

STUDENT'S COMMUNICATION SKILL OF 21ST CENTURY IN THE ERA OF DIGITAL EDUCATION IN VOCATIONAL HIGH SCHOOL

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ABSTRAK

Penelitian ini dilatarbelakangi oleh perkembangan digital di abad 21 yang disebut juga sebagai abad globalisasi. Pada abad tersebut, manusia dituntut untuk memiliki beberapa keterampilan, salah satunya adalah keterampilan berkomunikasi, karena komunikasi sangat penting untuk selalu dapat menghubungkan kita dengan orang-orang secara global. Pendekatan penelitian ini menggunakan pendekatan kuantitatif, siswa SMKN 1 Lebakbarang sebagai populasi dengan jumlah sampel 67 siswa, sampel diambil melalui metode random sampling. Pengumpulan data menggunakan metode angket, observasi, dan wawancara sedangkan analisis data menggunakan analisis data deskriptif kuantitatif. Berdasarkan uraian hasil penelitian keterampilan komunikasi abad 21 Data dalam penelitian ini bersifat primer. Tujuan penelitian ini adalah untuk menganalisis keterampilan komunikasi siswa SMKN 1 Lebakbarang abad 21 di era pendidikan digital. Kontribusi yang ingin dicapai adalah mengoptimalkan keterampilan komunikasi abad 21 dengan mengimplementasikannya dalam pendidikan di era digital. Hasil penelitian menunjukkan bahwa pendidikan di era digital dapat memberdayakan keterampilan komunikasi abad 21 siswa di SMKN 1 Lebakbarang.

Kata Kunci: *Keterampilan Komunikasi Abad 21, Pendidikan di Era Digital.*

ABSTRACT

This research is backgrounded by digital developments in the 21st-century which is also called the century of globalization. In that century, humans demanded that they have several skills, one of which was communication skills, because communication is very important to always be able to connect us with people globally. This research approach uses a quantitative approach, students of SMKN 1 Lebakbarang as a population with a total sample of 67 students, samples were taken through a random sampling method. Data collection uses the questionnaire method, observation, and interviews while the data analysis uses quantitative descriptive data analysis. Based on the description of the research results on communication skills of the 21st century The data in this study are primary. The purpose of the study is to analysis the communication skills of 21st-century students of SMKN 1 Lebakbarang in the era of digital education. The contribution to be achieved is to optimize 21st-century communication skills by implementing them in education in the digital era. The

results showed that education in the digital era can empower students' 21st-century communication skills at SMKN 1 Lebakbarang.

Keywords: *Communication Skills of the 21st Century, Education in the Digital Age.*

INTRODUCTION

The 21st century is also called the century of globalization, which means that human life has undergone some fundamental changes from the previous century. The 21st-century requires humans to have quality in their efforts and work, namely in the form of breakthroughs in thinking, acting, and compiling concepts to compete in an open world. According to the Philosopher Khun, if these new challenges are faced using the old paradigm, then his efforts will meet with failure (Ethical et al., 2016). In the 21st-century, it has differences from the previous century including in social life, work, and self-actualization, also characterized by the rapid development of information technology where many repetitive jobs began to be replaced with machines or computers. Humans must also develop with these technological developments (Fadhilah, N., 2016). No exception in the world of education, there is

abundant access to information and new patterns of communication and collaboration. To support this, individuals are required to have a skill base in this digital era including creative thinking skills, communication, collaboration, and critical and problem-solving skills. This 21st-century learning has become known as the term 4C (creativity and innovation, communication, collaboration, critical thinking, and problem-solving) (Zaeni, A., Fauyan, M., & Fadhilah, N., 2018). Students are expected to be able to face the realities of life and digital challenges of the 21st-century, one of which requires communication skills.

Communication is based on the Latin word communication which means to make togetherness or build togetherness between two or more people (Taufikin, N. Z., Falah, A., Wijayanti, R., Manijo, M. E. M., Fadhilah, N., Zamroni, A. Z., & Nabawiyah, H., 2021).

Communication is a process through which a person (communicator) conveys a stimulus (usually in the form of words) to change or shape the behavior of another person (audience) (Dani Vardiansyah, 2008). Communication is said to be very important in the 21st century because with the development of technology humans are required to be able to connect and actualize themselves in understanding, managing, and creating effective communication in various forms and contents orally, in writing, and multimedia (Hikmah Muallimah and Ishafit, 2017). Students can express their ideas both when discussing and solving problems given by their teachers and using digital communication properly.

RESEARCH METHODS

1. Types of Research

This type of research is quantitative descriptive research. is descriptive research but uses a quantitative approach. Descriptive research according to Arikunto (2010: 3) is a study intended to investigate the circumstances, conditions, or other

things that have been mentioned, the results of which are presented in the form of a research report. Meanwhile, quantitative research according to Arikunto (2006: 12) Quantitative research is research that is widely required to use numbers ranging from data collection, interpretation of data, and the appearance of the results.

