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# Usage and Impact of Teachers Self-Assessment Practices on Teaching of Upper Basic Social Studies in Kwara State

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#### **ABSTRACT**

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#### Keywords

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**Background**: Self-assessment is a mechanism that enables teachers to reflect how their own work meets the goals. It is set for teaching concepts and enhancing effective teaching and learning. The objectives of this study are to investigate prevalent patterns of self-assessment practices, extent of using as well as the impacts of self-assessment practices on teaching Social Studies.

**Contribution:** This study investigates impact of teachers' self-assessment practices on teaching of upper basic Social Studies.

**Method**: Through simple random sampling technique, 600 upper basic Social Studies teachers were selected. A questionnaire is used for data collection. Percentage and mean ranking were used to analyze the collected data.

**Results:** The findings of the study show that peer observation, testing the flexibility of teaching style and activity reports are prevalent patterns of self-assessment practices and frequently used. The practices have impacts on teaching of upper basic Social Studies in schools.

**Conclusion:** it is recommended that teachers should constantly self-assess their teaching processes to recognize and improve on the progress teaching in the classrooms.

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## INTRODUCTION

Education is the pertinent key to development of the individual, society and the nation as a whole. It is the act of sharing information, knowledge, value, ideas, attitudes, and concepts with learners, as well as acquisition of information, knowledge, and ideas from the teacher. Education is the whole process of the development of an independent and integrated personality that will enable the individuals to assess the progress of ones' task and make appropriate corrections and in areas where are necessary through assessment. Hence, assessment is integral part of

education. Assessment is a systematic process of gathering information about effective teaching and learning processes for making decisions related to personality, program development, and improving upon the educational standard. One of aims of assessment is to improve qualities and standard of teaching and learning in schools for effecting teaching [1]. Effective teaching is not only about the dispensation of information and knowledge to students but also involves assessing the processes that a teacher goes through before, during, and after the class presentation. Adequate teacher preparation in terms of resources, time and learning opportunities should be part of assessment practices. Preparation includes sufficient time, adequate instructional resources for teachers to develop appropriate strategies and techniques of teaching as well as selection of suitable methods and techniques for assessment [2].

Assessment involves decisions about techniques and procedures of ascertaining attainment of predetermined or intended learning outcomes. It is an aspect of evaluation as one of the components of curriculum that is very important in determining instructional outcomes at all levels of education. Assessment has a number of different purposes which include measuring learners' achievement, engendering teaching and learning, enabling learners to become aware of how they learn, enabling teacher to prepare well for the lesson, and determining progress of the class. However, teachers in secondary education have persistently focused on acquisition of knowledge rather than participation in learning [3]. When students are assessed in learning activities that seem intrinsically meaningful or functional, they are more likely to engage and invest in deep learning [4]. Assessment techniques should be two dimensions. It is teachers' capacity to judge their own progress and level of attainment of instructional outcomes so that teachers would not become passive recipients of externally imposed assessment practices.

In addition, assessment determines teachers' progress and students' performance in Social Studies. Teachers who understand the assessment process acquire the ability to teach better [5]. One of the elements of assessment is self-assessment. Most other kinds of assessment place the teachers in a mere passive role. It takes place at every stage of the teaching processes. The teacher engages in self-assessment practices to have feedback and obtain data on teaching and learning activities within and outside classroom and compare the information gathered with best practices purposely to take decisions that will improve effective teaching and learning activities. The patterns involved in the assessment include the components of teaching. These components are quality of lesson plan, instructional objectives, knowledge of subject matters, methods adopted in teaching, instructional material prepared, communication skills in classroom, class management, learners' activities during the class, personality and comportment of teachers, as well as lesson evaluation [6].

Self-assessment is advantageous especially for teachers preparing what they teach in the classroom. Teachers usually need to figure it out for themselves based on conditions of students in the classroom, nature of the subject, availability of materials, and teachers' level of understanding. However, most teachers do not prepare for the class which consequently affects lesson presentation. It is a powerful mechanism that enables teachers to enhance teaching and learning. It encourages teachers to reflect on how their own work meets the goals set for teaching concepts. It promotes metacognition about what is being taught and how knowledge could be internalized by learners. It encourages teachers to think about how a particular lesson or assignment fits into the context of the education. It imparts reflective skills that are useful in academic research [7].

