

DOI: <https://doi.org/10.38035/dijms.v5i6>

Received: 1 July 2024, Revised: 21 July 2024, Publish: 22 July 2024

<https://creativecommons.org/licenses/by/4.0/>

Analysis of Ict Learning In Increasing The Intellectual Intelligence of Students In MTSN 4 Aceh Utara

Nora Viviani¹, Almuhajir², Zainuddin Hasibuan³

¹ IAIN Lhokseumawe, Aceh, Indonesia, nora.21783@gmail.com

² IAIN Lhokseumawe, Aceh, Indonesia, abujaadalhaq@yahoo.com

³ IAIN Lhokseumawe, Aceh, Indonesia, zainuddinhasib@gmail.com

Corresponding Author: nora.21783@gmail.com

Abstract: Information and Communication Technology (ICT) education aims to provide knowledge and skills to learners in order for them to stay updated on technical advancements that are constantly changing. ICT learning at MTsN 4 Aceh Utara requires a variety of strategies and methods that emphasize the development of thinking, analysis, and problem-solving skills to enhance the intellectual intelligence of learners. The research is qualitative and uses methods of comparative analysis, involving students directly in the learning analysis of ICT. The results of the research show that intellectual intelligence has a positive influence in developing critical thinking, creativity, and analytical ability of students in MTsN 4 Aceh Utara. Average percentage results showed 73.3% for the learning material aspects of ICT, 70% for learning methods aspects, and 73,3% for learning evaluation aspects. These findings contributed to the overall improvement of learning quality in MTsN 4 Aceh Utara.

Keyword: Technology, Intelligence, Intellectual Learning.

INTRODUCTION

Information and Communication Technology (ICT) courses are an integral part of curricula in many countries, and their organization is based on the rapid development of information and communication technology. The goal of ICT education is to provide students the information and abilities they need to stay up to date with the rapidly evolving field of technology (Palti Ovu Sukisma, 2018). ICT learning that is limited to the guidelines of the package books and relies solely on the content of the book can obstruct the development of practical skills and contextual understanding of technology by learners (Nika Monika, 2023).

According to (Gilang Wisnu Saputra, 2017), his calculations indicate that social intelligence has a positive effect on children's social intelligence levels, emotional intelligence had a good impact, spiritual intelligence was adequate, and intellectual intelligence was negatively impacted by information technology.

According to (Euis Mukaromah, 2020), in his journal, MTsN 4 Ciamis's use of ICT in the classroom has been successful in both preventing students from becoming bored and

inspiring them to be more enthusiastic about learning, despite its limited availability as a medium, resources, and tools of learning evaluation.

The ICT learning process in the computer laboratory classroom may be adjusted in order to help students become more adept critical thinkers. The goal is to make learning enjoyable and engaging for kids, which will enhance their comprehension. In computer laboratory classrooms, professors might use this tactic to get students fully involved by getting them involved in lively discussions (Radjita Dwi Pesona, 2021).

Critical thinking skills can be acquired through the participants' participation in discussions on learning materials and problem solving. In addition, the selection of learning models applied by teachers in the classroom can also support the development of critical thinking skills of students (Ahmad Hulaimi, 2021). Learning models can be implemented in classrooms to vary the learning process, preventing boredom and saturation in students during learning. In addition, it can improve the critical thinking ability of the student, given that the student will be expected to play an active role during the learning process. Thus, the application of the learning model is expected to be an interesting solution to apply in the classroom, which in turn will optimize the critical thinking ability of the students (Husnul Hotimah, 2021).

Intellectual intelligence is the ability of a person to acquire knowledge, master it, and then apply it in solving problems using logic, and running ratios. There are a number of factors that may affect a child's intellectual intelligence, including age, gender, tribe, nutritional status, and parental patterns. These factors can be a parent's concern in evaluating and monitoring the level of intellectual intelligence of their child (Khumaerah, 2017).

Increased intellectual intelligence can be described as a series of efforts, steps, and activities carried out either independently or with the help of others to develop it. The development process to help the student develop in various aspects should start with an understanding of the development of the student. This is because the development of the students of MTsN 4 Aceh Utara is unique compared to the growth of adults. Each student has its own characteristics and brings their own world. In the early stages of education, it is important to understand the world of children and their developmental stages.

