

Toward a new beginning: exploring the instructional dynamics of expansive learning with workers in a youth supported housing unit

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Abstract

Purpose – This study aims at presenting an analysis of a Change Laboratory conducted with the personnel of a youth supported housing unit for clients with a history or at risk of homelessness. The analysis is centered on how the workers' expansive learning process was supported ensuring that they would be in the lead of their workplace transformation process.

Design/methodology/approach – The data were collected in six Change Laboratory sessions facilitated by interventionist-researchers and were analyzed with a specific method of discourse analysis devised for tracing expansive learning at work, the method of analysis of expansive learning actions and deviation from instructional intentions. The purpose of this method of analysis is to present in a detailed and structured manner how workplace expansive learning unfolds.

Findings – The results of the analysis indicate that the contribution of the practitioners participating in this Change Laboratory was such that the undertaken transformation resulting from the expansive learning process was actually owned by them. These results contribute to ongoing discussions on workplace expansive learning, which question the extent to which the Change Laboratory is truly a participatory intervention method in which the participating practitioners' agency becomes visible without the interventionists necessarily dominating.

Originality/value – This study addresses existing gaps in the literature on workplace expansive learning, by opening up a novel perspective for detailed empirical enquiries that demonstrate the role workers may play in supported expansive learning processes and ensuing transformations of their workplaces.

Keywords Workplace expansive learning, the Change Laboratory method, transformation of homelessness work, Practitioners' deviations from the researchers' instructional intentions in workplace expansive learning

Paper type Research paper

Introduction

Workplace learning is currently more than ever challenged by problems that require expansive learning (EL) (Engeström, 1987/2015; Engeström and Sannino, 2021), that is



learning something which is not yet there to find answers to questions for which there are no ready-made solutions. Usually, this type of learning is mediated by interventionist-researchers who rely on concepts and methodological instruments from cultural-historical activity theory (Sannino *et al.*, 2009). EL is therefore both a learning and an instruction process.

The relationship between learning and instruction at work, however, has largely been dealt with in a contradictory manner in the history of workplace learning. On the one hand, there has been the dominance of behaviorism and programmed instruction with the idea of the interventionist having complete control of the learning process (Seifried *et al.*, 2020). On the other hand, the pendulum has also moved to the other extreme where the interventionist is practically not at all in the focus of analysis (Wang *et al.*, 2021).

As there is much to gain in exploring the dialectics of the relation of learning and instructional processes at work, this paper builds on earlier attempts (Engeström and Sannino, 2012; Engeström *et al.*, 2013) to open up the productive interplay between learning and instruction in a Change Laboratory (CL) aimed at workplace EL. The CL was conducted with the personnel of a supported housing unit for young people with a history or at risk of homelessness. This study aims at contributing to the literature on CL-mediated workplace EL by focusing on the expansive learning actions (ELAs) initiated and pursued in this CL. More specifically, this study aims at bringing to light the extent to which and how ELAs took place in this CL, and by whose initiative and contribution.

The traditional unit of initiation–response–evaluation (Mehan, 1979) with the interventionist starting and ending the instructional triplet is the general framework put into use in systematic analyses of instructional processes. The CL is also an instructional setting, but of the type that challenges at least in theory this framework. This study is the first in which an analysis of instructional triplets has been systematically undertaken to include the identification of who begins and who ends an instructional triplet in the CL. This study shows the diversity of engagement in the instructional setting of the CL beyond the classic initiation–response–evaluation framework. This opens up a perspective for exploring possible diverse typologies of instructional episodes in formative interventions in workplace learning, addressing a concern in the specialized literature which has often been raised, as by Clemans and Rushbrook (2011):

It appears that over time, there has not been a forthright approach to building a robust orientation to learning that acknowledges the role of educators and trainers, the part they play in ensuring the transfer of competency into the workplace to positively enhance workplace performance and the nature of educational practice required to achieve this. [...] A robust orientation to learning requires more than a set of competencies to guide workplace learning. It relies on an understanding of the relationship between teaching and learning and how this relationship is enacted to achieve workplace competence on the part of the learners. (Clemans and Rushbrook, 2011, pp. 289-290)

Gaining knowledge on how ELAs occur in CLs, by whose initiative and what is the role of the interventionist contributes to filling the following two research gaps.

First, the CL has been object of a broad debate on intervention research, which is of key relevance in the field of workplace learning. In this debate, the CL has been compared with design-based research (Penuel, 2014; Greeno, 2016) and has emerged as a distinctive approach in that the type of learning fostered with the CL is open-ended and owned by the participating practitioners. In other words, workers may transform their workplace activities while systematically diverting from the original plans devised by the interventionists. Yet, so far, only one study (Engeström *et al.*, 2013) has investigated how and to which extent the interventionists' preexisting plans written before each CL session to

foster ELAs differ from ELAs that actually took place during the sessions. This study adds to this limited knowledge.

Second, there have been no studies on who initiates and completes ELAs in a CL, leaving a vacuum on the extent to which this is truly a learning and transformation process primarily owned and led by practitioners. This study is a first contribution toward filling this gap. This is particularly relevant within the scope of workplace EL studies as it opens up a novel perspective for detailed empirical enquiries that challenges the classic framework of instructional processes dominated by the instructor in interventions at work. This classic framework based on the initiation–response–evaluation triplet (Mehan, 1979) has been challenged in studies of workplace learning (Johnson *et al.*, 2018). Yet, systematic analyses that identify who begins and who ends instructional episodes of ELAs are not available.