As a part of assessment, self-assessment is a prominent element of teaching and learning that helps teachers to identify their own skill gaps, their lack of knowledge, the teaching focus. Besides, it is also to set realistic goals, revise their work, and track their own progress. Its

processes assist teachers to stay involved and motivated, and encourage self-reflection and responsibility for their teaching [8]. It makes teachers identify standards and criteria need to apply to their work, and to make judgments about the extent to which they meet these criteria and standards.

In Social Studies instruction, Self-assessment is the ability of teachers to assess their competence of handling the subject and to make right decisions that improve their competencies [2], [9]. During self-assessment process teachers express their judgment about the effort they make, which may be either homogenous and comes from their personal interest, or heterogeneous that comes from someone else [10]. It gives teachers the necessary feedback and make them take the appropriate actions to improve their quality of lesson preparation and attainment of educational goals [11]. In addition, it is a procedure where teachers judge or otherwise assess the lesson taught and the quality of the lesson, in the light of various factors related to the methods, strategies, techniques and selection of instructional materials, as well as evaluation techniques employed to determine learning outcome [12]. There are different practices in which self-assessment can be implemented for effective teaching and learning. The practices include activity reports, reflective statement practices and peer observation, portfolio, self-assessment tests which may be electronic, and forms in which teachers can write their judgment about the effort they make, the obstacles they encounter and how the obstacles are overcome [13]. LessonApp is another tool of self-assessment practices that enables teachers to improve and lift the quality of teaching and strengthen the teaching profession. It is designed to provide necessary skills for teachers to develop quality lesson plan for instructional presentation and curriculum implementation with innovative strategies, practices and methods. It also helps teachers keep track of their personal development and self-reflection.

Portfolios such as artifacts like pictures, documents, and videos of a teacher while teaching that could serve as feedback to improve on weak areas, are also practices of self-assessment. These practices enable teachers to conceptualize more about what they teach and construct more solutions to problems likely experienced. Hence the teachers do not depend much on materials for teaching but instead seeking to find knowledge based on the learners' needs [14]. The practices are very essential in social science subjects as they tend to improve teaching profession and develop in students and teachers' self-adjustment and discipline.

Social Studies is one of social science subjects cultivates in learners' self-discipline, societal values cultural practices, environment adaptation and awareness, as well as sensitization of people about contemporary issues and social problems. The role of Social Studies teachers on societal sensitization, human orientation, and contemporary issues cannot be underestimated. The teachers will guide learners to understand the society and develop necessary skills to cope and make right decision on socio-economic and political activities in various social institution in the Society. [15] points out that central point in the teaching of Social Studies is the human resources that is teacher, but the central value of teacher is his resourcefulness in preparation and presentation of lesson in the classroom in order to ensure effective teaching and learning outcomes. What will determine learners' learning ability, comprehension and retention is teachers' skillfulness, and resourcefulness in identifying and selecting methods, strategies, techniques, and instructional materials for presenting what he is to teach. In Social Studies class, teachers guide learners to understand the content; motivate them to develop social skills and learning outcomes based on predetermined learning objectives [16]. Therefore, it becomes imperative for the teachers to pre-assess and post-assess teaching methods, strategies and techniques employed while teaching in order to serve as feedback on the teaching activities, strengthen the areas of weakness, and improve the quality of the teachers. It will also help to

identify the strategies that will improve the teaching techniques and skills. Self-assessment occurs when teachers are able to judge their own style of teaching and identify areas that they still need to research in order to gain more attention of learners and have impacts on the life of learners [17]. It also enables teachers to collect, to review record books of students, and to give them higher priority than the revision of previous lesson to detect learning needs, misconception, and where students need to internalize the knowledge gain. By self-assessments, teachers gain more information and knowledge of concept to be taught, as well as progress and difficulties with teaching so that appropriate measures could be put in place to improve their skills of meeting learners 'needs. These needs are often unpredictable and vary from one subject to another [19].