Based on the above exposure, ICT learning at MTsN 4 Aceh Utara needs to involve various learning strategies and methods that emphasize the development of thinking, analysis, and problem-solving skills to improve the intellectual intelligence of students, help students develop better critical thinking, creativity, and analytical abilities, this analysis will make a positive contribution to efforts to improve learning quality and achieving ICT learning goals.

METHOD

Research techniques are generally understood to be scientific ways of gathering data for certain applications and goals. Therefore, in order to optimum and structured results, the researchers discussed the type of research that would be used before entering the data collection techniques (Rifa'i Abubakar, 2021).

This type of research is qualitative, which emphasizes the process through methods of comparative analysis. Using this approach, researchers plan to visit the investigated location in the field, pay close attention to comprehend the situation, and then describe the issues that arose. This study focuses on real-world problems as they arise following the research's execution (O. Hasbiansyah, 2005).

The subject that provides the data is known as the data source. Three sources of data are person, place, and paper. Person refers to a source of data that can provide information through oral answers through interviews or written answers via lift. Place refers for a data source that presents a view of standing and moving conditions, such as rooms, performance, teaching learning activities, and so on. Papers refer to data sources that present signs in the form of letters, numbers, images, or other symbols (Rahmadi, 2011).

The person in this context is the student who is directly involved in the learning analysis of ICTs and can provide relevant information for this research. Place refers to the Madrasah MTsN 4 Aceh Utara as the venue of educational activities. Paper is also a crucial source of data in this research because all educational activities require documentation and accounting as guidelines in conducting such activities.

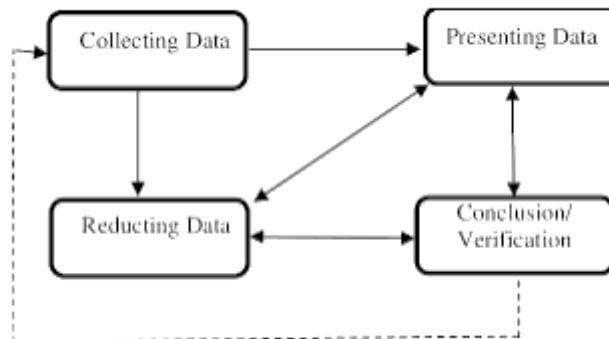


Figure 1. Data Analysis Techniques Chart

In the meanwhile, researchers employed Miles and Huberman's model, which is shown in the above figure, for data analysis.

RESULTS AND DISCUSSION

Result

By comparing data from observations with data from interviews and documentation, researchers may assess the validity of data gained through observation. In addition, by contrasting observational data with data from documentation, researchers were able to assess the validity of the data. Researchers may confirm and guarantee the consistency of data from different forms of data collection, such interviews with interviews, by using triangulation (Zuchri Abdussamad, 2021).

The results of the questionnaire for this study focused on class VII students in ICT learning at MTsN 4 Aceh Utara, requiring a more holistic and innovative approach. To enhance the intellectual intelligence of students, a variety of learning strategies and methods that encourage the development of thinking, analysis, and problem-solving skills should be applied. The data collection process is carried out using a questionnaire that serves as the main research tool.

By involving various innovative strategies, such as project-based learning, interactive discussions, and the application of technology in learning, it is expected that learners will be more active, creative, and able to apply their ICT knowledge in a variety of contexts. Thus, this research has the potential to create positive changes in ICT learning in MTsN 4 Aceh Utara and encourage the improvement of the intellectual intelligence of students in a comprehensive manner.

Aspects of Preference and Response of Students to ICT Learning Materials Based on the data obtained and analyzed, the results of the research can be presented as follows:

Table 1 Result of ICT learning material

Statements	Percentage of Compliance	Categories
Learning Experience	85%	High
Understanding Concepts	80%	High
Application Skills	70%	High
Creativity and Innovation	65%	Sufficient
Collaborative Experience	80%	High
Feedback and Improvement	60%	Sufficient

Table 1 shows the frequency of the component of the ICT learning material to the student's interest in the ICT subjects in MTsN 4 Aceh Utara, based on data obtained in the field through the dissemination of the questionnaire i.e., there are 2 questions per variable with a total of 12 questions for the student participants 10 people selected randomly in classes VII-B, there are answers to the percentage of suitability expected to the learning material of ICT in improving the intellectual intelligence of the student in the Aceh Utara average entrance in the high category is 73.3%. Based on these data it can be known that the majority of the learners have the ability to understand the learning materials high on the ICT subject matter and there is a positive contribution between intellectual intelligence to the students' learning outcomes, this means that the intelligence and learning interests influence academic achievement.