The article starts by outlining the theoretical framework of the study. Then, it presents the methods of data collection and data analysis, before giving an overview of the findings and ending with a discussion and concluding remarks.

Theoretical framework: workplace expansive learning and the Change Laboratory literature

The theoretical framework of this study is based on the theory of EL. In the theory of EL, the learner is an individual or a collective engaged in transforming culture through horizontal interactions and seeking collaborative formation of theoretical knowledge to better understand and act upon current challenges in the workplace (Engeström, 1987/2015). With EL what will be learned is not known by the practitioners nor by the researchers ahead of time. Solutions to the problems in the work activity are constructed together throughout the process, along with their origins and systemic dynamics. In this process, the emphasis is on the practitioners’ agency as EL is conceived as being authored by them by means of collective analysis, design and implementation (Sannino *et al.*, 2016).

In the EL literature, human activities are conceptualized with the help of the triangular model in Figure 1 (Engeström and Sannino, 2010).

An activity is a system of relations in constant movement. The subject represents the individual worker or the collective whose perspectives are chosen as the perspective of the analysis. The object represents the driving force of the activity that motivates practitioners

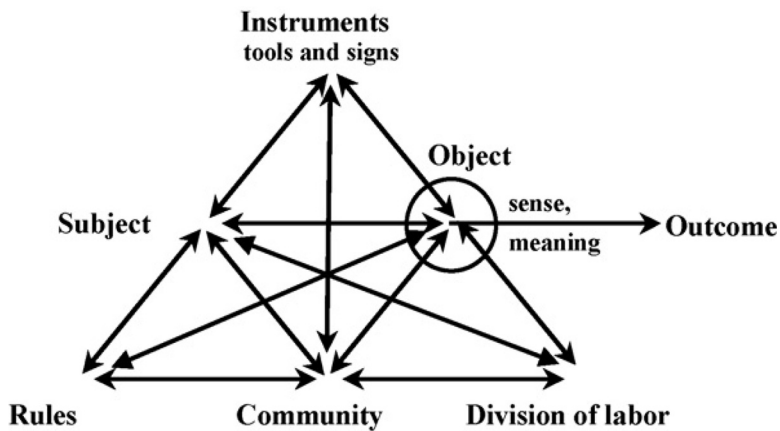


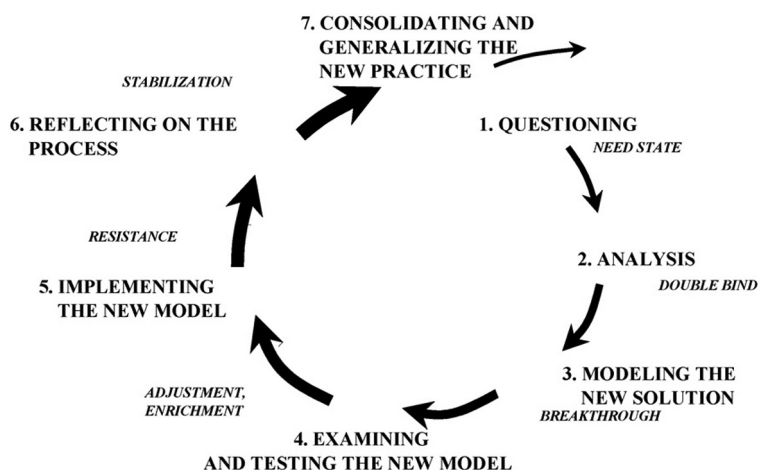
Figure 1. General model of an activity system

Source: Engeström (1987/2015, p. 78).

to carry it out. The object of activity of the practitioners in this study is the vulnerable residents in the housing unit. Instruments mediate the transformation of the object into an outcome. Community consists of collectives who share the same generic or specific object. Division of labor represents the horizontal division of tasks and vertical division of power and status. Finally, rules represent the explicit and implicit regulations, norms, conventions and standards of the activity. The circle around the object in Figure 1 indicates the significance of the object as the core element of an activity system, without which the whole activity would not exist, but which is nevertheless subject to constant interpretation and transformation (Engeström and Sannino, 2021).

In leaning expansively, practitioners analyze, experiment with and reconceptualize the object of their activity (Engeström,1987/2015). When this process is mediated by researchers-interventionists, the triangle of the activity system is used as a resource for participatory analysis of the past and present of the work activity and to design a vision for the future. The EL process is depicted as a cycle of seven actions (Figure 2).

