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Mentoring and the Dimensions of Trialogical Knowledge Creation - Mentors' Perceptions of Learning in a Mentoring Relationship

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Abstract

The mentoring process aims to promote learning and competence and support professional growth. The mentoring process inherently includes elements of learning. However, mentoring is not viewed from the perspective of learning and knowledge creation. This research examines mentors' perceptions of mentoring as a learning and knowledge creation process. The data consists of qualitative interviews with 10 mentors, which were analyzed using abductive content analysis. The results show that mentors' perceptions of the mentoring process as a learning and knowledge creation process are mixed. A narrow perception is that mentoring is a monologic transfer of information from mentor to actor. A broader, dialogical view is that the mentor and the actor interact to solve problems that are perceived as important. In a trialogical mentoring process, the mentor and the actor create new knowledge together as equal partners. The research suggests that the mentoring process should be viewed more deeply through the processes of learning, so that it is meaningful for the participants and reinforces the current enabling of continuous learning.

1. Introduction

Numerous and rapid changes in working life require a broad range of skills and active participation [17; 11]. Strengthening skills requires continuous learning and updating [27; 17]. Continuous learning at work can be supported by mentoring [15], as a significant part of learning takes place informally in the work context [23]. Mentoring is defined as reciprocal skills development in an interactive process [1; 38]. The mentoring process is always unique as the participants in the mentoring process, mentor, and actor, always bring their individual starting points to it [2].

There are many levels of learning processes involved in the mentoring process. In fact, recent research suggests that mentoring is seen as an educational process, where mentoring is seen as an interactive learning process for both the mentor and the actor, enabling both parties to grow and develop professionally [22]. To our knowledge, little research

has been conducted on mentoring from a learning theory perspective. Bryson [8] points out that mentoring involves a mentor sharing their career experiences, providing guidance, motivation, emotional support, and serving as a role model for a mentee. They assist in exploring careers, setting goals, networking, and identifying resources [8]. Research indicates that mentoring can be a transformative and positive experience for individuals. Therefore, we look at mentoring from the perspectives of knowledge creation and learning. We examine mentoring through trialogical learning and its associated learning dimensions, or metaphors: monological knowledge transfer, dialogical participation and trialogical knowledge creation [30]. The monological view of mentoring emphasizes the role of the mentor in transferring knowledge to the actor. The dialogic view of mentoring recognizes the importance of an interactive, equal mentoring relationship in which learning is essentially a shared activity [16]. The trialogical conception emphasizes the innovative dimension of learning, i.e., processes in which knowledge is consciously created and developed [19] reflecting the mutual opportunity for professional growth that mentoring can most ideally create [22]. The knowledge creation model has been applied in the past mainly in higher education contexts in technology-mediated learning, where the aim has been to use group work to introduce students to the world of work and teach them work-life skills by using authentic problems [42]. Based on an extensive data search, there is little research on the use of trialogical learning in the workplace and in the context of mentoring. However, model developers Paavola and Hakkarainen [32] see that trialogical learning has potential to develop in different pedagogical, professional, and academic contexts. They see that pursuing these lines of research is important because the productive participation in the emerging knowledge society which is oriented toward building a sustainable future will require a cultivation of competencies in all citizens. From these theoretical premises, we have set the research question: What are mentors' perceptions of mentoring as a process of learning and knowledge creation?

2. Theoretical Framework

In the theoretical framework, firstly, the starting points for mentoring and the diverse objectives of the mentoring process are examined. Second, a trialogical model of learning and knowledge creation is presented, through which the learning process in a mentoring relationship can be analyzed.

2.1. Mentoring as Learning Process

Mentoring is discussed in the literature from several different perspectives. It's identified as a process, which develops the mentee professionally through guidance, facilitation, and support [1; 34], where core elements are role learning and reflection [10]. It is also seen as an intensive exchange relationship which develops and opens new perspectives [44; 1]. Moreover, mentoring is also understood as a tool that builds a guiding relationship [39], produces experiential learning [4]. Generally, mentoring refers to interaction between more-experienced mentor and less-experienced actor, where mentors provide career and psychosocial knowledge and support [14]. Overall goal of mentoring is defined as to help people work effectively and achieve success in their professional and personal lives. Kram defined already in 1985's that mentors' core roles are career-related and psychosocial mentoring, but Scandura & Williams [36] have added role-modeling as a third crucial role. As a role model, mentor support actor by visioning and considering options together and encouraging for the future [43].

