New Model of Character Education Evaluation Management Information System Based on Google Workspace in Kindergarten

Gustriya Wijayanto¹, Wahyudi Wahyudi²*, Sophia Tri Satyawati³, Sachin Gupta⁴

^{1,2,3}Universitas Kristen Satya Wacana, Indonesia ⁴Mohanlal Sukhadia University, India *Email: yudhi@uksw.edu

Submitted: 2023-12-26. Revised: 2024-01-10. Accepted: 2024-01-25.

ABSTRACT

Character education is a joint responsibility between schools and parents, especially in the context of a character assessment inside and outside the school environment. This research and development aim to create a character education evaluation information system model based on Google Workspace, focusing on increasing parental participation in assessing children's character. The research method used is Research and Development (R&D), which uses the ADDIE model and the mixed method (sequential exploratory) approach. Respondents to this research involved school principals, teachers, and parents. Various data collection techniques such as interviews, observation, FGD, documentation studies, and questionnaires were used in this research. Data collection instruments include interview guidelines, observation guidelines, FGD guidelines, and questionnaires. The data analysis was carried out using qualitative descriptive and quantitative descriptive methods. The results of this research are the development of a model book and a Google Workspace-based character education evaluation website product. The validation by IT experts showed an assessment percentage of 88.61% in the excellent category, while the character education experts gave an assessment percentage of 84.65% in the exceptional category. The ratings from the users, especially teachers, reached 86.09% in the good excellent, and from the parents, it was 76.70% in the sound amazing. Therefore, it can be concluded that the product developed is suitable for use. The developed products can help parents and schools monitor children's character development.

Keywords: Buddhist Kindergarten, Character Education, Google Workspace, Management System

How to Cite:

Wijayanto, G., Wahyudi, W., & Satyawati, S. T. (2024). New Model of Character Education Evaluation Management Information System Based on Google Workspace in Kindergarten. Journal of Nonformal Education, 10(1), 62–74. https://doi.org/10.15294/jone.v10i1.1419

INTRODUCTION

Character education is an essential component in the world of education in Indonesia which must be implemented at formal, informal, and non-formal education levels (Peraturan Presiden Nomor 87 Tahun 2017 tentang Penguatan Pendidikan Karakter; Peraturan Menteri Pendidikan dan Kebudayaan Nomor 20 Tahun 2018 tentang Penguatan Pendidikan Karakter Pada Satuan Pendidikan Formal). Character education is a learning method that combines cultural values, knowledge, emotional attitudes, and positive behavior towards God, oneself, society, and the nation to instill character values in students so that they become individuals with holistic character (Insani et al., 2021; Muchtar & Suryani, 2019). The Character Education Strengthening (CES) Program is a character education program that contains five central CES values, namely a) religiosity, b) nationalism, c) independence, d) cooperation, and e) integrity (Hasbi et al. et al., 2019; Hasbi et al., et al.,

2019). Even though there are currently new regulations regarding the Pancasila Student Profile, the CES program can still be implemented because the CES program can be integrated with the Pancasila Student Profile (Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 22 Tahun 2020 tentang Rencana Strategies Kementerian Pendidikan dan Kebudayaan Tahun 2020-2024).

One of the educational levels that are required to implement the CES program is the Kindergarten level with the age range of students at this level being 4-6 years which is further regulated in the book entitled Penguatan Pendidikan Karakter Pada Pendidikan Anak Usia Dini serta buku Pedoman Penguatan Pendidikan Karakter Pada Pendidikan Anak Usia Dini (Hasbi et al., et al., 2019; Hasbi et al., et al., 2019; Peraturan et al. 20 Tahun 2018 tentang Penguatan Pendidikan Karakter Pada Satuan Pendidikan Formal; Peraturan Menteri Pendidikan Kebudayaan, Riset dan Teknologi Nomor 21 Tahun 2022 tentang Standar Penilaian Pendidikan pada Pendidikan Anak Usia Dini, Jenjang Pendidikan Dasar, dan Jenjang Pendidikan Menengah). Moral learning in early childhood is carried out using methods of reinforcement, punishment, and imitation, as well as the tendency to make the teacher a figure, character, and teacher's abilities who are emulated and become an idol for students through learning. (Lukman et al., 2021; Sinaga, 2018; Yenti & Maswal, 2021).

Even though teachers have an essential role in students' character education, it cannot be denied that students' parents also play an essential role in strengthening students' character education. In the educational context, the environments at school and home are interrelated and have an influence on each other which cannot be separated, with parents playing a role in providing advice and guidance in discipline, independence, creativity, religiosity, communicative attitudes, and respect for parents (Ariani et al., 2022; Kiral, 2020). Apart from parents, the roles of grandmothers, household assistants, and nannies are not significantly different in cultivating moral intelligence in young children (Auliya et al., 2020). Character development through education in a family environment and friendly relationships impacts growth and the formation of a sense of self-esteem in adolescents (Sugiarti et al., 2022). However, of course, parents have a more significant influence. Ki Hajar Dewantara also put forward the synergy between parents and schools in the world of education in the Tri Sentra Pendidikan theory, where family, school, and society must work in synergy with each other (Lodewijk, 2022).

