

Webtoon-based online comics in measuring the Pancasila student profile at Madrasah Tsanawiyah in Riau Province

Mas'ud Zein¹, Edi Iskandar², Meimunah S. Moenada³, Musa Thahir⁴

¹Islamic Religious Education Master Study Program, Faculty of Teacher and Training, Universitas Islam Negeri Sultan Syarif Kasim Riau, Pekanbaru, Indonesia

²Islamic Education Management Study Program, Faculty of Education and Teacher Training, Universitas Islam Negeri Sultan Syarif Kasim Riau, Pekanbaru, Indonesia

³Arabic Language Education Study Program, Faculty of Education and Teacher Training, Universitas Islam Negeri Sultan Syarif Kasim Riau, Pekanbaru, Indonesia

⁴Mathematic Education Study Program, Faculty of Education and Teacher Training, Universitas Islam Negeri Sultan Syarif Kasim Riau, Pekanbaru, Indonesia

Article Info

Article history:

Received Oct 23, 2022

Revised Sep 15, 2023

Accepted Sep 29, 2023

Keywords:

Madrasah Tsanawiyah

Pancasila

Student profile

Utilization

Webtoon-based online comics

ABSTRACT

The objectives of the Pancasila student profile are a number of characters and competencies that are expected to be achieved by students, which are based on the noble values of Pancasila. The purpose of this article is to measure the Pancasila student profile at Madrasah Tsanawiyah (MTs) Riau Province, Indonesia and to find out its effect through the use of webtoon-based online comics. This study conducted a quantitative descriptive approach and focus group discussions in six State MTs. The research instrument used in this study was a Pancasila student profile questionnaire, which was distributed to students. The findings showed the six indicators and their implementation in each madrasa. The six MTs in this study were categorized as very good, which indicated the need to increase Pancasila student profile. There are considerable disparities in indices of religion, fear of God Almighty, and noble character, global variety, mutual collaboration, independence, critical thinking, and creativity for Pancasila student profile policies. The use of webtoon-based online comics in measuring the Pancasila student profile is based on madrasa policy and it has not been thoroughly tested in all MTs in Riau Province. Furthermore, it can consider its use in a wider Madrasah Tsanawiyah frame. MTs in Indonesia can measure the Pancasila student profile through the use of webtoon-based online comics to achieve student character standards that are in line with educational goals in Indonesia. This research provides a webtoon-based online comic framework to measure the Pancasila student profile.

This is an open access article under the [CC BY-SA](#) license.



Corresponding Author:

Mas'ud Zein

Islamic Religious Education Master Study Program, Faculty of Teacher and Training, School of Education, Universitas Islam Negeri Sultan Syarif Kasim Riau

Simpang Baru, Kota Pekanbaru, Riau 28293, Indonesia

Email: mas'ud.zein@uin-suska.ac.id

1. INTRODUCTION

Character is something that exists in every living being. The form of character possessed by each individual is very diverse, and each individual has characteristics that describe the attitudes, character, behavior and differences of each individual [1]–[3]. The nation's civilization can be built properly and successfully if most of the people have strong, positive and resilient characters, but if most of the people have

negative characters it can result in the civilization being built to weaken [4]–[6]. Strengthening values at a time when everyone is very important, including the value of character education [7]–[9]. In Indonesia, character education is currently being discussed a lot. This is because character education is one of the government's efforts to improve the quality of education. Character education is an effort to educate children so that they can make smart decisions and practice them in everyday life so that they can have a positive impact on their environment [10]–[12]. This shows that improving the quality of student character formation is very important [13]–[15]. Thus, education in Indonesia does not only develop knowledge intelligence but comprehensive intelligence, namely teachers must be able to construct learning as a means of developing knowledge intelligence as well as the personality or character of students.

But in reality, the problem that has recently surfaced in the world of education is the problem of moral degradation. The Indonesian Child Protection Commission (ICPC) investigation found that the number of fights in Indonesia increased in 2018, from 1.1,000 in previous years. Based on ICPC data that in 2020 the number of bullying cases contributed to children's problems [16]–[18]. There are still many cases of rape against children or students which show that the country is facing a multidimensional crisis. As an alternative in dealing with multidimensional crises, the government has formulated a policy of cultural and national character education [19]–[22]. Furthermore, the fall in values, ethics, and manners leads to a deterioration in cultural education and the character of the Indonesian people [23]–[25]. As a result, we can see that character development is a fundamental requirement in the nation-building process, because only a nation with strong character will endure as a nation. Character education and Pancasila education are two efforts that may be made to improve the character of pupils in order to create a superior.

The Minister of Education and Culture said that strengthening the formation of the character of students can be achieved through various steps of the Ministry of Education and Culture which are focused on efforts to achieve *Pancasila* student profile from basic training to university studies. *Pancasila* student profile are one of the manifestations of lifelong learning for students in Indonesia who are able to have global competencies and behave based on the values of Pancasila as the basis of the Indonesian state [26]–[29]. Pancasila student profile have six main characteristics, namely: piety and faith in God as well as noble character, mutual cooperation, independent, creative, critical reasoning, and global diversity [30]–[32]. It was also stated that in addition to various actions that resulted in the formation of profiles of Pancasila students, the mechanism for character building socialization with content was carried out to educational units, families and communities which was coordinated with strengthening the character of the Ministry of Education and Culture Center [33], [34]. The dimensions of the Pancasila Profile are what teachers expect to be able to implement in the learning process (planning, implementation, and assessment) of learning. One of the media that can be used to cultivate the character of students who have the Pancasila Student indicator is through webtoon-based online comics.

Webtoon is an online comic service provider platform that can be read for free by everyone. Webtoon is the most popular online comic provider application in Indonesia [35]–[37]. This is because webtoon is the only online comic platform that provides comics to be read for free in five languages, namely Korean, Japanese, Thai, English, and also Indonesian. The popularity of webtoons has been rooted in beginner comics. Webtoon readers who have reached millions of readers put this comic content easily spread massively in a short time. Readers can immediately give an assessment and comment on the comics they read. Webtoon as an online comic platform can be used as a supporting media to reach more target audiences [37]–[39]. Besides that, webtoon-based comics are also able to shape the character of students [40], [41]. Character formation starts from oneself when a teacher can imitate good behavior or character towards students in the school environment [42]–[44]. The correlation between personality and visual elements in the image, it makes it easier for the audience to receive the information displayed (the impression of violence, strength, life) [45]–[47]. The results of the study [48], [49] are using the online comic to convey the character values of Pancasila students in the current era of disruption, namely by using rules in the discussion room so that there is an exchange of ideas, joint decision making with mutual respect, responsibility, freedom and consideration.

2. RESEARCH METHOD

This study aims to determine the Pancasila student profile at Madrasah Tsanawiyah (MTs) in Riau Province, Indonesia and to determine its effect through the use of webtoon-based online comics. The Pancasila student profile indicator is used in accordance with Regulation of the Minister of Education and Culture Number 22 of 2020 about the Ministry of Education and Culture's Strategic Plan for the Years 2020-2024. Therefore, this study measures the Pancasila student profile in the use of webtoon-based online comics that aim to support the improvement of the character of students. The steps taken in using webtoon-based online comics include: i) The teacher divides students into six groups with a total of seven students per

group; ii) The teacher distributes webtoon-based online comics about today's junior high school students which contain indicators of Pancasila student profiles as learning media to each group; iii) The teacher guides and encourages students to read and understand the comics that have been distributed; iv) The teacher distributes student worksheets to work on in groups by understanding the contents of the comics; v) Each group carries out the tasks given by the teacher, namely: each group works together in working on the student worksheet that have been distributed; vi) The teacher provides guidance to students or groups in working on student worksheet; vii) The teacher guides and encourages students to read the results of the worksheets they have worked on; viii) Each group is asked to send one a student as a representative to read the results of the student worksheet that has been done; ix) Each group member or student is given the opportunity to ask questions about material that has not been understood; and x) The teacher straightens out misunderstandings and provides reinforcement about ongoing learning.