The first action is that of *questioning*, not to be confused with requests to elicit information (e.g. asking questions). As an expansive action, questioning is raising concerns about the activity and also criticizing or rejecting aspects of the accepted ways and existing wisdom to carry out the activity. The second action is that of *analyzing* the challenges in the activity. The analysis aims at finding causes or explanatory mechanisms behind the problems experienced at work. One type of analysis is historical-genetic, seeking to explain existing challenges by tracing their origins and evolution within the activity. Another type of analysis is actual-empirical, seeking to explain existing challenges by constructing a representation of the activity and by identifying sore points or contradictions within its inner systemic relations. The third action is that of *modeling* the newly found explanatory relationship in some publicly observable and transmittable medium. This means constructing an explicit, simplified model of the new idea that explains and offers a solution to the experienced challenges. The fourth action is that of *examining* the model, running, operating and experimenting on it to fully grasp its dynamics, potential and limitations. The fifth action is that of *implementing* the model by means of practical applications,



Source: Engeström & Sannino, 2010, p. 8

Figure 2
Sequence of learning actions in the expansive learning cycle

enrichments and conceptual extensions. The sixth action is the one of *reflecting* on and evaluating the learning process and its outcomes. The seventh action is that of *consolidating* and generalizing the outcomes into a new stable form of the activity.

In the mid-1990s, researchers at the University of Helsinki developed a new intervention research toolkit under the name of CL (Engeström, 2001, 2007, 2011; Engeström *et al.*, 1996). This type of intervention is referred to as formative (Engeström *et al.*, 2013) to indicate its open-ended nature and its focus on fostering learning and agency for the transformation of work activities. A CL is generally conducted in an activity system that is facing a challenge. Practitioners together with representatives of the management and researchers conduct five to ten successive CL sessions and complementary follow-up sessions. When possible, also patients, students or clients join in. The CL has a key role in EL studies by supporting this type of learning in workplaces.

To contribute to fill the gaps presented in the introduction, this study asks the following research questions:

- RQ1. To what extent expansive learning actions were undertaken in this CL?
- RQ2. How were the expansive learning actions distributed between the participating practitioners and the researchers through the intervention and what were their contributions to the initiation and completion of these learning actions?
- RQ3. To which extent, if at all, did the learning actions taken by the workers in this CL divert from the interventionists' instructional intentions stated in the plans of each CL session?

Setting of the study and methods of data collection and analysis

This study is based on a major learning effort with the personnel of a youth supported housing unit which houses clients with a history or at risk of homelessness. At the time this inquiry started, the unit employed 15 workers aged between 30 and 50 years as housing counselors, service counselors and nurses specialized in addiction and mental health. Half of the personnel had served in the unit even since this was established in 2012. The remaining half were more recent recruits ranging from a few weeks to four years in service.

The learning effort consisted in rethinking relations, interactions and activities between the personnel and the residents of the unit, to face conflicts among the workers and deteriorating conditions in the well-being of the residents. With the help of the CL intervention method (Virkkunen and Newnham, 2013), the personnel in the unit moved from a culture of control and fear to a culture of open communication and guidance with colleagues and residents. Table 1 summarizes key features of this movement.

The change was already initiated before the CL by the managers and some of the personnel after realizing that the vulnerable youth in the unit was not doing well. Workers in the unit used to stay in a plexiglass office through which they could see who entered and who exited the building and they could keep "a safe distance" from the residents. A drastic change in initiative by the managers included the dismantling of the plexiglass office and the creation of a large open space with sofas, a television and newspapers for the workers and the clients to casually meet and interact more naturally on a daily basis. This was a very difficult phase for the unit, which led to several resignations among the personnel.

Subsequently, the change process was continued with the help of a series of six CL sessions taking place during work hours and to which all personnel was invited. During the sessions, the workers analyzed together with three researchers the past and newly developing activities in the unit and designed a shared vision for the future of the workplace.

Table 1.
Key features in the
shift from control
and fear to open
communication and
guidance

	2012–2017	2018-
Work environment	Employees worked in an office space behind a locked door and a plexiglass window through which they observed residents and visitors.	Employees worked in an open space in which they carried out their tasks by casually interacting with residents and visitors.
Work dynamics	Employees carried out their tasks by following strict instructions within a community characterized by turfs and a rigid division of labor between those in charge of administration and those in charge of practical work with the residents.	The work descriptions and the employees' tasks became broader and more flexible, based on the principle of individual assessment of the residents' needs, deliberate professional initiatives and responsibility.
Work instruments	Camera, security alarms, entry bans, visiting bans.	Projects designed to act as coaches and fellow travelers with the residents and by engaging also in outward-oriented activities such as establishing a football team of staff and residents playing with other teams in the neighborhood, putting together a band to perform for gigs in the area, opening a café serving snacks and meals to visitors.

All the personnel of the unit attended some sessions of the CL. The head of the NGO that owns the unit attended all sessions except one. The lead head of the unit attended all the sessions. The participation in the sessions was as follows: 5 in CL1, 8 in CL2, 12 in CL3, 11 in CL4 and 13 in CLs 5 and 6.

This study follows the ethical guidelines of the Finnish National Board on Research Integrity and the European Union Data Protection Regulations. The overall study was conducted during 13 months, including two months of preparatory ethnographic fieldwork, three months of CL sessions and two follow-up sessions that took place five and eight months, respectively after the sixth CL session. The data on which this article focuses consist of the video recordings of the 2-h CL sessions which took place every second week. The data also include the written plans that the interventionists wrote before each session and which include their instructional intentions.

