



Ispring: The Needs of Teachers and Students toward the ICT-Based Evaluation Tool

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ABSTRAK

Seorang pendidik membutuhkan alat evaluasi pembelajaran sebagai instrumen penilaiannya. Bisa dicetak atau dibantu dengan teknologi informasi dan komunikasi. Penelitian kualitatif ini menggambarkan kebutuhan pembelajar dan guru bahasa Indonesia terhadap pengembangan evaluasi berbasis TIK untuk siswa kelas sepuluh. Subyek diambil secara purposive sampling berdasarkan tujuan dan kebutuhan penelitian. Mereka adalah 68 responden dan tiga guru bahasa Indonesia. Penelitian ini menggunakan kuesioner dan wawancara untuk mengumpulkan data. Data yang diperoleh dideskripsikan oleh peneliti. Berdasarkan temuan tersebut, siswa sudah terbiasa menggunakan aplikasi berbasis ICT. Oleh karena itu, menunjukkan kebutuhan mereka akan aplikasi yang lebih baik, multiguna, dan multiguna sehingga peneliti merekomendasikan Ispring sebagai alat evaluasi bagi siswa. Ini adalah e-learning authoring multi-utilitas untuk membuat berbagai jenis konten e-learning. Ini memiliki beberapa fitur untuk membuat media pembelajaran yang menarik dan untuk mempromosikan presentasi. Bisa juga digabung dengan MS. PowerPoint dan dapat digunakan untuk mempresentasikan, mendukung pembelajaran elektronik, mendistribusikan file, dan membuat kuis.

ABSTRACT

An educator requires a learning evaluation tool as the assessment instrument. It can be printed or assisted with the information and communication technology. This qualitative research describes the learners and Indonesian language teachers' needs toward ICT-based evaluation development for the tenth-grade students. The subjects were taken by *purposive sampling* based on the objectives and the research needs. They were 68 respondents and three Indonesian language teachers. This research used questionnaire and interview to collect the data. The obtained data were described by the researchers. Based on the findings, the students were already habituated to use ICT-based application. Thus, it indicated their needs of a better, multi-purpose, and multi-utility application so that the researcher recommended *Ispring* as the evaluation tool for the students. It is a multi-utility *authoring e-learning* to create various *e-learning* content types. It has some features to make interesting learning media and to promote presentation. It could be also combined with MS. *PowerPoint* and can be used to present, support electronic learning, distribute file, and create quizzes..

1. INTRODUCTION

Evaluation in educational world is one of three important components of learning: the learning objective, learning activity, and learning outcome evaluation. Three components are correlated each other (Aghaaminiha et al., 2020). They also continuously create a cyclical pattern. This cyclical pattern is useful to diagnose learners' problems, achievement, and outcomes. This statement is supported by (Wijaya et al., 2019). They used evaluation to diagnose learners' learning problems. Therefore, evaluation should be concrete in the forms of scores obtained by the learners. It must clear evaluative components (Manan et al., 2020). It is to make learners aware the importance of evaluation since it has the purpose to measure the learners' material mastery successes. An educator requires a learning evaluation tool as the assessment instrument. At the present days, many experts have established evaluation instruments. These instruments may contain some indicators to determine outcome of a process (Madrazo & Dio., 2020). In this case evaluation does not end with score without any follow up. The use of this tool can determine the learning outcomes (Madrazo & Dio., 2020). Excellent evaluation tool must be able to evaluate without any changes even after the evaluation has been promoted (Arikunto., 2013). It means the evaluation instrument does not have changing information on what aspect the instrument evaluates (Kholis et al., 2020). The successful evaluation tool in learning shows the learners' skills and performance. The researcher perceives that evaluation must be consistent while being used to evaluate learners. However, after the evaluation results published, evaluators or teachers must be able to use it as learning follow up (Arikunto, 2013; Madrazo &

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Dio., 2020). Teachers must notice which cognitive, affective, and psychomotor aspect of learners that should be improved. Evaluation result to improve learners' cognitive skills of thinking abstract matters, for example mathematical cases (Chonge t al., 2019). Refers the use of evaluation to improve learners' cognitive, affective, and psychomotor aspects as formative evaluation (Riyanto et al., 2019).