The *Pancasila* student profile framework is used to assess the extent of consumption of webtoon-based online comics with appropriate quality assurance. As a result, indicators are required to analyze these requirements in order to satisfy them. To pick indicators, this study evaluates various past studies. Table 1 shows the evolution of indicators and statement items based on six indicators examined in this study: faith, fear of God Almighty, noble character, global variety, mutual cooperation, independence, critical thinking, and creativity.

Table 1. Development of the Pancasila student profile grid

No	Variable	Indicator	Description	Number of items
1	Pancasila student profile	Have faith, fear God Almighty, and have a noble character	Indonesian students who believe, fear God Almighty, and have noble character are students who have good morals in relation to God Almighty. He understands the teachings of his religion and beliefs and applies this understanding in his daily life.	13
		Global diversity	Indonesian students maintain their noble culture, locality and identity, and keep an open mind in interacting with other cultures, so as to foster a sense of mutual respect and the possibility of forming a noble culture that is positive and does not conflict with the nation's noble culture.	11
		Worked together	Indonesian students have the ability to work together, namely the ability to carry out activities together voluntarily so that the activities carried out can run smoothly, easily and lightly.	10
		Independent	Indonesian students are independent students, namely students who are responsible for their learning processes and outcomes.	10
		Critical reasoning	Students who think critically are able to objectively process both qualitative and quantitative information, build relationships between various information, analyze information, evaluate and conclude it.	10
		Creative	Creative students are able to modify and produce something original, meaningful, useful, and impactful.	10

The sample of this study was State MTs in Riau Province which did not have a policy of strengthening the *Pancasila* student profile as many as six MTs consisting of 385 students. MTs as the organizers of the policy to strengthen the *Pancasila* student profile in Riau Province are responsible for monitoring the sustainability of the policy. Furthermore, non-probability sampling was utilized in this study, which was specifically appointed by the researcher to join this study since it did not have a strategy of reinforcing the *Pancasila* student profile. To comprehend the problem of student character, a purposive sample assessment was utilized to identify precise information on Madrasah Tsanawiyah based on the policy of strengthening the *Pancasila* student profile and decision makers [50].

To verify the *Pancasila* student profile instrument, statistical testing was performed. There are several tests available, such as normal testing, validity tests, and reliability tests [51], [52]. The adoption of the *Pancasila* student profile is then carried out in stages, including: *Pancasila* student profile measurement. The *Pancasila* student profile at MTs was measured using online surveys and reinforced via focus group discussions. The factors were graded on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The criteria are used to assess the level of implementation of the *Pancasila* student profile enhancement program. The *Pancasila* student profile is measured by the value of each indicator, the percentage of the *Pancasila* student profile for each variable, and the overall impact of the *Pancasila* student profile implementation. This attempts to assess the implementation of the *Pancasila* student profile, as well as the variables that must be adjusted by the madrasa. Table 2 shows the interpretation of the *Pancasila* student profile conducted in MTs Riau Province [31].

Table 2. Interpretation of *Pancasila* student profile

Percentage (%)	Information
0% - 20%	"Not good"
21% - 40%	"Not good"
41% - 60%	"Pretty good"
61% - 80%	"Well"
81% - 100%	"Very good"

The Mann-Whitney U test was employed in this study to examine the influence of the variable employing webtoon-based online comics on the *Pancasila* student profile in six distinct Madrasah Tsanawiyah. This discovery also shows that the significance value, or asymp sig. (two-sided), must be smaller than 0.05. As a result, the hypothesis is accepted, implying that there are substantial variations in the factors of utilizing webtoon-based online comics in the six Madrasah Tsanawiyah. The Mann-Whitney U test was used to assess the degree of policy differences [53]. This study found that the orientation of the *Pancasila* student profile is one way to increase the use of webtoon-based online comics by using the Mann-Whitney U test.

3. RESULTS AND DISCUSSION

3.1. Development of *Pancasila* student profile instruments

The study instrument consists of six indicators, each of which has 64 statements. The validity test findings for these six Madrasah Tsanawiyah were certified valid since all instrument points were greater than 0.3. Furthermore, the Cronbach's alpha value must be larger than 0.6, with each value indicating markers of faith, piety to God Almighty, and noble character of 0.984; global variety of 0.954; mutual collaboration of 0.809; independence of 0.941; critical thinking of 0.884; and creative of 0.892. The normality test was then performed since the significance value was greater than 0.05. The significant value of the indicator of religion, fear of God, and noble character is 0.605; global variety is 0.549; mutual collaboration is 0.542; independence is 0.419; critical thinking is 0.488; and creativity is 0.598. As a result, the six indicators are assumed to be regularly distributed.

3.2. Implementation of webtoon-based online comic utilization in strengthening *Pancasila* student profiles

The use of webtoon-based online comics to boost the *Pancasila* student profile in six countries Madrasah Tsanawiyah was evaluated based on indicators such as faith, fear of God Almighty, and noble character, worldwide variety, mutual collaboration, independence, critical thinking, and innovation. Figure 1 shows the implementation of the use of webtoon-based online comics in strengthening the *Pancasila* student profile in this case study.

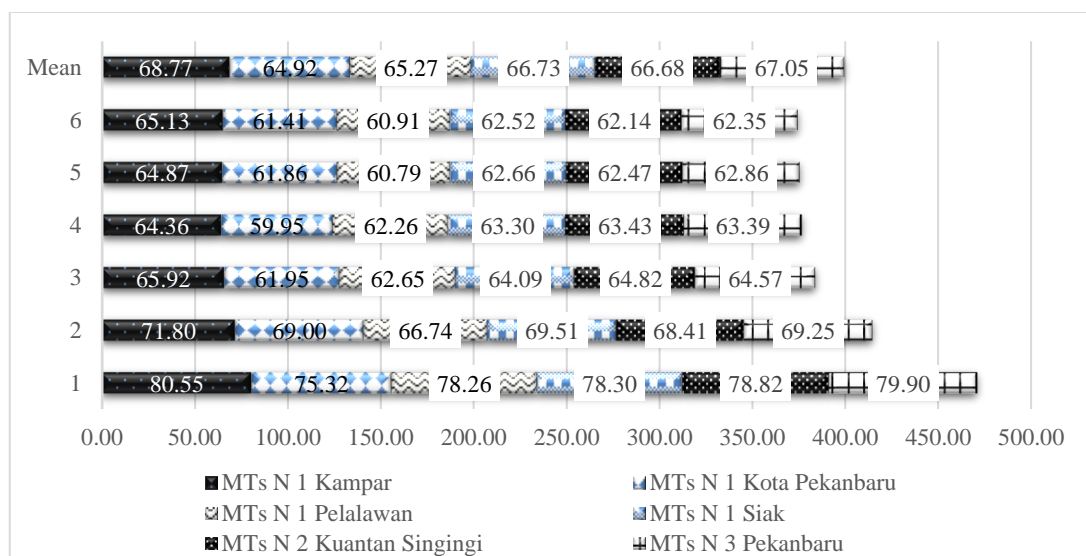
Figure 1. Student profile diagram of *Pancasila* students by Madrasah Tsanawiyah

Figure 1 shows that the overall use of webtoon-based online comics in strengthening the *Pancasila* student profile at MTs N 1 Kampar is better than other Madrasah Tsanawiyah. At MTs N 1 Kampar, indicators of faith, piety to God Almighty, and noble character reached 80.75% for the *Pancasila* student profile. This means that MTs N 1 Kampar under the guidance of the Regional Office of the Ministry of Religion of Riau Province has good character towards indicators of faith, fear of God Almighty, and noble character in the form of religious activities. However, the independent indicator is the lowest because of the motivation, interest in learning, the attitude of the child received from the family, especially the parents and the surrounding environment.