The study was carried out by following the guidelines of CL formative interventions (Virkkunen and Newnham, 2013). After receiving a formal agreement from the housing unit, extensive preparatory fieldwork was conducted consisting of meetings with the NGO service director and the heads of the unit, interviews with them as well as with personnel and residents. The video recordings from the interviews were used for preparing videoclips, also referred to as “mirror materials” in the CL method (Virkkunen and Newnham, 2013) to be used in the sessions. Mirror materials serve the purpose of triggering ELAs (questioning, analyzing, modeling, examining the model, implementing, and reflecting; see also Figure 2).

The transcripts and the video recordings of the CL sessions were analyzed with the help of a specific method of discourse analysis devised for tracing EL: the method of analysis of ELAs and deviation from instructional intentions (Bal, 2016; Engeström *et al.*, 2013; Sannino *et al.*, 2016). The learning actions have been coded in line with this method and by contrasting them with the session plans. The coding procedure and analysis involve the following steps:

Step 1. Using the definitions of each learning action in EL, presented in the theoretical section, the actions of questioning, analyzing, modeling, examining, implementing, reflecting on the process and consolidating were identified in the transcripts and by

watching the video recording. The speech turns in the CL were numbered and, if applicable, they were coded as a specific ELA. When necessary, each session of the CL was divided in episodes. As multiple speech turns were involved in single learning actions, the episodes allowed to keep the learning actions intact. Also, the episodes allowed to follow the topics discussed in the CL. This means that the coding of each learning action, be it in a single speech turn or in an episodic cluster of them, was also coded in terms of its topic.

The excerpt below is an example of how the coding was realized.

Y (researcher) ST425: I am now asking you the following. Now that we have described this (the new model), what are the biggest problems with it at the moment? Where are kind of those needs for change? Here and now. Of course, it is not complete. It has not yet been realized. You said it yourselves that the working community is in a flux and this means that it is incomplete as you can see in the outcomes. But is there here some specific sore point?

ZBP (practitioner) ST426: Time. As we here said, it is kind of this work force.

Y (researcher) ST427: Yes.

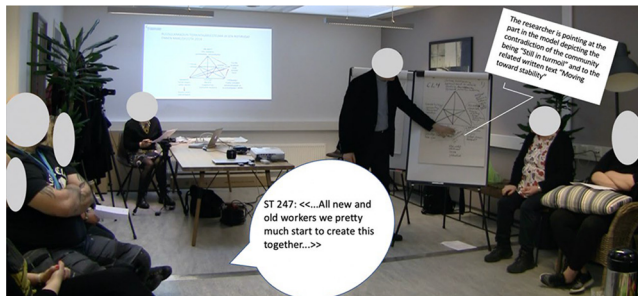
ZBP (practitioner) ST428: [. . .] And it is in a flux and it requires time. All new and old workers we pretty much start to create this together. But even Rome was not built in a single day. It requires time. And this can lead to a point when we ask why isn't this working? It does not work because it requires time to start working.

Y (researcher) ST429: Yes.

These speaking turns (ST) 425–429 were coded as a learning action of examining (Figure 3) and correspond to the video recording track 01:42:45 to 01:43:55. The participants had completed the modeling of their past activity in CL Session 3 shown by the triangular model projected on the wall. In this Session 4, they were modeling the present activity taking up many different topics, which were marked as episodes and given a corresponding name for identification. In this particular example, the excerpt belongs to a wider episode covering STs 425–472. This episode was named “The contradictions of the present activity (sore points of the present activity), specifically the need for intermediate stabilization.”

Step 2. This step consisted of examining all examples of a given ELA, by focusing on possible cyclicity and deviations from the researcher’s instructional intentions. The cyclicity of ELAs was examined at two levels: for each CL session and for the entire CL. As it will be shown in the analysis section (Tables 3–6), the frequency of each type of learning action was traced.

Figure 3.
Photograph from 01:43:44 into Session 4, depicting the collective action of examining – the researcher pointing at the examined part of the model during practitioner ZBP’s ST 249



The researcher is pointing at the part in the model depicting the contradiction of the community related workers' task "Moving toward stability."

ST 247: <<...All new and old workers we pretty much start to create this together...>>

The deviations between the instructional intentions of the interventionists as written in their plans and the learning process which is actually accomplished are analyzed. Each plan indicates at the beginning the intended primary action the researchers aimed at fostering in the session. Other planned actions or secondary actions, which are not specifically named in the plans, were inferred from the plan by applying the same criteria as in the coding of the transcripts. Table 7 in the analysis section shows how ELAs conform to and deviate from the plans.

The data coding was carried out independently by the first author and by another researcher, and all disagreements were carefully discussed and resolved.

Findings

Tables 2 and 3 present the results regarding the first research question: To what extent ELAs were undertaken in this CL? Although the intention behind conducting a CL is to achieve ELAs, only a systematic analysis of the data can reveal whether or not such learning actions actually occurred in the intervention. This is what Tables 2 and 3 aim at presenting. The later phases of the analyses will build on these results to explore the conformity to and deviation from the instructional plans the interventionists had written before each CL session took place (see Table 7).

The speaking turns involving ELAs are the vast majority of the speaking turns in all the CL sessions, ranging from 79% to 99%. This means that the undertaken ELAs were the dominant actions in this CL. More specifically, the speaking turns involving ELAs were 79% of the total actions in the first session, 87% in the second session, 93% in the third session, 94% in the fourth session, 89% in the fifth session and 99% in the sixth session. In the first and second sessions, the percentage of nonlearning action is higher because of the need for the researchers to provide information and clarifications at the beginning of CL process.