2. Place and Time of Research

This research was conducted at SMKN 1 Lebakbarang on June 10, 2022.

3. Subject and Object of Research

According to Arikunto (2006: 129), the subject of research is a source of data from which data is obtained in the form of people, places, or objects. While the object is the subject of research observed by the researcher or research variables.

The subject of this study was a student of SMKN 1 Lebakbarang. The object of this study is the communication skills of 21st-century students of SMKN 1 Lebakbarang in the era of digital education.

4. Population and Sample

The population of this study was all students of SMKN 1

Lebakbarang. Based on data from the information section of SMKN 1 Lebakbarang, the number of students of SMKN 1 Lebakbarang in 2022 is 261 students. Of the population, 67 students were sampled. The sampling technique is carried out using the random sampling method, according to Sugiyono (2017: 126) The definition of simple random sampling is the sampling of sample members from a population that is carried out randomly without paying attention to the strata in the population.

5. Research Variables

According to Sugiyono, (2009: 38) research variables are everything in the form of anything that is determined by the author to be studied so that information about it is obtained and then conclusions are drawn. 21st-century communication skills are referred to as variables. This study has one variable (single variable) namely the communication skills of 21st-century students of SMKN 1 Lebakbarang in the era of digital education.

6. Data Collection Methods

a. Questionnaire

According to Sugiyono (2017:142), a questionnaire or questionnaire is a data collection technique that is carried out by providing a set of questions or written statements to respondents for their answers. The questionnaire used is closed. The Likert scale is used to measure the attitudes, opinions, and perceptions of a person or group of people about social phenomena. With the Likert scale, the variables to be measured are described into variable indicators. Answers are scored 5 to 1.

b. Observation

Observation according to Sugiyono (2009: 145) states that data collection techniques with observation are used when research is related to research related to human behavior, work processes, and natural symptoms and when the observed respondents are not too large. Observations were made at SMKN 1 Lebakbarang, especially in classrooms and computer laboratories to get a complete picture of the subjects studied.

7. Validity and Reliability

a. Validity Test

According to Sugiyono (2011: 129), validity is a measurement that

will be measured. This test is using testing the validity of the content, the validity of the content is a validity test that can compare the instrument, and the material and the instrument are measured by measuring the results of the activity, and then this test can be done by comparing the content of the instrument with the content or design that has been determined. The correlation technique used is Product Moment correlation (Arikunto, 2010: 318).

$$r_{xy} = \frac{N(\sum xy) - (\sum x)(\sum y)}{\sqrt{\{N\sum x^2 - (\sum x)^2\} \cdot \{N\sum y^2 - (\sum y)^2\}}}$$

Information:

= Pearson Product Moment correlation coefficient

Y = total item score

X = question score

N = Number of Questions

Thus, if r-count > r-table, the question item is said to be valid, but if r-count < r-table, then the question item is invalid. Furthermore, the validity test in this study will be carried out with the SPSS version 25 program for windows. Based on the results of the validity test above, it can be seen whether or not all of the items are

valid by correlating the value of r count > r table. If r count < r table indicates that the item is not valid. In terms of the significance level used is 5% with N = 67, so:

$$Df = N-2 = 67 - 2 = 65$$

So, we get r table 0.317. The table above shows that r count > 0.317 with a distribution of 15 known questions that are all valid, so that they can be used for further research.

Table 1. Instrument validity result

No	r count		r table (n=67, a=0,05)	Note
1	0,39280 8	>	0,317	Valid
2	0,32316 1	>		Valid
3	0,66331 1	>		Valid
4	0,50183 3	>		Valid
5	0,57307 4	>		Valid
6	0,52754	>		Valid
7	0,56683 9	>		Valid
8	0,47569 7	>		Valid
9	0,67852 2	>		Valid
10	0,35505 7	>		Valid

11	0,63017	>		Valid
12	0,32698 4	>		Valid
13	0,51378 6	>		Valid
14	0,53219 8	>		Valid
15	0,55672 6	>		Valid

b. Uji Reliabilitas

Arikunto (2010: 221) states the same that reliability shows in an understanding that the instrument is trustworthy enough to be used as a data collection tool because the instrument is already good. To measure reliability, using Cronbach's alpha formula. According to Arikunto (2010: 239), Cronbach's Alpha formula is as follows

Information:

- r-15 = Instrument Reliability
- k = The number of question granules or the number of question
- = Number of grain variants
- = Total variance

Reliability tests obtained by analyzing data from one test are included in internal reliability (Arikunto, 2010: 223). To test reliability, by comparing with as for the decision rules: if

means reliable and means unreliable (Riduwan, 2010: 75)

Table 2. Instrument reliability result

Reliability Statistics	
Cronbach's Alpha	N of Items
.783	15

c. Analysis of data

The purpose of the analysis is to make an abbreviation of the data and infer the messages contained in it as information and easier to interpret.