The implementation of CES certainly requires good management to get maximum results. One management theory that can be used in implementing CES is the theory put forward by George R. Terry (Li, 2024), which includes planning, organizing, actuating, and controlling. The controlling stage usually contains monitoring and evaluation stages to determine the program's success (Muntatsiroh & Jamilus, 2023). Unfortunately, this stage is often not implemented optimally. The results of observations at one of the Buddhist kindergartens also found that the school had implemented character education. However, at the evaluation and character assessment stage, students experienced several problems that hampered the evaluation stage.

The problem experienced when schools carry out character education assessments is that teachers have difficulty assessing the application and development of student's character outside of school. The school already has an initiative to provide a character education assessment checklist, which is given to parents to observe and assess the implementation of students' character education outside of school. Parents' responsibility for their children's education involves supporting the school's educational process and providing learning motivation (Kiral, 2020; Shofwan et al., 2023). The collaboration between teachers and parents runs efficiently through mutual communication, aimed at developing student literacy and encouraging the application of moral values by community norms (Martati & Haryanti, 2023). However, the problem is that the assessment checklist is still paper-based, so several obstacles exist. The obstacle experienced is that many parents do not return the assessment checklist to school. This becomes an obstacle for schools in assessing the application and development of students' character outside of school. Apart from that, schools also lack feedback on improvements to character education programs. One way to overcome this problem is to use technology to make implementation more flexible and allow all data to be directly stored in the cloud.

In their research, Elmira et al. (2022) stated that teachers believe using technology in an educational context positively affects student achievement. Information Technology in education management enables

Journal of Nonformal Education Vol. 10, No. 1(2024) 62-74

efficient monitoring and evaluation of the performance of students, teachers, and educational institutions through routine data recording and analysis (Febrianti et al., 2023). The use of technology in the world of education today is often called the Education Information System (EIS). EIS can also be used to assess or evaluate learning outcomes. EIS has several advantages, such as speed and eases in processing, storing, searching, and reporting information; it is created and integrated to meet the school administration's needs and can be adapted to school needs (Rusdiana, 2018). Online assessment provides abundant opportunities to collaborate, interact, and communicate. In contrast, the flexibility and variety of technological tools provide great potential to stimulate autonomy, increase academic achievement, and enrich assessment skills (Al-Maqbali & Al-Shamsi, 2023). Meanwhile, Wahyono (2019) believes that using information technology in assessing learning outcomes is an innovation, replacing manual methods and freeing from space and time constraints, allowing implementation anytime and anywhere by anyone.

One site that can be used as an assessment tool is Google Worksheets. Google Worksheets provides many facilities that can be integrated between one feature and another to make the assessment process more accessible. Some Google Worksheet facilities that can be used in character education assessments, for example, are Google Sites for creating websites, Google Forms for creating assessment forms, Google Spreadsheets for data processing, and Google Drive for automatic data storage in the cloud.

The previous research states that using Google Workspace in the learning process is chosen because it allows for seamless integration, can be accessed with one accessible account, and eliminates the need to use various Web 2.0 tools or systems (Akcil et al., 2021). Google Workspace can be an alternative media for learning and assessment, including character education assessments. Schools need an information system that can be used to make it easier for teachers to carry out character education assessments inside and outside the school.

Facilities in Google Workspace that can be integrated and store data automatically will support character education assessments to be easier, faster, more effective, and more efficient. The advantages of using this Google Workspace-based information system are faster data processing, automatic data storage, and feedback delivery. They can be a reference in improving character education programs in schools. Therefore, this research aims to develop an educational character evaluation information system based on Google Workspace to increase active parental involvement. It is hoped that the results of this research can create a product that makes it easier for parents and schools to understand the growth and development of children's character but can still be understood and used efficiently by users, especially parents, students, and the community.

METHOD

This research is included in the research and development category using a Mixed Method (sequential exploratory) approach. This research and development follows the ADDIE development pattern. The steps in the ADDIE model include Analysis, Design, Development, Implementation, and Evaluation (Sugiyono, 2015). This research was carried out at Wira Putra Kindergarten, Semarang Regency. In the analysis phase, needs, problems, opportunities, and challenges are identified in the management of character education assessments at Wira Putra Kindergarten. During the development process, the steps involved creating a technology model by referring to the design prepared in the previous stage. When entering the implementation stage, the model that had been successfully developed was tested and implemented at Wira Putra Kindergarten, Semarang Regency. In the evaluation phase, an assessment was carried out on the effectiveness of the educational character evaluation system model based on Google Workspace.

The subjects in this research included school principals, teachers, and parents of Wira Putra Kindergarten students in Semarang Regency. The product validator in this research and development involves two validators, namely an information technology (IT) expert validator and a character education expert. The interview techniques included interviews, observation, documentation studies, focus group discussions (FGD), and questionnaires. Interview techniques were used to explore the implementation and problems of character

education at Wira Putra Kindergarten from the school. Observation techniques were used to observe how far users could use the product being developed. Documentation study techniques were used to find supporting data regarding the implementation of character education at Wira Putra Kindergarten. The FGD technique was used to find out the product development design and also the response from the school. Meanwhile, questionnaire techniques were used to obtain product assessment data from experts and users. The statement grid used in the questionnaire can be seen in the following tables.

