



Improving Teachers' Capability in Implementing Learning Through Information and Communication Technology (ICT)-based Academic Supervision in the Gugus V Teacher Working Group in Tambang

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ABSTRACT

This research aims to improve teachers' abilities in implementing learning through information and communication technology (ICT)-based academic supervision. Professional teachers are those who have mastered four main competencies, including: (1) pedagogical (academic) competencies, (2) personality competence (personal), (3) social competence, and (4) professional competence. These four competencies must always be improved in accordance with current developments. Academic supervision is an activity that creates appropriate conditions for the teacher's continued professional growth. This research is School Action Research in which a research that consists of a series of steps consisting of planning activities, implementing actions, observations, and reflection activities. Based on the results of the analysis and discussion, the conclusion indicates the ability of teachers at Elementary School Cluster V Tambang Kampar to carry out learning, which refers to Permendiknas No. 41 of 2007, can be improved through academic supervision in KKG activities. This can be seen from the average level of teacher ability in cycle I, which was 65.05% as classified as poor. It increased in cycle II to 72.14%, which was classified as poor. And in cycle III, it increased to 86.70%, which was in the good category.

Keywords: teacher capability, academic supervision, ICT

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INTRODUCTION

In the era of globalization, science and technology, which are sources of material for study, are developing so quickly. In such conditions, demands for the quality of educated humans, including intellectual abilities, vocational abilities and a sense of social, humanitarian and national responsibility also increase in line with societal development. Heterogeneity of students in various dimensions (intellectual, cultural and economic); continued development of science and technology as learning objects; The continuing change in society and its demands is a factor that makes teachers have to be competent and professional (Alwiyati, 2021). The teacher is a central figure for the implementation of education in schools, because teachers have a role, function and position in delivering the success of education (Muspawi, 2021).

Education is a change that occurs in human personality and behavior which includes changes in knowledge, attitudes and behavior (Usmaedi & Alamsyah, 2016). This was also conveyed by Wasitohadi (2014) who stated that education is guidance given by adults to immature children to achieve the goal of maturity. Every development or progress achieved is an alternative for teachers to try to improve the quality of learning carried out. From the various alternatives, you can choose which alternative to use. For teachers who follow various developments and advances achieved in the world of education, following these various developments is a necessity to improve work performance (Efferi, 2015).

Teachers as an important element in the national education system in Indonesia are required to always improve their quality, professionalism and performance (Sari, 2016). The main task of teachers is to educate, teach, guide, direct, train, assess and evaluate students in formal education (Efferi, 2015). In this case, a professional teacher is one who has mastered four main competencies, including: (1) pedagogical (academic)

competency; (2) personality competence (personal); (3) social competence; and (4) professional competence, these four competencies must always be improved in accordance with current developments (Sulastri, Fitria, H., & Martha, A., 2020).

One way of improving teacher competence or ability is academic supervision. Academic supervision is an activity that creates appropriate conditions for teachers' sustainable professional growth (Mu'alimin et al., 2021). The term supervision is very popular in academic environment, bureaucrats, politicians, even entrepreneurs. The supervision in question here specifically related to interests education and learning, so it is called academic supervision (Mardhiah, Yusrizal & Usman, 2014). The implementation of academic supervision needs to be directed at efforts that provide opportunities for teachers to develop professionally, so academic supervision management activities are necessary and must be arranged in such a way as to increase teacher professionalism in carrying out their duties as educators. students, because students will develop if teachers are able to develop themselves (Aqil et al., 2020).

The training that has been carried out so far has not shown results the maximum. Of the 199 elementary school teachers in Gugus Melati who have demonstrate the ability to carry out the learning process in accordance with Minister of National Education Regulation No. 47 of 2007 concerning process standards only 149 people or around 80%, the rest 20% or as many as 40 people have not shown satisfactory performance. Therefore, researchers consider it necessary to take corrective action. The action taken is to carry out effective and efficient academic supervision of teachers, especially for their ability to carry out learning. Through information and communication technology-based academic supervision, it is hoped that teachers in teaching and learning activities will be more professional. This business is a form of teacher development which is carried out on an ongoing basis. Based on these weaknesses, researchers want to improve teachers' abilities in carrying out the learning process, which is in accordance with Permendiknas Number 41 of 2007, concerning Process Standards. In fact, coaching by school principals and supervisors has been carried out. These coaching efforts has done in school each nor on moment teacher carries out KKG in the Researcher's School Cluster, namely Cluster V (Melati), which consists of 11 schools, namely SDN 010 Teluk Kanidai, SDN 015 Palung Raya, SDN 017 Kualu, SDN 028 Rimbo Panjang, SDN 018 Teluk Kenidai, SDN 020 Kualu Pineapple, SDN 024 Tarai Get up, SDN 031 Tarai Bangun, SDM 036 Gobah, SDIT Al Hidayah and SDIT Darussalam.