Ridwan (2007:27) states that descriptive analysis is an analysis that describes a data made both alone and in groups. In this study, the authors used mean analysis techniques to find out the average of each instrument item. The mean formula used (Arikunto, 2006: 275) is as follows:

1. *mean*
 $X =$
 Information:
 X = Calculated average (*mean*)
 $\sum x$ = Sum of all questionnaire values
 N = Number of respondents

2. Grand mean (\bar{x}) dalam Irianto (2009: 32) adalah sebagai berikut:

GM=

Information:

X = Calculated average

K= Number of question

Measure such perceptions can be grouped into interval scales. In this study, researchers used an assessment scale consisting of strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1). Then the interval scale range is sought using the formula proposed by Simamora (2008: 220), namely

$$RS = \frac{m - n}{b}$$

Information:

RS = Scale range

m = Highest score

n = Lowest score

b = Grading scale

With the formula above, the calculation of the scale range is as follows:

$$RS = \frac{5 - 1}{6}$$

$$= 0,80$$

Based on the calculation of the formula above, it is known that the scale range is 0.8. Thus, the assessment scale is as follows:

1.00 – 1.80 = Very bad

1.81 – 2.60 = Not good

2.61 – 3.40 = Enough

3.41 – 4.20 = Good

4,21 – 5,00 = Excellent

Data analysis was carried out based on the data obtained and then described descriptively into easy-to-understand sentences regarding the communication skills of 21st-century students of SMKN 1 Lebakbarang in the era of digital education.

DISCUSSION

1. Overview SMKN 1 Lebakbarang

SMK Negeri 1 Lebakbarang is a vocational high school with two majors, namely Accounting and Institutional Finance (AKL) and Motorcycle Engineering and Business (TBSM). In the learning process, this school applies the 2013 curriculum.

The 2013 curriculum is integrated, meaning a curriculum model that can produce skills, themes, concepts, and topics both in the form of within single disciplines, across several disciplines,

and across learners. SMK Negeri 1 Lebakbarang is located on Jl. Raya Lebakbarang, Lebakbarang, Lebakbarang District, Pekalongan Prov. Central Java, with an area of about 9,880 m² consists of 11 classrooms, 1 laboratory, and 1 library.

SMK Negeri 1 Lebakbarang has several goals to be achieved, namely:

1. Improving the competence of teachers and education personnel
2. Improve the professionalism of teachers and education personnel
3. Adding facilities and infrastructure
4. Improve the process of teaching and learning activities that can increase faith and piety and apply noble morals in daily life
5. Improve ethical and aesthetic learning as well as mastery and application of information and communication technology
6. Increase entrepreneurship and independence of superior students
7. Preparing students to enter the workforce
8. Raise funds
9. Improve/organize an effective and efficient management system
10. Increase community participation
11. Creating a good school environment
12. Increase competitiveness, produce quality graduates, and be relevant to the needs of the community at the local, national, and global levels.

SMK Negeri 1 Lebakbarang started using digital-based learning before the pandemic because the awareness that technology is growing requires us to continue to follow its developments for the progress of each individual and institution, starting with Microsoft teams training for teachers. Microsoft Teams is one of the online classroom applications designed for hybrid work so that a group of connected people stays informed, organized, and connected in one place (Zakaria, 2021:85), and also the implementation of exams based on a

computer base (Fadhilah, N., Sophya, I. V., Muthohar, A., & Mufid, A., 2021). Then with the Covid-19 outbreak, it requires everyone to do work from home, so SMK Negeri 1 Lebakbarang only develops digital-based learning because it has been studied before.

During the online learning process, the learning process is carried out through the Belajar.id site, which is an electronic learning account issued by the Ministry of Education and Culture which contains a User and Password to enter new services of learning applications on an internet basis such as zoom application services, google meet and others (Arief & Cahyandaru, 2018: 164).

There are several obstacles faced by SMK N Lebakbarang, one of which is network problems because of the condition of SMK N Lebakbarang which is in the mountains so sometimes signals are difficult to obtain, although this does not dampen the enthusiasm of the students of SMK Negeri 1 Lebakbarang. Likewise, the communication skills of the students also continue to develop even though

learning is based online through digital technology. Students are trained to communicate virtually both during learning and during presentations. When the pandemic began to decline, learning began to shift to face-to-face but did not stop digital learning that was already taking place at SMK Negeri 1 Lebakbarang, an example was PAT using an intranet and class XI prakrin with additional subjects to replace unfulfilled material with digital-based.