Mentoring theories conceive mentoring as a dynamic and developmental process whereby relationships and interactions between mentor and actor change over time. The prevailing view of mentoring is that it is a process-like experiential learning that is built in a mentoring relationship [4; 33]. The mentoring relationship typically lasts for a year, with various stages of growth and development. Mentoring is often described as a professional interaction between a more experienced and a less experienced partner, with the aim of supporting the development of the actor. According to Kram [20], the mentoring process is divided into the four distinct, albeit often overlapping, phases: initiation, cultivation, separation, and redefinition. During the initiation stage, participants learn about each other's personal styles and work habits. In the second stage, actors gain knowledge and psychosocial support from their mentors. During the third stage interaction decreases and it requires structural and psychological change in participants' relationships. In the final stage, at the end of the mentoring process, the relationship is redefined and at its best it turns into a collegial relationship with mutual support.

Studies in mentoring emphasizes perspective on individual-level consequences and outcomes. Although mentoring is considered to develop both parties, actor as a learner has been of interest in most studies. Mentoring is recognized to develop individuals' professional skills, such as awareness and understanding of career opportunities, working life in general and about professional networks [1; 2] but also social and cognitive skills [40], such as develop and strengthen self-knowledge and as well as professional identity [44; 12; 10]. As such it is considered as a powerful learning tool from the perspective of actors. Despite the reciprocal nature of the process [1; 38], less is known what and how mentors learn. During the mentoring process, the participants reflect on their ideas and experiences related to their working life and seek to develop alongside each other [23]. An interactive mentoring relationship generates new perspectives for both the actor and the mentor through dialogue [1; 38]. Previous studies state that mentors may benefit from mentorship as well in various ways, such as improving their cognitive and socio-emotional and communication skills [13].

As traditional mentoring entails one-way-learning and emphasis is even today in actors' learning, contemporary studies call for perspectives that mindfully value reciprocal learning and growth. Research on effective mentoring that stresses equitable learning with social transformative value is needed. [25.] More and more studies are nowadays exploring the benefits that harness both participants' strengths. Studies on co-mentoring [18] and collaborative mentoring [9], stress the collaborative learning relationship, where mentoring may be a mutually beneficial learning relationship [41]. Educative mentoring also offers perspective on positioning both mentor and mentees as co-learners within a collaborative relationship while emphasizing reciprocal learning [22]. Contemporary views on mentoring are moving towards the view where mentoring aims resulting in possibilities for growth and professional development for both parties.

2.2. Trialogical Model of Learning and Knowledge Creation

The trialogue model of knowledge creation is a collaborative and iterative approach to learning. It views learning through three metaphors of learning: learning as knowledge acquisition, learning as participation and learning as knowledge creation [28; 29; 30]. In the first metaphor of knowledge acquisition, learning is seen as the transfer of knowledge into the mind of the individual. This view represents a 'monological' view of human cognition and action. In the second metaphor of participation, learning is seen as growing and socializing in the

learning community. This means that participation in different cultural practices and shared learning situations affects the individual's cognitive functioning. [28; 29; 30]. In the metaphor of participation, learning is seen as a gradual process of growing into a full member of a community and knowledge is seen as being formed as part of cultural practices. In the metaphor of participation, a dialogical aspect is present in the formation of knowledge, as it emphasizes the interaction with culture, environment, or people. [28; 29; 30]. The third metaphor of knowledge creation creates a bridge between the two metaphors mentioned above. The metaphor of knowledge creation refers to the trialogical approach to learning (TLA), as it emphasizes collaborative creative ways of working, the co-operative development of mediating objects or artifacts as the starting point for knowledge creation, rather than monologues within the mind or dialogues between minds. It is based on a knowledge creation metaphor for learning. The knowledge creation metaphor refers to conceptions of learning that emphasize the development of something new as the main purpose of collaborative learning. Developing or creating something new does not necessarily mean doing something new in world history, but rather trying to go beyond the participants' previous knowledge and produce something new. [28; 29; 30].

Triological learning combines both individual knowledge and conceptual process approaches in a third element, where knowledge artifacts are constructed in accordance with the objectives of a collaborative learning community. The metaphors of acquisition and participation are included in the metaphor of knowledge creation. Thus, it includes both individual and social processes, conceptual knowledge construction and social practices that are central to fostering collaborative creativity. [35.]

The background of trialogical learning is based on several theoretical approaches [32]. One of the frameworks reflected in the background of trialogical learning is an inquiry-based learning model, which has been developed to guide teachers and students to work collaboratively with knowledge and produce new knowledge [26; 31]. Inquiry-based learning emphasizes shared expertise [6; 7], i.e., the sharing of all stages of the learning process among members of the learning community to produce insights that no single member of the community could produce alone. Another of the theories that underlie the trialogical learning model is Bereiter [5] and Scardamalia and Bereiter [37] theory of knowledge building. They argue that learning models focus too much on the individual and the mental world of individuals. Individual learning is also important, but more central to contemporary knowledge work is collaborative knowledge building [5]. Bereiter distinguishes between learning and knowledge building by arguing that the former is concerned with

the transformation of an individual's mental space (the knowledge and skills in the individual's mind), while the latter is concerned with the creation, development and sharing of conceptual artifacts [5]. Knowledge building emphasizes the promotion of a community's knowledge space and the reflective and shared responsibility of actors for improving ideas [37].

3. Data and Method

This research examines mentors' perceptions of mentoring as a learning and knowledge creation process. The research question is: *What are mentors' perceptions of mentoring as a process of learning and knowledge creation?* The focus group of the research were mentors (N=10) who were interviewed about their perceptions of mentoring. Mentors have academic degrees with varying levels of experience in the working life. Mentors had attended a mentoring induction and their previous mentoring experience was varied, some were mentoring for the first time, and some had years of mentoring experience.

The data consists of ten interviews with mentors. The interviews asked about mentors' perceptions of the mentoring process, its objectives, and opportunities. Mentors expressed a wide range of perceptions about mentoring and the associated process of learning and knowledge creation. The data allows for an interpretation of the mentors' perceptions.

The data was analyzed using a phenomenographic content analysis [3], which was based on the theoretical framework of mentoring and knowledge creation in learning and is therefore abductive. The aim of the analysis is to highlight the diversity of mentors' perceptions of the phenomenon under examination. Phenomenography is based on the premise that perceptions are understood as relational, socially constructed in context [24]. Mentors' perceptions are individual, but they are constructed over time and are influenced by both previous contexts and perceptions and experiences during the mentoring process.

The analysis process began by interpreting the data in terms of the dimensions of perceptions and their meanings. In the second stage of the analysis, more specific descriptive categories were created from the material, which were formed in dialogue with the research question and theoretical framework. The data were used to interpret mentors' perceptions of mentoring from the perspective of the learning and knowledge creation process. Mentors' perceptions were divided into three categories: 1) monologic mentoring, 2) dialogic mentoring and 3) trialogical mentoring. Within the different categories of description, variations in mentors' perceptions are described.

The validity of qualitative research can be strengthened by triangulation and self-critical observations by researchers at different stages of the hermeneutic research process. The article highlights the starting points and context of the research, allowing the reader to position the meaning of the research [3]. The data is comprehensive and quantitatively typical of qualitative research [21]. A critical reader can make independent interpretations of the data and its meanings and mirror them against the research objective.

4. Results

This section describes in more detail the mentors' perceptions of mentoring as a process of learning and knowledge creation. The results are described using the categories of the triological approach to learning and knowledge creation: 1) the concept of mentoring as monological information transfer, 2) the concept of mentoring as dialogical participation and 3) the concept of mentoring as triological new knowledge creation.

4.1. The Concept of Mentoring as Monological Information Transfer

According to the results, some mentors understood mentoring as a monologic transfer of information from mentor to actor. According to these mentors, mentoring is about transferring the previous solutions of the more experienced mentor to the similar situations of the actor. Mentoring emphasized the notion of individual learning, i.e., as a monologue process within the mind.

Mentoring was perceived by these mentors as a learning platform that allowed knowledge to be shared and absorbed. The mentors presented monologic premises related to the mentoring process and learning: the specific things they wanted to teach the actor and what they perceived to be the most important aspects of mentoring. These included, for example, how to write a good job application and how to succeed in a job interview. *"We've just gone through how to do a job interview and even simulated it, and how to make a good CV."*

The mentors felt that they had a comprehensive set of answers to the different questions asked by the actor and to situations that arise in the workplace. However, the mentors did not express any perceptions of a deeper discussion and the possibility of finding new perspectives together with the actor. The monologue mentors' perceptions did not include the idea that they themselves could learn something new from the actor about typical phenomena related to the time. *"It's good to teach younger people not to repeat the same mistakes."*

Mentors with a monologic mentoring perception expressed their perceptions with enthusiastic and

powerful expressions. They also wanted to transfer a certain external pattern of behavior, such as dynamic self-praise, to the actor. Through a certain behavior and self-confidence, the actor could, in their view, appear more competent and credible, which would contribute to the actor's career. *"I have a very goal-oriented approach, I have a clear motivation. We have progressed through different exercises, for example, the actor's CV was below average. I stressed the importance of attitude and showing your expertise. Then the actor rewrote and had a stunning CV and application!"*

Mentors who adopted a monologic transfer of knowledge concept perceived mentoring not only as a monologic transfer of knowledge, but also as pragmatic helping. They were willing to draw on their own networks for the career development of the person they were mentoring. *"I want to help make the transition from studies to work as smooth as possible. I have a lot of contacts in the working life, and I can use them too."*

Mentors who perceived mentoring as a monologic transfer of information presented perceptions that reflected career development as an emerging career and positions of power. It was also linked to the essential role of having a prominent employer and very rapid career development over time, including in terms of salary. *"I said at the very first meeting that we would basically go after a good job for you as soon as you graduate next spring. And the salary will be €1,000 to €2,000 better than without mentoring."*

Mentors who had adopted the monologue model of knowledge creation had given clear instructions to younger actors on how they should act. *"I want to encourage and help the young person to finish their studies, it will save a few years and you will be employed and develop your career faster."*

According to the monological mentors, mentoring meetings were successful if they knew the topic beforehand and there were no deviations. If the topics came as a surprise from the acute needs of the actor, the mentor felt that they were not able to help sufficiently in the situation. *"I could explain more concrete things beforehand, for example what makes a good CV or LinkedIn profile".* On the other hand, they also hoped that the actor would ask direct questions, such as requests to comment on a CV, or to read a job application, or to help prepare answers to a video interview. *"I hope that the mentored person has gained concrete things at the end of their studies and would know what kind of jobs they could apply for with their certificate or where the work experience they have gained would be applicable. And also, in job search tactics, try to find the keywords that will make you stand out from the crowd."*

Mentors with a monological knowledge creation and mentoring approach showed very little reflection

on the continuous forward-looking learning inherent in the mentoring relationship. In general, the link between mentoring and deep as well continuous learning remained weak in their perceptions. Mentoring focused on the transfer of existing knowledge that would result in dynamic and effective behavior of the actor and concrete career improvements in a rapid timeframe. *"I've been a mentor for ten years and I always tend to start by reflecting on their career and what their dream job and workplace could be."* The goal of an outwardly dynamic behavior of the mentored person overshadowed the mentor's inward reflections and deep reflection. Nor did mentoring involve longer-term career reflection. These perceptions were limited to concrete career events in the next few years.

In mentoring, learning was seen as an individual process and a way of acquiring knowledge. Mentors' perceptions of mentoring as learning and knowledge creation supported their internal cognitions, they were not able to question their understanding of the nature of learning through participation or knowledge creation dimensions.

4.2. The Concept of Mentoring as Dialogical Participation

According to the results, some of the mentors' perceptions emphasized mentoring as an interactive collaboration. Their perceptions of mentoring emphasized collaboration as an important opportunity to participate in the learning process and joint discussion. Mentors' perceptions emphasized the possibility of pushing the boundaries of individual learning by engaging in a new and dialogical mentoring relationship. Such an inclusive and dialogic mentoring relationship emphasizes the social cognition and process of learning.

These mentors' perception of mentoring as a process of learning and knowledge creation is situated between monologic and trialogical knowledge creation: mentoring was seen to them first and foremost as an equal and dialogic participation. According to the mentors' perceptions, mentoring is also a great opportunity for them to update their own understanding of current issues in working life and to maintain a renewed perception of mentoring. *"I found it extremely interesting to have the discussions and useful to think about the concrete issues myself."*

Mentors were willing to engage in dialogue and update their own perceptions. However, their perceptions did not reflect a desire to go beyond their own knowledge and the possibility of discovering completely new perspectives. Mentors' perceptions emphasized development, application and collective participation in the learning and knowledge creation that takes place in the mentoring relationship.

