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Analysis of the Implementation of Authentic Assessment in the Independent Learning Curriculum in Elementary Schools

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Abstract:

Assessment or Assessment is a systematic activity whose process is continuous which is continuously used as a measurement tool for assessing student learning outcomes and as a basis for processing assessment data which is intended as a report on student learning progress ultimately based on certain criteria and considerations for educators. The readiness of symptom evaluation instruments for classroom teachers is an important job to assist in working on the nature of the school, in particular to provide an understanding of demonstrative evaluation, especially to action members, to be specific educators. This article discusses how authentic assessment activities for self-paced curriculum are implemented. The Seven Stages Model Theory of Program Planning and Development is used in service implementation, and qualitative analysis is used in service analysis. The method of reviewing articles and reference sources becomes a supporting instrument. The implementation of the independent curriculum, the introduction of diagnostic assessment, the manufacture of diagnostic assessment instruments, and the analysis of question items are the four topics discussed in the technical guidance material. The advantage that members gain after taking this special assistance is that they can build their insight into the demonstrative evaluations carried out in learning in the learning space; Learn the technical details of diagnostic assessment tests so that they can be used in daily learning, and at least the references are clear enough; Able to understand ongoing curriculum modifications and obtain teaching strategies based on the applicable curriculum.

Keywords: Entrepreneurial Competence; Entrepreneurial Knowledge; The Success Of TheVenture; Entrepreneurship; Entrepreneurship

INTRODUCTION

Permendikbud number 23 of 2016 explains that assessment is the process of collecting and processing information to measure the achievement of student learning outcomes. Assessment of learning outcomes by educators aims to monitor and evaluate the process, learning progress, and improvement of student learning outcomes on an ongoing basis.

Assessment is the process of collecting various data that can provide an overview of student learning progress. The picture of student learning development needs to be known by the teacher in order to ensure that students experience the learning process correctly. Authentic assessment is an assessment approach that requires learners to display attitudes, using knowledge and skills gained from learning in real situations (the real world) (Nasution, 2021).

Authentic assessment is a process of collecting, reporting, and using information about student learning processes and outcomes by applying the principles of assessment, continuous implementation, authentic, accurate and consistent evidence as public accountability (Sugiri &; Priatmoko, 2020). Authentic assessment is an assessment that is carried out comprehensively to assess starting from inputs, processes, and learning outputs. Authentic assessments are developed because traditional assessments that have been used ignore real-world contexts and do not describe students' abilities holistically. Therefore, according to Pokey and Siders, authentic assessment is defined as an effort to evaluate students' knowledge or expertise in the context of approaching the real world or real life.

"Merdeka Belajar" was taken as a learning material from the Ministry of Education and Culture under the auspices of Nadiem Makarim. After all, the Indonesian curriculum has been updated three times in 10 years. There is no other way to meet Indonesia's needs that change every day, both internally and externally. This explains why Indonesia goes to great lengths to encourage its citizens to be competitive in the modern era. In curriculum implementation, there needs to be an assessment as a tool used to evaluate curriculum development (Sugiri &; Priatmoko, 2020). In general, assessment or also called evaluation is a systematic process used to determine the level of success and effectiveness of a particular program. Measurement of learning outcomes is the single biggest problem in the evaluation of educational programs. Measurement is the main reason for establishing education (Achmad et al., 2022). Only assessments based on measurement results can be used as a reliable guide for expressing opinions or suggestions. School learning assessments measure an individual's set of characteristics or behaviors such as knowledge, attitudes, and skills to make decisions about the status of those characteristics. Based on the use of these characteristics then indicate the status of the student. In the evaluation of learning outcomes, all aspects of teaching must be considered. Evaluation involves the ability to form an opinion about a topic or topics and be accountable for that opinion. The three main parts of assessment are cognitive, affective and psychomotor skills. When a person has good cognitive skills, they know how to convey information, especially when facing the challenges of daily life. Learning that lists the learning outcomes conducted by Bloom includes: cognitive, evaluative and physiological classifications. Cognitive is a term used to describe the development of mental abilities and consciousness. Affective can be interpreted as a domain name related to the growth of attitudes, feelings and emotions of learners. While psychomotor can be interpreted as the skills of learners (Neina et al., 2022)