The Riau province ministry of religion coordinates the policy level for measuring *Pancasila* student profiles. These six madrasahs collaborate with the Riau Province Regional Office, which is the policy-making agency. As a result, establishing the amount of variation in the policy of assessing the *Pancasila* student profile in these six places is required in order to give educational counsel to Madrasah Tsanawiyah. The Mann-Whitney U-test was used for the tests, which are reported in Tables 3 to 5.

Table 3. Descriptive statistics of *Pancasila* student profile

Indicator	N	Mean	Std. Deviation	Minimum	Maximum
Have faith, fear God, and have noble character	385	79.19	5.974	12	84
Global diversity	385	69.65	6.733	11	77
Worked together	385	64.55	5.926	10	70
Independent	385	63.34	6.187	10	70
Critical reasoning	385	63.07	6.135	34	70
Creative	385	62.93	6.409	25	70

Table 4. Comparison of ratings from Madrasah Tsanawiyah

Indicator	Madrasah Tsanawiyah	N	Mean rank	Sum of ranks
Have faith, fear God, and have noble character	MTsN 1 Kampar	104	68.23	7095.50
	MTs N 1 Kota Pekanbaru	22	41.16	905.50
	MTs N 1 Pelalawan	34	58.71	1996.00
	MTs N 1 Siak	82	58.41	4790.00
	MTs N 2 Kuantan Singingi	51	66.47	3390.00
Global diversity	MTs N 3 Pekanbaru	92	75.07	6906.00
	MTsN 1 Kampar	104	66.88	6956.00
	MTs N 1 Kota Pekanbaru	22	47.50	1045.00
	MTs N 1 Pelalawan	34	46.43	1578.50
	MTs N 1 Siak	82	63.51	5207.50
Worked together	MTs N 2 Kuantan Singingi	51	67.35	3435.00
	MTs N 3 Pekanbaru	92	74.58	6861.00
	MTsN 1 Kampar	104	67.67	7038.00
	MTs N 1 Kota Pekanbaru	22	43.77	963.00
	MTs N 1 Pelalawan	34	50.74	1725.00
Independent	MTs N 1 Siak	82	61.72	5061.00
	MTs N 2 Kuantan Singingi	51	71.34	3638.50
	MTs N 3 Pekanbaru	92	72.36	6657.50
	MTsN 1 Kampar	104	67.48	7018.00
	MTs N 1 Kota Pekanbaru	22	44.68	983.00
Critical reasoning	MTs N 1 Pelalawan	34	54.16	1841.50
	MTs N 1 Siak	82	60.30	4944.50
	MTs N 2 Kuantan Singingi	51	70.02	3571.00
	MTs N 3 Pekanbaru	92	73.10	6725.00
	MTs N 1 Kampar	104	65.46	6808.00
Creative	MTs N 1 Kota Pekanbaru	22	54.23	1193.00
	MTs N 1 Pelalawan	34	52.26	1777.00
	MTs N 1 Siak	82	61.09	5009.00
	MTs N 2 Kuantan Singingi	51	67.39	3437.00
	MTs N 3 Pekanbaru	92	74.55	6859.00
	MTsN 1 Kampar	104	67.33	7002.50
	MTs N 1 Kota Pekanbaru	22	45.39	998.50
	MTs N 1 Pelalawan	34	51.56	1753.00
	MTs N 1 Siak	82	61.38	5033.00
	MTs N 2 Kuantan Singingi	51	66.75	3404.00
	MTs N 3 Pekanbaru	92	74.91	6892.00

According to Table 5, the indicators of faith, fear of God Almighty, and noble character have values of $U=652.5$ and $W=905.5$. When translated to Z , the value is -3.369 . The significance threshold is thus 0.001 . If the significance level or p -value is less than 5% (0.05), the null hypothesis can be rejected. As a result, there is a considerable disparity between the six Madrasah Tsanawiyah, or H_1 is approved. Global variety, mutual collaboration, independence, critical thinking, and creativity are many factors that differ greatly in the policy of gauging the Pancasila student profile.

Table 5. Test the output statistics of the Mann–Whitney U-test

	Indicator 1	Indicator 2	Indicator 3	Indicator 4	Indicator 5	Indicator 6
Mann-Whitney U	652.500	792.000	710.000	730.000	940.000	745.500
Wilcoxon W	905.500	1045.000	963.000	983.000	1193.000	998.500
Z	-3.369	-2.290	-2.869	-2.680	-1.332	-2.611
Asymp. Sig. (2-tailed)	.001	.022	.004	.007	.018	.009

The results showed that the average success Pancasila student profile in SMP/MTs Riau Province was 90.26% with the “Very good” category, because the results of the analysis were 90.26% which were in the range of 81 – 100% . This success may be recognized through six indicators: faith, fear of God Almighty, and noble character; global variety; collaboration; independence; critical reasoning; and creativity.

3.2.1. Indicator of faith, fear of God Almighty, and noble character

Based on the results of the questionnaire distribution obtained, it can be seen that in the indicators of faith, fear of God Almighty, and noble character, an average percentage of 93.68% is obtained in the “very good” category because it is in the range of 81 – 100% . In the indicator of faith, fear of God Almighty, and noble character, the score is 93.18% with the category “Very good”. The first indicator gets the highest percentage score, it is because the practice of students’ religious values can be categorized as good. As a citizen in Indonesia, of course, you are required to have beliefs in accordance with the legalized religion, the religious teachings adopted by every citizen have been nurtured since childhood. The practice of students’ religious values is always developed through all kinds of school activities, these activities are always associated with religious values and noble character, such as when praying and being polite. The cultivation of religious characters is carried out by integrating cultural values into the implementation of student self-development programs in the implementation of learning in schools [54]–[56].

In addition, the factor that causes the increase in students’ religious values is habituation in the home environment, parents who direct their children well in embracing religion will of course have a good understanding of religion and morals [25], [57]. Factors that support the implementation of the formation of students’ religious character through habituation of religious activities, support from parents of students, commitment with school members and adequate facilities [11], [58]. Of course, the factors that have been described support the highest score percentage from the first aspect of the *Pancasila* student profile.

3.2.2. Global diversity indicator

Based on the results of the questionnaire distribution obtained, it can be seen that in the global Diversity indicator, an average percentage of 90.46% is obtained with the “very good” category because it is in the range of 81 – 100% . In the indicator of global diversity, the score is 89.75% with the category “Very good”. The second indicator gets the second highest percentage score of the six aspects of the Pancasila student profile. Students’ understanding of differences and diversity in schools can be categorized as good. The influencing factor of appreciating the diversity of students in the class is of course due to the interactions that occur during the learning process in the classroom. The learning process carried out is not limited to differences in ethnicity, race, or religion. An understanding of what students really need to reflect in the classroom, requires a variety of strategies for students to increase the value of diversity such as discussions, observations, case studies, simulations and role playing [59]–[61]. In addition, the guidance and examples provided by the teacher are factors that can increase students’ understanding of diversity, the teacher exemplifies how attitudes and behavior in respecting diversity [62]–[64]. Teachers foster diverse principles in children by educating in courteous manner and never bringing up sensitive themes such as religion and racial differences [65]–[67].