Based on the above background and in line with the vision of Kampar Regency "It came true *Kampar Cyber City Based Community*" Cyber City is term For A regency Which Already utilize technology information to run government, while providing access to network And based infrastructure Internet For the whole community. *Cyber City* is A draft regency period a future based on advanced information technology. A district with concept *Cyber City* will become a district that is connected in all fields. The various needs of the district community are varied fields, whether economic, social, political, educational and others presented in one interconnected concept. The aim of this research is to improve teachers' abilities in carry out learning through academic supervision based on information and communication technology so as to become a professional teacher.

METHOD

This type of research is School Action Research (PTS) located in Gugus Binaan V (Gugus Melati) Tambang District, Kampar Regency which is located at Jalan Raya Pekanbaru-Bangkinang KM 17.5 Rimbo Panjang, Tambang District, Kampar Regency. The research time was carried out for six months) in Semester I Academic Year 2023/2024. The population in this study was 40 teachers. This research consisted of 2 cycles, each cycle was carried out in 2 meetings. Every cycle covers *planning* (plan), *action* (action), *observation* (observation), and *reflection* (reflection) (Arikunto, 2016). Data collection techniques through observation and interview techniques. Data were analyzed qualitatively and presented in tabular form.

Procedure Action Research

a. Planning

This planning stage takes the form of an activity plan determining the steps the researcher will take to solve the problem. This step is an effort to correct teacher deficiencies in using computers. The activities that will be carried out are (1) preparing a tutoring schedule, (2) creating and preparing research instruments in the form of observation sheets to obtain non-test data, (3) preparing teacher reflection and improvement in teaching.

b. Action

Actions are activities that are systematically designed to produce an increase or improvement in the learning process, so that the teacher carries out the learning process more optimally and better so that learning can take place. With ICT tutoring, teachers can improve their ability to teach and master overall teacher competencies. With this, it will be easier for teachers to carry out administration work related to their main tasks.

c. Observation

Observation is observing the results or impacts of the actions carried out by teachers in ICT tutoring. Observations were carried out by researchers during the activity. Observations include observing teachers using computers.

d. Reflection

Reflection is reviewing, seeing, and considering the results or impacts from action. Based on the results of this reflection, Researchers can revise the next plan or the initial plan for cycle II. At this stage, the researcher analyzed the results of the teacher's ability to teach cycle I. If this ability has not met the target value that has been determined, action will be carried out in cycle II and the problems that have been determined arise on cycle I will look for alternative solutions on cycle III.

RESULTS AND DISCUSSION

Condition Beginning

Based on the results of previous observations and implementation of supervision in the Guidance Cluster V (Gugus Melati) Tambang District, Kampar Regency, it was obtained data that from 199 teacher who has supervised by head schools and supervisors who have demonstrated performance in implementing learning only 80% or 159 people, the remaining 20% or 40 teachers have not shown satisfactory performance. This condition is very worrying considering that the role and duties of teachers in the classroom are very important in improving the quality of the learning process. Based on the data above, the researchers conducted school action research by conducting academic supervision for 40 teachers from 11 schools. From the initial data obtained by the author, the 40 teachers have abilities in the teaching and learning process below average or around 40 – 64 with less criteria. The identification step was carried out by researchers, namely by using data from academic supervision including learning planning and implementation of learning carried out by the school principal and researchers which was carried out on 40 people. Researchers did this on Saturday, July 22 2023.

Cycle 1

1. Planning

At this stage, researchers used a *non-directive supervision model*. The first action carried out by the KKG meeting was to prepare an initial conversation (*preconference*) about the obstacles faced by teachers in implementing the learning process at the first cycle stage. This was done by method ask on which part? Teacher have difficulties in carrying out the learning process which refers to National Education Minister Regulation No. 41 of 2007 concerning Process Standards. Based on initial data from data processing results and initial conversations were held with 40 teachers, researchers carried out outreach through the Teacher Working Group (KKG). On this occasion the researcher conveyed the initial condition of the abilities of elementary school teachers in the Fostered Cluster V, then the researcher carried out research in collaboration with Core

Teachers in the KKG carrying out workshops and discussions on Preparing Interactive, fun and challenging Learning Implementation Plans that adjusted to each teacher's semester program, followed by the implementation of lesson plans in the implementation of classroom learning. At this planning stage the researcher also prepares an Academic Supervision Schedule, prepare instrument supervision academic and socialize it to teachers in KKG.