In implementing an independent curriculum, authentic assessment is very important for teachers to do so that the assessment or assessment of students in the learning process will increase. What exactly is authentic judgment? Authentic assessment is a significantly meaningful measurement of learners' learning outcomes in the domains of attitudes (affective), skills (psychomotor) and knowledge (cognitive) (Pratycia et al., 2023). The term assessment is defined the same as measurement, testing or evaluation. The term authentic is synonymous with real, genuine, valid or reliable. Thus, conceptually authentic assessments are significantly more meaningful than even standardized multiple-choice tests. In the application of authentic assessment to determine student achievement, teachers must have used criteria related to knowledge construction, observing and trying activities, and extramural achievement scores (Achmad et al., 2022).

Authentic assessment has strong relevance to the scientific approach to learning in accordance with the demands of the independent curriculum. The assessment is able to describe the improvement of student learning outcomes, both in the context of observing, reasoning, trying, building networks and others. Authentic assessments tend to center on complex or contextual tasks, allowing learners to demonstrate their competence in more authentic settings. For primary school level, authentic assessment is particularly relevant to an integrated thematic approach to learning for appropriate subjects. Authentic assessment mandated in the independent curriculum requires authentic learning as well. Authentic learning reflects the tasks and problem-solving required in the realities of life outside of school. The independent curriculum mandates that authentic assessment consists of a variety of assessment techniques. First, direct measurement of learners' skills relates to long-term educational outcomes such as success in the workplace. Second, assessment of tasks that require extensive involvement and complex performance. Third, the analysis of the process used to produce student responses to the acquisition of existing attitudes, skills and knowledge (Yunizar, n.d.).

Based on the statement above, the main point of this study is to determine the application of authentic assessment in elementary schools in the independent learning

curriculum through literature studies from 15 journals based on the last 5 years of publication. Researchers will sort the year of publication of the journal from the largest year to the smallest year based on journals published in the last 5 years with the aim of resummarizing whether authentic assessment in the independent curriculum can and is easily used for educators and can be carried out properly so that it can produce positive things in the learning process of students in elementary schools.

METHOD

This study used qualitative research with a descriptive approach. Qualitative research contains information about descriptive data which includes written data and oral data. The technique used in this study is purposive sampling technique. Purposive sampling technique is a technique whose research sample focuses on selected informants (Vhalery et al., 2022). The data sources used in this study were primary and secondary. Primary data sources are obtained through observation and interviews. While secondary data sources are obtained from literature relevant to the topic of discussion of researchers such as books, journals / articles, and other scientific literature. To collect information, researchers look for topics of discussion and then collect the information that has been obtained. After that, the data analysis method used is content analysis. Content analysis is carried out to obtain information objectively and systematically. Once the relevant data is collected in the data analysis technique, the next step is to analyze the data using a descriptive analytical approach. This approach consists of three stages, namely first analyzing the data that has been collected, which data is relevant to the problem topic; second, describe and interpret criticism of the collected data to produce conclusions that can answer the formulation of the research problem; and third, conclude (V.A.R.Barao et al., 2022).

The following are the reference sources used in writing this article:

Reference	Title	Years
Fahad A Sadat at all, UNISA	ASSESSMENT IN CURRICULUM 2013 AND CURRICULUM MERDEKA	2022
Hestiwahyuningrun JNES	Analysis of student learning styles in terms of learning assessment of the independent curriculum	2023
Kholifah Tur Rosidah, at all Adhi Buana Surabaya	ANALYSIS OF TEACHER READINESS TO IMPLEMENT ASSESSMENT AUTHENTIC IN THE INDEPENDENT CURRICULUM LEARN	2020
Mujiburahman, at all Aandalika University of ducation, Hamzanwadi Jniversity	PRIMARY SCHOOL LEARNING ASSESSMENT IN THE MERDEKA CURRICULUM	2023
Niku Aji Sugiri1 , Sigit Priatmoko UIN Malang	AUTHENTIC ASSESSMENT PERSPECTIVE AS AN EVALUATION TOOL IN MERDEKA BELAJAR	2020

RESULTS AND DISCUSSION

Teachers understanding of the implementation of authentic assessment, the implementation of attitude competency assessment, the implementation of knowledge competence, and the implementation of skill competencies in the implementation of thematic learning are further discussed in this study.

