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## **Knowledge Creation in Academic Writing Training at The State Islamic University of Mataram (SECI Model Analysis)**

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### **ABSTRACT**

A lifelong learning culture needs to be encouraged to create rigid and flexible individuals dealing with changes in work. The government carries out this changing condition, increasing the professionalism and performance of government employees, including librarians. The government's employee quality transformation process is called a competent employee. To survive in this condition, an employee needs to understand the process of knowledge creation to keep on developing, improving, and strengthening personal capacities and competencies dynamically, especially facing the new society 5.0 era. Increasing the capacity and competence of an employee can be done through various trainings, such as the Academic Writing Training conducted by the Research and Development Agency and Training Center for Education and Training of the Administrative Division of the Ministry of Religion. The training was held for 40 functional administrative officials at The State Islamic University of Mataram. This research was conducted to determine whether the trainers' learning process was in accordance with the stages of the knowledge creation process according to the SECI Model theory and how to increase the ability in academic writing for functional officials of The State Islamic University of Mataram. This research used a qualitative descriptive method, participatory observation techniques, documentation, and interviews. This study concluded that academic writing training accommodated the process and stages of knowledge creation, and 40 employees had increasing knowledge and ability in academic writing.

**Keywords:** *knowledge creation, competent employee, academic writing training, SECI Model*

### **INTRODUCTION**

According to the Indonesian Dictionary, knowledge means everything known, such as intelligence. (Kemendikbud, 2022). Humans can obtain knowledge with the help of all five senses. Nonaka et al. state that knowledge is not just a collection of information; it is created by someone when interacting with fellow humans or their environment. Therefore, understanding knowledge well must begin with understanding

humans and their interactions when the knowledge was initiated (discovered) (Nonaka et al., 2000, p. 2).

Next, Nonaka describes the five characteristics of knowledge. The first characteristic is subjective, meaning humans have a personal point of view when creating knowledge. Therefore, the truth differs depending on who and where the knowledge is obtained. The second characteristic of knowledge is process-relational, meaning that knowledge must undergo a dynamic social process so that a person can get personal beliefs into reality in their interactions with the environment and others. The third characteristic of knowledge is aesthetic, meaning that knowledge is obtained from one's interpretation of his beliefs' truth, goodness, and beauty. This aesthetic value is needed in the assessment of knowledge and to determine what type of knowledge should be created so that the creation of further knowledge will follow each individual's value. The fourth characteristic of knowledge is made through practice. This characteristic shows that knowledge is created through relational and aesthetic processes through actual practice in specific situations. Therefore, knowledge can be created through individual training in their environment. The fifth characteristic of knowledge is towards a process theory of the knowledge-based firm, which explains efforts to carry out knowledge-based management. This characteristic emphasises that individuals will continue to create knowledge to change the company and its environment.

From the five characteristics of knowledge above, Nonaka and Takeuchi also explain two other types of knowledge: tacit knowledge and explicit knowledge. Tacit knowledge is the most valuable individual knowledge because it is internal, inside the individual's head, which is in accordance with the person's understanding and experience and continuously develops through learning. Polanyi said, "*We can know more than we can tell*" (Polanyi, 1966, p. 4; Taggart, 2002, p. 10). It means that tacit knowledge collects all those things we know how to do but perhaps do not know how to explain (at least symbolically) (Dalkir, 2011, p. 10; *Tacit Knowledge Making It Explicit*, n.d., p. 1). It must be communicated through something other than manuals or theories. Instead, it is best expressed through experiences (Nonaka & Takeuchi, 1995, p. 2). In contrast, explicit knowledge is the knowledge that has been collected and translated into a form of documentation (summary) so that others more easily understand it. This knowledge is formal and easy to share with others in the form of documentation because it is generally theoretical knowledge, making it easier for someone to share their knowledge with others through books, articles, and journals without having to come directly to teach that person (Dalkir, 2011, p. 10; *Tacit Dan Explicit Knowledge*, n.d.).

The difference between these two types of knowledge can be seen in the table below:

Tacit Knowledge (subjective)	Explicit Knowledge (Objective)
Knowledge of Experience (Body)	Knowledge of Rationality (Mind)
Simultaneous Knowledge (Here and Now)	Sequential Knowledge (There and Then)
Analog Knowledge (Practice)	Digital Knowledge (theory)

Figure 1: The differences between Tacit and explicit knowledge

Based on the relationship between these two types of knowledge, Nonaka and Takeuchi stated that knowledge results from dynamic interaction between individuals and their environment while converting between tacit and explicit knowledge. Then, Nonaka and Takeuchi convert tacit and explicit knowledge into four conversion processes to produce new knowledge through socialisation, externalisation, combination and internalisation or Nonaka's SECI model. (Sopandi & Sa'ud, 2016, p. 5) This SECI model is used to describe the factors that influence the process of knowledge creation. Combining these factors occurs dynamically and continuously in real and abstract experiences, which arise in interactions between individuals or their environment. (Sugiono & Nugeraha, 2022, pp. 51–52).