As important as the self-assessment practices are, it is pertinent to examine the pattern of its practices, utilization of the practices, and impacts on teaching of Social Studies. Therefore, the main purpose of this study is to investigate usage and impact of teachers' self-assessment practices on teaching of upper basic Social Studies in schools in Kwara State. Specifically, the study investigates prevalent patterns of self-assessment practices used for teaching of upper basic Social Studies in schools, extent of using self-assessment practices, and its impacts on teaching of upper basic Social Studies in schools.

## **METHOD**

Descriptive survey research design was adopted for this study. The population of the study was all upper basic Social Studies teachers in Kwara State. Two Local Government Areas were selected in each Senatorial district. Simple random sampling technique was used to select twenty upper basic schools in each local government area selected. All upper basic Social Studies teachers in each school selected were sampled using purposive random sampling technique making 600 respondents for the study. A researcher-designed questionnaire titled "Teachers' Self-Assessment Practices on Teaching Social Studies Questionnaire" was used for data collection. The questionnaire had four sections; that is, A, B, C and D. Section A sought information on teachers' biographical data. Section B of the instrument dealt with items related to prevalent patterns of self-assessment practices for teaching upper basic Social Studies in schools. Section C sought information on upper basic Social Studies teachers' level of using self-assessment practices with a modified 3 Likert scaling of Frequently (FR) - 3, Sometimes (ST) -2, and Not at All (NA) - 1. Section D elicited information on the impacts of self-assessment practices on teaching upper basic Social Studies in schools with a weighted scaling of Strongly Agree (SA) - 4, Agree (A) - 3, Disagree (D) - 2, and Strongly Disagree (SD) - 1. The average mean of 2.5 was obtained from the weighted scaling of section D to determine the impacts of self-assessment practices on teaching of upper basic Social Studies in the schools. The average mean scores of items of the section were obtained by adding the points of the weighted scaling and divided by numbers of the weighted scaling; that was, 4+3+2+1=10/4=2.5. If the mean of an item was above the average mean, it indicated the high impact of self-assessment practices; while the mean less than 2.5 indicated the low impact of self-assessment practices.

Construct validity of the instrument was ascertained by showing the draft copy of the instrument to two lecturers in Department of Social Sciences Education, University of Ilorin. All corrections and suggestions were incorporated into final copy used for data collection. The reliability of the instrument was also determined through the test-retest method. Teachers who did not participate in the study were involved. This took place within three weeks' interval of the first and second administrations. The data collected in the two administrations were analyzed

using Pearson Product Moment Correlation co-efficient formula to determine its reliability. Reliability index of 0.75 was obtained. Research questions one and two were answered using frequency and percentage, while research question three was answered using mean ranking.

## RESULTS AND DISCUSSION

Not every teacher is able to self-assess their teaching before and after the lesson. Oftentimes teachers think they have a better understanding of a concept than they actually do, and therefore rate themselves higher than learning outcomes. Self-assessment is to identify areas of strength and weakness. Both of these circumstances present a challenge for the teachers. In spite of the support and encouragement given to the upper basic education by the government and other stakeholders, majority of the teachers either do not or partially work towards the goals of basic education. This can be deducted from the increasing concern of the general public on non-improving standard of our educational system that has resulted to the poor performance and inability to internalize the content of Social Studies into learners' daily activities in the society [19] [20] [21].

This poor performance could be attributed to feeble self-assessment which can hinder learning of Social Studies. Many teachers do not teach effectively in the class not because they do not have the teaching skills but because they fail to assess themselves prior to lessen presentation and after the class [20]. In order to improve teachers' pedagogical skills and promote effective teaching in Social Studies, deliberate efforts have to put in place by teachers with the acquisition of appropriate self-assessment techniques to improve teaching of the subject. Furthermore, most of the studies find that influence of students' self-assessment enhances learning motivation, and independence have been identified in among the learners in Social Studies; whereas there is no research on teachers' self-assessment. This study therefore, usage and impact of teachers' self-assessment practices on teaching of upper basic Social Studies in schools in Kwara State.

#### Research Questions

- 1. What are the prevalent patterns of self-assessment practices used for teaching of upper basic Social Studies?
- 2. To what extents do secondary school teachers use self-assessment practices for teaching upper basic Social Studies?
- 3. What are the impacts of self-assessment practices on effective teaching of upper basic Social Studies?

### Research Question One

What are the prevalent patterns of teachers' self-assessment practices used for teaching upper basic Social Studies?

