please provide an evaluation at the end of each child's teaching material, to welcome children's thinking and to recall the material being taught, so that it is not easily forgotten.

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References

1. D. Kalangan, S. Sekolah, S. Wulandari, D. A. Dewi, and Y. F. Furnamasari, "The Role of Citizenship Education in Developing a Sense of Tolerance," vol. 6, no. 1, pp. 981–987, 2022. https://ummaspul.e-journal.id/maspuljr/article/download/2505/1178

2. D. Novita Sari and D. Armanto, "Mathematics in Educational Philosophy," *AXIOM J. Pendidik. dan Mat.*, vol. 10, no. 2, p. 202, 2022, doi: https://doi.org/10.30821/axiom.v10i2.10302.

3. Y. Yuanita and F. Yuniarita, "Developing Science Practicum Instructions Based on Process Skills to Improve Critical Thinking Skills of Elementary School Students," *Profesi Pendidik. Dasar*, vol. 1, no. 2, p. 139, 2018, doi: https://doi.org/10.23917/ppd.v1i2.6608.

4. S. R. M. Azmi, "Improving Speaking Skills Using Storytelling Method for Class V Elementary School Students," *J. Sci. Soc. Res.*, vol. 2, no. 1, pp. 7–11, 2019. http://jurnal.goretanpena.com/index.php/JSSR/article/view/325

5. A. Rinawati, L. B. Mirnawati, and F. Setiawan, "Analysis of the Relationship Between Reading Skills for Elementary Schools Students," *Educ. J. J. Educ. Res. Dev.*, vol. 4, no. 2, pp. 85–96, 2020, doi: https://doi.org/10.31537/ej.v4i2.343.

6. Wirsita, "The Role of Parents in Supporting the Learning Process Through Off-Network Learning Introduction," pp. 106–114, 2022. http://openjurnal.unmuhpnk.ac.id/index.php/JME/article/view/3849

7. M. Adevita and Widodo, "The Role of Parents in Childrens Learning Motivation in Online Learning During the Covid-19 Pandemic," *J. Pendidik. Luar Sekol.*, vol. 5, no. 1, pp. 64–77, 2021. https://journal.unesa.ac.id/index.php/jpls/article/view/13539

8. O. Jatiningsih, S. M. Habibah, R. Wijaya, and M. M. K. Sari, "The Role of Parents in Fulfilling Childrens Educational Rights During Learning from Home," *J. Ilmu Sos. dan Hum.*, vol. 10, no. 1, p. 147, 2021, doi: https://doi.org/10.23887/jish-undiksha.v10i1.29943.

9. H. Yuswati and F. A. Setiawati, "The Role of Parents in Developing Children Language at the Age of 5-6 Years," *J. Obs. J. Pendidik. Anak Usia Dini*, vol. 6, no. 5, pp. 5029–5040, 2022, doi: https://doi.org/10.31004/obsesi.v6i5.2908.

10. M. Shaleh, B. Batmang, and L. Anhusadar, "Collaboration of Parents and Educators in Stimulating the Development of Early Childhood Literacy," *J. Obs. J. Pendidik. Anak Usia Dini*, vol. 6, no. 5, pp. 4726–4734, 2022, doi: https://doi.org/10.31004/obsesi.v6i5.2742.

11. N. S. Hermawati and S. Sugito, " The Role of Parents in Providing a Home Literacy Environment (HLE) in Early Childhoodi," *J. Obs. J. Pendidik. Anak Usia Dini*, vol. 6, no. 3, pp. 1367–1381, 2021, doi: https://doi.org/10.31004/obsesi.v6i3.1706.

12. N. N. Zakiyya. H., "Jurnal basicedu," *J. basicedu*, vol. 5, no. 4, pp. 2541–2549, 2022, [Online]. Available: https://doi.org/10.31004/basicedu.v5i4.1230.