The process of knowledge creation, according to the SECI Model theory, occurs in the following stages:

1. Socialization Process.

Knowledge creation occurs when there is a process of transferring knowledge from one person to another. This process involves the transfer of individual tacit knowledge to other individuals.

2. Externalization process

After the socialisation process, there is a process of changing the form of knowledge from tacit form to explicit form in individual recipients of knowledge. This process occurs when the individual tries to change his tacit knowledge into external knowledge. The individual will try to pour his tacit knowledge into other forms of media to make it easier for others to understand and learn. The structure of knowledge externalisation chosen can be in the form of images, writing, sound or video.

3. Combination process

In the combination process, knowledge in an explicit form was developed and disseminated through various media. The media that are often used are documents. Through education and training, this knowledge can be created again by combining or processing different existing knowledge to produce new knowledge.

4. Internalization process

In this process, there is a change in the form of knowledge from explicit form to tacit form carried out by individuals who try to understand existing knowledge (learn) or conduct research on a particular object within the organisation. The internalisation process can be satisfying when individuals balance learning with the practical process in the real world (learning by doing). Ultimately, it will generate and add new knowledge within the individual.

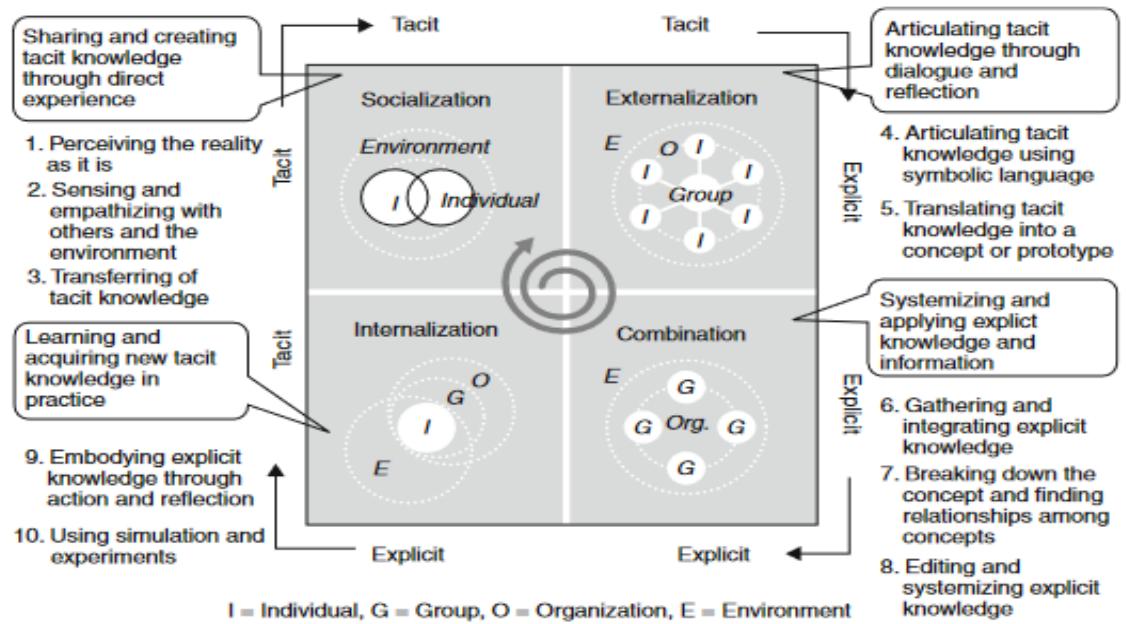


Figure 2: SECI Model

Source: (Nonaka et al., 2008, p. 19)

Although some experts state the weaknesses of the knowledge creation theory, the SECI Model uses the individual's perspective as a learning organisation (Salmador & Florin, 2013). However, the SECI model of the knowledge creation process is still acceptable as a measurement tool for distributing organisational knowledge. This knowledge creation model can be used as a reference for corporate development.

The process of knowledge creation is also trying to be accommodated by the Agency for Research and Development and Education and Training Center for Administrative Personnel Education and Training through Academic Writing Technical Training Activities for Functional Positions. Technical Training Activities for Functional Employees at The State Islamic University of Mataram. The training lasted five days, from 4 to 8 July 2022. This activity is based on the reality that academic writing is an obligation of each employee wanting a promotion. So, knowledge is essential when preparing for academic writing.

Compiling academic papers is complex and requires several supporting skills, such as information search, idea formulation, academic writing, reference management, statistics, and several other skills. Of course, someone cannot master this ability in a short time. It takes experience and training to produce a functional employee who can write and compile academic papers.