**Table 1**. Prevalent Patterns of Teachers' Self-assessment Practices Used for Effective Teaching.

S/N Prevalent Patterns of Self-assessment Practices Used (%) Not Used (%)

| 1  | Activity reports                           | 547 (91.17) | 53 (8.83)   |
|----|--|-------------|-------------|
| 2  | Reflective statement practice              | 551 (91.83) | 49 (8.17)   |
| 3  | Peer observation                           | 514 (67)    | 86 (33)     |
| 4  | Testing the flexibility of teaching styles | 120 (20)    | 480 (80)    |
| 5  | Putting oneself under the microscope       | 59 (9.83)   | 541 (90.17) |
| 6  | Keeping track of one progress              | 156 (26)    | 444 (74)    |
| 7  | Teacher self-efficacy practices inventory  | 204 (34)    | 396 (66)    |
| 8  | Traditional reviews                        | 270 (45)    | 330 (55)    |
| 9  | Using lesson App's self-assessment tool    | 45 (7.50)   | 555 (92.50) |
| 10 | Wieman teaching practices inventory        | 66 (11)     | 544 (89)    |

Results in Table 1 shows that out of ten prevalent patterns of teachers' self-assessment practices identified in this study, activity reports, reflective statement practice, and peer observation are prevalent patterns of teachers' self-assessment practices used by upper basic Social Studies teachers as their percentages are above 50%. This implies that activity reports, reflective statement practices, and peer observation are prevalent patterns of self-assessment practices used by upper basic Social Studies teachers.

Research Question Two

To what extents do upper basic Social Studies teachers use self-assessment practices for teaching Social Studies?

**Table 2.** Analysis of Extent of using Self-Assessment Practices for Teaching Social Studies.

| S/N | Self-assessment Practices                  | Frequently (%) | Sometimes (%) | Not at all (%) |
|-----|--|----------------|---------------|----------------|
| 1   | Activity reports                           | 450 (75)       | 104(17.33)    | 46 (7.67)      |
| 2   | Reflective statement practice              | 404 (67.33)    | 188(31.33)    | 8 (1.34)       |
| 3   | Peer observation                           | 412 (68.67)    | 160(29.33)    | 28 (4.67)      |
| 4   | Testing the flexibility of teaching styles | 84 (14)        | 88 (14.67)    | 428 (71.33)    |
| 5   | Putting oneself under the microscope       | 18 (3)         | 24 (4)        | 558 (93)       |
| 6   | Keeping track of one progress              | 20 (3.30)      | 20 (3.30)     | 560 (93.40)    |
| 7   | Teacher self-efficacy practices inventory  | 49 (8.17)      | 24 (4)        | 527 (87.83)    |
| 8   | Traditional reviews                        | 44 (7.34)      | 30 (5)        | 526 (87.67)    |
| 9   | Using lessonApp's self-assessment tool     | 82 (13.67)     | 88 (14.67)    | 430 (71.66)    |
| 10  | Wieman teaching practices inventory        | 34 (5.67)      | 62 (10.33)    | 504 (84)       |

Results shown on table 2 indicate that out of ten items that show the extent to which upper basic Social Studies teachers use self-assessment practices on effective teaching in schools, activity reports, reflective statement practice, and peer observation are frequently used by the teachers as their percentages are above fifty percent. Other self-assessment practices have different percent which are lower than average percent (50%). This indicates that activity reports, reflective statement practices, and peer observation are the self-assessment practices frequently used by upper basic Social Studies teachers.

Research Question 3

What are the impacts of self-assessment practices on teaching upper basic Social Studies?