Table 1. IT expert validation instrument grid

No	Rated Aspect		Indicator
1	Technical Quality of Product Use	a.	Quality product user manual
		b.	Ease of accessing products
		c.	Ease of use of the product
		d.	Ease of getting helpdesk facilities
2	Quality of Display and Product Systems	a.	The quality of the appearance and user interface of the product
	Developed		being developed
		b.	Ease of accessing and using the system developed
		c.	The product being developed has a few obstacles
		d.	Integration of Google Workspace facilities
		e.	, Ease of managing products independently by the school
3	Product Usefulness	a.	Ease of providing feedback
		b.	Ease of access to final assessment results
		c.	Speed of receiving information on evaluation results
		d.	Ease of viewing and processing input from parents

The assessment indicators above are used to measure whether the product being developed is suitable for use by users based on assessment standards by IT experts. The assessment indicators above will provide an idea of how effective the product being developed is for use based on an IT expert's point of view.

Table 2. Character Education expert validation instrument grid

N.T		T 1. 4		
No	Rated Aspect		Indicator	
1	Technical Quality of Product Use	a.	Quality product user manual	
		b.	Ease of accessing products	
		c.	Ease of use of the product	
		d.	Ease of getting helpdesk facilities	
2	Suitability of Character Education	a.	The product's capabilities help implement character education	
	Evaluation Management Elements in	b.	Suitability of the instrument developed	
	Developed Products	c.	Completeness of evaluation aspects of character education and	
			early childhood character development	
		d.	indicators t	
		e.	Correspondence of indicators to the five fundamental values of	
			CES	
		f.	Complete system menu	
		g.	The product's ability to manage parental involvement	
		h.	Ease of managing products independently	
3	Product Usefulness	a.	The product's ability to facilitate the implementation of	
			character education	
		b.	The product's ability to manage and increase the involvement of	
			student parents in character education assessments	
		c.	Product ability to process and report character education	
			learning outcomes	

Almost the same as the assessment indicators from IT experts, validation assessment indicators by character education experts will also provide an idea of how effectively the product can be used by users from the IT expert's perspective. Apart from that, this character education expert indicator will also assess how the user (school) uses the product.

Table 3. User (Teacher) validation instrument grid

No	Rated Aspect		Indicator
1	Technical Quality of Product Use	a.	Quality product user manual
		b.	Ease of accessing products
		c.	Ease of use of the product
		d.	Ease of getting helpdesk facilities
2	Suitability of Character Education	a.	Product suitability to school needs
	Evaluation Management Elements in	b.	The product's ability to manage parental participation
	Developed Products	c.	The product's ability to convey character education material
			information to parents
		d.	Ease of product management independently
		e.	, The product's ability to provide recommendations and follow-
			up to improve the implementation of character education
3	Product Usefulness	a.	The product's ability to facilitate character education assessment
		b.	The product's ability to process assessment data, from entering
			data to reporting assessment results

Assessment indicators by users, namely teachers, are used to measure how high the user's effectiveness and satisfaction is in using the product. Apart from that, this indicator also contains the school's readiness to manage products independently. This is important so that in the future the school can carry out assessments independently.

Table 4. User validation instrument grid (Parents of Students)

No	Rated Aspect		Indicator
1	Technical Quality of Product Use	a.	Quality product user manual
		b.	Ease of accessing products
		c.	Ease of use of the product
		d.	Ease of getting helpdesk facilities
2	Product Usefulness	a.	The product's ability to convey character education material
			information to parents
		b.	The product's capabilities help parents assess student character
			development
		c.	The product's ability to convey information on the results of
			character education evaluations

This indicator of assessment by students' parents is used to measure how satisfied parents are with using the character education assessment website product as a tool to assess students' character outside of school. The statements contained in the student parent assessment indicators will provide an overview of how parents see the quality of the product being developed and how they see the benefits of the product that has been developed.

The data analysis techniques used include qualitative descriptive and quantitative descriptive. Quantitative analysis processed qualitative data from interviews, observations, FGDs, and documentation studies. The qualitative descriptive analysis model used is the model from Miles and Huberman, which includes data collection, data reduction, data presentation, and conclusion. Meanwhile, quantitative analysis is used to process data in numbers from product assessment results from experts and users. Method validation results are used to identify scores, percentages, and categories.

RESULTS AND DISCUSSION

Character education has become one of the aspects that teachers at Wira Putra Kindergarten instill in their students. Apart from implementing character education, Wira Putra Kindergarten also assesses children's character growth and development based on the characters that have been taught previously. Based on the

Journal of Nonformal Education Vol. 10, No. 1(2024) 62-74

interviews with the principal and teachers of Wira Putra Kindergarten, information was obtained regarding the assessment of character education at Wira Putra Kindergarten. So far, Wira Putra Kindergarten has carried out character education assessments. Based on documentation studies, Wira Putra Kindergarten has a guiding document for implementing character education assessments.