Six of the seven ELAs occurred in the data, as presented in Table 3.

Speaking turns/sessions	S1	S2	S3	S4	S5	S6
STs involving EL actions	638	700	575	663	619	699
STs involving non-EL actions	165	102	42	43	75	6
Total	803	802	617	707	694	705
STs involving EL actions (%)	79	87	93	94	89	99
STs involving non-EL actions (%)	21	13	7	6	11	1

Table 2. Speaking turns included and non-included in expansive learning actions

	S1	S2	S3	S4	S5	S6	TOTAL (action)	(%)
Questioning	9	5	1	0	0	0	15	10
Analyzing	17	15	0	0	0	0	32	22
Modeling	9	7	12	18	0	0	46	32
Examining	0	0	0	1	1	0	2	2
Implementing	0	0	0	0	17	16	33	23
Reflecting	3	0	5	3	3	2	16	11
Consolidating	0	0	0	0	0	0	0	0
TOTAL (session)/TOTAL	38	27	18	22	21	18	144	100
	26%	19%	12%	15%	15%	13%	100%	

Table 3. Types and frequencies of expansive learning actions in the Change Laboratory sessions

The most frequent ELA was the action of modeling, which occurred 46 times, representing 32% of the total. Implementing and analyzing follow, occurring 33 times (23%) and 32 times (22%), respectively. Questioning and reflecting occurred 15 (10%) and 16 times (11%), respectively. ELA which occurred the least is the action of examining – 2 times (2%). The action of consolidating did not occur in the data. Modeling, analyzing and implementing were the most frequent actions, representing in total 75% of all ELAs of the CL.

Overall, in the first two sessions, the actions of questioning and analyzing were 46, which is 71% of all ELAs of these sessions. In Sessions 3 and 4, the actions of modeling were 31, which represents 76% of all ELAs of these sessions. In the last two sessions, the actions of implementing the model were 33, which represents 85% of the total actions of these sessions. This distribution of ELAs across the CL sessions indicates that the formative intervention closely followed the EL cycle (Figure 2).

The second research question of this study asked: How were the ELAs distributed between the participating practitioners and the researchers through the intervention and what were their contributions to the initiation and completion of these learning actions? The following Tables 4 and 5 present the results regarding this question.

Researchers (RI) initiated the majority of ELAs (62%), followed by practitioners (PI, 28%) and the management (MI, 10%). An exception to this initiation tendency is questioning in which the practitioners (PI, 53%) are slightly in the lead of the researchers, with the researchers (RI) at 40%, followed by the management (MI, 7%).

Table 4.
Types and frequencies of initiating and completing of expansive learning actions per expansive learning action

	Questioning	Analyzing	Modeling	Examining	Implementing	Reflecting	Total (I)	Total (C)	(%)
PI	8 (53%)	12 (38%)	9 (20%)	1 (50%)	7 (21%)	3 (20%)	40	28	
PC	13 (87%)	18 (53%)	17 (37%)	0	14 (42%)	5(31%)		67	47
RI	6 (40%)	18 (56%)	32 (70%)	1 (50%)	22 (67%)	11 (67%)	90	62	
RC	2 (13%)	5 (16%)	17 (36%)	1 (50%)	17 (52%)	8 (50%)		50	34
MI	1 (7%)	2 (6%)	5 (11%)	0	4 (12%)	2 (13%)	14	10	
MC	1 (7%)	9 (28%)	12 (26%)	1 (50%)	2 (6%)	3 (19%)		27	19
Total (I)	15	32	46	2	33	16	144		
Total (C)	15	32	46	2	33	16		144	

Notes: Legend: PI: Practitioner initiates the expansive learning action. PC: Practitioner completes expansive the expansive learning action. RI: Researcher initiates the expansive learning action. RC: Researcher completes the expansive learning action. MI: Member of management initiates the expansive learning action. MC: Member of management completes the expansive learning action. I: Initiations. C: Completions

Table 5.
Types and frequencies of initiating and completing of expansive learning actions per session

	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Total (I)	Total (C)	(%)
PI	17 (45%)	7 (24%)	3 (17%)	5 (23%)	7 (35%)	1 (6%)	40	28	
PC	26 (68%)	13 (48%)	10 (53%)	6 (29%)	9 (40%)	3 (17%)		67	47
RI	16 (42%)	19 (72%)	13 (72%)	16 (72%)	11 (50%)	15 (83%)	90	62	
RC	3 (8%)	7 (26%)	5 (26%)	11 (50%)	12 (60%)	12 (66%)		50	34
MI	5 (13%)	1 (4%)	2 (11%)	1 (5%)	3 (15%)	2 (11%)	14	10	
MC	9 (24%)	7 (26%)	3 (21%)	5 (21%)	-	3 (17%)		27	19
Total (I)	38	27	18	22	21	18	144		
Total (C)	38	27	18	22	21	18		144	

Practitioners (PC) completed the largest number of ELAs (47%), followed by researchers (RC, 34%) and management (MC, 19%). Exceptions in the overall tendency of the completion of ELAs are the actions of examining, implementing and reflecting. Actions of examining have the same percentage for the three parties (PC, RC and MC at 33%). For implementing and reflecting, researchers (RC) are in the lead.