Evaluation tool can be printed or can be assisted with the information and communication technology (ICT). In this advance era, the test development has applied computers in online manner. It includes the promotion of the national examination. Many factors influence the ICT-based evaluation tool implementation. The first one is - the conventional evaluation tool, by using paper, has many limitations and ineffectivenesses (Del Buono et al., 2019; Tien Bui et al., 2019; Yang et al., 2021). The uses of papers tend to make learners bored while reading the questions. Besides that, their time managements may be ineffective because learners cannot use it maximally. The use of paper-based evaluation has a high-cheating chance of the learners. Therefore, there is a need of ICT-based evaluation to promote fair and punctual atmosphere. In Public Senior High School 4 Palembang, the researcher found problems dealing with the use of evaluation. The first problem was the use of paper-based evaluation that required time to check the correctness. Second problem dealt with lack of feedback from the teacher toward the learners after being evaluated. The third problem was paper-based evaluation required higher cost to prepare the sheets. The fourth problem, the researcher found the use of evaluation did not develop learners' cognitive, affective, and psychomotor aspects.

Some previous studies also found the same problems. Incomplete stages of using evaluation (Wang et al., 2020). This problem was similar with the current research because the researcher found the teacher did not use evaluation results to develop learners' cognitive, affective, and psychomotor aspects. A problem in using evaluation was lack of quantification of evaluation. The same matter was also observable in the current research. The researcher found the evaluation results were score marks of the learners' performance, for example scores of 50 and 60. These scores did not represent what aspect the learners should improve (Liu et al., 2020). This research describes the learners and Indonesian language teachers' needs toward ICT-based evaluation development for the tenth graders at Public SHS 4 Palembang. This research focused the analysis on the third core competence. It dealt with the understanding, applying, and analyzing skills of factual, conceptual, procedural, and metacognitive science based on the learners' curiosities on technology, science, culture, art, and humanity under human, nationality, statehood, and civilization insights dealing with phenomena and occurrence, and procedural science implementation on specific field based on their talents and interests to solve problems.

2. METHODS

This research was a qualitative study. It was carried out in the preliminary stage. Research and Development model consisted of the test-planning arrangement. It covered the institutional information and test outline. This research is needed to facilitate the researchers to develop an appropriate evaluation based on the learners' and the teacher's needs (Agastya et al., 2018; Azhari & Agus., 2016; Winayarti et al., 2012). It aimed to get the evidence and findings to be reviewed, interpreted, and explained (Ahyar et al., 2020; Çelik et al., 2020; Coombs., 2017; Guetterman., 2015). The subjects were taken by *purposive sampling* based on the objectives and the research needs (Ames et al., 2019; Ernawati & Kuncoro., 2016; Etikan et al., 2016; Kuncoro & Husnurrosyidah., 2017). They were 68 respondents and three Indonesian language teachers. This research used questionnaire and interview to collect the data. The questionnaire was given for the students and it was actually a modification of (Chotijah & Suparman., 2017) questionnaire items. On the other hand, the interviews were carried out with both teachers and students to obtain clarification and deeper information. The obtained data were described by the researchers.

3. RESULT AND DISCUSSION

Results

The identification results of the needs

They were 68 respondents and three Indonesian language teachers. Based on the questionnaire analysis, the students' needs were identified as the principle to develop the ICT-based evaluation. The interview data analysis could be also used as considerations to develop the ICT-based evaluation. Some matters to consider in analyzing the students and teachers' needs were: (1) the respondents' responses toward the Indonesian language evaluation tool; (2) the importance of the evaluation in teaching-learning activity; (3) the hindrances during the evaluation; and (4) the needs of various evaluative applications to improve the students' learning outcomes.

The students' need identifications

The students' need identifications were carried out from October 16-20, 2020. Based on the students' responses from the questionnaire, the researchers realized the needs and expectations of the students while being evaluated. The data of this identification were collected via *Google Form* due to the large-scale social activity restriction during the pandemic. The questionnaire had 15 question items. The responses were entailed by various comments and expectations of the students toward the evaluation tool. The results are shown in the [Table 1](#).