The assessment described in the Wira Putra Kindergarten character education document is more focused on assessment using the checklist technique. However, the character education evaluation system implemented at Wira Putra Kindergarten includes several techniques used, namely a) using an assessment checklist, b) parenting organized by teachers by gathering parents of students at school, c) anecdotal notes on student character development, and d) sharing with parents when parents pick up students at school. The school did not specifically plan the sharing technique, but it was an incidental activity. This incidental sharing activity was also supported by the closeness between the student's parents and teachers because the two Wira Putra Kindergarten teachers were native residents of the village where Wira Putra Kindergarten was located. Of the several techniques used, teachers and school principals said that this parenting and sharing technique has advantages because the school can get direct feedback on student growth and development.

Apart from the advantages explained above, several disadvantages exist to the character education assessment practices at Wira Putra Kindergarten. Weaknesses in the checklist technique: Some of the shortcomings schools feel include parents who do not return the assessment results checklist to the school. This is because the assessment checklist provided is still in paper form and is usually entrusted to students to give to their parents. Apart from that, based on the document study, another problem with the assessment using this checklist is that the indicators used have not been revised and adapted to the latest regulations for a long time. So, the indicators used can be said to be less up-to-date.

Another problem is that some parents carelessly fill out the checklist and do not carefully assess the student's character by observing the child's growth and development. With some parents filling out the assessment checklist carelessly, the school feels that the data obtained cannot be processed, so the school does not get maximum feedback. Meanwhile, the technique's weakness for anecdotal notes on student character development is that the teacher has to observe one of the students who wants to be observed, so this technique requires quite a long assessment time. However, this anecdotal record of student character development has the advantage that teacher observation is a fairly accurate assessment. Schools carry out parenting techniques by gathering students' parents and discussing developments and problems related to the student's character with the parents. The weakness is that parenting techniques cannot always be done because parents are busy.

The development of a character education evaluation information system is carried out based on the ADDIE stages. At the analysis stage, researchers conduct a needs analysis to identify problems and opportunities in research and development. The problems experienced by Wira Putra Kindergarten are as explained above. Meanwhile, the opportunities obtained are that schools need a system to manage parent participation or involvement in implementing character education. Based on the problems and opportunities obtained, the researchers created a character education evaluation information system to increase parent participation in character education assessments and make it easier for schools to manage them. The system developed uses facilities from Google Workspace, which has several advantages, such as integrating one tool with another. Another advantage is that all website assessment and development processes can be saved automatically in the cloud.

The second stage is the design stage. The character education evaluation information system stage or character education website is developed based on several tools or facilities in Google Workspace. Some Google Workspace facilities used include Google Sites, Google Docs, Google Spreadsheet, Google Forms, and Google Drive. Google Site is a website that accommodates all tools to support the character education assessment process. Google Docs is used to display character material taught by schools to parents. Google Form is used as a questionnaire replacement for a checklist; with Google Form, the assessment data that has been carried out will be saved automatically. Google Spreadsheet is used for automatic data processing; assessment data will be directly connected to Google Spreadsheet, which has been given the formula to be processed automatically so that the assessment results can be known immediately.

Finally, Google Drive stores all data from all the tools Google Workspace provides. Researchers also analyzed the instruments developed based on the book entitled Panduan Praktis Penguatan Pendidikan Karakter Pada Pendidikan Anak Usia Dini, dan buku Pedoman Penguatan Pendidikan Karakter Pada Pendidikan Usia Dini (Hasbi et al., et al., 2019; Hasbi et al., et al., 2019). Using technology in the character education assessment process with the student's parents is hoped to simplify and speed up the character education assessment process and ease the processing and storage of assessment results documents.

The third stage is development. At this stage, the researcher develops an information system or website using various tools from Google Workspace, as explained previously. All tools are then integrated to become a unified system that can be used in character education assessments. The researcher also developed instruments that will be used in character education assessments. In developing the instrument, the researcher involved the Principal of Wira Putra Kindergarten School and one of the Buddhist Education Institute (LPB) administrators at Wira Putra Kindergarten, who was also an assessor for Early Childhood Education.

The involvement of school principals and LPB administrators ensures that the instruments developed are based on the characteristics of early childhood character development and the five fundamental values of CES. The instrument that has been developed is then converted into a Google Form questionnaire and then integrated with other Google Workspace tools such as Google Sites for display on websites and Google Spreadsheet for data processing. The product developed was then called the "Character Education Evaluation Website." Apart from the product in the form of a website, another product being developed is the Google Workspace-Based Character Education Evaluation Information System Model Book. The contents of the model book include an Introduction, a Theoretical Study, a Character Education Evaluation Information System Model Based on Google Workspace, a Usage Guide (for Teachers and Parents of Students), and a Conclusion.