3.2.3. Mutual cooperation indicator

Based on the results of the questionnaire distribution obtained, it can be seen that in the mutual cooperation indicator, an average percentage of 91.88% is obtained with the “very good” category because it is in the range of 81 – 100% . In the indicator of mutual cooperation, the score is 91.16% with the “Very good”

category. The third indicator gets the third highest score percentage of the six aspects of the Pancasila student profile. There are several factors that lead to the practice of gotong royong from students, namely from the learning process. The teacher conditions a class so that students can work together with each other, from the program created by the teacher it will cause students to socialize with friends around and collaborate with group friends to complete assignments. The teacher's strategy in instilling mutual cooperation character attitudes such as giving direct examples to students, giving rewards in the form of praise so that the students' spirit of mutual cooperation is in line with the goals of education in schools [68]–[70]. Furthermore, the factors that can affect the understanding of students' values in mutual cooperation are student activities outside of class hours or extracurricular activities, there are several extracurricular activities that emphasize teamwork in groups such as scouts.

Extracurricular activities train students to work together in a group and train cohesiveness. By participating in extracurricular activities, it will familiarize students in collaborating with all friends [71]–[73]. To put forward the cultivation of the formation of national character values to students more effectively through scout extracurricular activities by prioritizing the value of cooperation, love to help, so that mutual cooperation character education is able to change behavior, ways of thinking and ways of acting to make students better and integrated [74]–[76].

3.2.4. Standalone indicator

Based on the results of the questionnaire distribution obtained, it can be seen that in the independent indicator, an average percentage of 90.59% is obtained with the “very good” category because it is in the range of 81–100%. In the independent indicator, it gets a score of 89.83% with the “Very good” category. In the fourth indicator, the Pancasila student profile has the third lowest score percentage of the six aspects. There are several factors that influence the independent character of each student. One of the factors is encouragement from the family, especially parents, parents condition students to be able to do many things individually such as completing homework and habituation.

Furthermore, the school environment factor, in the school environment students are expected to increase independence with a learning process designed by the teacher and be responsible for the tasks given to students. Factors that can affect the development of independent character of students are the family environment, school environment and community environment [63], [77], [78]. Therefore, self-regulation influences student learning independence somewhat, and self-regulation and discipline influence student learning independence concurrently [79]–[81].

3.2.5. Critical reasoning indicator

Based on the results of the questionnaire distribution obtained, it can be seen that in the critical reasoning indicator, an average percentage of 90.36% is obtained with the “very good” category because it is in the range of 81–100%. In the critical reasoning indicator, the score is 89.23% with the category “Very good”. The critical reasoning indicator gets the lowest percentage score of the six aspects of the *Pancasila* student profile. There are several factors that can affect students' critical reasoning abilities, first from within students which are influenced by students' ability to reason and students' motivation to use reasoning skills in solving a problem. In addition, there are factors that are influenced from outside of students such as the condition of the student's social environment at school, student behavior in responding to a problem and the family environment.

Factors that affect students' critical thinking skills are psychological learning factors which include intellectual development, motivation, and anxiety, physiological factors which include physical conditions, learning independence factors, and interaction factors [82]–[84]. From the results of the research, the percentage score for the lowest critical reasoning aspect of the other six aspects, this describes that there are some students who have not implemented the character of critical reasoning well, the ability of students to reason about a problem has not been carried out optimally. Not all students are able to develop in accordance with the school's goals or vision and mission to develop humans with independent thinking in critical thinking; students' low ability to think critically in learning is due to a lack of a learning process that directs students to think critically to solve a problem [85]–[87].

3.2.6. Creative indicator

Based on the results of the questionnaire distribution obtained, it can be seen that in the creative indicator, an average percentage of 83.87% is obtained with the “very good” category because it is in the range of 81–100%. Based on this information, the average success of the student Pancasila student profile is 90.26%. The interpretation of the success of the Pancasila student profile concluded that the success of the Pancasila student profile was classified as “Very good”, because the results of the analysis were 90.26% which were in the range of 81–100%.

On the creative indicator, it gets a score of 76.53% with the “Very good” category. The creative indicator gets the second lowest score among the six aspects of the *Pancasila* student profile. The problems seen in elementary schools are that learning has not been able to optimize the creativity process in students and most students cannot recognize their potential, teachers should be able to understand the creativity potential of students so that it can be optimized in the learning process [88]–[90]. However, the percentage score obtained is still in the good category, so that students' interest in creativity and creating new ideas is at a good level. The creative thinking profile of elementary school students in solving a problem on fluent thinking skills is sparking many new ideas in solving problems with sufficient ability [91], [92].

Based on the results, *Pancasila* student profile in MTs Riau Province can be qualified well and sufficiently in every aspect. This finding is reinforced by the findings of previous researchers who stated that the *Pancasila* student profile in the learning process can be character education for students and is relevant in every learning process [93]–[95]. By having good ethics, behaving positively, and participating in learning well according to the values of *Pancasila*, it will be a contribution for students in the effort to defend the state [96]–[98]. The advantage of this research is to analyze the *Pancasila* student profile in the effort to defend the state in MTs in a quantitative and qualitative descriptive manner in every aspect. With this research, it is hoped that every school can pay attention to the practice of *Pancasila* values in students in the *Pancasila* student profile as a form of character education. The implication of this research is to provide references for teachers related to the inculcation of *Pancasila* values in the application of the *Pancasila* student profile to students in the school environment and community. This research is limited to the results of descriptive analysis of *Pancasila* student profile data, so it is hoped that other researchers can develop research related to the influence of the *Pancasila* student profile in various situations in schools.

4. CONCLUSION

The results of this research showed that the *Pancasila* student profile instrument consists of six indicators, each of which has 64 valid and reliable statements. The use of webtoon-based online comics in strengthening *Pancasila* student profiles showed varying success among the Madrasah Tsanawiyah studied, with MTs N 1 Kampar having the highest success rate. However, the use of webtoon-based online comics in several indicators such as independence, critical thinking and creativity still needs improvement. The implication of this research is that the use of webtoon-based online comics can be an effective tool in strengthening student character within the *Pancasila* framework, and recommendations for further research are to more deeply understand the factors that influence the implementation and long-term impact of the use of this technology in character education. student.

ACKNOWLEDGEMENTS

This research was carried out with the cooperation and research funding support from BOPTN Universitas Islam Negeri Sultan Syarif Kasim Riau in 2022, according to the 2022 Research Contract Letter Number: 864/Un.04/L.1/TL.01/03/2022.