Teacher Knowledge on the Use of Authentic Assessment in Thematic Learning Based on the results of the study, authentic assessment was used as an assessment of thematic learning in the 2013 curriculum. The results of this study are in line with the statement made in the Copy of Annex Number 104 of 2014 by the Minister of Education and Culture of the Republic of Indonesia (Permendikbud) concerning the Assessment of Learning Outcomes by Educators in Primary and Secondary Education, which states that authentic assessment is mandatory for the 2013 curriculum.

According to research findings, the definition of authentic assessment based on the opinion of review techniques is an assessment that is carried out continuously and comprehensively both from the aspects of knowledge and skills, as well as social and religious attitudes. Student performance and/or outcomes show that authentic assessment is the real one (Rosidah et al., 2021) (Mustikarani &; Ruhimat, 2018: 149 (Mamat and Ruhimat, 2018, According to Sani (2014), authentic assessment is a type of assessment in which students are asked to demonstrate the skills and competencies necessary to deal with real-world problems and situations.

A legitimate evaluation is a substitute assessment act that underscores cycles and outcomes with an assortment of evaluation instruments. According to E. Nurhayati & Ahmad (2018), this is adjusted to the competency requirements outlined in competency standards also called core competencies and basic competencies. Meanwhile, Kunandar 2013 (Ari Astriyandi, Umi Chotimah, 2016) states that the actual assessment is an evaluation that focuses on the disposition competence, information, and ability sections. (According to the Curriculum Center, 2009 (Umami, 2018), authentic assessment is the process of collecting, reporting, and using information about student learning outcomes by using authentic, accurate, and consistent evidence as public accountability and applying assessment principles. According to the study, teachers' lack of ability to use information technology and the age of teachers who are approaching retirement are challenges for schools that implement authentic assessment. This is based on Ms. Miryarti's opinion. Young teachers help older teachers in overcoming this problem. In addition, the willingness to learn is influenced by age and the availability of computer and laptop facilities which are supporting and inhibiting factors. Because it does not touch the true essence of student learning processes and outcomes, traditional learning outcomes assessments even have a tendency to reduce the meaning of the curriculum (Science &; National, 2023). Where traditional assessments have a tendency to reduce the meaning of the curriculum, are unable to describe basic competencies, and have poor predictability regarding the extent to which many subjects or disciplines articulate attitudes, skills, and thinking abilities; It was at that moment that authentic judgment really took off. In fact, there are still strengths and weaknesses in any assessment method. However, it is time for professional educators in all education units to lead efforts to integrate the potential of students, schools, and the surrounding environment through authentic assessment of learning processes and outcomes (V.A.R.Barao et al., 2022).

Authentic assessment data is used for a variety of purposes, including determining whether curriculum implementation and classroom learning are accountable or not. Both qualitative and quantitative approaches can be used to analyze authentic assessment data. Narratives or descriptions of the achievement of student learning outcomes, such as strengths and weaknesses, motivation, courage to argue, and so on, are qualitative analysis formats of authentic assessment. Quantitative examination of legitimate evaluation information uses assessment rubrics or agendas to survey overall student reactions compared to models within a limited scope, i.e. at least four ability levels (e.g. very capable, capable, moderately capable, underprivileged, and incapable). Assessment rubrics can be holistic or analytical. Analyze holistically but not proficiently). The assessment rubric can be scientific or comprehensive. Comprehensive investigations provide general value of student presentations, such as judging National Science Olympiad contests.

Implementation of Attitude Competency Assessment in Thematic Learning

Based on research findings, social and religious attitudes are aspects of observed attitudinal competence. Based on the research, it is known that researchers make observations and use journal assessments to assess the competence of religious and social attitudes. The following assessment techniques are used, namely review techniques. Journal assessment is carried out using review methods both inside and outside the classroom, but only on certain events, both positive and negative. One of the ways teachers record what students do and record is through journal assessments (Pratycia et al., 2023).