Figure 1. Character Education Evaluation Information System Model Book Based on Google Workspace and display of the start page of the Character Education Evaluation Website

All these products, both from websites and model books, are then validated by IT experts and character education experts to determine the effectiveness of the products developed. The validation results can be seen in the following table:

Table 5. IT Expert Validation Test Results

No	Assessment Aspects	Valuation Percentage
1	Technical Quality of Product Use	87,50%
2	Quality of Display and Product Systems Developed	93,33%
3	Product Usefulness	85,00%
	Average	88,61%

Based on this data, the average score obtained shows that the validation results carried out by IT experts obtained an assessment percentage of 88.61% and fell into the Good category. Thus, the product is declared

suitable for testing with several product improvement notes. Some of the product improvement notes provided by IT experts are a) separation of usage guides between usage guides for teachers and for parents of students, b) addition of qualitative assessment categories, c) improvements to indicators to suit parents' conditions, and d) input so that At the school, it is enough for the teacher to carry out the assessment. The product repair record becomes a reference for product improvement.

Tabel 6. Hasil Uji Validasi Ahli Pendidikan Karakter

No	Assessment Aspects	Valuation Percentage
1	Technical Quality of Product Use	85,50%
2	Suitability of Character Education Evaluation Management Elements in	84,44%
	Developed Products	
3	Product Usefulness	84,00%
	Average	84,65%

In line with the validation results by IT experts, the validation results by character education experts also obtained a percentage value that fell into the Good category, namely 84.65%. With the Good category, the product is declared suitable for testing with several product improvements. The product improvement notes provided by character education experts include several improvements to the model book.

The next stage is the implementation stage. At this stage, the product will be tested on users, including teachers and parents of students. The assessment results from users are as follows.

Table 7. Product Assessment Results by School Principals and Teachers

No	Assessment Aspects	Valuation Percentage
1	Technical Quality of Product Use	82,50%
2	Suitability of Character Education Evaluation Management Elements in	87,78%
	Developed Products	
3	Product Usefulness	88,00%
	Average	86,09%

The assessment results from teachers as users obtained an assessment percentage of 86.09%, which fell into the excellent category. This means that the product developed is declared suitable for use in implementing character education assessments at Wira Putra Kindergarten. There are no product repair records provided by teachers as users. Based on the results of observations, when teachers used the product, they did not experience any difficulties using the product and quickly understood the guidebook.

Table 8. Product Assessment Results by Student Parents

No	Assessment Aspects	Valuation Percentage
1	Technical Quality of Product Use	73,41%
2	Product Usefulness	80,00%
	Average	76,70%

Student's parents also carry out user assessments. As a result, the assessment by the student's parents received an assessment percentage of 76.70% and was in a Good category. Some parents still experienced obstacles when conducting trials and needed guidance from researchers and teachers. However, researchers assume that parents only need a few habituations to get used to using the product. Even though they experienced a little difficulty, based on the results of observations, parents seemed enthusiastic about trying to use the product. In the assessment by parents, there were also no records of product improvements provided by the student's parents.

The final stage is the evaluation stage. The results of input on improvement notes provided by validators and users are used as a reference for evaluating and improving the product. The products developed are improved based on input from experts and users after product implementation. Another note is that parents

still need to try using the product several times to get used to using the product to get used to it. This is because one of the obstacles in using the product is parents who are not used to using the product.

Based on the results of the data analysis that has been carried out, it can be seen that the character education evaluation information system model based on Google Workspace received the Good category. With these categories, the character education evaluation information system model based on Google Workspace is suitable for use. This is because several factors support the suitability of the Google Workspace-based character education evaluation information system model. The first factor is time flexibility and efficiency in storing assessment results documents.

The benefits of the evaluation process in the context of online education include several factors, such as advantages in terms of time, storage efficiency, various method choices, as well as ease of carrying out the work (Ajizah, 2021; Gane et al., 2018; Hanifah Salsabila et al., 2020; Tashbolatovna et al., 2022). With these advantages, using technology in school assessment can make it easier for schools to implement it. This is because schools need help from people to strengthen and assess students' character because parents who know more about their children's abilities and growth and development can provide motivation and learning support to students (Cahyati & Kusumah, 2020; Jannah & Umam, 2021). The more flexible the character education assessment process is, the more parents can support the child's character growth and development process and participate in assessments required by the school.

The second factor that supports the suitability of the product for use is that the product used can improve the quality of the learning process and character education assessment. Information technology in the learning process is essential to improve the quality of education or learning itself (Rafi et al., 2020). Another role of the use of technology in improving the quality of learning is providing options to overcome problems with the performance of educational organizations in a structured manner, as well as enabling teachers to stay up to date with innovations in both learning and evaluation (Hanifah Salsabila et al., 2020; Kandel, 2022). In this context, the character education evaluation information system model based on Google Workspace provides options for resolving the problems experienced by Wira Putra Kindergarten in terms of assessing character education outside of school.

The third factor is that the character education evaluation information system model based on Google Workspace can be used as a character assessment medium. Web-based assessments can be expanded and utilized to assess student character and can be easily accessed by users (Asrial et al., 2023).). Educators can use various features and applications available in Google Workspace for Education to increase the effectiveness of the learning process, collaboration between teachers, and student interaction (Tanjung, 2023). Ease of access for users is an essential point in product feasibility. This is because the users of this website product, apart from teachers, are parents of students who must also be involved in learning and assessing student character. The role of parents is crucial in managing their children's educational development; they need to ensure that the steps taken by children are going in the right direction in education (Haryanto et al., 2022).

