

# TEACHER COMPETENCY IN MODEL IMPLEMENTATION TUTORIAL ON LEARNING INFORMATION AND COMMUNICATION TECHNOLOGY: STUDY AT THE AVICENNA LASEM INDONESIA INTEGRATED ISLAMIC ELEMENTARY SCHOOL

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## Abstract

A classic problem in learning is the occurrence of learning boredom at school, which is the background for conducting this research. This research aims to analyze the competency of elementary school teachers regarding the tutorial model in information and communication technology (ICT) learning and determine the obstacles teachers have in implementing the tutorial model in ICT learning at the Avicenna Lasem Integrated Islamic Elementary School (SDIT). The research used a case study method with the research subjects being grade 3-6 teachers and one information and communication technology (ICT) teacher. Data was obtained through interviews. The research results show that conceptually, teachers understand the tutorial model in information and communication technology (ICT) learning well, but in practice, 4 out of 5 teachers studied still need to implement the tutorial model in learning. This research also reveals that teachers experience obstacles in implementing the tutorial model in information and communication technology (ICT) learning.

**Keywords:** Teacher Capabilities, Elementary Schools, Tutorial Models, ICT Learning.

### Abstrak

Permasalahan klasik dalam pembelajaran adalah terjadinya kejenuhan belajar di sekolah yang menjadi latar belakang dilakukannya penelitian ini. Penelitian ini bertujuan untuk menganalisis kompetensi guru sekolah dasar mengenai model tutorial dalam pembelajaran teknologi informasi dan komunikasi (TIK) dan mengetahui kendala yang dihadapi guru dalam menerapkan model tutorial dalam pembelajaran TIK di Sekolah Dasar Islam Terpadu (SDIT) Avicenna Lasem. Penelitian ini menggunakan metode studi kasus dengan subjek penelitian adalah guru kelas 3-6 dan satu orang guru teknologi informasi dan komunikasi (TIK). Data diperoleh melalui wawancara. Hasil penelitian menunjukkan bahwa secara konseptual, guru memahami model tutorial dalam pembelajaran TIK dengan baik, namun pada praktiknya, 4 dari 5 guru yang diteliti masih perlu mengimplementasikan model tutorial dalam pembelajaran. Penelitian ini juga mengungkapkan bahwa guru mengalami kendala dalam mengimplementasikan model tutorial dalam pembelajaran teknologi informasi dan komunikasi (TIK).

**Kata kunci:** Kemampuan Guru, Sekolah Dasar, Model Tutorial, Pembelajaran TIK

### A. Introduction

Creating excellent children for the country may be achieved via high-quality education. In the field of education, teachers play a significant role. The capacity of educators to create diverse learning models is a contributing element to students' academic achievement. The instructional model is one of the learning models that will be covered by researchers. With the tutorial model, it is hoped that teachers become tutors in developing students' abilities through memorable and meaningful learning, utilizing students' experiences of what they are learning.<sup>1</sup>

The tutorial is a guidance-based learning approach designed to motivate students to engage in autonomous computer or laptop interactions as a means of actively participating in the learning process. Tutorials provide students the direction, support, advice, and incentive they need to study successfully and efficiently. Tutors are participants or staff members who provide guidance during tutorial events. Teachers, instructors, trainers, administrators, and even students who have been chosen and assigned by teachers to assist their peers in the classroom may serve as tutors. Technology-based tutorial learning can be an effective alternative for students to carry out activities practically and is easier to

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<sup>1</sup> J. Morrison, J. Frost, C. Gotch, A. R. McDuffie, B. Austin, & B. French, "Teachers' role in students' learning at a project-based STEM high school: Implications for teacher education," *International Journal of Science and Mathematics Education*, 19(1) (2021), 1103-1123.

understand if students gain experience in discovering and proving these concepts (Weerasinghe, Quigley, Pucihar, Toniolo, Miguel, & Kljun, 2022).<sup>2</sup>

Tutorial is divided into three. The first is Instructional, a learning process in which students learn independently through predetermined modules or media. The second is diagnosis guidance, namely helping students who experience problems in studying modules based on the results of assessments, both formative and summative, so that students can guide themselves. The third is Personal, namely providing examples to students such as mastery of module material or media, learning methods, attitudes, and behavior that indirectly inspire independent learning motivation and achievement motives.<sup>3</sup>

One of the many goals of tutorials is to help students become more proficient in the information covered in the modules by providing them with more rich and insightful content. Then, students' skills in solving problems and overcoming difficulties or obstacles should be improved so that they can guide themselves. Finally, to enhance students' ability to learn independently and apply it to each module being studied. There are three types of tutorials; the first is the Consultation tutorial; in this method, students and teachers meet regularly by conducting interactive consultations between the tutor and students. The second is a group tutorial, where the tutor guides a group of five or seven students simultaneously. The third is practical tutorials, usually held with groups or individuals to teach psychomotor skills in laboratories, workshops, and others.<sup>4</sup>