**Table 3.** Analysis of Impacts of Self-assessment Practices for Teaching Social Studies.

| S/N | Impacts of Self-assessment Practices  | Mean | SD   | Ranking                |
|-----|---|------|------|------------------------|
| 1   | Self-assessment practice provides chances to reflect on teachers' challenges and design                                     | 3.31 | 0.87 | 2nd                    |
|     | approaches to correct the challenges  |      |      |                        |
| 2   | It makes teachers reflect about their core pedagogical values and belief.   | 2.96 | 1.01 | 8 <sup>th</sup>        |
| 3   | It makes teachers play an informed and active role advancing in their teaching.   | 2.90 | 0.92 | 10 <sup>th</sup>       |
| 4   | It enable teachers to collect, record and analyse what happened in the lesson so as to improve own actions where necessary. | 3.04 | 1.06 | 6 <sup>th</sup>        |
| 5   | It makes teachers create critical reflective practice in their own actions.   | 2.93 | 1.13 | 9 <sup>th</sup>        |
| 6   | It allows teachers to recognize their own strengths and targets for development.  | 3.07 | 1.07 | 5 <sup>th</sup>        |
| 7   | It enhances and facilitates effective teaching process in the classroom.  | 2.97 | 1.15 | <b>7</b> <sup>th</sup> |
| 8   | Self-assessment practice allows teachers to consider their decisions, reflect on actions and plan for future.               | 3.78 | 0.63 | 1 <sup>st</sup>        |
| 9   | It helps teachers to review their work and minimize errors.   | 3.27 | 0.86 | 4 <sup>th</sup>        |
| 10  | Self-assessment practice improves teachers' academic achievement in teaching.   | 3.29 | 0.92 | 3 <sup>rd</sup>        |

Table 3 indicates that out of ten items that address impacts of self-assessment practices on effective teaching, all items are ranked and show the impacts of self-assessment practices on effective teaching of upper basic Social Studies as their means are above 2.5 benchmark. This implies that self-assessment practices have impacts on effective teaching of upper basic Social Studies in schools.

Finding of the study reveals that activity reports, reflective statement practices, and peer observation are prevalent patterns of self-assessment practices used by upper basic Social Studies teachers. This implies that Social Studies teachers self-assess themselves by going through the Head of the Department, monitoring teams' or supervisors' reports, and through observation of their colleagues. This finding is in line with finding of [15, 22] who discovers that different practices can be implemented while teaching such as activity reports, reflective statement practices, and peer observation, portfolio, self-assessment tests, in which teachers can write their judgment about the efforts they make, the obstacles they encounter, and how they overcome these obstacles.

Furthermore, the finding of this study also shows that activity reports, reflective statement practices, and peer observation are the self-assessment practices frequently used by upper basic Social Studies teachers. This indicates that teachers only use most prevalent pattern of the self-assessment patterns while patterns are not common in their teaching environment, hence they might be using the practices. This finding is consistent with finding of [11] who finds that self-assessment is a very crucial and important process of the assessment because it gives

teachers the necessary feedback and makes them take the appropriate actions to improve themselves.

In this study, finding also revealed that self-assessment practices have impacts on effective teaching of upper basic Social Studies in schools. This finding implies that self-assessed teachers affirm that effective teaching is enhanced through self-assessment practices. This finding is inconsistent with the findings of [7] who reports that self-assessment encourages teachers to think about how a particular lesson or assignment fits into the context of the education. It also imparts reflective skills that are useful in academic research. It is also in line with finding of [8] who affirms that self-assessment helps teachers stay involved and motivated, and encourage self-reflection and responsibility for their teaching.

## CONCLUSION

From this study, it is indicated that the prevalent pattern of teachers' self-assessment practices frequently used by secondary school teachers are activity reports, reflective statement practices, and peer observation. The self-assessment practices (activity reports, reflective statement practices, and peer observation) have impacts on effective teaching of upper basic Social Studies in schools. Based on the findings of the study, it is recommended that effective and appropriate utilization of self-assessment practices should be embraced to ensure better adjustment and proper attainment of instructional outcomes. Teachers should see self-assessment as an important component of evaluation, and practice for self-improvement and proper attainment of instructional outcomes. Teachers should improve on effective use of the practices by considering other patterns of self-assessment in lesson preparation and presentation. Teachers should effectively use the practices to sustain their impacts on teaching and learning processes.