2. Implementation

Implementation of Cycle 1 was carried out starting on Saturday 19 August 2023. In accordance with the agreement with the teachers in Gugus Melati, the researcher carried out Supervision Academic ones will evaluate ability teach the teachers. The stages carried out by researchers include pre-observation, observation and post-observation.

At the observation stage the researcher carefully observed the learning process in the classroom. The aim is to obtain objective data on aspects of the learning situation, teachers' difficulties in trying to improve the learning process. In general, the aspects observed are: efforts And activity teacher-student in process learning, method use media teaching, variation method, accuracy use media with material, accuracy use method with material, and reaction mentally para student in process learn how to teach.

3. Observation

At the observation stage, the supervisor makes observations of teachers in carrying out the learning process which refers to the Minister of National Education Regulation Number: 41 of 2007 concerning Process Standards which contains minimum criteria for the learning process in educational units including planning the learning process, implementing the learning process, assessment of learning outcomes, and supervision of the learning process for the implementation of an effective and efficient learning process.

The implementation of learning carried out by the teacher in cycle I is the implementation of the RPP. Implementation of learning includes activities introduction, activity core And activity closing. Observation Which done to 40 person Teacher emphasized on Preliminary activities , activity Core, And activity closing. On activity introduction in a way general Teacher capable prepare students psychologically and physically to follow the process learning, and submitting questions Which hook knowledge previously with the material to be studied but generally the teachers have not explained it objective learning or competence basis to be achieved.

Observations on core activities focused on exploration and elaboration activities And confirmation process learning to achieve the set indicators And is process the done in a way interactive, inspiring, fun, challenging, motivating students to participate active, as well as give room Which Enough for initiative, creativity and independence in accordance with talents, interests and development physique as well as the psychology of students. In general, at the core activity stage, teachers are not able to utilize the available time allocation according to the learning stages.

4. Evaluation And Reflection

At the evaluation and reflection stage, the supervisor carries out an analysis of the supervision activities that have been carried out by involving all class teachers, with Meaning as coaching special. Teacher Which made Research subjects in feedback action activities explain their experiences in carrying out the learning process. Evaluation stages and reflection First done in a way individually through post-observation activities to obtain identification of difficulties and problems faced by teachers after carrying out learning activities. Here, the assessor's role as a facilitator and listener is to foster the teacher's motivation and desire to improve the process of teaching and learning activities in class during the next supervision.

Cycle II

1. Planning

Cycle II is carried out through stages like Cycle I which includes planning, implementation, observation and reflection. Implementation of Cycle II Actions is based on the results of reflection and evaluation of Cycle I, in other words, weaknesses found in Cycle I are corrected through the second cycle (Cycle II). Based on the weaknesses in Cycle I, the researchers took action by carrying out academic

supervision using a contemporary model implemented with a clinical approach, so it is often referred to as the clinical supervision model. Academic supervision with a clinical approach is collaborative academic supervision. The clinical supervision procedure is the same as direct academic supervision, namely: classroom observation, but the approach is different. The implementation of clinical supervision takes place in a cycle consists of the following three stages:

- a. *Initial planning stage* . At this stage the supervisor pays attention to the following things (1) creating an intimate and open atmosphere, (2) reviewing the learning plan which includes objectives, methods, time, media, evaluation of learning outcomes, and others related to learning, (3) determine the focus of observation, (4) determine the observation tools (instruments), and (5) determine the technique for carrying out the observation.
- b. *Observation implementation stage*. At this stage several things must be considered, including: (1) must be flexible, (2) do not interfere with the learning process, (3) No nature evaluate, (4) take notes And record things that occur in the learning process according to mutual agreement, and (5) determine technique carrying out observations.
- c. *Final stage (back discussion)*. At this stage several things that must be considered include: (1) providing reinforcement; (2) reviewing learning objectives; (3) reviewing things that have been mutually agreed upon, (4) reviewing observation data, (5) not blaming, (6) observation data not being disseminated, (7) drawing conclusions, (8) avoiding direct suggestions, and (9) reformulating agreements as a follow-up to the improvement process.