A computer-based tutorial is a superior learning experience in which a certified teacher uses topic-specific computer software to provide pupils a thorough knowledge (mastery learning) of the content or subject matter they are studying. Incorporating tutorial model learning media into the teaching and learning process may boost productivity, inspire students more, promote experimental and active learning, align with student-centered learning, and direct improved learning.<sup>5</sup>

Learning occurs when students and instructors engage in a setting that is intended to help them meet learning goals, namely the abilities that students are expected to have after the learning process takes place. It demonstrates how learning is a process that people go through in order to acquire a new, overall change in behavior as a consequence of their own interactions with their surroundings.<sup>6</sup>

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<sup>2</sup> M. Weerasinghe, A. Quigley, K. Č. Pucihar, A. Toniolo, A. Miguel, & M. Kljun, "Arigatō: Effects of Adaptive Guidance on Engagement and Performance in Augmented Reality Learning Environments," *IEEE Transactions on Visualization and Computer Graphics*, 28(11) (2022), 3737-3747.

<sup>3</sup> L. Novita, S. Talitha, R. Rohimah, F. S. Sundari, & R. Purnamasari, "Independent Curriculum Management Through Developing Teaching Modules on Style Materials," *AL-ISHLAH: Jurnal Pendidikan*, 16(2) (2024), 1275-1288.

<sup>4</sup> M. M. A. Nuñez, A. D. Yazon, S. B. Sapin, V. E. Tamban, & K. A. Manaig, "Improving high school students' performance in basic calculus using the Enhancing Mastery & Expertise in Mathematics supplementary material," *Applied Quantitative Analysis*, 3(1) (2023), 42-54.

<sup>5</sup> R. Roemintoyo, N. Miyono, N. A. N. Murniati, & M. K. Budiarto, "Optimising the Utilisation of Computer-Based Technology through Interactive Multimedia for Entrepreneurship Learning," *Cypriot Journal of Educational Sciences*, 17(1) (2022), 105-119.

<sup>6</sup> A. S. Munna, & M. A. Kalam, "Teaching and learning process to enhance teaching effectiveness: a literature review," *International Journal of Humanities and Innovation (IJHI)*, 4(1) (2021), 1-4.

Utilizing science and technology (science and technology) to support learning is one of the positive impacts of technological progress. One technological advancement that may be implemented and used as a reference in knowledge growth is the development of information technology. ICT (information and communication technology) is developing and becoming an inseparable part of human existence. Information technology is now a part of every aspect of life, but it is particularly prevalent in the educational sector.<sup>7</sup>

The Republic of Indonesia's Ministry of Education and Culture has been using the 2013 curriculum since 2013. From elementary school through high school, the government eliminated the Information and Communication Technology (ICT) course from the curriculum. According to the government, the ICT subject was removed, but ICT was integrated into all subjects. This decision was based on the awareness that the development of ICT has affected various aspects of human life. Then, the ICT subject was removed from the 2013 curriculum structure and used as an ICT guideline through Permendikbud number 45 of 2015.<sup>8</sup>

The two interdependent components of information and communication technology (ICT) are information technology and communication technology. All of the processes involved in using technology as a tool to handle different kinds of information are included in information technology. This involves hardware such as computers, servers, and storage devices, as well as software used to process and manage data. Information technology enables organizations and individuals to store, access, and manipulate information efficiently and effectively.<sup>9</sup>

Conversely, communication technology makes use of instruments to handle and move data across devices. This includes technologies such as telephones, radios, televisions, and the internet, which facilitate long-distance and real-time communication. Communication technology has transformed how we interact with each other, allowing for the rapid and efficient exchange of information. With communication technology, information can be disseminated widely and quickly, connecting people across the globe.<sup>10</sup>

Technology for information and communication (ICT) as a tool or medium to support knowledge sharing between people. This definition highlights the role of ICT in facilitating the exchange of information and knowledge. ICT enables individuals to access information that was previously difficult to reach, broadening their horizons and knowledge.

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<sup>7</sup> Y. Cheng, U. Awan, S. Ahmad & Z. Tan, "How do technological innovation and fiscal decentralization affect the environment? A story of the fourth industrial revolution and sustainable growth," *Technological Forecasting and Social Change*, 162(1) (2021), 1-10.

<sup>8</sup> A. Nurdin, S. A. A. Samad, M. Samad, & F. Fakrurrazi, "Government Policy Regarding Education in Indonesia: Analysis of Competence-Based Curriculum, Educational Unit Level Curriculum, and Curriculum 2013," *Journal of Governance and Social Policy*, 4(1) (2023), 139-155.

<sup>9</sup> T. L. Adi, S. Hidayatullah & H. Respati, "Analysis of the Utilization of Information and Communication Technology in the Communication and Information Services of Batu City in Supporting the Realization of Batu City as a "Smart City"," *International Journal of Scientific Research and Management*, 10(02) (2022), 3129-3136.