REFERENCES

- [1] R. B. Cattell, *The scientific analysis of personality*. Routledge, 2017. doi: 10.4324/9781315134772.
- [2] A. S. Griffin, L. M. Guille, and S. D. Healy, “Cognition and personality: an analysis of an emerging field,” *Trends in Ecology & Evolution*, vol. 30, no. 4, pp. 207–214, Apr. 2015, doi: 10.1016/j.tree.2015.01.012.
- [3] A. J. Carter, W. E. Feeney, H. H. Marshall, G. Cowlishaw, and R. Heinsohn, “Animal personality: what are behavioural ecologists measuring?” *Biological Reviews*, vol. 88, no. 2, pp. 465–475, May 2013, doi: 10.1111/brev.12007.
- [4] M. Aydın, “Twenty years before, twenty years after: Turkish foreign policy at the threshold of the 21st century,” in *Turkey's Foreign Policy in the 21st Century*, Routledge, 2019, pp. 3–24. doi: 10.4324/9781315198736-1.
- [5] K. A. Mingst, M. P. Karns, and A. J. Lyon, *The united nations in the 21st century*. Routledge, 2018. doi: 10.4324/9780429494307.
- [6] T. Fallon, “The new silk road: Xi Jinping's grand strategy for Eurasia,” *American Foreign Policy Interests*, vol. 37, no. 3, pp. 140–147, May 2015, doi: 10.1080/10803920.2015.1056682.
- [7] K. Kristjánsson, *Aristotelian character education*. Routledge, 2015. doi: 10.4324/9781315752747.
- [8] A. van Wynsberghe, “Designing robots for care: care centered value-sensitive design,” in *Machine Ethics and Robot Ethics*, Routledge, 2020, pp. 185–211. doi: 10.4324/9781003074991-17.
- [9] E. van Baarle, J. Bosch, G. Widdershoven, D. Verweij, and B. Molewijk, “Moral dilemmas in a military context. A case study of a train the trainer course on military ethics,” *Journal of Moral Education*, vol. 44, no. 4, pp. 457–478, Oct. 2015, doi: 10.1080/03057240.2015.1087389.
- [10] L. Halimah, R. R. M. Arifin, M. S. Yuliatiningsih, F. Abdillah, and A. Sutini, “Storytelling through ‘wayang golek’ puppet show: practical ways in incorporating character education in early childhood,” *Cogent Education*, vol. 7, no. 1, Jan. 2020, doi: 10.1080/2331186X.2020.1794495.




- [11] A. Hermino and I. Arifin, "Contextual character education for students in the Senior High School," *European Journal of Educational Research*, vol. 9, no. 3, pp. 1009–1023, Jul. 2020, doi: 10.12973/eu-jer.9.3.1009.
- [12] Zurqoni, H. Retnawati, J. Arlinwibowo, and E. Apino, "Strategy and implementation of character education in senior high schools and vocational high schools," *Journal of Social Studies Education Research*, vol. 9, no. 3, pp. 370–397, 2018, [Online]. Available: <https://dergipark.org.tr/en/pub/jsser/issue/43625/534243>.
- [13] A. Tymon, "The student perspective on employability," *Studies in Higher Education*, vol. 38, no. 6, pp. 841–856, Aug. 2013, doi: 10.1080/03075079.2011.604408.
- [14] C. E. Domitrovich, J. A. Durlak, K. C. Staley, and R. P. Weissberg, "Social-emotional competence: an essential factor for promoting positive adjustment and reducing risk in school children," *Child Development*, vol. 88, no. 2, pp. 408–416, Mar. 2017, doi: 10.1111/cdev.12739.
- [15] T. Lebedeva, E. Egorov, T. Tsapina, T. Fokina, and T. Vasilyeva, "Intellectual provision of the innovative entrepreneurship development," *Mediterranean Journal of Social Sciences*, Sep. 2015, doi: 10.5901/mjss.2015.v6n5s3p303.
- [16] A. Rahman, S. Daulay, R. Manshor, Z. Jaafar, and D. Sanjaya, "Alternative solutions to prevent bullying at schools: tertiary student's perspectives," *Journal of Archaeology of Egypt*, vol. 17, no. 3, pp. 1239–1257, 2020.
- [17] I. S. Borualogo and F. Casas, "Understanding bullying cases in Indonesia," in *Handbook of Children's Risk, Vulnerability and Quality of Life*, Springer, Cham, 2022, pp. 187–199. doi: 10.1007/978-3-031-01783-4_12.
- [18] A. M. Yanti and S. Fatimah, "The strategy of Nagari for children's protection in realizing children friendly Nagari at Batu Balang," in *Proceedings of the International Conference On Social Studies, Globalisation And Technology (ICSSGT 2019)*, Paris, France: Atlantis Press, 2020, doi: 10.2991/assehr.k.200803.043.
- [19] M. M. Ashenafi, "Peer-assessment in higher education – twenty-first century practices, challenges and the way forward," *Assessment & Evaluation in Higher Education*, vol. 42, no. 2, pp. 226–251, Feb. 2017, doi: 10.1080/02602938.2015.1100711.
- [20] L. Darragh and N. Franke, "Lessons from Lockdown: Parent Perspectives on Home-learning Mathematics During COVID-19 Lockdown," *International Journal of Science and Mathematics Education*, vol. 20, no. 7, pp. 1521–1542, 2022, doi: 10.1007/s10763-021-10222-w.
- [21] J. Kast, K.-T. Lindner, A. Gutschik, and S. Schwab, "Austrian teachers' attitudes and self-efficacy beliefs regarding at-risk students during home learning due to COVID-19," *European Journal of Special Needs Education*, vol. 36, no. 1, pp. 114–126, Jan. 2021, doi: 10.1080/08856257.2021.1872849.
- [22] D. R. Sadler, "Three in-course assessment reforms to improve higher education learning outcomes," *Assessment & Evaluation in Higher Education*, vol. 41, no. 7, pp. 1081–1099, Oct. 2016, doi: 10.1080/02602938.2015.1064858.
- [23] T. Y. Harjatanaya and C.-Y. Hoon, "Politics of multicultural education in post-Suharto Indonesia: a study of the Chinese minority," *Compare: A Journal of Comparative and International Education*, vol. 50, no. 1, pp. 18–35, Jan. 2020, doi: 10.1080/03057925.2018.1493573.
- [24] D. Saripudin, K. Komalasari, and D. N. Anggraini, "Value-based digital storytelling learning media to foster student character," *International Journal of Instruction*, vol. 14, no. 2, pp. 369–384, Apr. 2021, doi: 10.29333/iji.2021.14221a.
- [25] A. Tohri, A. Rasyad, M. Sururuddin, and L. M. Istiqbal, "The urgency of Sasak local wisdom-based character education for elementary school in East Lombok, Indonesia," *International Journal of Evaluation and Research in Education (IJERE)*, vol. 11, no. 1, p. 333, Mar. 2022, doi: 10.11591/ijere.v11i1.21869.
- [26] A. M. Sari, I. Wilujeng, and A. Satriana, "The development of optical devices learning book integrated with Pancasila practice values," *Journal of Physics: Conference Series*, vol. 1440, no. 1, p. 012036, Jan. 2020, doi: 10.1088/1742-6596/1440/1/012036.
- [27] Sulistyarini, R. Rosyid, J. A. Dewantara, and E. Purwaningsih, "Pancasila character education in teaching materials to develop college students' civic disposition," in *Proceedings of the 2nd Annual Civic Education Conference (ACEC 2019)*, Paris, France: Atlantis Press, 2020, pp. 325–330. doi: 10.2991/assehr.k.200320.063.
- [28] B. Nor, E. T. Djatmika, S. U. M. Widjaja, and H. Wahyono, "Development of economic learning model based on Pancasila values," *International Journal of Instruction*, vol. 15, no. 1, pp. 259–276, Jan. 2022, doi: 10.29333/iji.2022.15115a.
- [29] A. Abdulkarim, K. Komalasari, D. Saripudin, N. Ratmaningsih, and D. N. Anggraini, "Development of a unity in diversity-based Pancasila education text book for Indonesian Universities," *International Journal of Instruction*, vol. 13, no. 1, pp. 371–386, Jan. 2020, doi: 10.29333/iji.2020.13125a.
- [30] T. Pangalila, "Character education: the future key for developing Indonesian citizens with character," in *Religious Education in Asia*, 1st ed. Routledge, 2020, pp. 76–89. doi: 10.4324/9780429321351-6.
- [31] A. Zakso, I. Agung, A. B. Susanto, and M. C. Capnary, "The effect of strengthening character education on tolerance increasing and development of Pancasila students in border area: case of West Kalimantan Province," *Academic Journal of Interdisciplinary Studies*, vol. 10, no. 5, p. 232, Sep. 2021, doi: 10.36941/ajis-2021-0136.
- [32] W. Mistiani, E. Istiyono, and A. Syamsudin, "Construction of the character assessment instrument for 21st century students in high schools," *European Journal of Educational Research*, vol. 11, no. 2, pp. 935–947, Apr. 2022, doi: 10.12973/eu-jer.11.2.935.
- [33] S. Yuliani and D. Hartanto, "Perceptions of education role in developing society: a case study at Riau, Indonesia," *Journal of Education and Learning*, vol. 6, no. 1, p. 143, Nov. 2016, doi: 10.5539/jel.v6n1p143.
- [34] F. Syam, F. M. Mangunjaya, A. R. Rahmanillah, and R. Nurhadi, "Narrative and the politics of identity: patterns of the spread and acceptance of radicalism and terrorism in Indonesia," *Religions*, vol. 11, no. 6, p. 290, Jun. 2020, doi: 10.3390/rel11060290.
- [35] D. K. A. Diani Apsari, "The influence of the advancement of social media in the visual language of Indonesian comics strips," *5th Bandung Creative Movement International Conference on Creative Industries 2018 (5th BCM 2018)*, vol. 197, pp. 156–161, 2019, [Online]. Available: <https://www.atlantis-press.com/proceedings/bcm-18/125910929>.
- [36] J. Y. Pyo, M. Jang, and T.-J. Yoon, "Dynamics between agents in the new webtoon ecosystem in Korea," in *Transmedia Storytelling in East Asia*, Routledge, 2020, pp. 93–110. doi: 10.4324/9780367246549-8.
- [37] D. Y. Jin, "Digital convergence of Korea's webtoons: transmedia storytelling," *Communication Research and Practice*, vol. 1, no. 3, pp. 193–209, Jul. 2015, doi: 10.1080/22041451.2015.1079150.
- [38] B. Yecies, A. Shim, and J. Yang, "Chinese transcreators, webtoons and the Korean digital wave," in *Digital Transactions in Asia*, New York, NY: Routledge, 2019. | Routledge, 2019, pp. 224–241. doi: 10.4324/9780429425110-13.
- [39] J. Nam and Y. Jung, "Exploring fans' participation in digital media: transcreation of webtoons," *Telecommunications Policy*, vol. 46, no. 10, p. 102407, Nov. 2022, doi: 10.1016/j.telpol.2022.102407.
- [40] F. M. van der Kleij, "Comparison of teacher and student perceptions of formative assessment feedback practices and association with individual student characteristics," *Teaching and Teacher Education*, vol. 85, pp. 175–189, Oct. 2019, doi: 10.1016/j.tate.2019.06.010.
- [41] J. Gil-Flores, J. Rodríguez-Santero, and J.-J. Torres-Gordillo, "Factors that explain the use of ICT in secondary-education classrooms: The role of teacher characteristics and school infrastructure," *Computers in Human Behavior*, vol. 68, pp. 441–449, Mar. 2017, doi: 10.1016/j.chb.2016.11.057.