Umi Salamah (2018) stated that the diary is an evaluation instrument used to collect educators' records inside and outside the classroom, including perceptual data on students' perspectives and behaviors. In addition, according to Imron (2011), a learning journal is a collection of relevant materials, notes, observations, and thoughts organized over a predetermined period of time, usually during a predetermined learning period. Everything about students is recorded in the teacher's journal, which can be used as a reference when making decisions regarding student attitudes during the learning process. Imron (2011) adds that learning journals have several uses as follows: 1) Provide real records of one's experience or mastery of material. 2) Shows one's learning progress. 3) Keep a record of one's ideas and thoughts through learning experiences 4) Help one know their strengths, weaknesses, and options in learning (Characters et al., n.d.).

Given that the impact of diary evaluation cannot be distinguished from its inhibitors, it is realized that the obstacle in diary assessment is the mentality of students that cannot be known directly by educators, especially in the learning process outside the classroom. Application of Knowledge Competency Assessment in Thematic Learning

Based on research findings, there are various methods used to carry out authentic assessments in thematic learning based on knowledge competency assessment, including: structured tests, oral tests, and assignments. Alimuddin (2014) stated that information assessment can be interpreted as an evaluation of scientific potential which includes original, reasonable, procedural, and metacognitive information. However, only a few methods are used with the review method, as shown below: Written exam. Given the results of the review, it can be seen that the teacher applies a written test to assess the information ability of students. The tests prepared are involved with survey methods in Day to day Test (UH) and Assessment (U) in each example. In this writing technique, some questions are written on paper, both on the question sheet and on the blackboard. The task book also contains answers to questions (Achmad et al., 2022).

According to S. Nurhayati (2019), the written test consists of multiple choice, filling in the blanks, true false, matchmaking, and the form of questions and essay answers. In addition, according to Sani (2016), the written test consists of questions submitted to

students in writing and answered in writing. Based on the research findings, it is known that teachers ask questions in an essay style. According to Muttaqin & Kusaeri (2017), the written test in the form of an essay consists of a series of questions that require students to organize and express the answers in their own words.

According to Asmawi Zaenul and Noehi Nasution (Muttaqin &; Kusaeri, 2017), the essay-shaped written test consists of questions that participants respond to by expressing their thoughts. From the research findings, it is also known that Mrs. Wuri Indayani had prepared assessment questions in advance. Daily tests are carried out at the sixth learning meeting or at the conclusion of the subtheme, and examination assessments are carried out in each lesson to ensure complete learning. The evaluation is completed and circulated directly to each student. This obstacle is inseparable from the application of written test techniques for assessing students' knowledge competencies.

Given the side effects of the review, it was realized that the obstacle in evaluating student information through the testing procedures drawn up, was a large spending plan to double down on questions. Furthermore, instructors need tremendous assets.

Assignment. From the research findings, it is known that teachers use the assignment method to evaluate students' knowledge competence. The instructor assigns homework as an instrument for assignment. The findings of this study are in line with the findings of Sani (2016: 89) which states that assignment instruments in the form of school assignments and additional projects are done separately or in groups. Based on the research findings, it is also known that the researcher first prepares questions for the assignment. The task is not completed by researchers every day; Instead, all collected tasks are evaluated. The implementation of assessment of students' information abilities through the task method cannot be separated from obstacles. Given the consequences of review, the impediment lies with students not submitting assignments on time.

Implementation of Teacher Skills Competency Assessment in Thematic Learning

Based on the study findings, only the following assessment methods are used in the implementation of authentic assessment in thematic learning:

Product. According to the study, researchers use product assessment to evaluate students' skill competencies. Researchers prepare for tests by giving students instruction on what they need to bring and prepare ahead of time. The assessment of question items is led directly by the researcher. In addition, researchers do not directly convey the results of product evaluation. Fitria and Rini (2013) stated that the evaluation of question items is an assessment of the ability of students to apply the information they have as question items, and an assessment of the quality of question items. However, the challenge cannot be separated from this assessment. Some students forget to bring the tools and materials they need to make a product, so teachers have to provide them extra (Neina et al., 2022).

According to Mamat Ruhimat (2018), more assessments with tests are carried out compared to non-tests, both on Daily Tests, Midterm Exams (UTS), and Final Semester Exams (UAS). In addition, there are teachers who do not make grids, and only a small number of teachers who answer make questions using grids.