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## **REFERENCES**

- [1] I. N. Olokooba, "undergraduates' self-assessment and learning of Social Studies in University of Ilorin, Ilorin, Nigeria" Journal of Evaluation, vol. 7, no. 1, pp. 189-200, 2022.
- [2] O. E. Abdullahi, "Principles of classroom evaluation" In A. A. Adegoke, et al. (Eds.) Introduction to teaching methodology. Ilorin: Faculty of Education, University of Ilorin, pp. 56, 2016.
- [3] D. Boud, & N. Falchikov, "What does research tell us about self-assessment?" London: Kogan. 2006.
- [4] K. Sambell, L. McDowell, L. & C. Montgomery, Assessment for Learning in Higher Education. Routledge: Oxon, 2013.
- [5] C. McKevitt, 2016). "Engaging Teachers with Self-Assessment and Tutor Feedback to Improve Performance and Support Assessment Capacity" Journal of University Teaching and Learning Practice, vol. 13, no. 1, pp. 2016.
- [6] H. O. Owolabi, "Evaluation in the Practice of teaching" In A. A. Adegoke, et al. (Eds.) Introduction to teaching methodology. Ilorin: Faculty of Education, University of Ilorin, 2016.
- [7] E. Gehringer, "Self-Assessment to Improve Learning and Evaluation" North Carolina State University, 2017.
- [8] H. Andrade & A. Valtcheva, "Promoting learning and achievement through self-

- assessment, Journal of Theory into Practice in Education, vol. 48, no. 1, 12-19, 2009.
- [9] E. Chalkia, "Self-assessment as an alternative method of assessing speaking skills in the sixth grade of a Greek state primary school classroom" Research papers in language teaching and learning, vol. 3, no. 1, pp 34-45, 2012.
- [10] E. Bellou, "Assessment of teacher performance: A factor that shapes the effectiveness of school's educational work" Master's thesis, University of Ioannina, Ioannina, Greece, 2017.
- [11] M. Zapitis, "The effects of self-evaluation training on writing of teachers in grades 5 & 6, Master's thesis, University of Toronto, Toronto, Canada, 2011.
- [12] Z. Yan, "Teacher self-assessment practices: the role of gender, school level and goal orientation. Assessment in Education: Principles, Policy & Practice, vol. 25, no. 2, pp 183-199, 2018.
- [13] S. Sungur, & C. Tekkaya, "Effects of problem-based learning and traditional instruction on self-regulated learning. Journal of Educational Research, 99(5), 307-317, 2006.
- [14] J. O. Adetayo, "Classroom interaction patterns of part-time and full-time trained Social Studies teachers," Nigerian Journal of Social Studies, vol. 14, no. 2, 28-46, 2011.
- [15] I. N. Olokooba, "Effective utilization of instructional materials for Social Studies in Upper Basic Schools in Kwara State. Anatolian Journal of Education, 6(1), 167-174, 2021.
- [16] D. A. Ariya, "Relative effects of concept-mapping instructional strategies on junior school students' performance in social studies in Oke-Ogun, Nigeria," An Unpublished Ph.D. Thesis, Department of Arts and Social Sciences Education, Faculty of Education, University of Ilorin, Ilorin, Nigeria, 2012.
- [17] J. H. McMillan & J. Hearn, J. "Student self-assessment: The key to stronger student motivation and higher achievement, Educational Horizons, 87(1), 40-49, 2008
- [18] A. Cobbinah & R. K. Annan-Brew, "Students' perceptions of classroom feedback on teacher assessment practices in the Central Region of Ghana" Journal of Educational Research and Development, 7, 1, 1-10, 2019.
- [19] A. A. Abdulsalam, "Effects of guided-discovery and concept-mapping on Social Studies students' performance in colleges of education in Kwara State, Nigeria," Ph.D. dissertation, Department of Social Sciences Education, Faculty of Education, University of Ilorin, Ilorin. 2017.
- [20] I. N. Olokooba, & A. A. Abdulsalam, "Impacts of instructional evaluation techniques on teaching of upper basic Social Studies in Kwara State", Journal of Educational Research and Development, 7, (1), 179 186, 2019.
- [21] I. N. Olokooba, & A. A. Abdulsalam, "Teacher variables and use of Computer Assisted Instructional Materials (CAIM) in upper basic Social Studies in Kwara State", Nigeria Journal of Educational Technology 1, (2), 124-131, 2016.
- [22] Chen T, Crosbie RC, Anandkumarb A, Melville C, Nguyen N, Chen J. Conceptions of Learning and Teaching and Their Relation to Educational Variables During Teaching Second Language. SPEKTA (Jurnal Pengabdian Kepada Masyarakat: Teknologi dan Aplikasi). 2022 Jun 14;3(1):1-2.

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