Table 1. The Questionnaire Results

No.	Questions	Yes		No	
1	Experiencing difficulties while working on the Indonesian language lesson question items	29.9%		70.1%	
2	The question or the evaluation outwitted the chosen answers	74.6%		25.4%	
3	The question or evaluation completing time should have been longer.	68.7%		31.3%	
4	Having difficulties to answer the questions or evaluations	43.3%		56.7%	
5	Feeling comfortable to use the given evaluation media	80.8%		19.4%	
6	Using gadgets, smart phone, or computer to work on the evaluation	95.5%			
7	The teachers have been frequently using application or technology-based evaluation	89.6%		10.4%	
8	The given evaluation facilitates the students to work on it	80.6%		19.4%	
9	The technology-based evaluation should be developed into different forms	83.6%		16.4%	
10	Agree or disagree if the evaluation is developed by using Ispring application	79.1%		20.9%	
11	Agree or disagree if the evaluation is presented in the forms of videos, figures, and sounds	88.1%		11.9%	
12	The most frequently question forms worked by the students	29.9%	22.4%	1.5% true or false	46.3% multiple choice and essay
13	The applied media while working on the questions	25.4%	35.8%	38.8% Internet or computer applications	
14	The media to facilitate the students to work on the questions	23.9%	38.8%	37.3% Internet or computer applications	
15	The frequencies of using gadgets, smart phones, or computers that are connected to the Internet	88.1%	Once a week	During learning	6% during leisure time

Table 1 shows that students did not experience any difficulty while working on the questions because the materials have been understood. This finding was confirmed by the teachers during the interview. They stated that the students did not experience the difficulties because they had understood the materials. However, a percentage of students were outwitted while answering the evaluation is still high. More than half students admitted that the time allotment to work on the questions was very short. They also argued that the texts were very long and should have had longer time to work. Some of them also

admitted that they needed longer time to work because the questions were in the forms of text. Based on the data, students also stated that the questions' languages were unclear and could not be understood.

Table 1 also shows that the teachers used multiple choice and essay for their question item forms. It showed that the students had been habituated to work on these question types. Thus, based on the findings, the researcher would develop the evaluation with multiple choice question type. The other reason underlying this choice was during the final semester test, the student would also encounter multiple choice test type. Table 1 shows a much of students used Internet or computer application to work on the evaluation. It could be concluded that they had been habituated to work on the ICT-based technology. The table also shows the satisfaction of the learners toward the evaluation media. There are high percentages of students felt comfortable with ICT-based evaluation media. Thus, the researcher concluded that most students would be familiar with the application-based evaluation. Therefore, this research would develop a different application-based evaluation tool that they ever used. The reason was - the students expected a new application-based evaluation development as shown in the questionnaire result. They were interested to work on the questions but they expected the application did not make them bored.

The information related to evaluation media to facilitate students based on table showed the used of smart phone is the highest one. The information related to the use of gadgets that could connect to the Internet showed a high percentage of students accessed the Internet for learning. The information related to the students' needs of using gadgets or computers to evaluate the learning showed a high percentage too. Students ever used gadgets or computers to work the questions. The information related to evaluation test display applied by the teachers showed that majority of students admitted their teachers had applied ICT-based application. Most of students admitted that the applied evaluation tool could facilitate them to work on the questions. On the other hand, the rest of students argued that they had difficulties to do the evaluation by using the ICT-based application. The table shows the importance of developing the evaluation tool in different form. There are more students admitted that the ICT-based evaluation tool should be revised. More than half of students agreed with the idea to use *iSpring*-based evaluation tool while the remaining students disagreed with it. Then there are much students agreed with the idea to make the evaluation tool could cover not only texts but also videos, figures, and sounds. However, not all students agreed with the idea. There are also few of students disagreed with the idea to present the evaluation with videos, figures, and sounds. From the responses, can conclude most students showed positive responses.

In general, the students wanted a new thing for their evaluation tool. During the pandemic, students have been using ICT-based technology. Thus, they expected the same thing for their future learning. The students wanted the evaluation to be developed not only cover texts but also videos, figures, and sounds. Besides that, the students expected the questions items could train their HOTS so they would be ready to take the final school test and other kind of evaluation.

The teachers' need identifications

The identification was carried out in October 16-21, 2020. The process involved three teachers of Indonesian language of the school. The teachers' need identifications were done by distributing the questionnaire to three Indonesian language teachers. Based on the answers, the teachers argued that (1) the Indonesian language learning evaluation tool was important to do. It was to measure the students' skill and mastery levels toward the materials; (2) the Indonesian language learning evaluation activities were mostly realized into multiple choices and essays; (3) the presented evaluation tools were varied, such as printed media for the essay type, and smart phone or computer media for multiple choice type; (4) the implementation of ICT-based application were such as *WhatsApp* and *Google Classroom*; (5) the results obtained from the students showed that the students could use the application; (6) the teachers argued that the students had difficulties to answer the questions because they were in rush to finish the questions; (7) the teachers needed a supportive application to promote a better evaluation; (8) the requested application should be based on animation media to attract the students; (9) two teachers answered that they knew *iSpring* for learning media and evaluation; (10) *iSpring* was expected to be the alternative to facilitate the teachers and students; (11) the teachers expected the recommended application to be interesting; and (12) both teachers and students needed guideline or procedure to operate the evaluation tool.