The estimation instrument did not meet the stage of unshakable validity and quality testing. The quality of the development of instruments for measuring student learning outcomes has not improved, according to teacher respondents (Digital, 2023). Researchers suggest that all parties improve, train, and supervise teachers in creating assessment instruments that measure student learning outcomes, especially for social science teachers. According to E. Nurhayati and Ahmad (2018), history teachers understand well authentic assessments in the 2013 curriculum. The educator's suite of experiences has directed informational assessment result reports, instructors use online grade-handling programs; The diversity of student backgrounds and characters presents challenges for history teachers, but the quality of students, availability of learning facilities and resources, and grade-processing software support the conduct of authentic assessments.

According to Ari Astriyandi and Umi Chotimah (2016), teachers at SMA Negeri 1 Indralaya lack the ability to use authentic assessment to teach citizenship. The absence of an assessment rubric on the attitude and skill assessment instrument, the incompatibility of the essay test with the material taught, and the authentic assessment implementation rate of only 46.8% prove this.

CONCLUSION

It can be concluded, based on the findings and discussion of the study, that the teacher has carried out various authentic assessments, including attitude assessments with Journal Techniques, essay tests, and assignments for the ability of teacher knowledge and skills in using product research. Teachers still face several challenges in carrying out authentic assessments, including the inability to observe students' attitudes during the learning process, the low cost of making questions, and students who are not disciplined in preparing products and others. Therefore, teachers should not delay investigating student performance.

Basically, every problem raised by teachers about standards and assessment, there is a solution. It's just that if teachers are willing to continue learning, looking for information, opening their minds about new things and not rushing to express negative opinions and in the form of complaints, because there have been many references or literature that teachers can access related to the application of authentic assessment. Training conducted by the government is very limited, so the moment should only be used as additional information or maybe clarify the confusion experienced by discussing it with the instructor. However, the rest of the time teachers have more time to learn and develop their professionalism independently with a lot of reading mainly related to authentic standards and assessments. So that it can carry out assessments of students properly and correctly. If this is done by teachers with enthusiasm, teachers will have better readiness in carrying out the learning process, especially in implementing authentic assessments

BIBLIOGRAFI

- Achmad, G. H., Ratnasari, D., Amin, A., Yuliani, E., &; Liandara, N. (2022). Authentic Assessment of the Independent Learning Curriculum in Islamic Religious Education Learning in Elementary Schools. *Educational : Journal of Education*, 4(4), 5685–5699. https://doi.org/10.31004/edukatif.v4i4.3280
- Digital, B. (2023). EDUCARE : Journal of Educational Sciences. 02(01), 1–15.
- Science, J., &; National, P. (2023). National Journal of Education Analysis of Student Learning Styles in terms of Learning Assessment of the Independent Curriculum of the National Journal of Education. 1(April), 38–44.
- Character, S., Level, P., &; Basic, P. (n.d.). *PAI ASSESSMENT IS BASED ON MINIMUM COMPETENCY ASSESSMENT AND CHARACTER SURVEY AT THE BASIC EDUCATION LEVEL.*
- Nasution, S. W. (2021). Assessment of the Independent Learning Curriculum in Elementary Schools. *Proceedings of the National Seminar on Basic Education*, 1(1), 135–142. https://doi.org/10.34007/ppd.v1i1.181
- Neina, Q. A., Qomariyah, U., &; Aditia, R. (2022). Authentic Assessment Based on Independent Learning in Learning Literature with Higher Level Thinking Skills (HOTS) to Prevent Learning Loss in Secondary Schools. Journal of Indonesian Literature, 11(2), 115–121. https://doi.org/10.15294/jsi.v11i2.57559
- Pratycia, A., Son, A. D., Ghina, A., Salsabila, M., &; Adha, F. I. (2023). Analysis of the Differences between the 2013 Curriculum and the Independent Curriculum, Journal of Science and Computer Education. *Journal of Science and Computer Education*, 3(1), 58– 64.
- Rosidah, C. T., Pramulia, P., &; Susiloningsih, W. (2021). Analysis of teacher readiness to implement assessments. *Journal of Basic Education, Vol 12 No*(1), 87–103.