13. M. Yara, Y.S. & Taufik, "Jurnal basicedu," *J. basicedu*, vol. 5, no. 6, p. 6349_6356, 2021. https://www.jbasic.org/index.php/basicedu/article/view/2882 https://doi.org/10.31004/basicedu.v6i3.2882

14. M. Ninawati, N. Wahyuni, and R. Rahmiati, "The Influence of Artculation Models Assited by Concrete Objects on the Speaking Skills of Low Grade Students," *J. Educ. FKIP UNMA*, vol. 8, no. 3, pp. 893–898, 2022, doi: https://doi.org/10.31949/educatio.v8i3.2433.

15. N. A. Wiratama, I. D. Fatimah, and E. Widiyati, "Improving Reading Comprehension Skills to Solve Text Problems of Elementary School Student," *J. Basicedu*, vol. 6, no. 3, pp. 3428–3434, 2022, doi: https://doi.org/10.31004/basicedu.v6i3.2527.

16. N. Putu, K. Widiastuti, I. B. Putrayasa, and K. S. Adnyana, "Elementary School Students Writing Skills Assessment Instrument," *file:///C:/Users/HP/Downloads/445–1354–1-PB.pdf*, vol. 5, no. 1, pp. 50–56, 2022. https://doi.org/10.23887/jp2.v5i1.42473

17. R. Hadawiya, I. Muda, and B. M. Batubara, "Structuring: Scientific Journal of Masters in Public Administration Community Participation in Village Development Planning Deliberations Community Partcipation in Village Development Planning Deliberation," vol. 3, no. September, pp. 192–200, 2021, doi: https://doi.org/10.31289/strukturasi.v3i2.749.

18. R. D. Nur'aini, "Application of the YIN Case Study Method in Architectural and Behavioral Research," *Inersia*, vol. XVI, no. 1, pp. 92–104, 2020. http://dx.doi.org/https://doi.org/10.21831/inersia.v16i1.31319

19. S. N. M. FAUZI, "Application of The Method of Changing Interview Text into a Narrative Computer to Improve English Ability for Class VII A Students of MTs Negeri 2 Purbalingga ODD Semester for the 2019/2010 Academic Year," *Lang. J. Inov. Pendidik. Bhs. dan Sastra*, vol. 1, no. 1, pp. 1–13, 2021, doi: https://doi.org/10.51878/language.v1i1.354.

20. B. S. Bachri, "Ensuring Data Validaty Through Triangulation on Study Qualitative," *Teknol. Pendidik.*, vol. 10, pp. 46–62, 2010. http://www.yusuf.staff.ub.ac.id/files/2012/11/meyakinkan-validitas-data-melalui-triangulasi-pada-penelitian-kualitatif.pdf

21. S. RAPHAEL, "Descriptive Method," *An Oak Spring Sylva*, vol. 7, no. 1, pp. xxvii–xxviii, 2019, doi: https://doi.org/10.2307/j.ctvckq9v8.7.

22. I. junaid, "Qualitative Data Analysis in Study Tourist," vol. 10, no. 01, pp. 59–74, 2018, doi: https://doi.org/10.31219/osf.io/npvqu.

23. S. Hikmah, "The Problems of Achieving Students Speaking Skills Competence in Indonesia Language Learning," *J. PENEROKA*, vol. 1, no. 01, pp. 59–66, 2021. https://ejournal.iaida.ac.id/index.php/Peneroka/article/view/739

24. M. Muhanif, S. Suhartono, and J. Juhana, "The Influence of Disciplin and Creativity on Writing Skills of Elementary School Students," *Edukatif J. Ilmu Pendidik.*, vol. 3, no. 4, pp. 1962–1973, 2021, [Online]. Available: https://edukatif.org/index.php/edukatif/article/view/1046.

25. Minsih, "Implementing Basic Guidance Services in Shaping Student Character at Muhammadiyah Elementary School Special Program in Surakarta City," *J. Profesi Pendidik. Dasar*, vol. 2, no. 2, pp. 112–120, 2015. https://journals.ums.ac.id/index.php/ppd/article/viewFile/1646/1172

26. N. L. Safitri, M. Sulistiono, and D. W. Ertanti, "The Effect of Parental Tutoring on Learning Achievement of Elementary School Students P," vol. 4, pp. 309–320, 2022. http://www.uniflor.ac.id/e-journal/index.php/JPM/article/view/1209