These results indicate a distribution in the expansion process according to which the researchers acted primarily as initiators, but the participants had the last word. Furthermore, these results indicate that the EL process was largely in the hands of researchers and practitioners, with the management occupying a nondominant role. Table 5 partly supports and further specifies these results.

These frequencies per session in Table 5 confirm the results from Table 4 for the initiations with ELAs largely started by the researchers (in Sessions 2–6). For the completions, however, the results in Table 4 are only confirmed to an extent, as in this distribution per session, the practitioners are in the lead of completing ELAs only in Sessions 1–3, researchers taking a slight lead in the remaining three sessions.

Also, this distribution per session indicates that for the completions, the management (MC), in some sessions, took an equal role as much as the researchers (RC, Session 2) or as much as the practitioners (PC, Session 6), and a closer and slightly dominant role than the practitioners (PC, respectively, in Sessions 3 and 6). Overall Table 5 confirms that in this CL, a fairly distributed EL process took place during which the practitioners played a significant role and the management did not dominate.

As an example, during a phase in Session 4, an ELA of modeling was *initiated by the researcher (ST211) and completed by practitioner HAK (ST240)*. This excerpt occurs when the participants are considering the rules in the current activity and what to write down in the model of the activity system (Figure 1), provided as an empty template. The researcher starts with the assumption that the practitioners have more autonomy to make decisions, building on a prior statement of the head of the unit.

Y (researcher) ST 211: What about the rules? What rules do you have now? E (head of unit) already brought us that now you are expected to make a lot of independent decisions. So, this has kind of replaced detailed or tight rules. What are the most important rules at the moment?

Aligning with several practitioners (ST219, ST221, ST223 and ST225), the researcher suggests to write down in the model “freedom to make independent decisions” (ST222). What happens shortly after, however, is a shift which starts with the speaking turn of one practitioner (ST227) and allows to expand on the original interpretation of the rules in the present activity.

ZPE (practitioner) ST227: I think it is a brilliant example of rules that the residents make them for themselves. When we tore down the walls and here is the freezer and we did not have an idea what would be allowed. Can the residents take the food from the freezer or not? There was such behavior that someone took two kg of grounded meat and stuck it into his breast pocket. The same about the paper plates. Always when one went by one took a pack, just to be sure. Now that has ended completely. And now when someone needs something he or she will ask even about sugar if there is no sugar. The morning shift has left the sugar bowl in the shelf. It should be next to the freezer and then someone comes and ask, “may I take sugar from there?” It is astonishing comparing with the situations from which we started when there was all the time somebody picking something from the freezer.

The speaking turns following ST227 till the end of the learning action involve the researcher, the head of unit and another practitioner, in an expansion from an understanding of the rules as “freedom to make independent decisions” (researcher in ST222) to “trust” (ST233 and ST235 by practitioner HAK and ST234 by the researcher) and to “rules are continuously created together” (ST236 and ST238 by a head of unit, ST237 and ST239 by the researcher, and ST240 by practitioner HAK). The three characterizations of the rules (“freedom to make independent decisions,” “trust” and “rules are continuously created together”) were written down in the model of the activity system. We see here that the researcher is not the only one to lead the process, but the process is led in a distributed manner among all participants, in this case being completed by a practitioner.

Table 6 expands on these results by showing the extent to which the same ELAs are both initiated and completed by the same party.

Table 6 shows that the numbers of ELAs both initiated and completed by the researchers (RI-RC) rose progressively from Session 1 to Session 6. These results confirm that the EL process in the last three sessions was pushed forward largely by the researchers. In most of sessions and particularly in Session 1, the practitioners (PI-PC) both initiated and completed ELAs, although without forming a consistent pattern. To a small extent and only in two sessions, the management as well did initiate and complete some learning actions.

The occurrences of initiations-completions of ELAs by the researchers require a closer look at how they unfold in the interactions with the other participants in the CL. The following example serves this purpose.

Session 4: Y112-Y120, modeling

Y (researcher) ST112: But then let us ask right away what your own corner is. It used to be a controller. What are you now then? What is the subject in that left hand corner?

HAK (practitioner) ST113: I do feel that I am more a fellow traveler than any kind of controller.

WHA (practitioner) ST114: *Me, fellow traveller.*

HAK (practitioner) ST115: *Yes.*

Y (researcher) ST116: It is a nice concept that fellow traveler. What it comes from? Because it can be found also in documents from the past, that fellow traveler. Is it a concept in the field or is it your very own idea?