- [42] M. R. M. Nor and M. Malim, "Revisiting islamic education: the case of Indonesia," *Journal for Multicultural Education*, vol. 8, no. 4, pp. 261–276, Nov. 2014, doi: 10.1108/JME-05-2014-0019.
- [43] U. Rusilowati and W. Wahyudi, "The significance of educator certification in developing pedagogy, personality, social and professional competencies," in *Proceedings of the 2nd Social and Humaniora Research Symposium (SoRes 2019)*, Paris, France: Atlantis Press, 2020. doi: 10.2991/assehr.k.200225.095.
- [44] D. I. Walker, M. P. Roberts, and K. Kristjánsson, "Towards a new era of character education in theory and in practice," *Educational Review*, vol. 67, no. 1, pp. 79–96, Jan. 2015, doi: 10.1080/00131911.2013.827631.
- [45] X. Pan and A. F. de C. Hamilton, "Why and how to use virtual reality to study human social interaction: The challenges of exploring a new research landscape," *British Journal of Psychology*, vol. 109, no. 3, pp. 395–417, Aug. 2018, doi: 10.1111/bjop.12290.
- [46] D. U. Patton, R. D. Eschmann, and D. A. Butler, "Internet banging: new trends in social media, gang violence, masculinity and hip hop," *Computers in Human Behavior*, vol. 29, no. 5, pp. A54–A59, Sep. 2013, doi: 10.1016/j.chb.2012.12.035.
- [47] L. Jiang, D. Yin, and D. Liu, "Can joy buy you money? the impact of the strength, duration, and phases of an entrepreneur's peak displayed joy on funding performance," *Academy of Management Journal*, vol. 62, no. 6, pp. 1848–1871, Dec. 2019, doi: 10.5465/amj.2017.1423.
- [48] C. R. Graham, W. Woodfield, and J. B. Harrison, "A framework for institutional adoption and implementation of blended learning in higher education," *The Internet and Higher Education*, vol. 18, pp. 4–14, Jul. 2013, doi: 10.1016/j.iheduc.2012.09.003.
- [49] W. W. Porter, C. R. Graham, K. A. Spring, and K. R. Welch, "Blended learning in higher education: institutional adoption and implementation," *Computers & Education*, vol. 75, pp. 185–195, Jun. 2014, doi: 10.1016/j.compedu.2014.02.011.
- [50] R. Q. Aini, A. Rachmatullah, M. D. Harliadi, and M. Ha, "Indonesian pre-service biology teachers' and biology education professors' views on evolution," *Science & Education*, vol. 29, no. 3, pp. 713–741, Jun. 2020, doi: 10.1007/s11191-020-00127-5.
- [51] M. Zein and D. Darto, *Evaluation of learning mathematics*. Pekanbaru: Daulat Riau (in Indonesian), 2012.
- [52] D. M. Zein and M. Thahir, *PAI learning evaluation*. Pekanbaru: Zanafa Publishing (in Indonesian), 2012.
- [53] S. Petković and S. Sorak, "Effects of the establishment of entrepreneurial orientation on the performances of small and medium enterprises in transition countries: empirical evidences from Bosnia and Herzegovina," *Zagreb International Review of Economics and Business*, vol. 22, no. s1, pp. 37–67, Mar. 2019, doi: 10.2478/zireb-2019-0004.
- [54] B. Aprilia, Y. Y. Sari, and A. R. A. Ghani, "The implementation of cultivating good values through character education in Prince's Primary School Tangerang," *Proceedings of the 1st Annual International Conference on Natural and Social Science Education (ICNSSE 2020)*, 2021. doi: 10.2991/assehr.k.210430.012.
- [55] T. Zhang, Z. A. Shaikh, A. V. Yumashev, and M. Chlād, "Applied model of E-learning in the framework of education for sustainable development," *Sustainability*, vol. 12, no. 16, p. 6420, Aug. 2020, doi: 10.3390/su12166420.
- [56] F. P. Santoso, M. Mulyoto, D. Djono, and M. Hanif, "Inculcating character values to the student of polytechnic ATMI Surakarta Vocational School," *Universal Journal of Educational Research*, vol. 8, no. 3D, pp. 79–89, Mar. 2020, doi: 10.13189/ujer.2020.081712.
- [57] K. Anwar and M. M. A. Sholeh, "The model of developing school culture based on strengthening religious characters," *Proceedings of the 2nd Southeast Asian Academic Forum on Sustainable Development (SEA-AFSID 2018)*, 2021. doi: 10.2991/aebmr.k.210305.039.
- [58] N. Yulianti, Yusrizal, and N. Usman, "Principal management in strengthening character education," *Proceedings of the 2nd International Conference on Science, Technology, and Modern Society (ICSTMS 2020)*, 2021. doi: 10.2991/assehr.k.210909.086.
- [59] M. Lai, K. M. Lam, and C. P. Lim, "Design principles for the blend in blended learning: a collective case study," *Teaching in Higher Education*, vol. 21, no. 6, pp. 716–729, Aug. 2016, doi: 10.1080/13562517.2016.1183611.
- [60] Y.-C. Yen, H.-T. Hou, and K. E. Chang, "Applying role-playing strategy to enhance learners' writing and speaking skills in EFL courses using Facebook and Skype as learning tools: a case study in Taiwan," *Computer Assisted Language Learning*, vol. 28, no. 5, pp. 383–406, Sep. 2015, doi: 10.1080/09588221.2013.839568.
- [61] K. Taylor Backor and S. P. Gordon, "Preparing principals as instructional leaders," *NASSP Bulletin*, vol. 99, no. 2, pp. 105–126, Jun. 2015, doi: 10.1177/0192636515587353.
- [62] M. Lundin, "Homo- and bisexual teachers' ways of relating to the heteronorm," *International Journal of Educational Research*, vol. 75, pp. 67–75, 2016, doi: 10.1016/j.ijer.2015.11.005.
- [63] M.-T. Wang and J. L. Degol, "School climate: a review of the construct, measurement, and impact on student outcomes," *Educational Psychology Review*, vol. 28, no. 2, pp. 315–352, Jun. 2016, doi: 10.1007/s10648-015-9319-1.
- [64] N. Dogra et al., "Teaching diversity to medical undergraduates: curriculum development, delivery and assessment. AMEE GUIDE No. 103," *Medical Teacher*, vol. 38, no. 4, pp. 323–337, Apr. 2016, doi: 10.3109/0142159X.2015.1105944.
- [65] E. Lavrenteva and L. Orland-Barak, "Teaching culture in the EFL classroom as informed by teachers' approaches to student diversity," *Research Papers in Education*, vol. 37, no. 5, pp. 633–666, Sep. 2022, doi: 10.1080/02671522.2020.1864763.
- [66] S. Elton-Chalcraft, V. Lander, L. Revell, D. Warner, and L. Whitworth, "To promote, or not to promote fundamental British values? Teachers' standards, diversity and teacher education," *British Educational Research Journal*, vol. 43, no. 1, pp. 29–48, Feb. 2017, doi: 10.1002/berj.3253.
- [67] B. Setyono and H. P. Widodo, "The representation of multicultural values in the Indonesian ministry of education and culture-endorsed EFL textbook: a critical discourse analysis," *Intercultural Education*, vol. 30, no. 4, pp. 383–397, Jul. 2019, doi: 10.1080/14675986.2019.1548102.
- [68] R. Bustan, L. Milani, and Y. Mukti, "Implementation of character values in kindergarten," in *Proceedings of the 1st International Conference on Early Childhood Care Education and Parenting (ICECCEP 2019)*, Paris, France: Atlantis Press, 2020. doi: 10.2991/assehr.k.201205.098.
- [69] S. Sugiyanto, S. Y. LN, M. Supriatna, and A. Budiamin, "Implementation of 'Tut Wuri Handayani' in the perspective of practical pedagogic foundation," *Proceedings of the International Seminar on Innovative and Creative Guidance and Counseling Service (ICGCS 2021)*, 2022. doi: 10.2991/assehr.k.220405.032.
- [70] A. Mundir, H. Baharun, S. Soniya, and S. Hamimah, "Childhood behavior management strategy based on fun learning environment," *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, vol. 6, no. 4, pp. 2583–2595, Jan. 2022, doi: 10.31004/obsesi.v6i4.2063.
- [71] B. C. Collins, M. M. Leahy, and M. J. Ault, "Guidelines for becoming a teacher leader in rural special education," *Rural Special Education Quarterly*, vol. 36, no. 4, pp. 203–213, Dec. 2017, doi: 10.1177/8756870517732038.
- [72] P.-L. Hsu, "High school students' and scientists' experiential descriptions of cogenerative dialogs," *International Journal of Science and Mathematics Education*, vol. 17, no. 4, pp. 657–677, Apr. 2019, doi: 10.1007/s10763-017-9877-4.