Discussion

The finding showed learners did not have difficulty while working on the question. However, 74.6% learners were outwitted while answering the question. From this finding, it showed a gap between their admission and the reality. In this case, the researcher found that understanding the language or instruction in the question did not indicate the learners' understanding to solve the question. Outwitted students might be caused by the unclear answer options (Manoppo & Manuhutu., 2020; Sidabutar et al., 2017; Tarmizi et al., 2019; Wati et al., 2015). Thus, the options did not properly function as decoys. However, outwitted

learners indicated they were lack of cognitive mastery on the given material while being evaluated (Usman et al., 2018). Therefore, they suggest evaluators to use the results as guideline to improve cognitive, affective, or psychomotor aspects.

The language uses within the question items of an evaluation instrument might be complex for certain learners. On the other hand, the same language uses within the question items of the same evaluation instrument might be very understandable for other learners. Text readability that may be relative for readers indicates fluctuation of text complexity (Aji & Hartono., 2019; Ardiyani & Hidayat., 2021; Celik et al., 2021; Georgieva., 2019; Gizatulina et al., 2020; Jamalin & Abdul., 2021; Saputri et al., 2018; Suryani & Rasdawita., 2018; Syathroh et al., 2019). It is because certain texts bring certain context that can be understood by certain readers. Therefore, readability of a text with how the readers' read the text becomes a complex matter. The authors found that text complexity did not make learners think higher. Therefore, an evaluation instrument developer must ensure the readability of the text. The developer must be aware that the text should not make the learners confused. Moreover, in an evaluation, the objective is to measure the learners' learning aspects.

The other findings dealt with limited time to answer the question and the length of the reading passage of the question item. The learners admitted they needed longer time. At the beginning, the researcher thought there were correlation between the length of the passage and the learners' progress to complete the evaluation. However the time allotment required by the students to work on their tests or evaluation were not correlated to the length of the question texts (Febyronita & Giyanto., 2016; Harsiati & Priyatni., 2017; Sumarwati & Budiyo., 2017). They found that this matter was correlated to the core question item and how the test-takers recalled the information to answer the question.

Based on the third finding, the researcher observed the learners were habituated to work on multiple choice and essay typed questions. Moreover, the learners would also encounter the same type of question. Multiple choice typed questions have some advantages. Multiple choice had an advantage to check and measure the students' cognition (Diken., 2020; Javaeed., 2018; Singamurti., 2020; Sulaeman et al., 2018). Measuring the learners' cognition means that evaluators only measure what thinking process occurs inside of learners' brain. Some studies proved the superiority of using multiple choices. The previous study revealed learners' reading strategies with multiple choice question type (Singh et al., 2021). In their evaluation, the authors designed the questions orderly from the first until the last lines of a passage. Each question had some choices to choose. With this design, the authors could find and determine the reading strategy of learners. In the authors' evaluative item design, they adopted theme-rheme design. The design provides old and new information in each sentence (Nurlela et al., 2021). This design allowed test takers to recheck previous information on the evaluation instrument.

Another study that used multiple choice and found it useful was done by (Madzlan & Mahmud., 2018). The authors found multiple choice could help them observing how learners processed audio information. In this research, multiple choices facilitated the teachers to determine the cognitive understanding of the learners. The same matter was also done by (Istighfarini et al., 2021; Setyowati et al., 2020). They used multiple choices to check the cognitive level of the learners. Multiple choices should be developed by the teachers and researchers. In this case, the teachers could collaborate with researchers. The teachers' involvement to design the multiple choice is important (Rofi & Fatkurochman., 2021). It is because the teachers will use the result of the evaluation to improve the learners. That was the reason why the current research also involved teachers to develop the multiple-choice question items. The other reason of using multiple choices was – multiple choices allowed the researchers to group the learning outcomes of the learners. Explain multiple choice could facilitate researchers to group the learning outcomes for each research groups (Wahyuni et al., 2019). In this current Research & Development, the researcher also compared the effectiveness of the developed evaluation instrument with the previous applied evaluation instrument. Thus, the researchers had to use consistent test item, with multiple choice.