RZE (head of unit) ST117: It belongs to the concepts of the field. When I think of social work there is quite a lot of talk about special kind of goals, selecting a partnership relation. I myself am a strong proponent of partnership relation in which we have expert roles. The

Table 6.
Types and
frequencies of
initiating-completing
of expansive learning
actions per session

	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6
Total of ELA	38 (100%)	27 (100%)	18 (100%)	22 (100%)	21 (100%)	18 (100%)
PI-PC	11 (29%)	3 (11%)	3 (17%)	-	1 (5%)	-
RI-RC	1 (4%)	6 (22%)	5 (28%)	10 (43%)	8 (38%)	10 (56%)
MI-MC	3 (8%)	-	-	1 (4%)	-	-

resident is one and we are the other one and we are in equal partnership relation and I walk side by side with the resident in that partnership relation as long as need be. And that is being a fellow traveler who does not determine and does not have to offer ready-made choices. The fellow traveler does not solve problems; he or she is not for that. It is a matter of shared expertise in which none is wronger or righter than the other one. They just have different knowledges. That is where the fellow traveler comes from.

Y (researcher) ST118: *Could one say that you are a fellow traveler and a partner? Is partner too strong a word?*

RZE (head of unit) ST119: *As a term it sounds like that [..]*

Y (researcher) ST120: *But fellow traveler is pretty good. Fellow traveler, yes.*

This example stems from one of the sessions in which modeling was taking place. Here, the researcher (ST112) is guiding the participants to fill in the subject corner of the activity system model (Figure 1). This excerpt from the transcript shows that the researcher is proceeding so that the contents written down in the model are systematically coming from the participants. The term fellow traveler is coming from the practitioners HAK and HA. It is interesting to note that in ST117, the head of unit suggests adding to fellow traveler also the term partner. In ST118, the researcher then tests the resolve of the collective to write down in the model the proposed term fellow traveler, and he does it by asking the participants to also consider adding partner and questioning whether the term partner is too strong. The response from the head of unit in ST119 withdraws the term partner, thus aligning with the practitioner’s initial suggestion. This brings about the closure by the researcher, stabilizing the notion of fellow traveler, which is written into the model for the development of the work activity in the unit. So, we see here that even in ELAs both initiated and completed of by the researcher, the latter attempts at keeping the lead firmly in the hands of the practitioners.

The third research question of this study asked: To which extent, if at all, did the learning actions taken by the workers in this CL divert from the interventionists’ instructional intentions stated in the plans of each CL session? Regarding this question, the results are presented in summary Table 7.

The quotation marks in the tables indicate primary ELAs explicitly spelled out in the researcher’s plans for the specific intervention session. The other actions, without quotation marks, refer to intended secondary actions, which have been inferred from the plans by applying the same criteria as in the coding of the transcripts. In the columns of the deviation, the sign plus (+) indicates that the corresponding ELA took place although it was not specifically intended by the researchers and included in their plan for the session. The sign minus (–) indicates that the corresponding ELA did not take place although it was

Table 7.

Summary table of conformity to and deviation from the plans of the expansive learning actions (ELA) per session (S)

ELA	S1	S2	S3	S4	S5	S6
Questioning	“.”	+	+			
Analyzing	.	“.”				
Modeling	+	.	“.”	“.”		
Examining				+	“.”	
Implementing					.	“.”
Reflecting	.	–	.	+	+	.

specifically intended by the researchers and included in their plan for the session. The point (.) indicates that the corresponding ELA did take place and was specifically intended by the researchers who included it their plan for the session.

Overall, across the six sessions, mostly the intended learning actions occurred, marked with points (.) in Table 7. More specifically, all the primary intended actions, explicitly mentioned in the plan (".") occurred. Mostly, also the actions that could be inferred from the plan and marked in Table 6 with points and without the quotation marks (.) occurred.

Table 7 indicates also that throughout the CL, from Sessions 1 to 5 the participants contributed to the process in ways that deviated from the researchers' plans, as signaled by the minus (−) and pluses (+). In one occasion, in Session 2, the participants did not fulfill ELA of reflection planned and fostered by the researchers. In other occasions, added ELAs of questioning (S2 and S3), examining (S4) and reflecting (S4 and S5) can be observed.

For example, with a deviation in Session 3, the practitioners engaged in questioning, although this ELA was not mentioned nor inferable from the written plans by the researchers. The action started upon initiative of practitioner HAK in ST561 questioning the meaning of community when applied to their activity:

HAK (practitioner) ST561: Yes. But what is community? I am asking you (the researchers) what you mean? Are we talking strictly about work community? During this change process I have had moments when I have thought off [...] (swear word) what s [...] (swear word), I will leave. [...] Nothing was good, nothing went well. Everything will fail and for sure somebody is going to be killed, or at least assaulted when we do not anymore sit behind the plexiglass. And the amount of whining that one had to listen here while working, it was something so heavy and draining that I got the feeling that I cannot take it anymore. I do not have the stamina to do this work this way. But then I thought that if we actually have the stamina and pull this through, we will step into a new phase. We will actually get a chance to do here what we originally came here for.

From this start, the action of questioning was coconstructed by HAK and three other colleagues to highlight that a supported housing unit such as theirs cannot be considered a real community if they endorse the stigma and reification of residents not as people but as drug addicts, homeless and immigrants.

These deviations tell that the practitioners were willing to exert more criticisms toward their own activity (Questioning) and toward their own designs (Examining and Reflecting) than the researchers considered needed when planning the sessions.

Discussion and concluding remarks

This study positioned itself within a discussion of workplace EL as both a learning and an instruction process. We argued that this instructional dimension requires a focus of analysis also on the interventionists themselves, their original intentions and their contributions to the collective process of expansion. This focus is particularly relevant in CL research claiming that this method fosters EL understood as a type of learning that is open ended and owned by the practitioners who participate in the intervention.