- [73] S. McDaniel, "An exploration of extracurricular clubs for building the 21st century skills of students with autism spectrum disorder," *Dissertation Abstracts International Section A: Humanities and Social Sciences*, vol. 79, no. 9-A(E), 2018, [Online]. Available: <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=psyc15&NEWS=N&AN=2018-30339-068>
- [74] M. Vansteenkiste, N. Aelterman, G.-J. De Muynck, L. Haerens, E. Patall, and J. Reeve, "Fostering personal meaning and self-relevance: a self-determination theory perspective on internalization," *The Journal of Experimental Education*, vol. 86, no. 1, pp. 30–49, Jan. 2018, doi: 10.1080/00220973.2017.1381067.
- [75] D. Ratcliffe and N. Ellison, "Obesity and internalized weight stigma: a formulation model for an emerging psychological problem," *Behavioural and Cognitive Psychotherapy*, vol. 43, no. 2, pp. 239–252, Mar. 2015, doi: 10.1017/S1352465813000763.
- [76] H. C. Kelman, "Further thoughts on the processes of compliance, identification, and internalization," in *Social Power and Political Influence*, London: Routledge, 2017, pp. 125–171. doi: 10.4324/9781315129693-6.
- [77] K. Allen, M. L. Kern, D. Vella-Brodrick, J. Hattie, and L. Waters, "What schools need to know about fostering school belonging: a meta-analysis," *Educational Psychology Review*, vol. 30, no. 1, pp. 1–34, Mar. 2018, doi: 10.1007/s10648-016-9389-8.
- [78] S. M. Daily, M. J. Mann, A. L. Kristjansson, M. L. Smith, and K. J. Zullig, "School climate and academic achievement in middle and high school students," *Journal of School Health*, vol. 89, no. 3, pp. 173–180, Mar. 2019, doi: 10.1111/josh.12726.
- [79] N. Schünemann, N. Spörer, V. A. Völlinger, and J. C. Brunstein, "Peer feedback mediates the impact of self-regulation procedures on strategy use and reading comprehension in reciprocal teaching groups," *Instructional Science*, vol. 45, no. 4, pp. 395–415, Aug. 2017, doi: 10.1007/s11251-017-9409-1.
- [80] J.-W. Lin, H.-H. Huang, and Y.-S. Chuang, "The impacts of network centrality and self-regulation on an e-learning environment with the support of social network awareness," *British Journal of Educational Technology*, vol. 46, no. 1, pp. 32–44, Jan. 2015, doi: 10.1111/bjet.12120.
- [81] M. Odinkaya, T. Krepkaya, I. Karpovich, and T. Ivanova, "Self-regulation as a basic element of the professional culture of engineers," *Education Sciences*, vol. 9, no. 3, p. 200, Jul. 2019, doi: 10.3390/educsci9030200.
- [82] M. H. Immordino-Yang, L. Darling-Hammond, and C. R. Krone, "Nurturing nature: how brain development is inherently social and emotional, and what this means for education," *Educational Psychologist*, vol. 54, no. 3, pp. 185–204, Jul. 2019, doi: 10.1080/00461520.2019.1633924.
- [83] A. S. Rahmatullah, E. Mulyasa, S. Syahrani, F. Pongpalilu, and R. E. Putri, "Digital era 4.0," *Linguistics and Culture Review*, vol. 6, pp. 89–107, Jan. 2022, doi: 10.21744/lingcure.v6nS3.2064.
- [84] V.-L. Holmes and Y. Hwang, "Exploring the effects of project-based learning in secondary mathematics education," *The Journal of Educational Research*, vol. 109, no. 5, pp. 449–463, Sep. 2016, doi: 10.1080/00220671.2014.979911.
- [85] C. R. Huber and N. R. Kuncel, "Does college teach critical thinking? A meta-analysis," *Review of Educational Research*, vol. 86, no. 2, pp. 431–468, Jun. 2016, doi: 10.3102/0034654315605917.
- [86] B. T. Dill and R. E. Zambrana, "Critical thinking about inequality," in *Feminist Theory Reader*, Fifth edition. | New York, NY: Routledge, 2020.: Routledge, 2020, pp. 108–116. doi: 10.4324/9781003001201-14.
- [87] J.-M. Sáez-López, M. Román-González, and E. Vázquez-Cano, "Visual programming languages integrated across the curriculum in elementary school: a two year case study using 'Scratch' in five schools," *Computers & Education*, vol. 97, pp. 129–141, Jun. 2016, doi: 10.1016/j.compedu.2016.03.003.
- [88] G. Wang, J. Yang, and J. Xu, "Granular computing: from granularity optimization to multi-granularity joint problem solving," *Granular Computing*, vol. 2, no. 3, pp. 105–120, 2017, doi: 10.1007/s41066-016-0032-3.
- [89] S. Pill and B. SueSee, "Including critical thinking and problem solving in physical education," *Journal of Physical Education, Recreation & Dance*, vol. 88, no. 9, pp. 43–49, Nov. 2017, doi: 10.1080/07303084.2017.1367741.
- [90] T. Hidayat, E. Susilaningsih, and C. Kurniawan, "The effectiveness of enrichment test instruments design to measure students' creative thinking skills and problem-solving," *Thinking Skills and Creativity*, vol. 29, pp. 161–169, Sep. 2018, doi: 10.1016/j.tsc.2018.02.011.
- [91] R. I. Segundo Marcos, V. López Fernández, M. T. Daza González, and J. Phillips-Silver, "Promoting children's creative thinking through reading and writing in a cooperative learning classroom," *Thinking Skills and Creativity*, vol. 36, p. 100663, Jun. 2020, doi: 10.1016/j.tsc.2020.100663.
- [92] D. Henriksen, C. Richardson, and R. Mehta, "Design thinking: a creative approach to educational problems of practice," *Thinking Skills and Creativity*, vol. 26, pp. 140–153, Dec. 2017, doi: 10.1016/j.tsc.2017.10.001.
- [93] M. Wahono, P. Lestari, A. Suhardiyanto, and N. W. Wardhani, "Implementation of local cultural values in the habituation process of character education in the school of the Semarang city," in *Proceedings of the Annual Civic Education Conference (ACEC 2018)*, Paris, France: Atlantis Press, 2018. doi: 10.2991/acec-18.2018.8.
- [94] Asniwati, Z. A. Fauzi, and H. Fikri, "Improving learning activities using a combination of mind mapping model, think pair share and teams game tournament," in *1st International Conference on Creativity, Innovation and Technology in Education (IC-CITE 2018)*, Amsterdam: Atlantis Press, 2018, pp. 318–322. doi: 10.2991/iccite-18.2018.67.
- [95] S. Fitriyari, I. S. Masyitoh, and Baeihaqi, "The role of Pancasila education teachers and citizenship in strengthening character education based on Pancasila values," in *Proceedings of the 2nd Annual Civic Education Conference (ACEC 2019)*, Paris, France: Atlantis Press, 2020. doi: 10.2991/assehr.k.200320.101.
- [96] I. Abdullah, B. Hidayana, P. M. Kutanegara, and A. Indiyanto, "Beyond school reach: character education in three schools in Yogyakarta, Indonesia," *Journal of Educational and Social Research*, vol. 9, no. 3, pp. 145–159, Sep. 2019, doi: 10.2478/jesr-2019-0032.
- [97] R. Aulia and C. Darmawan, "The actualization of civic education in strengthening youth generation state defense spirit," in *Proceedings of the 1st International Conference of Education, Social and Humanities (INCESH 2021)*, Bandung: Atlantis Press SARL, 2021, pp. 315–319. doi: 10.2991/assehr.k.211028.137.
- [98] D. A. Pradana, M. Mahfud, C. Hermawan, and H. D. Susanti, "Nasionalism: character education orientation in learning development," *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, vol. 3, no. 4, pp. 4026–4034, Jan. 2021, doi: 10.33258/birci.v3i4.1501.