The rapid development of digital at SMK Negeri 1 Lebakbarang is influenced by several factors including young teachers who are quick to catch up, and quickly adjust to encourage female students who have a developing mindset, one of which is communication skills including open-minded, not being shy when speaking in public, and critical when communicating both in groups and individuals.

2. Data Analysis, Research Result and Discussion

The results of the data obtained from the study using a questionnaire filled out by 67 class X students

majoring in accounting at SMK Lebakbarang, were presented in the form of numbers to find out the average results of the instrument items. From the results of data analysis obtained based on respondents' answers regarding 21st-century communication skills of students in digital education.

Table 2. Students' 21st-century communication skills in the era of digital education on the "Expressing Opinions" indicator.

No.	Pertanyaan	Nilai Rata-Rata	Kategori
1	Saya mau menjelaskan dengan baik dan jelas saat presentasi di depan kelas	2,87	Cukup
2	Saya senang mendapatkan teman diskusi ketika belajar	4,40	Sangat Baik

The indicator of expressing an opinion is classified as "Sufficient", that is, with an average value of 3.365.

Figure 1. Students' 21st-century communication skills in the age of digital education

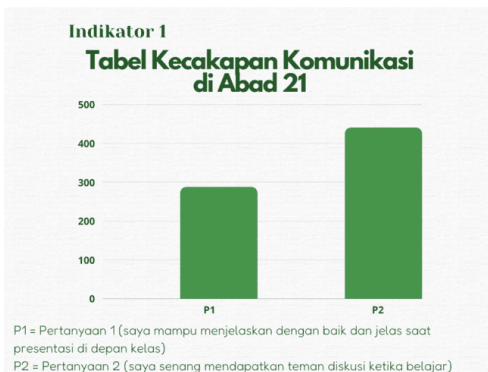


Table 3. Students' 21st-century communication skills in the age of digital education on the "Listening" indicator.

No.	Pertanyaan	Nilai Rata-Rata	Kategori
1	Melihat guru ketika mendengarkan pelajaran	3,95	Baik
2	Saat teman saya menyampaikan pendapat, saya mendengarkan dengan baik tanpa menyela	3,92	Baik
3	Saya lebih mendengarkan apa yang saya butuhkan untuk diri sendiri	3,28	Cukup
4	Saya berusaha mendengarkan penjelasan materi dari guru walaupun saya sebenarnya tidak menyukai pelajarannya	3,98	Baik

The listening indicator is classified as "Good", that is, with an average value of 3.78.

Figure 2. Students' 21st-century communication skills in the age of digital education



Table 4. Students' 21st-century communication skills in the era of digital education on the "Opinion" indicator.

No.	Pertanyaan	Nilai Rata-Rata	Kategori
1	Saya bertukar pendapat dengan teman	3,75	Baik
2	Saya merasa pendapat saya selalu benar dibandingkan teman saya	3,31	Cukup
3	Saya menghargai perbedaan pendapat teman	4,43	Sangat Baik
4	Saya mampu menerima pendapat dan kritikan dari orang lain	3,69	Baik

The indicator argues that it is classified as "Good" with an average value of 3.795"

Figure 3. Students' 21st-century communication skills in the age of digital education.



Table 5. Students' 21st-century communication skills in the era of digital education on the "Looking for Sources" indicator.

No.	Pertanyaan	Nilai Rata-Rata	Kategori
1	Saya lebih suka mencari informasi melalui buku cetak	3,89	Baik
2	Apabila sedang dirumah atau luar jam pelajaran, saya menggunakan media sosial untuk berdiskusi dengan teman saya terkait materi yang diajarkan	2,87	Cukup
3	Saya lebih suka mencari sumber bacaan dari internet dari pada membaca buku pelajaran	3,98	Baik
4	Saya menggunakan gaya berkomunikasi yang berbeda beda tergantung lawan bicara saya	3,41	Baik
5	Saat disekolah saya berdiskusi dengan siapa saja tanpa memilih	3,70	Baik

The indicator argues that it is classified as "Good" with an average value of "3.63".

Figure 4. Students' 21st-century communication skills in the age of digital education



CONCLUSION

This study concludes that students' perceptions of 21st-century communication skills of students in digital education at SMK Lebakbarang, namely 3.64, are categorized as "Good". Based on 4 indicators, namely expressing opinions, listening, arguing, and looking for sources. There is the highest indicator value, which is the opinion indicator with a value of 3,795. And the lowest value is occupied by the indicator of expressing an opinion with an average value of 3.365. In the indicator, there is 1 question that has a low average value and is classified as a sufficient category. The statement is that I want to explain well and clearly during the presentation in front of the class, with an average score of 2.87.

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