<sup>10</sup> S. Bansal & D. Kumar, "IoT ecosystem: A survey on devices, gateways, operating systems, middleware and communication," *International Journal of Wireless Information Networks*, 27(3) (2020), 340-364.

Additionally, ICT allows for better collaboration and communication between individuals and organizations.<sup>11</sup>

The importance of ICT in modern life cannot be overstated. ICT has become the foundation of many aspects of our lives, from education and business to entertainment. In education, ICT provides access to a wide range of learning resources and enables distance learning. In business, ICT allows for more efficient operations, better communication with customers, and access to global markets. In entertainment, ICT has changed how we consume media, with the availability of streaming video, music, and online games.<sup>12</sup>

One essential element of contemporary civilization is information and communication technology. Technology will always play a bigger part in our life as long as it keeps developing. It is important for us to understand and utilize ICT wisely to improve our quality of life and achieve our goals. ICT thus operates as a bridge that connects us to the outside world in addition to being a tool for managing information.<sup>13</sup>

Technology related to information and communication (ICT) is evolving quickly. Numerous facets of human existence are impacted by this growth, including schooling. Each technological era influences and shapes the educational era of its time. Utilizing computers to build useful, interesting, and interactive learning environments is a hallmark of ICT growth in the education sector. Most of the use of computers is in creating learning media. With the involvement of computers, many innovations have emerged in learning media, such as learning videos, animation, interactive multimedia, instructional games, and virtual laboratories. Using computers as a learning medium is very helpful in conveying learning material. Encouraging physics learning is greatly enhanced by the use of technology as a teaching tool.<sup>14</sup>

The two components of educational information and communication technology that are connected are educational communication technology and educational information technology. Educational technology views teaching and learning as problems or problems that must be faced rationally and scientifically. The creation, implementation, and evaluation of methods, strategies, and resources aimed at enhancing the learning process of an individual constitute educational technology. According to its definition, an ICT tutorial model is a set of methodical, sequential steps that are followed in order to acquire knowledge and accomplish predetermined learning goals. There are types of ICT-based learning resources

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<sup>11</sup> Y. Bilan, O. Oliinyk, H. Mishchuk, & M. Skare, "Impact of information and communications technology on the development and use of knowledge," *Technological Forecasting and Social Change*, 191(1) (2023), 1-10.

<sup>12</sup> A. Abirami, S. Lopez, P. R. Kumar, & P. Mishra, "Role of ICT Technology in Modern Education for Growth of Indian Economy," *Journal of Informatics Education and Research*, 3(2) (2023), 1-10.

<sup>13</sup> C. Zhang, I. Khan, V. Dagar, A. Saeed, & M. W. Zafar, "Environmental impact of information and communication technology: Unveiling the role of education in developing countries," *Technological Forecasting and Social Change*, 178(1) (2022), 1-10.

<sup>14</sup> N. Kholiavko, O. Popelo, I. Bazhenkov, I. Shaposhnykova, & O. Sheremet, "Information and communication technologies as a tool of strategy for ensuring the higher education adaptability to the digital economy challenges," *International Journal of Computer Science & Network Security*, 21(8) (2021), 187-195.

and media that elementary school teachers can utilize in the learning process, including computers, LCDs, the Internet, and learning CDs.<sup>15</sup>

Elementary school (SD) is the lowest tier of official education in Indonesia, as is well known. From grade 1 to grade 6, elementary education lasts six years. Article 17 of the National Education System Law (UU Number 20 of 2001) provides the following definition of basic education: (1) Elementary school (SD), Madrasah Ibtidaiyah (MI), or other such forms are examples of basic education. (2) Basic education is the level of education that precedes intermediate education.<sup>16</sup>

Teacher abilities, also known as teacher competency, are the personal, scientific, technological, social, and spiritual aptitudes that perfectly complement a teacher's professional aptitudes, which include professionalism, mastery of the subject matter, comprehension of students, educational learning, and personal growth. There are four categories for teacher competence.<sup>17</sup>

Teachers need to possess a variety of competencies, including pedagogical competence. The capacity to manage learning is characterized by this competency, which sets teachers apart from other professions. Teachers may take satisfaction in their competency, which can also be used to gauge how well the process and student learning results are going. The following are some pedagogical competencies that teachers should be well-versed in and capable of mastering: managing learning programs, controlling classrooms, utilizing learning media in the 4.0 era (quick advancement of industrial technology); comprehending the principles of education; overseeing teaching and learning interactions; giving students assessments for educational purposes; being aware of the roles of guidance and counseling; and understanding and putting into practice school administration.<sup>18</sup>

Personality competence is related to the behavior of teachers who must have noble and commendable moral values so that they become role models for students in carrying out learning tasks in everyday attitudes. Teachers will increase their authority if noble and commendable values accompany learning and reflect the teachers they admire and emulate. Teachers must also be able to instill in their pupils the virtues of virtue and good character, which includes adhering to religious standards. Some of the personalities that teachers must have include knowing children's personalities and emotions, understanding children's

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<sup>15</sup> Y. Hao, Y. Guo, & H. Wu, "The role of information and communication technology on green total factor energy efficiency: does environmental regulation work?," *Business Strategy and the Environment*, 31(1) (2022), 403-424.