Another preparation carried out by the supervisor is preparing pre-observation, observation and post-observation instruments. In the Pre-Observation stage the supervisor focuses on planning learning in accordance with process standards. Meanwhile, the observation stage uses instruments that have been agreed with the teacher. At the post-observation stage, there is a feedback discussion to formulate an agreement as a follow-up to the improvement process.

2. Implementation

Implementation of Cycle II will be carried out starting on Saturday 9 September 2023. In accordance with the agreement with the teachers in Gugus Melati, the researcher carried out Supervision Academic ones will evaluate ability teach the teachers. The stages carried out by researchers include pre-observation, observation and post-observation. At the observation stage the researcher carefully observed the learning process in the classroom. The aim is to obtain objective data on aspects of the learning situation, teachers' difficulties in trying to improve the learning process. In general, the aspects observed are: efforts And activity teacher-student in process learning, method use teaching media, variation method, accuracy use media with material, accuracy use method with material, and reaction mentally para student in process learn how to teach.

3. Observation

The implementation of learning carried out by teachers in cycle II is the implementation of the RPP. Implementation of learning includes preliminary activities, core activities and closing activities. Observations made to 40 person Teacher emphasized on activity introduction, core activities , and closing activities. On activity introduction in a way general Teacher capable prepare students psychologically and physically to follow the learning process, and submit questions Which hook knowledge previously with the material to be studied but generally the teachers have not explained it objective learning or competence basis to be achieved.

Observations on core activities are focused on exploration, elaboration and confirmation of the learning process to achieve the specified indicators And is process the done in a way interactive, inspiring, fun, challenging, motivating students to participate active, as well as give room Which Enough for initiative, creativity, and independence in accordance with talents, interests and development physique as well as the psychology of students. In general, at the core activity stage, teachers are not able to utilize the available time allocation according to the learning stages.

In Cycle II, as observed by the observer, the students were not able to compete in a healthy manner to improve their learning achievement. Because the discussion process is still dominated by a group of students who actively carry out discussions and report verbally and in writing. This is caused by the teacher's lack of

ability to provide encouragement and opportunities for students to carry out individual and group activities which can have an impact on students' low sense of pride and self-confidence . At the confirmation stage, the teacher is able to provide positive feedback and reinforcement in the form of verbal, written, gestures or gifts regarding student success, or provide confirmation of the results. exploration And elaboration participant educate through various source.

In the final or closing activity, observations are carried out by the supervisor by focusing the observations on the stage of making a summary or conclusion Which engage students. Special stages evaluation all Teachers who can go through this stage generally do not apply various types of assessment according to the expected indicators. In the final activity the teacher begins to carry out a reflection process on the activity Which Already held in a way consistent And programmed matter this is visible from Teacher can give bait come back to process and learning outcomes.

4. Evaluation And Reflection

At the evaluation and reflection stage, the teacher who was used as the research subject in the feedback activity explained his experience in carrying out the learning process. The supervisor carries out an analysis of the supervision activities that have been carried out by involving all class teachers, with the aim of providing special guidance through teacher working group activities. Evaluation stages and reflection first done in a way individually through post-observation activities to obtain identification of difficulties and problems faced by teachers after carrying out learning activities. Here, the assessor's role as a facilitator and listener is to foster the teacher's motivation and desire to improve the process of teaching and learning activities in class during the next supervision.

The next coaching process carried out in this KKG activity focuses on teacher deficiencies from the results of evaluation and reflection in Cycle II and continues with the delivery of training material which includes the use of ICT in implementing learning. The next activity carried out by the supervisor is to provide guidance through the Teacher Working Group in Cluster V (Gugus Melati) which is adjusted to the results of the analysis and recommendations. The KKG activity material is focused on analyzing teacher needs, especially those related to the implementation of core activities in the learning process, including the use of approaches, methods, learning models, use of IT-based media and learning resources, and assessment of learning outcomes. Specifically in the application of IT-based learning, teachers are trained through group meetings to be able to utilize ICT in learning, including making teaching aids using power point media, introducing use *cameras digital* And *Movies Maker* . Furthermore, *Peer Teaching* activities at KKG are used by teachers as training in the use of ICT-based learning media in the classroom.