BIOGRAPHIES OF AUTHORS






Mas'ud Zein    completed a bachelor's degree in Islamic Religious Education at the Faculty of Tarbiyah and Teacher Training, IAIN SUSQA Pekanbaru; a master's degree in Learning Evaluation at the Research and Educational Evaluation Study Program at the Yogyakarta State University Postgraduate Program and a Doctorate Degree in the Islamic Education Study Program at the Institute's Postgraduate Program The Islamic Religion of the State of Imam Bonjol Padang. He works as a permanent lecturer and researcher at the LPPM UIN Sultan Syarif Kasim Riau. As a researcher, he actively undertakes research and development tasks in the field of education and development. In addition, he is actively writing scientific articles published in various Scopus indexed international journals and accredited national journals. Apart from being active as a writer, he is also active as an editor and reviewer in various accredited national journals. He can be contacted at email: mas'ud.zein@uin-suska.ac.id.






Edi Iskandar    completed his undergraduate education at IAIN SUSQA Pekanbaru, Masters in the Postgraduate Program at Padang State University and Doctoral Program in Islamic Education Studies at the Postgraduate Program at the Imam Bonjol State Islamic Institute Padang. He works as a permanent lecturer and researcher at the Institute for Research and Community Service (LPPM) UIN Sultan Syarif Kasim Riau. As a researcher, he actively carries out research and development assignments in the field of education and development. In addition, he actively writes scientific articles that are published in various national journals. He can be contacted at email: edi.iskandar@uin-suska.ac.id.



Meimunah S. Moenada    completed her bachelor's degree in Arabic language education at the Tarbiyah and Teacher Training Faculty, IAIN SUSQA Pekanbaru, master's degree in the Islamic Religious Education Study Program, Sulthan Syarif Kasim State Islamic University Postgraduate Program and Doctoral Program in Islamic Education Studies at the Imam Bonjol Padang Islamic Institute Postgraduate Program. She works as a permanent lecturer and researcher at the Institute for Research and Community Service (LPPM) UIN Sultan Syarif Kasim Riau. As a researcher, she actively carries out research and development assignments in the field of education and development. In addition, she actively writes scientific articles that are published in various journals. She can be contacted at email: maemunahs.moenadah@uin-suska.ac.id.



Musa Thahir    completed his Bachelor degree in Mathematics Education at the Faculty of Tarbiyah and Teacher Training of UIN Sultan Syarif Kasim Riau and Master in the Mathematics Education of Postgraduate Program of Universitas Riau. He works as a lecturer and young researcher at the Institute for Research and Community Service (LPPM) of UIN Sultan Syarif Kasim Riau. As a researcher, he actively conducts research and development tasks in the field of education and development. In addition, he is active in writing scientific articles published in Scopus indexed international journals and several accredited national journals. Apart from being active as a writer, he is also active as an editor in various accredited national journals and is active as a member of the Indonesian Journal Volunteer of Riau Regional Coordination. She can be contacted at email: musa.thahir@uin-suska.ac.id.