The product developed has also answered the needs and problems experienced by Wira Putra Kindergarten regarding character education assessment, especially character education assessment outside of school. Apart from that, tools from Google Workspace that can be integrated and process data automatically also make it easier for schools to process, manage, and report the results of character education assessments. Implementing management information systems in educational institutions involves using information technology to support learning, provide educational services, and facilitate learning practices through technological infrastructure, such as combining learning facilities with computers (Loilatu et al., 2020). Educators can adopt Google Workspace for Education as a learning tool and an instrument for assessing students (Irani, 2022). Thus, this Google Workspace-based character education evaluation information system model product is easy for parents to use and makes teachers' work more accessible in evaluating character education.

The fourth factor is that the product developed can be used in a collaboration between the student's parents and the school. Information and Communication Technology (ICT) is crucial in education because it is designed to process information, share knowledge, develop skills, facilitate discussions, and create

communication (Irani, 2022). Communication in the context of the product developed in this research is sharing information between parents and schools regarding children's character growth and development through collaborative assessment of children's character education. Communication between teachers and parents is essential in ensuring that children have experienced effective learning and achieved optimal progress in both growth and personal or character development (Arini, 2020).

CONCLUSION

The results of the data analysis show that the character education evaluation system model based on Google Workspace, which has been developed, has received good reviews from experts and users. Therefore, it can be concluded that the product produced meets suitable standards. Using a character education evaluation system model based on Google Workspace can help facilitate character assessment in the school environment and outside of school. This product also positively contributes to increasing parental participation in children's character education outside school. For schools, the product that has been developed can provide convenience in all stages of character assessment, from the assessment process to data processing and reporting assessment results. The flexibility and efficiency of the developed product make it easy to access and use. The product developed can be widely used in society, significantly to help monitor children's character growth and development both inside and outside school quickly, easily, and efficiently.

REFERENCES

- Ajizah, I. (2021). Urgensi Teknologi Pendidikan: Analisis Kelebihan dan Kekurangan Teknologi Pendidikan di Era Revolusi Industri 4.0. *ISTIGHNA: Jurnal Pendidikan Dan Pemikiran Islam*, 4(1), 25–36. https://doi.org/http://dx.doi.org/10.33853/istighna.v4i1.93
- Akcil, U., Uzunboylu, H., & Kinik, E. (2021). Integration of Technology to Learning-Teaching Processes and Google Workspace Tools: A Literature Review. In *Sustainability (Switzerland)* (Vol. 13, Issue 9). MDPI. https://doi.org/10.3390/su13095018
- Al-Maqbali, A. H., & Al-Shamsi, A. (2023). Assessment Strategies in Online Learning Environments During the COVID-19 Pandemic in Oman. *Journal of University Teaching and Learning Practice*, 20(5). https://doi.org/10.53761/1.20.5.08
- Ariani, F., Ulfatin, N., Supriyanto, A., & Arifin, I. (2022). Implementing Online Integrated Character Education and Parental Engagement in Local Cultural Values Cultivation. *European Journal of Educational Research*, 11(3), 1699–1714. https://doi.org/10.12973/eu-jer.11.3.1699
- Arini, N. W. (2020). Pentingnya Komunikasi Guru dengan Orang Tua dalam Membangun Karakter Peserta Didik. *Guna Widya: Jurnal Pendidikan Hindu*, 7(2), 154–159. https://doi.org/https://doi.org/10.25078/gw.v7i2.1724
- Asrial, A., Syahrial, S., Kurniawan, D. A., Aldila, F. T., & Iqbal, M. (2023). Implementation of Web-Based Character Assessment on Students' Character Outcomes: A Review on Perception and Gender. *Journal of Technology and Science Education*, *13*(1), 301–328. https://doi.org/10.3926/jotse.1564
- Auliya, F., Sunarso, A., & Pranoto, Y. K. S. (2020). Grandmother, Household Assistant, and Daycare Provider raised Early Childhood Moral Intelligence. *Journal of Nonformal Education*, 6(1), 44–50. https://doi.org/10.15294/jne.v6i1.21616
- Cahyati, N., & Kusumah, R. (2020). Peran Orang Tua Dalam Menerapkan Pembelajaran Di Rumah Saat Pandemi Covid 19. *Jurnal Golden Age*, 04(1), 152–159. https://doi.org/https://doi.org/10.29408/goldenage.v4i01.2203
- Elmira, U., Duisengalievna, E. A., Akgul, Z., Zhorabekovna, B. B., Yntyk, B., & Meiramkul, K. (2022). Primary school teachers' acceptance levels of educational technologies. *Cypriot Journal of Educational Sciences*, *17*(6), 2187–2198. https://doi.org/10.18844/cjes.v17i6.7557
- Febrianti, I., Tuffahati, J., Rifai, A., Affandi, R. H., Pradita, S., Akmalia, R., & Siahaan, A. (2023). Pengaruh Penggunaan Teknologi Informasi dalam Manajemen Perencanaan Pendidikan untuk Meningkatkan