Multiple choice for evaluation may be promoted online and offline. This choice allows teachers to evaluate and provide feedback immediately. Multiple choice could be applied on various online media, such as quiz bot telegram, to facilitate teachers in evaluating and delivering the feedback for learners' improvements (Hidayat et al., 2021). From the finding, the learners had been habituated to use ICT based-technology. The use of ICT is not something new for learners in 21st century. In this era, learners and teachers also use various digital learning sources. This activity is a positive activity and must be encouraged. At he present days, learners need up to date content for learning (Bakri & Yusni., 2021). Learners and students perceived learning source from online media as interesting learning content (Wulandari et al., 2019). These were the reasons the current researcher developed the evaluation based on ICT technology and used the online media source as the content. From the explanation, there were no reasons for the researcher not to use ICT-based technology because the learners needed it. Individuals are categorized as milenial generation and they could not be separated from ICT. They found that the milenial students had

wider and broader opportunity to enrich their knowledge and skills by using ICT (Dewi & Caropepoka, 2020; Hidayatullah et al., 2018; Kusuma, 2019; Prasarti & Prakoso, 2020; Utomo, 2018; Valenci & Winata, 2020). This finding motivated the researcher to develop the ICT-based evaluation for the students. Moreover, during this pandemic, the students would need this ICT-based evaluation due to the social restriction regulation.

The learners also thought using evaluation media could facilitate them. The finding was also in line with (Dewi & Caropepoka, 2020; Hidayatullah et al., 2018; Kusuma, 2019; Valenci & Winata, 2020). They found that milenial generation had been habituated to use smart phone for their learning. The responses showed the needs to develop an integrated evaluation application with smart phone or Internet and computer applications. This idea was also in line with the finding because a percentage of 88.1% students accessed the Internet for learning. 95% students ever used gadgets or computers to work the questions. This encouraged the researcher to develop a different ICT-based evaluation tool. 89.6% students admitted their teachers had applied ICT-based application. The use of ICT-based evaluation application was the only way for the teachers to promote the learning activities. Thus, teachers should be aware of the supportive evaluation application selections. It was important to reach the evaluation objectives. Most students admitted the applied evaluation tool could facilitate them to work on the questions, 80.6%. On the other hand, a percentage of 19.4% students argued that they had difficulties to do the evaluation by using the ICT-based application. They expected the other evaluation application could support their evaluation activities. A percentage of 83.6% students admitted that the ICT-based evaluation tool should be revised. They needed a different ICT-based evaluation tool. However, a percentage of 16.4% students did not think the current evaluation tool should be revised and developed. They argued that the current evaluation was excellent and understandable. Thus, the researcher assumed that the students required an ICT-based evaluation tool that was varied to promote the evaluation. Therefore, the researcher recommended using *iSpring*.

On the teachers' perspective, they commented that they needed the developed evaluation media to facilitate them in assessing the students' understanding. They also expected the evaluation media could facilitate the students to work on the evaluation and to obtain excellent outcomes. Therefore, the researchers recommended *Ispring*. *Ispring* is a tool to converts presentation file into *flash* and SCORM/AICC formats (Anwar et al., 2019; Fadillah et al., 2021). They are formats that can be used in *e-learning* LMS (*Learning Management System*). *Ispring suite* application is a multi-utility *authoring e-learning* to create various *e-learning* content types. It has some features to make interesting learning media and to promote presentation. It could be also combined with MS. *PowerPoint* and can be used to present, support electronic learning, distribute file, and create quizzes. In general, the students wanted a new thing for their evaluation tool. During the pandemic, students have been using ICT-based technology. Thus, they expected the same thing for their future learning. The students wanted the evaluation to be developed not only cover texts but also videos, figures, and sounds. Besides that, the students expected the questions items could train their HOTS so they would be ready to take the final school test and other kind of evaluation.

4. CONCLUSION

From the analysis of the learners' and the teachers' needs, the researcher recommended to use *Ispring* as the evaluation tool for the students. *Ispring* is a multi-utility *authoring e-learning* to create various *e-learning* content types. It has some features to make interesting learning media and to promote presentation. It could be also combined with MS. More over it is expected qnd recommended this platform to use not only during the pandemic situation but also after the pandemic has gone.

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