The coaching activities ended together where an agreement was obtained between the supervisors and the teachers that the following Cycle III activities were carried out with academic supervision by the respective school principals, the lesson plans made by the teacher had to be sent via *email* to the supervisor then the learning process had to be recorded with a *Handycam*, then a copy was made via CDRW and sent to supervisor.

Cycle III

1. Planning

In accordance with the agreement between teachers and researchers, planning for Cycle III was carried out because the results of the learning process in the classroom were still low, which were still below the criteria for completeness to be achieved. At the planning stage of Cycle III, the researcher and the teachers agreed that the next academic supervision process would be assessed by observer for each school principal. The results of the RPP preparation made by the teacher which are prepared for the implementation of the learning process are sent via email to the supervisor. Meanwhile, the learning process supervised by the school principal must be recorded with a *handycam* and a softcopy made then submitted or sent to the school supervisor.

Supervisors carry out data processing using instruments that have been mutually agreed upon to assess lesson plans and softcopies of recorded learning implementation results. The results of assessments carried out by supervisors are disseminated both individually and in teacher working group activities.

2. Implementation

previous cycles . The stages of implementing academic supervision in Cycle III begin with pre-observation activities by the principal, then the principal and the teacher enter into an agreement to carry out classroom observations on the process of implementing learning in the classroom that uses ICT in learning. Researchers only assess indirectly through emailed lesson plans and recordings of the learning process carried out by teachers. After seeing and observing the results of preparing the lesson plans and recording the learning process, the researcher carried out individual post-observation activities with the teachers.

3. Observation

At this observation stage, the researcher assessed the Learning Implementation Plan (RPP) sent by the teachers via supervisor's email, then the observation continued by observing the learning implementation process recorded by the teachers (40 people). At this stage the researcher also collects data obtained from learning planning and learning implementation. The focus of the research is the process of implementing learning that is interactive, fun and challenging and involves students as much as possible in the learning process. The implementation of learning carried out by teachers also focuses on implementing innovative learning models and using learning media based on Information and Communication Technology.

4. Evaluation And Reflection

Based on the results of observations and assessments of the RPP components and implementation of learning carried out by teachers in Cluster V, Tambang District, the results showed that in general the teachers have demonstrated good abilities in carrying out the learning process, this can be seen from the results of the recordings carried out by each school para Teacher can use other learning approaches such as cooperative learning, team learning, problem-based learning, project-based learning, and learning with various sources.

The implementation of core activities which is a learning process to achieve KD can be carried out by teachers in an interactive, inspiring, fun, challenging and motivating manner (I2M3) where students actively participate. Cycle III evaluation and reflection activities were carried out in teacher working group (KKG) activities in Cluster V (Gugus Melati). At the evaluation stage, the supervisor as researcher conveys the results of the evaluation of academic supervision activities carried out in Cycle III. On this occasion the supervisor evaluated the implementation of the learning process carried out by the group and was able to demonstrate the optimal effectiveness of the learning process.

According to the researchers, the KKG meetings were very effective in developing teacher competency. Meetings in working groups is a meeting attended by the supervisor teacher. Through This forum allows teachers and supervisors to equate perceptions regarding learning activities, discuss emerging education and learning issues, and jointly look for solutions, *share* with teachers about good practices that need to be passed on.

Symptoms or phenomena in the learning process that are not inspiring, fun and challenging, do not provide enough motivating students to participate actively, students are not given space for initiative, creativity and Independence in accordance with the development of students' talents, interests, physical and psychological abilities has occurred in Cluster IV Elementary School, Tambang District. Of the 199 teachers who were able to carry out planning and The implementation of learning was quite good, only 159 people or 79%, the remaining 21% or 40 teachers, were very far from expectations. The results of the supervision carried out on 40 teachers showed very worrying values. They do not make learning plans, so that the implementation of the learning that is carried out is only limited to eliminating tasks and obligations.

Table 1. Results Implementation Supervision Academic Cycle I and Cycle II

No	Activity	Planning	Implementation	Average	Category
1	Cycle I	64.52	65.58	65.05	<i>Enough</i>
2	Cycle II	70.44	73.84	72.14	<i>Good</i>

Based on the table above, it was found that the implementation of teacher planning in Cycle I was 64.52, while the fulfillment of the implementation of process standards reached a value of 65.05. Meanwhile, the results of Cycle II showing quite significant changes in the preparation of the lesson plans, a score of 70.44 was obtained and at the learning implementation stage a score of 73.84 was obtained with an average score of 72.14. So it can be seen that there has been an increase in the teacher's ability to carry out the learning process. The increase in teacher abilities was due to the guidance process which was based on analysis of teacher needs, *the coaching process* and *peer teaching*. Below is a diagram of the Results of the Implementation of Academic Supervision Cycles I and II.