Aspects of Preferences and Reactions of Students to ICT Learning Methods Based on the data obtained and analyzed, the results of the research can be presented as follows:

Table 2 Result of ICT Learning Methods

Statements	Percentage of Compliance	Categories
Learning Experience	80%	High
Participant Engagement	90%	High
Experience Practical	60%	Sufficient
Creativity and Innovation	70%	High
Collaborative Experience	60%	Sufficient
Feedback and Improvement	60%	Sufficient

Table 2 shows the frequency of the ICT learning method component against the student's learning interest in ICT subjects in MTsN 4 Aceh Aceh. This data was obtained through the dissemination of a questionnaire, which consists of 2 questions for each variable, with a total of 12 questions. The questionnaires were distributed to 10 students randomly selected in classes VII-B. The results showed that the percentage of responses to the learning methods of ICT in improving the intellectual intelligence of students in MTsN 4 Aceh Utara average falls in the high category, namely 70%. From the data, it can be concluded that most students have a high understanding of the method of ICT learning. In addition, there is a positive contribution between intellectual intelligence and the learning outcomes of the students. This means that the intel and interest in learning have a significant influence on their academic achievement.

Aspects of Preferences and Response of Students to ICT Learning Evaluation Based on the data obtained and analyzed, the results of the study can be presented as follows:

Table 3 Result of ICT Learning Evaluation

Statements	Percentage of Compliance	Categories
Understanding of evaluation Objectives	70%	High
Evaluating Process	75%	High
Assessment Experience	70%	High
Understanding of Outcomes	70%	High
Feedback and Improvement	75%	High
Experience Sharing Evaluation Results	50%	Sufficient

Table 3 shows the frequency of ICT learning evaluation against the learning interests of students at MTsN 4 Aceh Utara. The data was obtained through a questionnaire with a total of 12 questions, distributed to 10 randomly selected students in classes VII-B. The results showed that 68.3% of the answers matched ICT learning methods that enhanced the intellectual intelligence of the students.

There was a positive contribution between the intellectual intelligence and the learning outcomes of the students, suggesting that the intellectually intelligent and learning interests have a significant influence on their academic achievement.

Discussions

From the results of this study, it was found that the majority of students expressed pleasure and interest in ICT subjects. The results of the study found that ICT learning material was very relevant to everyday life. Students are interested in how information technology can be used to solve problems and facilitate communication. The ICT learning method used is very effective. Teachers often hold interactive discussion sessions and live demonstrations that make the material easier to understand.

Students fully understand that the aim of the evaluation is to measure their understanding and ability in mastering the ICT material that has been taught. The evaluation also helps students and teachers to know how far the students have evolved.

In learning activities, interest acts as a driving force for achieving desired goals. Without interest, the goal of learning will not be achieved. However, one's interest in learning is not always stable and tends to change. Interest is a high inclination and passion or a great desire for something. One's interests can change due to the influence of the environment and needs. Students are often assigned project tasks that enable them to apply the concepts they have learned in real-life situations. It makes learning more interesting.

In the learning process, someone who has no learning motivation will not engage in learning activities, and his academic performance will be low. On the contrary, with strong motivation, academic achievement tends to increase. It shows that in schools, students are affected by changes in psychological conditions or certain problems, so that as the learning process proceeds, they are less attentive to the lesson.

In addition to intelligence, talent is a very influential factor in a person's learning process and outcome. Studying in a field that matches talent increases the chances of success because students tend to be more enthusiastic and motivated. However, other factors such as teacher teaching styles, learning methods, and classroom atmosphere also play an important role. If the teaching style does not match the student's learning preferences or the classroom atmosphere is less conducive, the student may lose interest, regardless of the talent he possesses.

Therefore, it is important for educators to recognize and develop the talents of students, as well as to create an attractive and supportive learning environment. Thus, students with high talents can optimal performance, while participants with lower talents remain supported to develop their potential as best as possible.