The State Islamic University of Mataram has 43 employees. Some of them are functional officials, 18 people from the pure appointment of the State Civil Apparatus (SCA), including 14 librarians, eight from the inpassing (adjustment), and 17 from the equalisation route.

The process of equalising and adjusting employees has increased the number of functional employees at The State Islamic University of Mataram, which aligns with the initial goals of bureaucratic reform and SCA management. This condition was deliberately created so that SCA can carry out career development, increase

professionalism, and improve organisational performance.(Rohida, 2018, p. 13) Improving organisational performance must be supported by professionalism, integrity, and high motivation for an SCA who has experienced a bypassing process to continue improving the profession's capacity and quality. This condition is referenced as a smart SCA. Smart SCA is a solution to Indonesia's ineffective bureaucracy. The condition was shown by the Global Talent Competitiveness Index by the fact that Indonesia is in 77 of 119 countries in the index. The condition obligates the government to encourage the employees to adapt to global external changes in the bureaucratic environment that occur so quickly (Faedlulloh et al., 2020, p. 314).

Unfortunately, the increase in the number of functional employees at The State Islamic University of Mataram is not followed by the competence of functional employees. There still needs to be a gap between structural and technical knowledge and skills following functional competence for an SCA, which accommodates changes in status through equalisation and adjustment.

Improving the competence of functional employees, especially within the Ministry of Religion, is one of the responsibilities and targets of the Research and Development Agency and Training Center for Administrative Divisions Education and Training. One of the most critical competencies to be mastered by functional employees is writing skills for academic papers.

This study was conducted to determine whether the learning process carried out by the trainers in the training was in accordance with the SECI Model Analyses and how to increase the ability to prepare academic papers for functional employees of The State Islamic University of Mataram.

## **METHOD**

This study used a descriptive qualitative method. This approach was chosen so that researchers can examine or dig deeper information from the focus of the problem under study. This study used participatory observation techniques and documentation in the data collection process.(Rahardjo, 2011, pp. 2-3) Participatory observation was carried out through the direct involvement of researchers to obtain additional data related to obstacles in the knowledge transfer process regarding the preparation of scientific papers for training participants.

In addition, researchers also used the interview method by selecting key persons as informants. The key persons used have the following characteristics: (1) functional officials who have experienced a process of equalisation (in passing); (2) have a high level of position because it comes from the structural position of the Head of Division (echelon 3); (3) and have a good understanding of the ASN career advancement process. Based on these characteristics, Mrs. S was chosen to hold the position of Middle Personnel Analyst with the rank of Supervisor in class IV/a.

## **RESULTS AND DISCUSSION**

Academic Writing Training for functional employees was conducted from Monday, July 4, 2022, to Friday, July 8, 2022. This training was conducted on 40 employees at The State Islamic University of Mataram. Participants were gathered in

one WhatsApp group a few weeks before the activity to facilitate communication. On the first day, after the opening and pre-test activities, the trainer started brainstorming and building learning commitment. In this activity, the chief and secretary of the trainees are selected, and the trainees agree on the principles: commitment to learn together, strengthening togetherness, and personal motivation.

The knowledge creation process at the socialisation stage begins when the trainer gives material on the basics of writing academic papers and information retrieval on the second day of the training. In this process, the resource person transfers knowledge to the participants. Hence, the transfer process is from the trainer's tacit knowledge to the trainees' tacit knowledge.

The trainees were divided into three large groups on the third day, and a trainer guided each group. In that group, the trainees were required to compile an article to discuss with each trainer. Pouring the trainees' ideas into written form is a form of knowledge creation in the externalisation stage, where trainees transfer knowledge from tacit knowledge to explicit knowledge. The trainers mentor trainees intensively in the knowledge externalisation process in the groups.

Mentoring trainers to trainees in small groups also encourages the knowledge-creation process at the combination stage. At this stage, the trainees' knowledge that is poured in explicit form is directed, sharpened, and given various enrichments from various academic sources by the trainers. The trainer does this for concept maturity and the perfection of the written work that the trainees are preparing.

Seminar activities strengthened the mentoring process on the fourth day. Trainees must present their ideas and articles to trainers in their respective groups in seminars. The speakers provided various final inputs to improve the written work in this seminar.

The process of creating knowledge at the internalisation stage of the trainees occurred when the trainees started trying to put their ideas into academic writing. When the trainees compile an academic paper, changing explicit knowledge into tacit knowledge occurs with an increased understanding of the practices and principles. The seminar process further strengthened this internalisation stage on the fourth day of the training. Trainees are required to present ideas and defend their ideas before the trainer. Trainees also keep trying to optimise the process and results based on input from the trainer.

The dynamics in creating knowledge among trainees in Technical Training for Functional Employees can also be observed from the interviews conducted by researchers with the informant, Mrs. S.(S. S, personal communication, August 5, 2022). Mrs. S is one of the trainees who is an analyst at the Intermediate level in the Staffing Department.

Mrs S stated that at the socialisation stage in the five-day training activity, the trainers had succeeded in motivating and assisting trainees in the knowledge transfer process to prepare an academic paper. As for the externalisation and combination stages, Mrs S believes that the trainers have also made maximum efforts to guide the trainees. This is evidenced by the enthusiasm shown in the mentoring process, the motivation given to the trainees and the consultation opportunities that remain open for trainees to coordinate and communicate when the activity time is over because trainees are still required to submit compiled academic papers. However, the success of

the trainees depends on the ability of each trainee to absorb the information provided by the trainers, express their ideas, and concoct them with various existing references based on the instructions from the trainers.

As a trainee, Mrs. S also experienced difficulties due to her shortcomings and limitations, such as a lack of understanding and mastery of the multiple references needed to prepare her writing. Mrs. S also realised that she faced difficulties and obstacles in preparing academic papers because she needed to get used to writing. Writing skills are skills that a person acquires through a process of habituation. Because she is not used to it, a writer sometimes feels "stuck", especially when selecting appropriate words or sentences to represent an idea she wants to put into her writing. The acquisition of these writing skills must go through continuous training stages, which is challenging to realise, considering the working conditions of administrative employees. The conditions are less supportive in developing writing habits and compiling academic papers. This condition is a challenge faced by functional or administrative employees.

Another obstacle experienced by Mrs. S in the training process was time constraints. Academic Writing Technical Training activities for Functional Employees are only conducted for five days. In the five days of activities, there was a process of transferring knowledge by the trainers, the process of preparing ideas for academic papers, the process of classical mentoring, and the process of seminars. The short duration of the training affected many things in the training process, for example, the quality of material delivered by the trainers, the reception and absorption of information by the trainees, and the mastery of writing skills in each trainee. So, at the internalisation stage, success can be measured from the abilities of each trainee.

At the end of the interview, Mrs. S emphasised the reality that the various knowledge provided and the mentoring efforts by the trainers had greatly helped the trainees develop the ability to compose academic papers. As a functional employee, this ability is very much needed to develop the quality of resources for each employee. This is because the demands for the career development of functional employees are academic papers. So, whatever the obstacles faced, one should maintain the spirit of the functional employee to compile an academic paper.

So, the trainers carried out the process of creating knowledge in the Academic Writing Technical Training activities for 40 functional employees. However, the success rate of the training process also greatly depended on the ability of the trainees to absorb information and put their ideas to work. Academic writing. Factors that hinder the knowledge creation process, such as time and habits, will challenge an employee in internalising knowledge and skills in preparing an academic paper.

From the researcher's documentation process, the researcher also obtained the reality of the success of the training activities carried out during the five days. This reality is indicated by an increase in the scores obtained by 8% (the difference between the accumulated pre-test and post-test scores) in the trainees. Another fact is that the trainees submitted 13 journal articles to the committee due to the training process.

The success obtained from the efforts of the trainers in the Academic Writing Technical Training for Functional Employees should be appreciated. Because of their efforts in imparting knowledge in the socialisation process, efforts to mentor and assist trainees in the externalisation and combination process, as well as reinforcements

provided for the internalisation process, they must deal with the limitations of time, interest, motivation, and the ability of trainees to receive and absorb the information provided. However, despite all the existing conditions, training activities for functional employees are very much needed to develop, improve, and strengthen skills to realise the coveted smart SCA.

## **CONCLUSION**

One of the theories of knowledge creation is the socialisation, externalisation, combination, and internalisation in (SECI) model. This theory describes the factors that influence the process of creating knowledge between the dimensions of tacit and explicit knowledge that occur dynamically and continuously in natural and abstract experiences during interactions between individuals or their environment.

This knowledge is created through academic writing technical training activities for functional employees, held from Monday, July 4, 2022, to Friday, July 8, 2022. This training is conducted by the Research and Development Agency and Training Center for Administrative Division, Education and Training to improve competency in preparing academic papers among functional employees at The State Islamic University of Mataram.

The results of this study indicate that the trainers have succeeded in increasing the knowledge and skills of the trainees. The learning process characterises this condition following the stages of knowledge creation in the SECI Model, the presence of scientific papers submitted by the participants, and an increase in achievement in post-test scores at the end of the training activity.

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## **AUTHOR CONTRIBUTIONS**

Both authors conceived of presented ideas by going directly to the source to collect and investigate the data in the field. The first author verifies and performs the analysis method, while the second researcher develops the theory and writes the paper. All authors discussed the results and contributed to the final manuscript.

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