- Efisiensi Pendidikan. *Academy of Education Journal*, 14(2), 506–522. https://doi.org/10.47200/aoej.v14i2.1763
- Gane, B. D., Zaidi, S. Z., & Pellegrino, J. W. (2018, June 1). Measuring what matters: Using technology to assess multidimensional learning. In *European Journal of Education*. Blackwell Publishing Ltd. https://doi.org/10.1111/ejed.12269
- Hanifah Salsabila, U., Irna Sari, L., Haibati Lathif, K., Puji Lestari, A., & Ayuning, A. (2020). Peran Teknologi Dalam Pembelajaran Di Masa Pandemi Covid-19. *Al-Mutharahah: Jurnal Penelitian Dan Kajian Sosial Keagamaan*, 17(2), 188–198. https://doi.org/10.46781/al-mutharahah.v17i2.138
- Haryanto, H., Ghufron, A., Suyantiningsih, S., & Kumala, F. N. (2022). The correlation between digital literacy and parents' roles towards elementary school students' critical thinking. *Cypriot Journal of Educational Sciences*, 17(3), 828–839. https://doi.org/10.18844/cjes.v17i3.6890
- Hasbi, M., Maryana, Suwaryani, N., Albertus, D. K., Mangunwibawa, A. A., Gracia, A., Parakasi, P., Taher, S. M., Winarsunu, T., Royanto, L. R., Fridani, L., Ramdhan, R. M., & Adnan, E. (2019). Pedoman Penguatan Pendidikan Karakter Pada Pendidikan Anak Usia Dini. https://paudpedia.kemdikbud.go.id/uploads/anggun/images/Pedoman_Penguatan_Karakter/V.10_Buku-Pedoman_PPK_PAUD.pdf
- Hasbi, M., Maryana, Suwaryani, N., Anggareni, Jane, G., Mangunwibawa, A. A., Nihayah, Z., Sinaga, M., Maria, H., WKP, D., Triastika, R. A., & Meylina. (2019). *Panduan Praktis Penguatan Pendidikan Karakter Pada Pendidikan Anak Usia Dini* (N. Suwaryani, P. Parakasi, A. A. Mangunwibawa, Jakino, A. Susanto, & Hafidz, Eds.). Direktorat Pembinaan Pendidikan Anak Usia Dini. https://paudpedia.kemdikbud.go.id/uploads/pdfs/TINY 20211011 095623.pdf
- Insani, G. N., Dewi, D., & Furnamasari, Y. F. (2021). Integrasi Pendidikan Karakter dalam Pembelajaran Pendidikan Kewarganegaraan untuk Mengembangkan Karakter Siswa Sekolah Dasar. *Jurnal Pendidikan Tambusai*, *5*(3), 8153–8160. https://doi.org/https://doi.org/https://doi.org/https://doi.org/10.31004/jptam.v5i3.2313
- Irani, N. K. C. P. (2022). Pemanfaatan Google Workspace For Education Bagi Guru Dalam Pembelajaran. *Metta: Jurnal Ilmu Multidisiplin*, 2(3), 160–174. https://doi.org/10.37329/metta.v2i3.1795
- Jannah, N., & Umam, K. (2021). Peran Orang Tua Dalam Pendidikan Karakter Berbasis Keluarga di Masa Pandemi COVID-19. *FALASIFA: Jurnal Studi Keislaman*, 12(1), 95–115. https://doi.org/https://doi.org/10.36835/falasifa.v12i1.460
- Kandel, G. K. (2022). Integration of Information and Communication Technology in Education: The Opportunities and Challenges. *Peer Reviewed Article Marsyangdi Journal*, 3(1), 82–90. https://doi.org/https://doi.org/10.3126/mj.v3i1.47954
- Kementerian Pendidikan dan Kebudayaan. (2018). *Peraturan Menteri Pendidikan dan Kebudayaan tentang Penguatan Pendidikan Karakter Pada Satuan Pendidikan Formal Nomor* 20 Tahun 2018. https://peraturan.bpk.go.id/Download/129375/Permendikbud%20No%2020%20Tahun%202018.pdf
- Kementerian Pendidikan dan Kebudayaan Republik Indonesia. (2020). *Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 22 Tahun 2020 tentang Rencana Strategis Kementerian Pendidikan dan Kebudayaan tahun 2020-2024*. https://peraturan.bpk.go.id/Download/156510/Permendikbud%20Nomor%2022%20Tahun%202020-compressed.pdf
- Kiral, B. (2020). A case study regarding parental responsibilities to their children. *Eurasian Journal of Educational Research*, 2020(85), 65–92. https://doi.org/10.14689/ejer.2020.85.4
- Li J., Peng L., Xu S., & Li Z. (2020). *Dasar-Dasar Manajemen Pendidikan*. Bantul: Bildung. https://doi.org/10.1016/j.eswa.2023.122570
- Lodewijk, D. P. Y. (2022). Pedagogik dalam Mengajar Pada Pembelajaran Abad 21. Bogor: Guepedia.
- Loilatu, S. H., Rusdi, M., & Musyowir, M. (2020). Penerapan Sistem Informasi Manajemen Pendidikan dalam Proses Pembelajaran. *Jurnal Basicedu*, 4(4), 1408–1422. https://doi.org/10.31004/basicedu.v4i4.520