<sup>16</sup> S. N. Azizah, S. Suparwoto, & Z. Nuryana, "An evaluation toward the post-certification teacher performance in the natural history learning process for the elementary school degree," *Psychology, Evaluation, and Technology in Educational Research*, 2(2) (2020), 115-128.

<sup>17</sup> H. Oktarina, M. Kristiawan, & A. Martha, "Teacher Competency Development In The Digital Era," *Jurnal Pendidikan Tambusai*, 5(2) (2021), 5149-5155.

<sup>18</sup> C. Wardoyo, Y. D. Satrio, & D. A. Ratnasari, "An analysis of teachers' pedagogical and professional competencies in the 2013 Curriculum with the 2017-2018 revision in Accounting subject," *REiD (Research and Evaluation in Education)*, 6(2) (2020), 142-149.

motivation, behavior in work groups, children's individual behavior, daily attitudes at school towards learning and assignments given by teachers, and children's learning discipline.<sup>19</sup>

Teachers must have the ability or skills to complete teaching tasks well and correctly. These are technical abilities that have a direct bearing on how well teachers function. Mastery of the subject matter being taught, including its structure, concepts, and scientific mindset, as well as the Competency Standards (SK), Basic Competencies (KD), and learning objectives of the lessons taught, as well as the ability to develop the subject matter creatively to provide deeper and broader knowledge that can act reflectively to develop professionalism sustainably, are indicators of a teacher's professional competence. Having the ability to use information and communication technology (ICT) for education and personal growth.<sup>20</sup>

A teacher's capacity to interact with others is a key component of social competency as it sets the standard for his function, viewpoint, manner of thinking, and behavior in society. Teachers are examples for those who are treated normatively because of their habits and social status. Consequently, in order to interact with children, teachers, parents/guardians, and the society at large, one has to possess a number of social abilities. Among these skills include the ability to behave impartially and without bias against others based on their gender, color, religion, physical appearance, family history, or socioeconomic standing. Effectively, sympathetically, and courteously communicate with other educators, school staff, student parents/guardians, and the local community. Adjust to the many sociocultural workplaces found in the Republic of Indonesia. Communicate both in paper and vocally.<sup>21</sup>

ICT alters the role of the teacher such that they are no longer just a source and supplier of information, but also a friend and facilitator of their students' learning. In ICT learning and several other types of learning in schools, teachers often only use the lecture method to make the learning process tedious. It could be more attractive, even though the content of ICT learning itself is exciting with the use of media and infrastructure to support learning, so it is deemed inappropriate if learning is only carried out using the lecture method alone. Therefore, teachers can share knowledge/skills and participate as much as possible like an expert.<sup>22</sup>

Previous relevant research was the effect of tutorials in learning building drawings at SMK N 3 Yogyakarta. This research aimed to determine the effect of learning outcomes using the tutorial learning method in the Basic Technical Drawing subject class X using quasi-experimental research methods. The learning outcomes of pupils using the tutorial

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<sup>19</sup> O. Arifudin, & H. R. Ali, "Teacher personality competence in building the character of students," *International Journal of Education and Digital Learning (IJEDL)*, 1(1) (2022), 5-12.

<sup>20</sup> Y. Suchyadi, F. S. Sundari, E. Sutisna, O. Sunardi, S. Budiana, E. Sukmanasa, & T. Windiyani, "Improving The Ability Of Elementary School Teachers Through The Development Of Competency Based Assessment Instruments In Teacher Working Group, North Bogor City," *Journal Of Community Engagement (JCE)*, 2(1) (2020), 01-05.

<sup>21</sup> A. M. Qobilovna, "Communicative competence as a factor of teacher's professional competency," *American Journal Of Social Sciences And Humanity Research*, 3(09) (2023), 32-44.

<sup>22</sup> C. Rapanta, L. Botturi, P. Goodyear, L. Guàrdia, & M. Koole, "Online university teaching during and after the Covid-19 crisis: Refocusing teacher presence and learning activity," *Postdigital science and education*, 2(1) (2020), 923-945.

learning technique and those using the non-tutorial learning approach vary positively and significantly, according to the data.<sup>23</sup>

During the coronavirus pandemic, the following pertinent research supports online learning with video lessons. This research methodology makes use of quantitative descriptive techniques. The study's findings indicate that there are four steps involved in utilizing video tutorials as a learning tool: planning, filming, finishing, and implementing. Responses from students to video lessons have received high marks. The goal of this research differs from that of previous studies in that it uses the case study method to examine elementary school teachers' proficiency with the tutorial model of ICT learning at Avicenna Lasem Integrated Islamic Elementary School (SDIT). The research subjects consist of teachers of grades 3-6 and one ICT teacher. The ability of educators to use ICT in an efficient manner to raise the caliber of instruction is essential. Additionally, professional development must be contextually appropriate for a range of work roles in the educational setting, especially in supporting teacher professional development in mastering the content of the subjects taught. Many learning models continue to develop, including the tutorial model. Therefore, studying tutorial models and ICT learning matters is necessary based on this description.