Analysis of the Implementation of Authentic Assessment in the Independent Learning Curriculum in Elementary Schools

- Sugiri, W. A., &; Priatmoko, S. (2020). Authentic assessment perspective as an evaluation tool in Merdeka Belajar. At-Thullab : Journal of Madrasah Ibtidaiyah Teacher Education, 4(1), 53. https://doi.org/10.30736/atl.v4i1.119
- V.A.R.Barao, R.C.Coata, J.A.Shibli, M.Bertolini, & J.G.S.Souza. (2022). ASSESSMENT IN CURRICULUM 2013 AND CURRICULUM MERDEKA. *Braz Dent J.*, *33*(1), 1–12.
- Vhalery, R., Setyastanto, A. M., &; Leksono, A. W. (2022). Curriculum Merdeka Belajar Kampus Merdeka: A Literature Review. *Research and Development Journal of Education*, 8(1), 185. https://doi.org/10.30998/rdje.v8i1.11718
- Yunizar, R. E. (n.d.). Assessment as an Evaluation Tool in the Implementation of the Independent Learning Curriculum at SDN 01 Ngawonggo.
- Alimuddin. (2014). Assessment in the 2013 Curriculum. National Seminar on Education Characters, 01(1), 23–33.
- Ari Astriyandi, Umi Chotimah, E. E. F. (2016). Teachers' Ability to Apply Assessments Authentic in Learning Ppkn. Journal of Bhinneka Tunggal Ika, 3(4), 187–198.
- Basit, A., &; Wardana, L. A. (2016). Development of Authentic Assessment Tools in
- Civic Education Learning. Scientific Journal of Pancasila and Civic Education, 1(2), 73–78. <u>Https://Doi.Org/10.17977/Um019v1i22016p073</u>.
- Fitria Wahyu Pinilih, Rini Budiharti, E. Y. E. (2013). Development of Assessment Instruments
- Products on Science Learning for Junior High School Students. Journal of Physics Education, 1(2), 23–27.
- Imron, K. & A. (2011). Application of Learning Journal Assessment Techniques to Defender Model
- Problem-based teaching to improve student learning outcomes of quadrilateral subject matter. Kreano: Journal of Creative-Innovative Mathematics, 2(1), 57–71. <u>Https://Doi.Org/10.15294/Kreano.V2i1.1246</u>
- Kunandar. (2014). Authentic Assessment (Assessment of Student Learning Outcomes Based on Curriculum 2013). Eagle Press.
- Mamat Ruhimat. (2018). Competency in Making Learning Outcome Measurement Instruments by

- Junior High School Social Studies Teacher in Bandung City. LENTERA EDUCATION, 21(2), 176–187.
- Muttaqin, M. Z., &; Kusaeri, K. (2017). Development of Ben's Written Test Assessment Instrument
- For Descriptions for Problem-Based Pie Learning Fiqh Material. Tatsqif Journal, 15(1), 1–23. <u>Https://Doi.Org/10.20414/J-Tatsqif.V15i1.1154</u>
- Novauli. M, F. (2015). Teacher Competence in Improving Learning Achievement in Junior High School

The Land in the City of Banda Aceh. Journal of Educational Administration : Pascasar Program

- jana Unshiah, 3(1), 45–67. Nurhayati, E., &; Ahmad, T. A. (2018). Implementation of authentic assessment in learning
- History at SMA Negeri 1 Semarang. Indonesian Journal Of History Education, 6(1), 21–30.
- Nurhayati, S. (2019). Management of Assessment of Subject Learning Outcomes. Journal of Balai Diklat Bandung Religion, XIII, 154–161.
- Shabir, M. (2015). Position of teachers as educators: (duties and responsibilities, rights and obligations, and teacher competence). OLADUNA Journal, 2(2). Umami, M. (2018).
 Authentic Assessment of Islamic Religious Education Learning and Budi
- Ethics in the 2013 Curriculum. Journal of Education, 6(2), 222–232. <u>Https://Doi.Org/10.24090/Jk.V6i2.2259</u>
- Umi Salamah. (2018). Quality Assurance, Educational Assessment. Evaluation, 2(1), 274–293.
- Yovi Anggi Lestari and Margaretha Purwanti. (2018). The Relationship of Pedagogic Competence,
- Professional, Social, and Personality in Nonformal School Teachers X. Journal of Education, 2(1), 197–208.

Analysis of the Implementation of Authentic Assessment in the Independent Learning Curriculum in Elementary Schools

Yuni Pantiwati. (2013). The nature of authentic assessment and its application in learning Biology. Journal of Mathematics and Science Education, 1(1).

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