- Lukman, Marsigit, Istiyono, E., Kartowagiran, B., Retnawati, H., Kistoro, H. C. A., & Putranta, H. (2021). Effective teachers' personality strengthens character education. *International Journal of Evaluation and Research in Education*, 10(2), 512–521. https://doi.org/10.11591/ijere.v10i2.21629
- Martati, B., & Haryanti, T. (2023). Phenomenology of Character Education from Elementary School Student Literacy in the Covid-19 Era. *Journal of Nonformal Education*, 9(1), 97–105. https://doi.org/10.15294/jne.v9i1.41883
- Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi. (2022). Peraturan Menteri Pendidikan, Kebudayaan, Riset, dan Teknologi Nomor 21 Tahun 2022 tentang Standar Penilaian Pendidikan Pada Pendidikan Anak Usia Dini, Jenjang Pendidikan Dasar, dan Jenjang Pendidikan Menengah. https://peraturan.bpk.go.id/Home/Download/219038/Salinan_Permendikbudristek%20No_21%20Tahu n%202022_%20Standar%20Penilaian%20Pendidikan.pdf
- Muchtar, D., & Suryani, A. (2019). Pendidikan Karakter Menurut Kemendikbud. *Edumaspul: Jurnal Pendidikan*, 3(2), 50–57. https://doi.org/10.33487/edumaspul.v3i2.142
- Muntatsiroh, A., & Jamilus. (2023). Pentingnya Evaluasi Pendidikan Islam dalam Sebuah Lembaga Pendidikan. *Jurnal Pendidikan Dan Konseling (JPDK)*, 5(1), 3070–3082. https://doi.org/https://doi.org/10.31004/jpdk.v5i1.11472
- Presiden Republik Indonesia. (2017). *Peraturan Presiden Republik Indonesia Nomor 87 Tahun 2017 tentang Penguatan Pendidikan Karakter*. https://peraturan.bpk.go.id/Home/Details/73167/perpres-no-87-tahun-2017
- Rafi, I., Nurjannah, F. F., Fabella, I. R., & Andayani, S. (2020). Peluang dan Tantangan Pengintegrasian Learning Management System (LMS) dalam Pembelajaran Matematika di Indonesia. *Jurnal Tadris Matematika*, 3(2), 229–248. https://doi.org/10.21274/jtm.2020.3.2.229-248
- Rusdiana. (2018). Sistem Informasi Manajemen Pendidikan: Konsep, Prinsip, dan Aplikasi. Bandung: UIN Sunan Gunung Djati Bandung.
- Sinaga, R. (2018). Pendidikan Karakter Pada Anak Usia Dini. *Societas Dei: Jurnal Agama Dan Masyarakat*, 5(2), 180–180. https://doi.org/https://doi.org/10.33550/sd.v5i2.89
- Shofwan, I., Sunardi, S., Gunarhadi, G., & Rahman, A.H. (2023). Entrepreneurship Education: Encouraging Entrepreneurial Intentions for Equality Education Students in Semarang. *International Journal of Learning, Teaching and Educational Research*. https://doi.org/10.26803/ijlter.22.6.10
- Sugiarti, R., Erlangga, E., Purwaningtyastuti, P., & Wisudaningtyas, A. (2022). Character Education and Friendship on Students' Self-Esteem. *Journal of Nonformal Education*, 8(2), 162–170. https://doi.org/10.15294/jne.v8i2.36776
- Sugiyono. (2018). Metode Penelitian Evaluasi. Bandung: Alfabeta.
- Tanjung, R. (2023). Peningkatan Kompetensi Guru melalui Pemanfaatan Google Workspace for Education di SMPN 4 Tanah Merah. *Instructional Development Journal (IDJ)*, 6, 53–60. https://doi.org/http://dx.doi.org/10.24014/idj.v6i1.24621
- Tashbolatovna, M. K., Duisenbaevna, U. Z., Kaldyhanovna, K. R., Koyshibaevna, A. G., Ulmeken, Z., & Gulzat, S. (2022). Development of the evaluative activities of teachers in the conditions of updated education. *Cypriot Journal of Educational Sciences*, 17(4), 1304–1319. https://doi.org/10.18844/cjes.v17i4.7156
- Wahyono, H. (2019). Pemanfaatan Teknologi Informasi dalam Penilaian Hasil Belajar pada Generasi Milenial di Era Revolusi Industri 4.0. *Proceeding of Biology Education*, 3(1), 192–201. https://doi.org/10.21009/pbe.3-1.23
- Yenti, Y., & Maswal, A. (2021). Pentingnya Peran Pendidik dalam Menstimulasi Perkembangan Karakter Anak di PAUD. *Jurnal Pendidikan Tambusai*, 5(1), 2045–2051. https://doi.org/https://doi.org/10.31004/jptam.v5i1.1218