## B. Research Method

The method used is case study research to determine teacher competence regarding the tutorial model in ICT learning at the Avicenna Lasem Integrated Islamic Elementary School (SDIT). One kind of research that may address several questions or concerns about a phenomena is the case study research approach. As a qualitative research design, case study is used to assess real-world occurrences or circumstances (actual issue). Case studies are a qualitative research approach focused on human understanding and behavior based on variations in values, beliefs, and scientific knowledge when evaluated from its intended perspective. An intense, in-depth scientific investigation of a program, event, or activity conducted at the person, group, institutional, or organizational levels in order to gain comprehensive understanding about the event is called a case study. The goal of case study research is to examine genuine, real-life, and distinctive.

In-depth analysis was done on the data collected from interviews for this study. The Miles and Huberman technique, which consists of four activity flows—data collection, data reduction, data presentation, and data verification/conclusion—was used by the researchers to analyze the data. Five teachers from the Avicenna Lasem Integrated Islamic Elementary School (SDIT) participated in this study as informants: four were high school teachers and one was an ICT instructor. The selection of informants was motivated by their concern for the educational program of the Avicenna Lasem Integrated Islamic Elementary School (SDIT), particularly with regard to ICT education. Semi-structured interviews with instructors at the Avicenna Lasem Integrated Islamic Elementary School (SDIT) were used

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<sup>23</sup> M. A. Lazuadi, "The Relationship of Student Learning Achievement in Engineering Drawings with Software Applications and Building Interior Design at Modeling and Building Information Design Study Program in SMK Negeri 3 Surabaya: learning achievement result, technical drawing, software application," *Education and Human Development Journal*, 7(03) (2022), 22-33.



in this study's data gathering methods. Between September 25 and October 1, papers containing questions were delivered to each instructor who served as an informant by private chat.

The following are the interview rules used by researchers:

Table 1. Interview Guidelines

Research Subjects and Objects	Question
Teacher at Avicenna Lasem Integrated Islamic Elementary School (SDIT).	What do you know about the tutorial method and how to carry out learning using the tutorial method?
	Have you ever used the tutorial method? If yes, on what learning and explain the steps to apply it?
	What do you think about learning via tutorials in the real world given the state of primary education today?
	Is it ideal if ICT learning is implemented using the tutorial method?
	In terms of current educational realities, how do you implement ICT learning based on the tutorial method?

### C. Result and Discussion

This research aims to discover how teachers can know, understand, and apply the tutorial model in elementary school learning. Interview results were obtained from the five informants based on the researcher's questions. The interview results were divided into 2 tables based on whether or not the teacher had ever used the tutorial model and grouped according to the informant's opinion, which showed the same or interrelated essence. The outcomes of four informants' interviews who have not used the tutorial learning approach are as follows:

Table 2. Informant interviews with similar results

Question	Informant 1
What do you know about the tutorial method, and how do you learn how to use it?	The tutorial model is a way to do something in a guided manner, such as the teacher giving learning steps and students copying. Teachers provide learning guidance for students through teachers providing study guidance to students. It can also be delivered as lesson material in modules, media, worksheets, etc. Then,

	students can consult the material in a guided manner with educators.
Have you ever used the tutorial method? If yes, what learning did you use it for, and can you explain the steps to apply it?	It hasn't been used yet as learning models need to be customized for the subject matter, the circumstances of the pupils, and the surrounding environment. However, in terms of usage steps, it is quite understandable. If the tutorial model is applied, it means that learning is carried out in a guided manner in doing something. For example, regarding skills in making a work, the teacher can provide tutorials via video or in practice.
What do you think about learning via tutorials in the real world given the state of primary education today?	From a theoretical point of view, the method is quite good. This model could be used. However, as a method, we as teachers will collaborate with various other methods to get maximum results. You need to study this method further to create an appropriate learning design. The tutorial method might be an alternative for learning, but you must adapt the material.
Is it ideal if ICT learning is implemented using the tutorial method?	Ideally, ICT should be explained through practicum; a tutor will explain it directly. Using the tutorial model, students can directly implement the theory learned in class. If ICT learning is only explained through theory, it can sometimes confuse students because ICT learning should be done practically in the lab so that students can find out for themselves in real life. In terms of personality, children of elementary school age are good at imitating older people, so the speech model can be a way for students to direct their imitative attitudes correctly, such as imitating things related to knowledge and skills.
In terms of current educational realities, how do you implement ICT learning based on the tutorial method?	It is quite good in theory, but I have never put it into practice, so I need to study this method further to create an optimal design.

	<p>It can be used but seems to have to be collaborated with other media or learning models to be effective.</p> <p>This learning model can be applied to any learning, especially ICT. It seems that tutorials would be better.</p>
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According to Table 2's interview findings, the informant explained that the tutorial method is a guided learning method, where the teacher provides learning steps and students follow. This method can be delivered through various materials such as modules, media, and worksheets, which students can then consult with educators. Although the informant has never used the tutorial method, they understand the steps of its use, which involve guided learning through videos or practical demonstrations. However, the application of this method must be adjusted to the material, student conditions, and environment. In the context of current elementary school education, the tutorial method is considered good in theory and can be used, but it needs to be combined with other methods for maximum results. The informant also emphasized the importance of studying this method further to create the right learning design. For ICT learning, the tutorial method is considered ideal if it is carried out in practice with direct explanations from the tutor, because students can directly apply the theory learned in class. Elementary school children tend to imitate, so the tutorial method can help direct their imitation behavior in the right direction regarding knowledge and skills. However, in the reality of current education, the informant has never practiced this method and feels the need to study it further to create an optimal design. This method can be applied to any learning, especially ICT, but must be combined with other media or learning models to be effective.

The fifth informant, the ICT teacher at the Integrated Islamic Elementary School (SDIT) Avicenna Lasem, received different interview results from the other four informants, so the interview data was grouped in a different table. At the Avicenna Lasem Integrated Islamic Elementary School (SDIT), ICT learning is not integrated into thematic learning but stands alone. The outcomes of the researcher's interview with the fifth informant are listed below:

Table 3. Informant interviews with different results

Question	Informant 5
What do you know about the tutorial method, and how do you learn how to use it?	Tutorials are guidance on learning which is best-done face to face and even better in direct practice
Have you ever used the tutorial method? If yes, on what learning?	Already on ICT learning
What do you think about learning via tutorials in the real world given the state of primary education today?	The tutorial method should use a projector, and students imitate using a computer so

	that they can imitate directly, not just with teacher commands using words.
Is it ideal if ICT learning is implemented using the tutorial method?	Technically, it is pretty ideal, especially during practicum.
In terms of current educational realities, how do you implement ICT learning based on the tutorial method?	This method is quite effective because it can be done practically, and students immediately imitate it. On the other hand, in elementary school, if there are only 10 computers in the classroom, there are around 25 pupils, meaning that 2-3 kids utilize one computer at a time.

The teacher's comprehension of the tutorial model in ICT learning was determined by looking at the interview data mentioned above. Five instructors at the Avicenna Lasem Integrated Islamic Elementary School (SDIT) were interviewed, and the findings showed that the average teacher had between one and seven years of experience in the classroom. Nearly all of the general data that was gathered could be used to describe the instructional model. Nearly all teachers could explain and understand the tutorial model and ICT learning. The responses provided by the informants indicate that tutorials serve as learning assistance, and that the ideal way to do this is for teachers to provide learning stages, which students may subsequently imitate. However, four out of five informant teachers had yet to implement learning using a tutorial model for various reasons. Following up with the elementary school teacher informant, the researcher discovered that while instructors are still unfamiliar with the tutorial model, it must still be employed in instruction. Teachers often use models and methods, such as lectures, discussions, questions and answers, and several learning models listed in books or modules.

ICT learning at the Avicenna Lasem Integrated Islamic Elementary School (SDIT) is a stand-alone lesson separate from thematic learning. At the beginning of the implementation of the 2013 curriculum, ICT was indeed integrated into one part of thematic learning. Still, it should be noted that the ICT subject was removed from the 2013 curriculum structure. Subsequently, the Minister of Education and Culture of the Republic of Indonesia utilized it as ICT advice in Regulation Number 45 of 2015. ICT has become a stand-alone subject in Islamic Primary Schools Integrated (SDIT), Avicenna Lasem.

Informant 5 understands the tutorial method as a learning guide that is most effectively done face-to-face and even better if accompanied by direct practice. They have experience using the tutorial method in ICT (Information and Communication Technology) learning. In their view, the tutorial method in elementary schools today should involve the use of a projector and allow students to imitate actions on the computer, not just follow verbal instructions from the teacher. Technically, this method is considered quite ideal, especially during practical sessions. But in primary schools, its adoption is sometimes hindered by few resources, including a lack of computers, which forces two to three pupils to use one

computer at a time. Nevertheless, this method is still considered effective because it allows students to directly practice what they have learned.

Researchers conducted interviews with elementary school teachers to explore how they could implement the tutorial learning model. The findings revealed that most teachers have not yet adopted this model, primarily because they rely on traditional methods such as lectures, questions and answers, and discussions, which are more commonly used and familiar. Despite this, all the teachers demonstrated a clear understanding of the tutorial learning model's essence, as evidenced by their responses to the initial questions. One significant reason for their reluctance to use the tutorial method is the need to tailor it to the specific learning material they aim to teach.

The instructors who were questioned demonstrated these abilities when their competencies were assessed using the four core indicators of pedagogical competence, personality competence, professional competence, and social competence, particularly in terms of pedagogical competence related to learning management. According to the teachers' responses, effective learning implementation requires a variety of methods, adapted to the material, student conditions, and the learning environment. This adaptability is a testament to their ability to manage learning effectively, which is a crucial aspect of pedagogical competence.

Although only one out of the five teachers interviewed currently uses the tutorial learning model, the others expressed a strong understanding and interest in this approach. They recognize the potential benefits of the tutorial model but face challenges in integrating it with their existing teaching practices and curriculum requirements. This indicates a gap between theoretical knowledge and practical application, which could be addressed through targeted professional development and support.

The research emphasizes how crucial it is to provide educators the tools and training they need to use a variety of teaching strategies, such as the tutorial model. By doing so, teachers can enhance their pedagogical skills and offer more personalized and effective learning experiences for their students. The effective implementation of novel educational approaches also depends on creating a conducive atmosphere where instructors may test out and improve new teaching techniques.

While the tutorial learning model is not widely implemented among the interviewed elementary school teachers, there is a clear understanding and interest in its potential. Addressing the barriers to its adoption, such as the need for adaptation to specific learning materials and providing adequate training and resources, can help bridge the gap between knowledge and practice. In the end, this will result in more dynamic and successful teaching strategies that meet the various requirements of pupils.

Personality competence is a crucial aspect of a teacher's overall effectiveness. It encompasses the teacher's behavior and moral values, which serve as a model for students. At Avicenna Lasem Integrated Islamic Elementary School (SDIT), teachers exhibit strong personality competence. They know how important it is to lead by example for their kids, and this is clear. Elementary school students are particularly impressionable and tend to imitate the behaviors of adults around them. Therefore, teachers at SDIT are mindful of their actions, ensuring they display positive behaviors that students can emulate.

The teachers at SDIT are aware that their behavior significantly influences their students. They recognize that young students are keen observers and often mimic the actions of their teachers. This understanding drives the teachers to maintain high standards of conduct. By embodying noble moral values, they provide a living example of good behavior for their students. This approach not only helps in the moral development of the students but also fosters a positive learning environment.

From the perspective of the teachers, the tutorial model is an effective method to guide students in learning. This model is designed to ensure that students follow and imitate the teacher in a structured manner. By using this approach, teachers can provide clear examples of how to approach learning tasks and solve problems. This guided imitation helps students develop their skills and understanding in a supportive environment. The tutorial model thus serves as a practical tool for teachers to impart knowledge and values effectively.

Professional competence is another vital component of a teacher's skill set. At SDIT, teachers demonstrate a high level of professional competence, particularly in technical aspects related to their performance. This competence is reflected in their mastery of the subject matter they teach. According to interview results, SDIT teachers conduct their lessons in alignment with the curriculum, ensuring that the content delivered is accurate and comprehensive. This adherence to the material indicates that the teachers possess the necessary knowledge and skills to educate their students effectively.

Despite the tutorial model not being fully implemented in practice, SDIT teachers have a solid understanding of its technicalities. They are well-versed in the principles and methods of the tutorial learning model, which prepares them to apply it effectively when the time comes. This openness to implementing new teaching techniques demonstrates their commitment to both professional development and giving their pupils the finest education possible. The combination of personality and professional competence ensures that SDIT teachers are well-equipped to foster both the academic and moral development of their students. Finally, a teacher's capacity to interact with others is directly tied to his social competency. Subsequent interviews demonstrated that teachers had strong communication skills. Teachers were able to express their thoughts and views in a suitable manner. Although the majority of instructors still required to use the tutorial learning approach, all informant teachers already had four teaching competences specific to their disciplines.

SDIT teachers' understanding of the tutorial model's technicalities is a testament to their dedication to mastering new educational methodologies. Even though the model has not been fully put into practice, their theoretical knowledge ensures they are prepared for future implementation. This preparation is crucial as it allows teachers to seamlessly integrate the model into their teaching practices when the opportunity arises, ensuring a smooth transition and effective application.

An obvious sign of SDIT instructors' dedication to ongoing professional development is their willingness to implement new teaching techniques. Through keeping abreast of current developments in educational trends and approaches, they exhibit a proactive stance towards their profession. This commitment not only enhances their teaching skills but also ensures that they can provide the highest quality education to their students, adapting to new challenges and opportunities as they arise.

Furthermore, the personality and professional skill of SDIT instructors are important factors in their capacity to support their students' moral and intellectual growth. Their professional competence ensures they have the necessary skills and knowledge to deliver effective instruction, while their personality traits, such as empathy and patience, help them connect with students on a personal level. This all-encompassing method of teaching is crucial for producing well-rounded people who achieve academic success and uphold high moral standards.

An additional crucial component of SDIT instructors' efficacy is their social competency. To establish a cooperative and encouraging learning environment, they must be proficient communicators with colleagues, parents, and students. The follow-up interviews highlighted that SDIT teachers are adept at expressing their ideas and opinions clearly and appropriately, which is essential for building trust and understanding within the school community. This competence ensures that they can address any issues or concerns promptly and effectively, fostering a positive and productive educational atmosphere.

Finally, while SDIT teachers possess the four key competencies required in their respective fields, the full implementation of the tutorial learning model remains a work in progress. This ongoing development underscores the dynamic nature of education, where continuous improvement and adaptation are necessary. The teachers' willingness to embrace new models and methodologies, despite the challenges, reflects their dedication to providing the best possible education for their students. This dedication, combined with their existing competencies, positions them well to successfully implement the tutorial model in the future, further enhancing the quality of education at SDIT.

Previous research relevant to this study was conducted by Ali (2022), aiming to develop learning media in the form of animated video tutorials for the Special Proficiency Test (TKK). The result of this research is an animated tutorial video that can be used as a reference in scouting activities for administering the TKK exam. This video is designed to help exam participants better understand the material through engaging and interactive visualizations. The use of this animated video has proven effective in enhancing participants' understanding, as evidenced by an increase in scores from the initial test to the final test in the assessment of scouting activities. Furthermore, Ali's (2022) research demonstrates that video-based learning media can be a highly useful tool in the context of scouting education. The tutorial video not only provides clear and structured guidance but also motivates exam participants to learn in a more enjoyable and engaging manner. With the significant improvement in scores, this animated video can be considered an important innovation in scouting teaching methods, contributing positively to the effectiveness of learning and the success of participants in the TKK exam.<sup>24</sup>

The next pertinent study, conducted in 2022 by Zaini, Yulianto, Gusti, and Agustira, attempts to ascertain the learning objectives and areas of interest of students who are instructed by video tutorial medium. This study has a one-group pretest-posttest design and is a pre-experiment. The analysis's findings indicate that students' average levels of interest

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<sup>24</sup> W. S. Ali, "The Effect of Educational Infographics (Fixed/Mobile) Using (QR Code) Technology in Mobile Learning Environment on the Outcomes of the "Scouting Education and Its Applications" Course," *Journal of Applied Sports Science*, 12(2) (2022), 15-29.

varied before and after the use of video lesson materials. In its implementation, it was found that one teacher who used the tutorial model was a teacher who teaches ICT subjects.<sup>25</sup> According to the interview results, the tutorial model is ideal for use in ICT learning, especially during practicums in the laboratory. In its implementation, the teacher explains the material and then demonstrates it in practice using a computer connected to an LCD screen. Students follow the instructions according to the material. It is good that this tutorial model is combined with the drill and practice model, directly practicing what students learn. If tutorial learning only follows the steps given by the teacher without practicing, students may understand and remember but then forget. Implementing the tutorial model in ICT learning requires the teacher's ability as a tutor and, in practice, requires media such as computers and LCDs. There are barely ten computers available for practicums in primary schools, according to the ICT instructors' interviews. There are around 25 pupils enrolled at the same time, which implies that 2-3 kids utilize one computer unit alternately. It starts to get in the way of learning. Several parties must provide support in order to optimize learning media in primary schools, particularly with regard to contemporary technology.

Using computers in the school environment still needs to be more effective. Lack of facilities and infrastructure is one of the causes, apart from the fact that teachers and administrative staff use computers more widely than students. It was clarified by Chen, Zou, Cheng, & Xie, (2020)<sup>26</sup> that the existence of computers in the education sector is still primarily used to support school administration activities, and the use of computers as learning media is still felt to be minimal and limited. It is due to limited ability/skills to develop computer-based media, a need for knowledge among teachers about how to develop computer-based media, and the limitations of software and hardware devices.

#### D. Conclusion

The instructors at Avicenna Lasem Integrated Islamic Elementary School (SDIT) have met the requirements for all four of the current teacher competencies—pedagogical competence, personality competence, professional competence, and social competence—according to the study results previously mentioned. Additionally, the informant instructor has shown a solid grasp of the instructional methodology. Essentially, instructors see tutorial learning as instruction in which they provide students with guidance. However, 4 out of 5 teachers have never implemented tutorial learning and more often use other learning models. Implementing the tutorial model in ICT learning requires more than just the teacher's ability as a tutor but, in practice, requires media; a lack of media can be an obstacle to ongoing learning, especially during practicums.

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<sup>25</sup> M. Zaini, R. T. Yulianto, G. P. Gusti, & Y. Agustira, "The Influence Of Video Tutorial Learning Media On Improving Financial Literacy Knowledge: A Study For E-Commerce User Students," *Malaysian E Commerce Journal (MECJ)*, 6(2) (2022), 72-75.

<sup>26</sup> X. Chen, D. Zou, G. Cheng, & H. Xie, "Detecting latent topics and trends in educational technologies over four decades using structural topic modeling: A retrospective of all volumes of *Computers & Education*," *Computers & Education*, 151(1) (2020), 1-10.



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