CONCLUSION

This research shows that these three aspects are accepted, meaning that there is a significant influence of the level of intellectual intelligence both partially and jointly on the interests of learners in ICT subjects. Based on the above exposure, it is obtained that partially in this study, the impact of the material, methods, and evaluation of ICT learning can improve the intelligence of students in MTsN 4 Aceh Utara. Intellectual Intelligence has a positive influence in the development of critical thinking, creativity, and analytical abilities of students at MTsN 4 Aceh Utara with an average value of 73.3% for the learning material aspects of ICT, a percentage of 70% to the learning methods aspects, and a percent of 73,3% to the evaluation aspect of learning of ICT. One aspect that is expected to be enhanced is the intellectual intelligence of the students. Thus, MTsN 4 Aceh Utara can implement recommendations or learning methods emerging from this research in order to improve learning effectiveness and support the development of the intellectual intelligence of students.

REFERENCE

- Afrizal. (2014). *Metode Penelitian Kualitatif Sebuah Upaya Mendukung Penggunaan Penelitian Kualitatif dalam Berbagai Disiplin Ilmu*. Jakarta: RajaGrafindo Persada.
- Agustian. (2008). *Rahasia Sukses Membangun ESQ Power, Sebuah Inner Journey Melalui Ihsan*. Jakarta: Penerbit Arga.
- Arifin, M., Muadin, A., & Salabi, A. S. (2019). Strategi Komunikasi Kiai Pesantren Darul Falah dalam Perubahan Budaya Merariq Nyongkolan (Studi Kasus Pada Masyarakat Suku Sasak Sekitar Pesantren Darul Falah Lombok Nusa Tenggara Barat). *LENTERA*, 3(1). <https://doi.org/10.21093/lentera.v3i1.1762>.
- Euis Mukaromah, *Pemanfaatan Teknologi Informasi Dan Komunikasi Dalam Meningkatkan Gairah Belajar Peserta didik, Indonesian Journal of Education Management and Administration Review*, Vol. 4 No. 1, 2020.
- G.W. Saputra, *Pengaruh Teknologi Informasi Terhadap Kecerdasan (Intelektual, Spiritual, Emosional Dan Sosial) Studi Kasus: Anak-Anak*, *Studia Informatika: Jurnal Sistem Informasi*, Vol. 10 No. 2, 2017.
- Husnul Hotimah, *Penerapan Metode Pembelajaran Problem Based Learning Dalam Meningkatkan Kemampuan Bercerita Pada Peserta didik Sekolah Dasar*, *Jurnal Edukasi*, Vol. 7 No. 3, 2020.
- Masayu Ayuning Tyas, *Eksperimen Semu (Quasi Eksperimen)*, *Eksperimen Semu*, No. 01, 2011.
- Miles, M. B, Huberman, M. A, & Saldana, *Qualitative Data Analysis (3rd ed)*, 2014.
- Nika Monika, *Pengaruh Media Pembelajaran Powerpoint Terhadap Hasil Belajar Peserta didik Pada Mata Pelajaran TIK*, *Journal on Education*, Vol.5 No. 4, 2023.
- Palti Ovu Sukisna, Johannes Sapri, *Penerapan Metode Latihan Berbantuan LKS Untuk Meningkatkan Perhatian Dan Prestasi Belajar Peserta didik*, *Jurnal Ilmiah Teknologi Pendidikan*, Vol. 8 No. 2, 2018.
- Prasetyo, M. A. M., Salabi, A. S., & Muadin, A. (2021). Mengelola Efektivitas Organisasi Pesantren: Model Kesesuaian Budaya Organisasi. *FENOMENA*, 13(1), 41–62. <https://doi.org/10.21093/fj.v13i01.3245>.
- Radjita Dwi Pesona, *Strategi Pembelajaran Bervariasi Dalam Mengatasi Kejenuhan Belajar Peserta didik Pada Mata Pelajaran Fiqih Di MA Nurul Iman Modong*, *Jurnal Pengabdian Masyarakat* Vol. 1 No. 1, 2021.
- Rahmadi, *Pengantar Metodologi Penelitian*, Banjarmasin: Antasari Press, 2011.
- Salabi, A. S., & Prasetyo, M. A. M. (2022). Organizational Culture of Sukma Bangsa Learning School (Analytical Study of Learning Organization Primordial Value). *Sukma: Jurnal Pendidikan*, 6(1), 91–110. <https://doi.org/10.32533/06105.2022>.
- Sukidi. (2004). *Kecerdasan Spiritual*. Jakarta: Gramedia Pustaka Utama.