The study shows that ELAs were the vast majority of the learning actions undertaken during the CL sessions and that the practitioners of the unit initiated and completed a good number of ELAs. The learning actions taken by practitioners deviated significantly from the researchers-interventionists' instructional intentions. These results support the argument that practitioners were the main agents of change through the workplace EL process. In other words, EL occurred mainly with the contributions of the practitioners' themselves and,

although this process was supported by researchers-interventionists, the practitioners were in the lead of their own learning process.

These results have implications for both research and practice. From the research viewpoint, this study confirms a previous CL inquiry (Engeström *et al.*, 2013), which showed that the interventionists' preexisting plans may differ from the ELAs that actually took place during the sessions. Furthermore, this article, for the first time, offers a systematic analysis of initiations and completions of these learning actions showing that the interventionist did not have instructional control over EL. These results are relevant because they open up the dialectical relation between learning and instruction, indicating that what the learners do can diverge in interesting ways from what the instructor plans and prescribes. For those interested in change processes, these are the most rewarding instances to explore, as in them lie powerful resources for collective creativity, self-determined initiatives and transformative agency.

From the practice viewpoint, this study has implications for instructors by pointing at the expansive possibilities beyond the classic initiation–response–evaluation framework and at the need to construct more robust frameworks of learning and instruction that acknowledge the productive interplay between these two. Although this article is only a modest step toward the direction Clemans and Rushbrook (2011) point at, in the quote reported in the introduction of this article, it illustrates an analytical procedure that can potentially enrich our understanding of the dynamics of instruction along with workplace learning in CLs, as well as in other contexts aimed at or involving EL.

References

- Bal, A. (2016), "From intervention to innovation: a cultural-historical approach to the racialization of school discipline", *Interchange*, Vol. 47 No. 4, pp. 409-427.
- Clemans, A. and Rushbrook, P. (2011), "Competency-based training and its impact on workplace learning in Australia", in Malloch, M. Cairns, L. Evans L. and O'Connor B.N. (Eds), *The SAGE Handbook of Workplace Learning*, Sage, London, pp. 279-292.
- Engeström, Y. (1987/2015), *Learning by Expanding*, Cambridge University Press, New York, NY.
- Engeström, Y. (2001), "Expansive learning at work: toward an activity theoretical reconceptualization", *Journal of Education and Work*, Vol. 14 No. 1, pp. 133-156.
- Engeström, Y. (2007), "Enriching the theory of expansive learning: lessons from journeys toward co-configuration", *Mind, Culture, and Activity*, Vol. 14 Nos 1/2, pp. 23-39.
- Engeström, Y. (2011), "From design experiments to formative interventions", *Theory and Psychology*, Vol. 21 No. 5, pp. 598-628.
- Engeström, Y. and Sannino, A. (2010), "Studies of expansive learning: foundations, findings and future challenges", *Educational Research Review*, Vol. 5 No. 1, pp. 1-24.
- Engeström, Y. and Sannino, A. (2012), "Whatever happened to process theories of learning?", *Learning, Culture and Social Interaction*, Vol. 1 No. 1, pp. 45-56.
- Engeström, Y. and Sannino, A. (2021), "From mediated actions to heterogeneous coalitions: Four generations of activity-theoretical studies of work and learning", *Mind, Culture, and Activity*, Vol. 28, pp. 4-23.
- Engeström, Y., Rantavuori, J. and Kerosuo, H. (2013), "Expansive learning in a library: actions, cycles and deviations from instructional intentions", *Vocations and Learning*, Vol. 6 No. 1, pp. 81-106, doi: [10.1007/s12186-012-9089-6](https://doi.org/10.1007/s12186-012-9089-6).
- Engeström, Y., Virkkunen, J., Helle, M., Pihlaja, J. and Poikela, R. (1996), "The change laboratory as a tool for transforming work", *Lifelong Learning in Europe*, Vol. 1 No. 2, pp. 10-17.

- Greeno, J.G. (2016), "Cultural-historical activity theory/design-based research in Pasteur's quadrant", *Journal of the Learning Sciences*, Vol. 25 No. 4, pp. 634-639.
- Johnson, L.L., Sieben, N. and Buxton, D. (2018), "Collaborative design as mediated praxis: professional development for socially just pedagogies", *English Education*, Vol. 50 No. 2, pp. 172-198.
- Mehan, H. (1979), *Learning Lessons: Social Organization in the Classroom*, Harvard University Press, Cambridge, MA.
- Penuel, W.R. (2014), "Emerging forms of formative intervention research in education", *Mind, Culture, and Activity*, Vol. 21 No. 2, pp. 97-117.
- Sannino, A., Daniels, H. and Gutierrez, K. (Eds) (2009), *Learning and Expanding with Activity Theory*, Cambridge University Press, Cambridge.
- Sannino, A., Engeström, Y. and Lahikainen, J. (2016), "The dialectics of authoring expansive learning: tracing the long tail of a change laboratory", *Journal of Workplace Learning*, Vol. 28 No. 4, pp. 245-262.
- Seifried, J., Brandt, S., