Chapter 8
Entrepreneurial Learning. Learning Processes Within a Social Innovation Lab Through the Lens of Illeris Learning Theory

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Abstract This chapter seeks to answer the following question: In what way is Illeris's Learning Triangle useful for analyzing learning processes within a new field of practice? The chapter explores the content, incentive, and social interaction dimensions of Illeris's classical learning theory through a meta-analysis of an innovation lab. The original research project intended to facilitate entrepreneurial learning. The analysis at hand strives to illustrate the theoretical analytical perspective of the learning triangle and extends the model for the given context. Findings are re-analyzed according to the participants´ learning processes.

For the analysis, I used interview and protocol material out of an innovation lab research project that took place in German welfare organizations in 2018/2019. For this study, I have analyzed the learning dimensions of content, incentive and social interaction. I adapted Illeris's learning triangle, renaming the environment dimension into organization and incorporating the innovation lab as the learning situation and the home organization as the organizational situation. The society becomes another layer surrounding the situation. With its grounding in classical learning theories, the learning triangle can enable a detailed perspective for the diverse discourse of entrepreneurial learning and innovation labs. From this perspective, this research contributes to a learning theory basis for learning arrangements in work-related organizational studies and those of human resources.

At the end of this chapter, the reader has learned about (a) innovation labs as new fields of practice and (b) how the model of the learning triangle can be fruitful to analyze learning processes, in this case, entrepreneurial learning.

Keywords Entrepreneurial learning · Illeris learning triangle · Human resources · Adult learning · Organizational learning · Innovation lab

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Introduction

This chapter seeks to answer the following question: In what way is Illeris's Learning Triangle useful for analyzing learning processes within a new field of practice? The chapter explores the content, incentive, and social interaction dimensions of Illeris's classical learning theory through a meta-analysis of an innovation lab intended to facilitate entrepreneurial learning. The analysis strives to illustrate the theoretical analytical perspective of the learning triangle and extends the model for the context at hand. The chapter develops a richer perspective on learning and the acquisition of entrepreneurial competencies.

Previous research on innovation labs (e.g., Schröer & Rosenow-Gerhard, 2019; Schröer & Händel, 2020) has not foregrounded the learning process itself. Until now, entrepreneurial learning processes in these labs has not been explored in detail as learning is not observable *in vivo*. Therefore, in the following chapter, I adopt Illeris's learning theory to re-analyze material from a research project on an innovation lab in the social sector.

Illeris's model was developed in connection with his practice in continuing education. His model of a "learning triangle" (2007) was designed to analyze and explain adult learning processes. The model is grounded in classical learning theories (e.g., Piaget or Dewey) and enables a deeper understanding of learning processes by accounting for cognitive, social, and emotional dimensions. In this study, the model is used to analyze how the participants learned to create innovations as part of entrepreneurial learning (Bacigalupo et al., 2016).

This study is grounded on research that has analyzed the development of social service innovation processes within the social sector in Germany. German welfare organizations are under pressure to innovate due to legal and financial changes and increasing complexity, which characterize this field (Becher & Hastedt, 2019; Ridder & Baluch, 2019). Accordingly, social services must respond to current and future challenges facing organizations at different levels (Schröer, 2016). Research on innovative social services in Europe shows that innovations occur in the form of "new services, new practices, new processes, new rules and regulations, or new organizational arrangements" (TEPSIE, 2014, p. 36). To sum up the findings, I discovered that entrepreneurial learning means to be challenged with new perspectives and methods, to balance very different emotions, and to involve the organization in the project development process.

Section "Definitions in the innovation lab & theoretical background of the meta-analysis" elaborates the theoretical background of fostering entrepreneurial learning and innovation and presents the learning triangle. Section "Material & research process of the meta-analysis" describes the methods and material used for the meta-analysis. Section "Analysis – Using the triangle for learning processes in the lab" presents the results, following the main elements of this model. In Section "Discussion & conclusion", I discuss the study according to the two main questions of this anthology.

Definitions in the Innovation Lab & Theoretical Background of the Meta-analysis

Fostering Entrepreneurial Learning and Innovation Through Innovation Labs

Entrepreneurial competence is defined by Bacigalupo et al. (2016) as follows:

> Entrepreneurship is when you act upon opportunities and ideas and transform them into value for others. The value that is created can be financial, cultural, or social (ibid., p. 10)

They describe entrepreneurship as a competence that affects all spheres of life, and they focus on value creation, regardless of the type of value or context (ibid., p. 11). Hence, entrepreneurial competence includes intrapreneurship, one of the main goals of the innovation lab at hand (see Section "Material – The laboratory process").

The two most popular theories in entrepreneurial learning trace back to Schumpeter and Kirzner. In a Schumpeterian view, entrepreneurial learning is conceptualized as "a behaviour that is discontinuous and leads to the disruption of stability." However, from a Kirznerian perspective, it "leads to a behaviour that is adaptive and [...] restores stability" (Erdélyi, 2010, p. 13). While literature agrees largely that entrepreneurship can be learned and increased, the means of doing so is seen differently. The aspect of learning is implicit in early literature starting with Schumpeter (1934), but its explicit articulation has increased in recent decades (Erdélyi, 2010). Although the use of the term "learning" is widespread in entrepreneurial learning literature, "the definitions are diverse, highly individualistic and fragmented or even not existent" (Wang & Churgh, 2014).

In this study, the participants are identified as social intrapreneurs (Schmitz & Schröer, 2016) – people who operate as entrepreneurs by developing and implementing new products, services, or processes within existing organizations. Nandan describes intrapreneurs as people who "focus on innovation and creativity that transform the way organizations do business and create social solutions" (Nandan et al., 2015, p. 39). In recent years, the term "social intrapreneurship" has become established for describing start-up practices in existing social enterprises (Schmitz & Schröer, 2016).

Innovation labs, originally designed to develop technical innovations and marketable products, are increasingly known for fostering social innovations (Kieboom, 2014; Westley & Laban, 2015; Then & Mildenberger, 2017). They are often run in cooperation with universities and social service providers. Successful laboratories are characterized by at least three elements (Tiesinga & Berkhout, 2014): They bring together different internal and external perspectives; they encourage learning, experimenting, and failing as quickly as possible, developing collaborative solutions together; and they look at the specific system (ibid). Jones and English emphasize

> the need for entrepreneurial education to be conducted in a different learning environment. Essentially, a teaching style that is action-oriented, supportive of experiential learning, problem solving, project based, creative, and involves peer evaluation (2004, p. 422).

I follow Gryszekiewicz and colleagues' definition of an innovation lab as

> a semi-autonomous organization that engages diverse participants – on a long-term basis – in open collaboration for the purpose of creating, elaborating, and prototyping radical solutions to open-ended systemic challenges (2016, p. 16).

Accordingly, innovation labs systematically link informal and formal structures of innovation development (Schröer, 2016). In this study, participants from different organizations and backgrounds used the innovation ecosystem of the lab to learn how to create a business model for a social service innovation within the context of their home organization.

By featuring the above-mentioned aspects, the researched innovation lab increases the likelihood of initiating individual and organizational learning processes. By embedding new knowledge and competencies into the routines, systems, and structure of the organizations, the long-term goal of organizational learning is achieved (Dutta & Crossan, 2005). To deepen the insights into the learning processes, it is therefore beneficial to conduct a meta-analysis through the lens of Illeris's learning theory.

Illeris's Learning Theory

Illeris's learning theory was intended to encompass the entire breadth of current learning theories (Illeris, 2002, 2015). The model has gradually developed over 50 years and is based on different classical learning theories, including socialization theory (Lorenzer), developmental psychology (Piaget), and activity theory (Engeström). Illeris involved a number of theories and fits them into the learning triangle for a general view of these theoretical positions (Illeris, 2007, p. 257). He once described the development of the theory in an interview:

> The [. . .] development of my theory of learning has taken place in conjunction with practical experience [. . .] with vocational courses of study [. . .]. And this has contributed to an understanding of learning that has many facets to it (Hansbøl & Christensen, 2016, p. 306f.)

According to Illeris, this model is an auxiliary tool that

> can function to provide an overview as a kind of checklist of different key matters that are at play, and as a guide pointing out the areas one comes through and the elements to which one must relate (Illeris, 2004, p. 441).

This theory is based on two basic assumptions:

1. Learning takes place in two different processes: The external process addresses the social, material, and cultural context; the internal process addresses

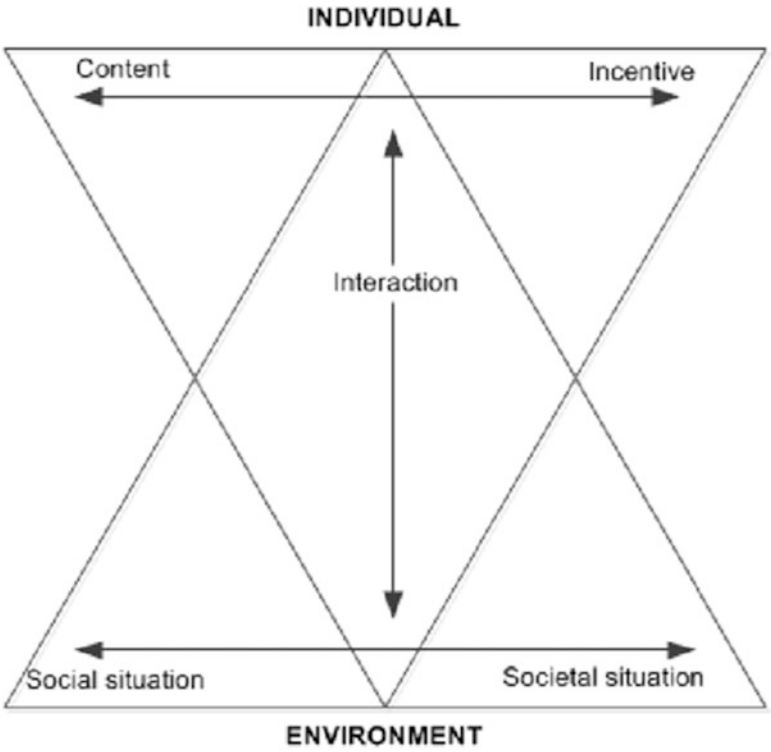

Fig. 8.1 Illeris's complex learning model. (Illeris, 2007, p. 98)

acquisition on a psychological level. Learning is an integrated process, which consists of these two connected processes influencing each other (Illeris, 2007, p. 22).

2. Every learning process contains three dimensions – the content, incentive, and interaction. Therefore, Illeris developed the model of a triangle (see Fig. 8.1; the triangle with the tip down), where the process of acquisition is represented by an arrow that includes the learning content and incentive, and the process of interaction includes the learner in his or her specific environment, because "no learning process can be fully understood without considering all three dimensions" (ibid. 29).

Illeris broadly defines learning as "any process that in living organisms leads to permanent capacity change and which is not solely due to biological maturation or ageing" (Illeris, 2007, p. 3). Learning is influenced by what the learner already knows (his or her existing dispositions), so that both the existing scheme and the new impulse are influenced or changed. He formulates criteria in his model that must be met to progress from experiencing to learning: Learning "must be of considerable subjective significance" (Illeris, 2002, p. 153), and the subject must be "present and self-aware" (p. 154). In the model, there is a second triangle added (wide side down

and tip up) to integrate the learning situation, which comprises the social situation and the societal situation that influence the learning situation of the individual.

Furthermore, the theory differentiates between four types of learning: "Cumulation" (additional learning without direct connection to the situation); "assimilation" (something is added to an existing schema); "accommodation" (an existing schema is changed); and "transformation" (existing schemata are no longer sufficient, so new orientation is needed). The four types of learning are further examined in Section "Analysis – Using the triangle for learning processes in the lab".

This theoretical model has been adopted in teaching, but it has been less used in empirical work (one example is Poortman et al., 2011). In the present research, this theory is employed because intrapreneurship needs implementation into an organization. This can be considered as individual and organizational learning. In the model, three dimensions of learning are differentiated, and the context of learning is also studied. In the context of innovation labs, there are several environments in which learning occurs: The lab itself, the home organization, and the society.

Material & Research Process of the Meta-analysis

Material – The Laboratory Process

The data was gathered from an innovation lab which took place in 2018–2019 in a large German city. The innovation lab process aimed at three outcomes: For the participants to (1) gain entrepreneurial competencies, (2) create a social service innovation, and (3) contribute to change in their home organization (intrapreneurship). The lab consisted of six workshops, one day each, over ten months. Between each workshop, the participants were assigned individual tasks. In addition, the participants were offered three optional meetings to discuss the tasks. There were kick-off and closing events that were attended by representatives of the participating organizations (supervisors, colleagues), experts, and the interested public. Teaching methods used in the workshops were expert input, teamwork, group discussion, feedback, and presentations. Between the workshops, the participants worked on their projects individually. Moderators were present for questions during all phases and between the workshops.

The participants ($N = 12$) were mainly professionals in social services who attended the training as part of their organizations' human resource development initiatives ($n = 8$), some in leading positions, and four students of Organizational Education and Social Work. They differ in age (23–62 years old), gender (6 female; 6 male), and entrepreneurial expertise. In pairs, they addressed a social problem, for example, loneliness of elderly people in the countryside, and sought a solution to it. As such, they were taught Design Thinking-methods (Plattner et al., 2009), e.g., which is a human-centered and iterative methodical approach for solving complex problems. Through these methods, the participants were enabled to keep the potential user in focus and to develop a solution that met the potential user needs, for

example, by creating a persona – a fictive person representing the potential future user. In addition, to help them create a business model, they learned methods like the Business Model Canvas which "describes the rationale of how an organization creates, delivers, and captures value" (Osterwalder & Pigneur, 2010, p. 14) through factors such as customer segments, value propositions, and cost structure. After the moderators presented each step of the method, the participants implemented the steps in the context of their project.

As an example, one team started with the question of why young people do not participate in educational workshops in their voluntary year. They found out that these young people are anxious because they do not know what will happen and are unwilling to meet people they do not know. After interviewing young volunteers and educational staff of the educational workshops, they created a mobile app that connected volunteers before the workshops and provided information about the schedule. With this solution, the organization updated its digital information process and created a participant management tool that could be scalable for other organizations.

Methods – The Process of the Meta-analysis

The data was collected using semi-structured interviews and participatory observation. The research project was performed by one project leader, one project member (myself), and two assistants.

Before and after the lab, telephone interviews were conducted with participants and their supervisors (28 calls averaging 52 mins). The semi-structured interviews aimed to generate narratives and evaluate the process. The topics for the first interview included the professional background, personal motivation, resources, entrepreneurial competencies, and expectations of each participant. The topics covered in the second interview included whether expectations were met, the reaction at the workplace (colleagues, supervisors), the learning content, personal growth, and the developed solution. On an evaluation level there was a focus on the methods used in the lab and their support to entrepreneurial learning. The interviews were then transcribed and coded according to Mayring's Structuring Qualitative Content Analysis (2011), which builds categories.

The participatory observation – following the ethnographic approach of Breidenstein et al. (2013) –was conducted by a team of two who were present during the entire workshop days. Interaction in the workshops was not directly influenced by the researchers – they did not influence the communication by suggesting topics, for example. In line with the ethnographic approach, the observers synchronously monitored and took notes on local practices (ibid.), with (a) focusing on how the project developed, (b) which challenges and successes the participants described, (c) how the teams worked together, and (d) how the moderators supported the participants. The observers conducted a reflective analysis on their notes in the retreat from the field.

Subsequently, for this study, I re-analyzed the Qualitative Content Analysis-coded interview material from the original study in the light of Illeris's learning triangle with categories adopted from Poortman et al. (2011). As an example to define the two main types of learning processes in the lab, assimilative learning is operationalized as follows:

> New impressions are elaborated and integrated into previously established structures. The new element is linked as an addition to a scheme or pattern that was already present (Poortman et al., 2011, p. 280).

Accommodative learning is operationalized as follows:

> New impressions are difficult to fit into any existing schemes or patterns because they are not really understood or are difficult to relate to. The learner therefore needs to break down all or parts of an existing scheme and transform it so that the new situation can be integrated. Established structures are reconstructed through dissociation, liberation and reorganization (ibid., p. 281).

Also with these categories, I enriched the interview material with situations of the observation protocols that suggest the assimilative or accommodative learning processes of the participants.

Analysis – Using the Triangle for Learning Processes in the Lab

In the following section, I illustrate learning processes in the lab through the learning triangle. Therefore, the analysis focuses on the main elements of the model: Content, incentive, and social interaction with the environment (see Fig. 8.1; triangle with the tip down). The analysis focuses in particular on social interaction because it was found to be the most important dimension in the lab. In the context of intrapreneurship, in particular, the participants' learning situation in the lab group and the involvement of the home organization during the lab process was important. For this study, I have adapted Illeris's learning triangle, renaming the environment dimension into organization and incorporating the innovation lab as the learning situation and the home organization as the organizational situation (see Fig. 8.2). The society becomes another layer surrounding the situation.

Content – What Did the Participants Learn in Terms of Content and How?

The first dimension in the learning triangle is content. All learning has a content, which can be "skills, knowledge, opinions, understanding, insight, meaning, attitudes, qualifications and/or competence" (Illeris, 2007, p. 51). The acquisition process is mainly cognitive. In the following, I describe what the participants

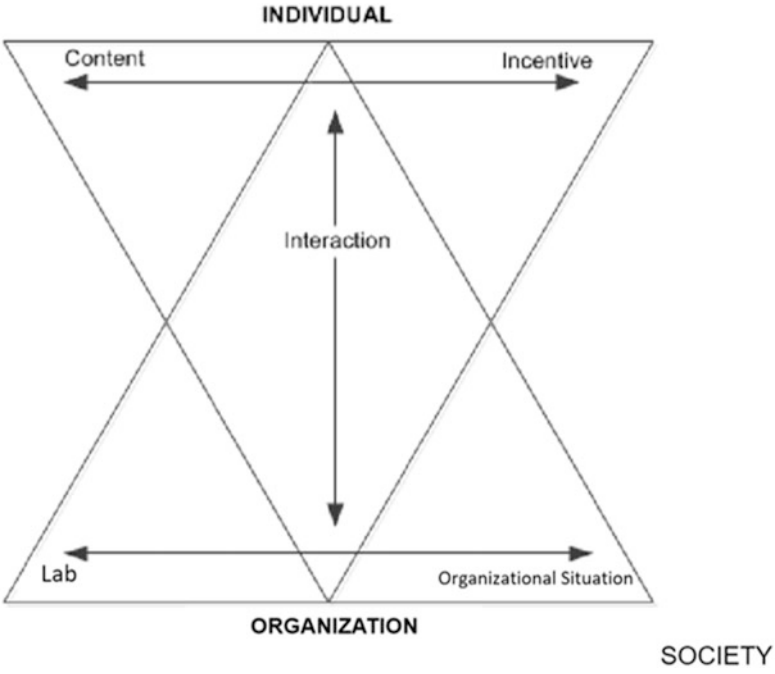

Fig. 8.2 The extended complex model in the context of intrapreneurship. (Own picture based on Illeris, 2007)

(identified as, e.g. "P1") stated they had learned and what form of internal acquisition process is identifiable. Illeris describes four types of learning: "Cumulative," "assimilative," "accommodative," and "transformative learning" processes. Cumulative and transformative learning were not identifiable in the material.

An intended learning goal was for participants to learn to use the new methods. The moderators presented these methods to develop a certain solution to a specific social problem (see Section "Methods – The process of the meta-analysis"). Therefore, problem-based learning (Illeris, 2007, p. 244) was used in the lab. Although some participants were familiar with project management, this was a very different and new way of developing a project and a business model. Some participants described that although parts of the tasks – like conducting interviews – were not new to them, the concrete methods like Design Thinking were new. The participants learned how to discover the need of the target group, to generate ideas, to choose and create potential solutions, and set up the financial business model. Overall, participants adapted the new elements to their prior knowledge. For example, when the moderators explained how the participants should create a persona, one participant ensured that the participants acted like a profiler – a criminal psychologist or policeman (P7, WS2b). This participant formerly worked for the police. In this situation, the new element was tied to personal experience and the participant ensured that the task was understood correctly. At the same time, this comparison

to a profiler operated as an additional explanation for the other participants. It illustrates what Illeris describes as assimilative learning – connecting new content to prior knowledge. Therefore, new understandings were developed and integrated into previously established structures (see Section "Material – The laboratory process").

In addition to the new methods, during the workshops, the participants were challenged to create a solution from a need-oriented perspective. This is different from regular project management, which is typically goal-oriented. The process was demanding but beneficial for all of them, as this participant describes:

> I actually found it difficult in the beginning. [. . .] it's really a hurdle I had to overcome. [. . .] really difficult [. . .] to leave out this goal perspective [. . .] because somehow, somehow, I feel that one strives towards the target somehow [. . .]. But, as I said, this has great advantages, because you can then work in a more unbiased way [. . .] at that moment (P11, t2, 135; translated from German by the author)

This participant describes how the lab process challenged her way of developing ideas. It illustrates accommodative learning processes, which occur when established structures are reconstructed. This is sometimes a hard and energy-demanding process because the new concepts challenge the existing schemes or patterns, and the learner must transform these schemes to incorporate the new situation.

The participants also mentioned unintended learning that went beyond the intended learning objectives. For example, one participant stated that he learned from how the moderators led the group and influenced the atmosphere in the lab positively (P13, t2).

In sum, the participants learned new methods to create a social service innovation. They gained knowledge with assimilative and accommodative learning processes and also learned, e.g. by copying the moderators leading the group.

Incentive – Which Affective Components Influence the Learning in the Lab?

The second dimension of Illeris's triangle, "incentive," concerns the motives, emotions, and volitions which power the learning process. Therefore, this section discusses the participants' motives for participation in the lab, their motivation while attending, and emotions that influenced their learning process.

All participants stated that a motive for their participation was to learn new methods and different ways of thinking and acting. The lab process itself was highly motivating – the participants commented that they had fun in the lab and that the interaction with other participants and experts motivated and enriched them. Four participants reported that their level of motivation for their project increased throughout the project, two reported that their level of motivation remained the same (high), one participant's motivation decreased, and three described their

motivation as fluctuating, or a "rollercoaster" (P3, t2; 10 out of 12 participants responded).

All participants were motivated to participate by a desire to contribute to something "higher." that makes sense to them. Innovative social services aspire to solve a social problem, such as the loneliness of elderly people in the countryside. Long-term social impact is addressed in the lab, and the participants resonate with that aim, which is evident in the following quote:

> So most of all, I would be happy if it works in the end. [...] And it would be the best of all if it develops further and picks up speed and [is rolled out] nationwide [...] everyone is then allowed to steal the idea and put it into practice. And hence many thousands of people are torn out of their loneliness. That would be the greatest joy. That's actually my (.) my motivation (P8, t2, 54)

This quote illustrates the subjective significance demanded by Illeris (see Section "Illeris's learning theory") and the interconnectedness society with the model (see Fig. 8.2). Interestingly, during the labs, the moderators did not initiate any discussions about the personal motivations of the participants (see observation protocols of the workshops). When the progress of the projects was discussed, personal motivations were not mentioned, which could have affected the learning process.

Another emotional aspect that had influence on the learning processes was the dealing with expectations and challenges. All participants stated how much the process itself challenged them, e.g. P2:

> Well, yes, because you went in there with a certain expectation, or you took a kind of order from your colleagues, from your supervisor, and from yourself, an expectation that you could use the laboratory in a certain way to implement this order. To break away from this and to say, (.) I am not fulfilling this task by implementing what I have taken up, but I am really open to something completely new, is very difficult, yes (P2, t2, 25)

The participants were pressurized by the need to meet their own and their supervisors' intentions (organizational situation in Fig. 8.2). This created a particularly challenging situation when they created a different solution to that which they had originally expected to develop.

The participants faced expectations for both human resource development and organizational development. From the perspective of human resource development, there were assumptions of personal growth and knowledge increase. From the perspective of organizational development, there was an expectation of organizational change. Half of the participants were uncertain about how to deal with these requirements. The other half saw it as a challenge and were motivated to do something new and different.

The atmosphere in the lab was mostly positive, and the moderator lightened the atmosphere with occasional jokes. At the beginning of nearly every workshop, the mood ranged from relaxed to exuberant. Participants were joyful about meeting each other and sharing creative ideas, which they mentioned in the interviews. Towards the end, especially in the last workshop, there was a recognizable strain caused by presenting the developed ideas to guests. This can be seen, for example, in the

participants' irritable or monosyllabic answers to each other, their stressed focus on their presentation, the speed at which they encouraged each other, loud sighing, and occasional grumbling (Protocol WS6). It was visible that the participants had to balance very different emotions while gaining entrepreneurial competencies.

Social Interaction – How Do the Participants Interact in the Lab and with Their Environment?

All learning in Illeris's model is situated, which means that the social and societal context influences the learning process and the results (Illeris, 2007, p. 214). Because the participants in the lab were part of different social environments that influenced their social interaction, the following subsections differentiate between the learning situation within the lab (lab in Fig. 8.2) and the participants' interaction with their social environment, which is mainly the home organization in the context of intrapreneurship (organizational situation in Fig. 8.2).

The societal dimension of Illeris's model (society in Fig. 8.2) is not covered as the analysis is a meta-study and the original data does not cover societal dimensions.

Interaction Within the Lab (Social Situation)

Illeris describes six ways participants can socially interact within their environment (Poortman et al., 2011; Illeris, 2007): "Transmission," "perception," "experience," "imitation," "activity," and "participation." In the lab (a social learning situation), the most-adopted form of participant interaction was transmission, which was evident to the observer when the participants were listening actively and taking notes. In some situations, participants used perception, which was evident when participants passively perceived information or listened to other lab participants. Experience was the third type of interaction, and this was noted in all observation protocols. This was evident when participants presented their project and were actively involved, for example. The participants also interacted through activity, which was evident when they worked independently and purposively on their projects. When participants were working together with others, for example in pairs or tandems, this was deemed to be participation, according to the model. Imitation was not evident in any workshop protocol.

Interaction with the Environment (Organizational Situation)

The intrapreneurs' environment is the home organization. To implement intrapreneurship, the organization is a primary facilitator or preventor of success (Rosenow-Gerhard, 2020). Individuals can develop ideas, create solutions, and

develop new competencies (see Section "Content – What did the participants learn in terms of content and how?"), but without implementation into the organization, there is no intrapreneurship (Rosenow-Gerhard & Händel, 2020). Therefore, it is important to illustrate how the participants in this study interacted with the home organization.

There were two primary ways in which participants interacted with their home organization concerning the projects in the lab: Half of the participants included their supervisor and colleagues in the development process and half of them did not. Nevertheless, all participants described their colleagues as "rather positive" towards their project. Home organizations that were involved gave feedback that was helpful for the progress of the project. Some participants included their supervisor or colleagues (for example, to test the prototype) and accordingly enabled processes of experience – the third type of social interaction (see above; Illeris, 2007).

The following quote is typical of those who did not include their supervisor or colleagues:

> There were some queries from my department head. At some point, my supervisor said, "You don't hear anything about [P4/the participant; JRG] anymore." (.) But otherwise, it wasn't very well announced within the organization. So, we have over six hundred employees. I think maybe a handful of them knew that I was in this lab (P4, t2, 53)

When the participants did not involve their organization, their colleagues and supervisors had no choice but to be passive, following the second type of social interaction – perception (Illeris, 2007). Even though the department head requested feedback, no information was provided. Opportunities for organizational learning were blocked. This is especially clear in an interview with a participant's home organization supervisor:

> I don't know the results of the project. As I told you, I don't have a presentation from my employee who said [they] would come to me and say "I would like to realize this" [...]. So, I don't have an appointment from my employee, I don't have a business plan, I don't have an elaborated project idea. I'm not involved. [...] I heard [them] say at another point that [they] assume that the project will be realized, but then [they] would have to talk to me, I would say. [laughing] so it would be advisable (A2, t2, 85–93)

The supervisor wished to have been more included in the project development. Even after the lab ended, there was still no involvement or knowledge about what the employee developed. This created a feeling of alienation, as the project status could not be described in the interview after the last workshop. Furthermore, the supervisor indicated that the non-involvement impeded the project implementation and any organizational learning opportunities.

In conclusion, social interaction is a crucial factor within entrepreneurial learning and intrapreneurship. The participants gained significant amounts of intended and unintended entrepreneurial knowledge. However, as they are the gatekeepers to their home organizations, they either facilitated or prevented opportunities for organizational learning, which is evident in the social interactions with the home organization. Social interaction was the primary factor affecting whether participants only performed their new methods within the lab, or whether they implemented them in

the home organization as well, having gained entrepreneurial expertise. For the subsequent implementation, additional resources are needed (Rosenow-Gerhard, 2020; Rosenow-Gerhard & Händel, 2020).

Discussion & Conclusion

In this section, I first discuss the findings of my research and connect the discussion to the two guiding questions of this anthology. Finally, I provide an outlook on further research.

The chapter has explored the extent to which Illeris's learning triangle is useful to analyze learning processes within a new field of practice, with the case study of an innovation lab. The participants learned new methods and different perspectives on developing projects as solutions to social problems. The participants reached intended learning goals (e.g., Design Thinking-methods) and also mentioned unintended learning (e.g., how the moderator led the group). The participants' learning processes can be described as assimilative and accommodative, according to Illeris's theory. In the learning process, they had to balance different or conflicting emotions, for example, their own motivation and the supervisors' expectations. Subjective significance was important because of their motivation. This aligns with Schmitz and Schröer's (2016) description of social intrapreneurs (see Section "Fostering entrepreneurial learning and innovation through innovation labs").

The participants in this analysis connected theory with practice when using the new methods to work on their projects. They explained that bridging this gap was very helpful for their learning processes (see Section "Content – What did the participants learn in terms of content and how?"). According to entrepreneurial learning literature, personal experience is a central element for successful entrepreneurial learning (e.g., Politis, 2005). In line with this discussion, Jones and English (2004) emphasize the importance of an action-oriented, supportive, and experiential learning situation (see Section "Illeris's learning theory"). The innovation lab in this study matched these conditions.

The analysis illustrates that subjective significance is vitally important for the learner (see Section "Incentive – Which affective components influence the learning in the lab?"). This is as true for intrapreneurship as it is for learning in general. Schmitz and Schröer (2016) define intrapreneurs – among others – as people who have a vibrant character, which is evident in pro-activeness or persistency. Looking at the participants' entrepreneurial learning in the lab through the lens of this theory helped to identify the implications of their motivation (see Section "Incentive – Which affective components influence the learning in the lab?").

The moderators primarily created opportunities for assimilative and accommodative learning (see Section "Content – What did the participants learn in terms of content and how?"). This is appropriate for the context of workplace learning (Poortman et al., 2011). Intrapreneurship includes the implementation of new ideas

into the organization, so connections between the lab situation and the organization are crucial. Accommodative learning processes lead to the transfer of the learning content in different situations (Illeris, 2007) and could enable the employees to recognize, discover, and create opportunities. Successful entrepreneurs must be able to identify, address, and create opportunities (Sarasvathy, 2001).

Social interaction between the participants and the home organization is vital for the facilitation of the progression from individual to collective learning (see Section "Social interaction – How do the participants interact in the lab and with their environment?"). Organizational learning means the embedding of new knowledge and competencies into the routines, systems, and structure of the organization (Dutta & Crossan, 2005). If the organization is not included in the development process from the start, there may be resistance to the implementation of the new social service in the organization later on (Rosenow-Gerhard & Händel, 2020). Accordingly, individual learning was enabled in the lab, but the potential for organizational learning – here, the institutionalization of social service innovation – was not fully exploited. Some participants needed support to constructively interact with the home organization.

Two questions link the chapters of this anthology: Firstly, what is lost and what are the costs for the turn to new fields of practice? Secondly, what may be gained in terms of theoretical and empirical insights by bringing learning back in? In answer to the first question, the innovation lab is an interesting new field of practice – it strives for individual learning resulting in organizational change, in this context, social intrapreneurship. Individual and organizational learning processes co-occur. Illeris's model was applicable to analyze and illustrated the participants' learning processes in their specific situation. The triangle fits the learning processes in the lab because of its focus on the individual situation and the dual learning environment. Therefore, this study offers insights into the learning processes of adults in a human resource initiative in the welfare sector. This approach clarifies how adults gain entrepreneurial competencies. To strengthen the explanatory power in the context of intrapreneurship, Illeris's model was extended with the layers of the lab and the home organization (see Fig. 8.2). Future research should include the concepts of "mislearning" (learning the content incorrectly) and "non-learning" (not learning the content of the pedagogical situation, e.g., because of resistance; Illeris, 2007).

In answer to the second question, changes to organizations are often seen with a focus on innovation and, therefore, the product. This implies a loss of focus or depth on the learning process of the participants. When the focus changes from "innovation" to "learning," Illeris's model can be used to analyze the types of learning and account for the situation with its dimensions of content, incentive, and social interaction. Research can identify supporting and impeding factors for this process and strengthen the explanatory power of the process. In future analyses, the learning triangle needs additional theoretical embedding and specification to derive theory-based categories – Illeris provides no concrete operationalization of his model in the literature.

The results of this study can be used as a starting point for further research. With its grounding in classical learning theories, the learning triangle can enable a detailed

perspective for the diverse discourse of entrepreneurial learning. From this perspective, this research contributes to a learning theory basis for learning arrangements in work-related organizational studies and those of human resources.

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