Dialogic mentors understood mentoring as a continuous process of learning and knowledge creation. Mentoring had many important meanings for both mentor and actor, it enabled both participants to be part of a process of continuous learning and development. Mentors were keen to hear about the experiences of younger generations and those entering the workforce. They were interested in what it's like to study today and what newcomers might be thinking about entering the working world. This would also allow them to update their own perceptions in the discussions. *"What was significant about the mentoring meetings was that it was a leap beyond the usual everyday reflections, including for myself. I got to hear the hot and reflective topics of the younger generation. It has been nice to update my own knowledge, an excellent experience."*

The mentors felt that they were able to offer perspectives to the actors that reflected their own past experiences, but the mentors recognized that the answers required application to the actor's context and current situations. Direct instructions or tips were not, according to the mentors' perceptions, the aim of mentoring. What was essential in mentoring, according to these mentors' perceptions, was learning to strengthen the actor in a deeper way. *"Bringing two different people together on the same topic to work together for a longer period of time, no two life paths are the same. What has worked for me may not work for him."*

Mentors who saw mentoring as a dialogical relationship also emphasized their humanistic approach to people. They hoped that some kind of human or professional growth would take place in the mentoring relationship, and that change would occur especially through a dialogic relationship.

The dialogical conception of mentoring allowed for participation in collaborative activities, but learning was perceived as a social cognition. In the mentoring process, learning was seen as knowledge acquisition through participation and co-creation of knowledge. It emphasized dialogical or interactive models.

4.3. The Concept of Mentoring as Trialogical New Knowledge Creation

A few mentors' perception of mentoring as a process of learning and knowledge creation acquired features of the trialogical dimensions of knowledge creation. These mentors' perception of mentoring was very much on a par with that of an actor creating new knowledge. Mentoring was perceived as a meaningful opportunity to create new understanding of current challenges and solutions in working life together with an actor. The experience of working and learning as a mentor opened new perspectives on the possibilities of mentoring and strengthened the

mentor's own knowledge of working life. *"Expectations of learning from the actors themselves and seeing how they think, the future working experts of the world and of working life. Frankly, I was surprised by how much you learn and get different perspectives."*

According to the mentors, the mentoring relationship consisted of two equal and active interlocutors who solved work-related problems, seeking to exceed each other's existing knowledge and skills with new insights. The mentor and the actor had their own strengths, which they brought to the table as common capital. According to the mentors, what is essential is that mentoring aims to enable the participants to be truly involved and that it significantly expands their understanding of work contexts.

Triological mentors reflected on the importance of mentoring bringing genuine dimensions to learning about pressing issues in the world of work. Mentors emphasized their own and the actors' active role as community innovators and creators of new practices in line with triological knowledge creation. The mentors' perceptions highlighted the perspective that mentoring is at best a long-term collaboration and a future-oriented work that strengthens the actor for the future. Triological mentors aim for a longer-term sustainable goal, rather than supporting the pursuit of a single skill or position of the actor. *"An actor's competence is not whether he or she can perform individual high-level specialist tasks. An actor's competence is much more: the ability to solve problems or see the big picture."*

The learning approach of the triological mentors supported deep actor learning and the importance of equal new knowledge creation in the mentoring process. This was, according to them, particularly important at a time of rapid change in the world of work. The ability to innovate and to think differently were valuable skills to learn, according to the mentors, as these skills will support the actor in the future. Mentors whose understanding of mentoring was based on triological knowledge creation identified their own role as a key enabler of collaborative learning for the actor. *"We were able to connect and talk openly about the direction we wanted to take the mentoring process. We focused on each other and the feedback from the actor was that I had accepted him as a person and appreciated him."*

Being a mentor was also an excellent learning and knowledge creation process for the triological mentors themselves. They took their role as an honor and an opportunity to learn, perhaps even something completely new and surprising. These mentors showed by their own example how respectful and open interaction in a mentoring relationship can enable deep learning and proactively create new practices. The mentors stressed that the mentoring

relationship is a free-form one and that its nature cannot be predetermined. For mentoring to reach its triological dimensions, the attitude and goal of both parties was crucial.

Triological mentors highlighted that work, work contexts and the meaning of work are inevitably changing as part of societal change, and that the courage to innovate and renew is essential. These insights also inspired the mentors themselves. According to the mentors, continuous learning and renewal was an essential starting point for an actor's working life. The mentors also linked the big and sustainability-enhancing goals of mentoring to ethical issues, the importance of cooperation skills in wider networks and the importance of perseverance. This, in their view, could be used to develop not only work communities but also work culture more broadly. From a triological learning perspective, the aspect of inclusion and development was justified.

5. Discussion

The research findings underscore the importance of identifying and implementing mentoring opportunities in a qualitative manner. While mentors demonstrated a positive attitude towards learning and knowledge creation in mentoring, the study revealed variations in how these opportunities were recognized and executed. This highlights the need for a more systematic and standardized approach to identifying mentoring possibilities, ensuring that they align with the specific needs and goals of the actors involved. At the same time, it is important to maintain sufficient openness and freedom in mentoring to allow mentoring to develop authentically through an interactive process and based on individual needs. By establishing clear criteria and guidelines for mentor-mentee pairing, organizations can maximize the potential for meaningful learning experiences and knowledge exchange.

Mentors emphasized that mentoring extends beyond individual development and has the power to shape social practices, including those within the workplace. In an era of rapid change and evolving work dynamics, mentors recognized the importance of flexible and sustainable solutions. They emphasized the need to consider the broader context and engage the actor in the mentoring process to collectively address the challenges posed by a rapidly changing working life [15; 2]. This means mentoring based on the needs and goals of the actor and a strong recognition of the interactivity of mentoring. Mentoring, therefore, becomes a means to foster adaptability, resilience, and agility in individuals, enabling them to navigate the complexities of the modern professional landscape.

Building upon the research findings, it becomes evident that mentoring has immense potential to

meet the demands of continuous learning in the face of evolving work contexts [23; 15]. Consequently, it is essential to focus on the qualitative aspects of the mentoring process and the participants' perceptions of learning. This necessitates comprehensive research endeavors that explore not only the outcomes but also the intricate dynamics and mechanisms that contribute to successful mentoring relationships. By gaining a deeper understanding of these factors, organizations and practitioners can refine mentoring programs, ensuring they are tailored to the unique needs and preferences of the individuals involved.

Moreover, to fully harness the benefits of mentoring, it is imperative to provide mentors with appropriate training. This training should encompass not only the practical aspects of mentoring but also the theoretical foundations that underpin effective learning. By equipping mentors with a comprehensive understanding of learning theories, pedagogical approaches, and effective communication strategies, they can perform their role with enhanced proficiency. It is essential to understand that mentoring is first and foremost a learning process in which the opportunity for growth opens up for both the mentor and the actor. We see that further training in mentoring should be developed across disciplinary boundaries. Mentors who possess a solid grounding in the learning-theoretical underpinnings of mentoring can create an optimal learning environment, fostering critical thinking, knowledge creation, and transformative learning experiences.

In conclusion, the research highlights the significant potential of mentoring as a vehicle for learning and knowledge creation. To fully capitalize on this potential, attention must be given to the qualitative aspects of the mentoring process and the participants' perceptions of learning. By conducting further research, refining mentoring practices, and providing comprehensive training for mentors, organizations can unlock the transformative power of mentoring, supporting individuals in their continuous learning journey and enabling them to thrive in an ever-changing professional landscape.

6. Conclusion

This article explored mentors' perceptions of mentoring as a process of learning and knowledge creation. The research combined the perspectives of mentoring and trialogical learning and knowledge creation. The data consisted of qualitative interviews with 10 mentors, which were analyzed using abductive content analysis. The results showed that mentors' perceptions of the mentoring process as a learning and knowledge creation process were mixed. A narrow perception was that mentoring is a monologic transfer of information from mentor to

actor. A broader, dialogical view was that the mentor and the actor interact to solve problems that are perceived as important. In a trialogical mentoring process, the mentor and the actor created new knowledge together as equal partners. The research suggests that the mentoring process should be viewed more deeply through the processes of learning. The meaningful mentoring process is learning for both participants and reinforces the continuous learning in working life contexts.

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