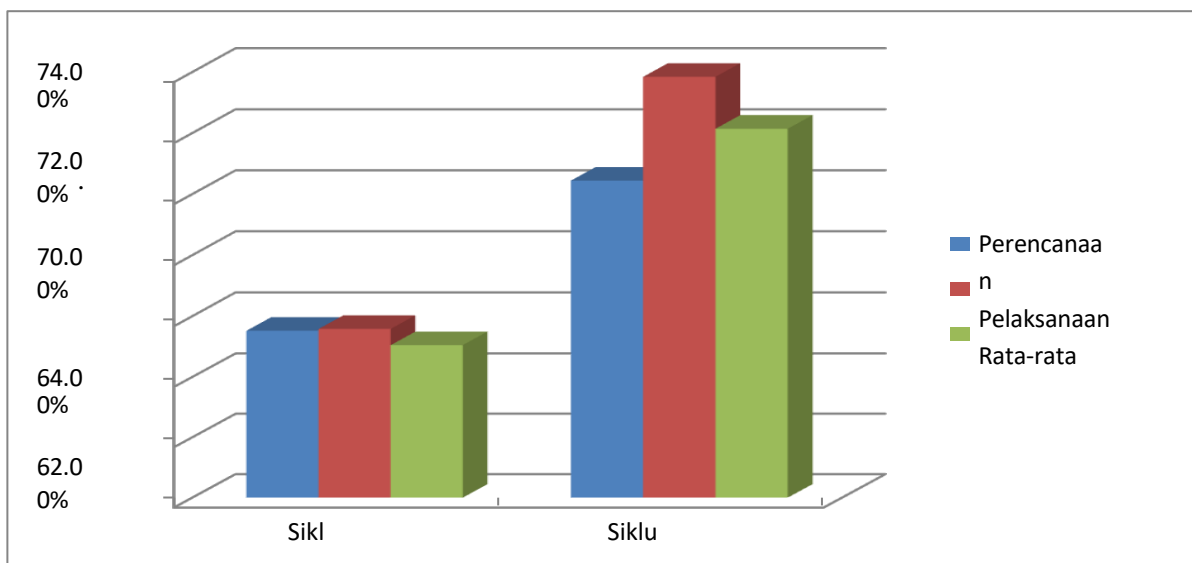


Figure 1. Diagram Results Implementation Supervision Academic Cycle I and Cycle II

Based on the diagram above, it can be explained that the implementation of Academic Supervision is carried out on teachers in Cluster V, Tambang District on cycle I on stage planning obtained a value of 64.52%, at the implementation stage a value of 65.68% was obtained with an average value of 65.05%. Meanwhile, the results of Cycle II showed quite significant changes in the preparation of the lesson plans, obtaining a score of 70.44% and at the learning implementation stage, a score of 73.84% was obtained with an average score of 72.14%.

Implementation Cycle III, carried out because the results of cycle II were still not significant, so it was carried out activity coaching grouped Gugus teacher work V with focus in shortage teacher from the evaluation and reflection results of Cycle II and continued with the delivery of training materials includes the use of ICT in implementing learning. The KKG activity material is also focused on analyzing teacher needs in particular Which related with implementation activity Core in learning process between other use approach, method, learning models, use media And source Study Which based IT, And evaluation learning outcomes .

Specifically in the application of IT-based learning, teachers are trained through group meetings to be able to utilize ICT in learning, including making teaching aids using power point media, introducing the use of *digital cameras* and *Movie Maker*. Furthermore, *Peer Teaching* activities at KKG are used by teachers as training in the use of ICT-based learning media in the classroom. The coaching activities ended together where an agreement was obtained between the supervisors and the teachers that the following Cycle III activities were carried out with academic supervision by the respective school principals, the lesson plans made by the teacher

had to be sent via *email* to the supervisor then the learning process had to be recorded with a *Handycam*, then a copy was made via CDRW and sent to supervisor.

Table 2. Results Implementation Supervision Academic Cycle II and Cycle III

No	Activity	Planning	Implementation	Average	Category
1	Cycle II	70.44	73.84	72.14	Good
2	Cycle III	84.89	88.5	86.70	Good

Based on the table above, it was found that the implementation of teacher planning in Cycle II was 70.44, while the fulfillment of the implementation of process standards reached a value of 73.84 with an average value of 72.14. Meanwhile, the results of Cycle III showed quite significant changes in the preparation of the RPP, obtaining a score of 84.89 and at the learning implementation stage obtained a score of 88.50 with an average score of 86.70 in the Good category. So it can be known that has happen enhancement ability Teacher in carrying out the learning process.

The increase in teacher abilities was due to the guidance process which was based on analysis of teacher needs, *the coaching* and *peer teaching process* which was followed by the creation of learning materials using technology-based learning media. Meanwhile, the learning process was recorded using *Handycamp*. Process This make activity learning in class become more planned and students become more active as well as teachers trying as hard as possible to show their professional abilities in implementing learning. In lower This served Results diagram Implementation Supervision Academic Cycles II and III.

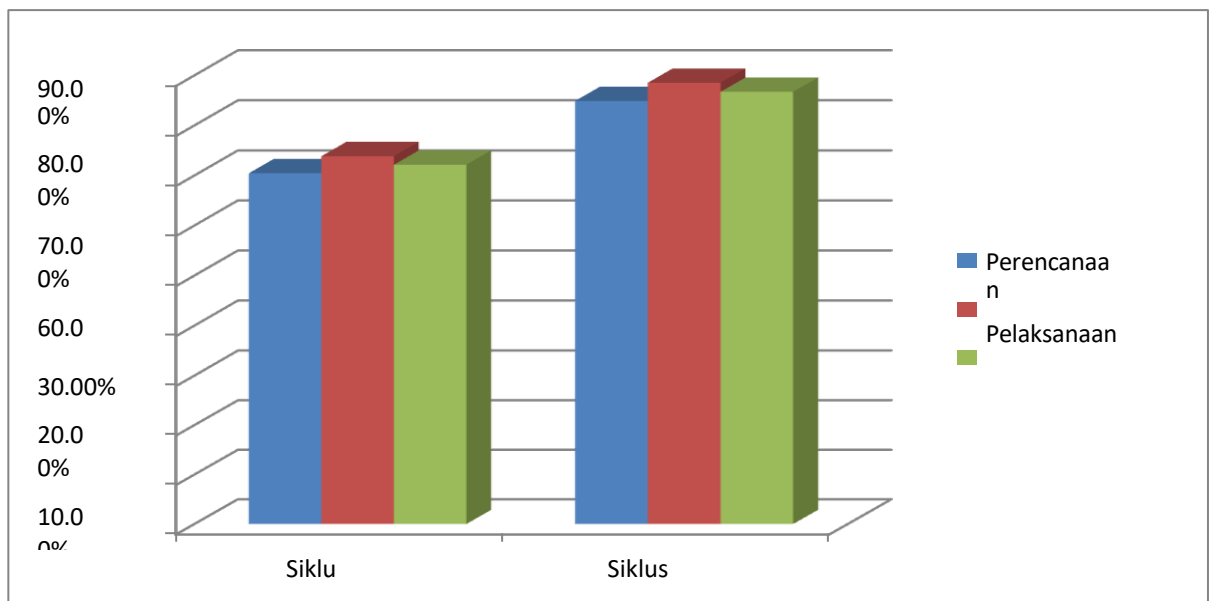


Figure 2. Diagram Results Implementation Supervision Academic Cycle II and Cycle III

Based on the diagram above, it can be explained that the implementation of Academic Supervision carried out on teachers in Cluster V, Tambang District in Cycle II showed quite significant changes in the preparation of lesson plans, obtaining a score of 70.44% and at the learning implementation stage, a score of 73.84% was obtained with an average score. -average 72.14%. Whereas results Cycle III show change Which Enough significantly, in the preparation of the RPP a score of 84.89% was obtained and in the learning implementation stage a score of 88.50% was obtained with an average score of 86.70%.

Discussion

Based on the table above, it can be explained that the implementation of academic supervision is based on information and communication technology (ICT) in cluster V, Tambang District Kampar Regency can improve capabilities Teacher in carry out learning quality. The academic supervision process carried out by researchers uses various contemporary approaches so that teachers experience services and guidance that are useful for implementing the teacher's main duties as a learning agent. Supervision academic Which done researcher has capable improve teachers' abilities in preparing lesson plans and implementing learning processes in accordance with Minister of National Education Regulation No. 41 of 2007. The implementation of the learning process through academic supervision is carried out using a collaborative approach in teacher working group activities and is carried out through sharing experiences with other teachers, with supervisors from school supervisors.

Academic supervision was chosen in this research through coaching activities within the teacher working group in Cluster V which was able to improve abilities prepare lesson plans and carry out process learning so that of their own accord they will make improvements and refinements to their main duties as learning agents, through the implementation of academic supervision it is hoped that they can improve teacher performance and motivation in preparing and implementing learning activities, (Erni, 2017; Wiwin, Endang, & Cicih, 2016; Karsiyem, & Wangid, 2015). Research conducted by Edi Rismawan (2015) shows that the results of supervision by school principals or supervisors influence teachers' teaching performance. Through supervision, teachers as the main actors in implementing the education system can be assisted in their professional growth and development to achieve learning goals (Istianah, 2019).

Academic supervision is a series of activities that help teachers develop their ability to manage the learning process to achieve learning goals (Daresh in Sugiyanti & Sabar Narimo, 2016). The aim of academic supervision is to help teachers develop their abilities to achieve the learning goals set for their students (Riyanto, 2015). Meanwhile, according to Sukarmen (2018) the aim of supervision is to improve the quality of the learning process so that it becomes better. Capacity development is not only emphasized on increasing teachers' knowledge and teaching skills, but also on increasing teachers' commitment or will or motivation, because by increasing teachers' abilities and work motivation, the quality of learning will increase. The essence of the academic supervision dimension is in the context of developing teachers to improve the quality of the learning process (Lalupanda, 2019).

Academic supervision aims to provide assistance and guidance to teachers who have difficulties when conducting classroom learning so that it can help to improve teacher performance (Sitaasih, 2020). Academic supervision activities are one of the aims of developing the learning process in the classroom and improving teacher performance. This is in accordance with the opinion of Atmodiwiryo, (2011) that the aim of academic supervision in improving teacher performance is to help teachers improve the quality of teacher teaching and foster the professionalism of teacher performance. The competence of teachers who are able to change their mindset can be seen at the learning stages (Usman, 2018; Purnawanto, 2019). According to Zulfikar, Yusrizal, & Ibrahim (2017) the implementation of academic supervision by school principals can improve the learning process if it is carried out in accordance with applicable principles. This task is quite important because through the role of supervisor, the principal can provide assistance, guidance or services to teachers in carrying out their duties or in solving problems faced during the learning process (Suradi, 2018).

Sagala (2020) emphasized that practical reflection on teacher performance assessment in academic supervision is to look at the real conditions of teacher performance. Conceptually, academic supervision is a series of activities to help teachers develop their ability to plan and manage the learning process to achieve learning goals. According to (Arifin, 2022), the implementation of academic supervision by the school principal can improve the learning process if it is carried out in accordance with applicable principles.

Teachers need to have the skills to motivate students and emphasize the elaboration process so that student behavior to be measured emerges during the learning process, referring to the principles of active student learning (Sitepu et al., 2023). In developing and implementing academic supervision programs, especially in the context of classroom learning, factors such as the level of ability, needs, interests and

professional maturity, as well as the teacher's personal characteristics, must be the basis for consideration (Fatimah, 2020).

CONCLUSIONS AND RECOMMENDATION

The ability of teachers at Gugus V Elementary School, Tambang District, Kampar Regency to carry out learning that refers to Permendiknas No. 41 of 2007 can be improved through academic supervision in KKG activities. This can be seen from the average level of teacher ability in cycle I of 65.05% which is classified as poor, and increased in cycle II to 72.14% which is classified as poor. and in cycle III it increased to 86.70% in the good category. The implementation of Information and Communication Technology-based academic supervision carried out in Cluster V, Tambang District, Kampar Regency is able to improve teachers' abilities in carrying out the learning process. This is because the academic supervision process carried out is adjusted to the teacher's characteristics and begins through a process of coaching and training with colleagues.

Students are expected to follow the learning implemented by the teacher optimally so that the planned learning objectives can be achieved optimally. For teachers, they should be able to utilize Teacher Working Groups as a vehicle for improving professional abilities so that they can improve their abilities and skills in carrying out learning processes that are inspiring, innovative, challenging and fun.

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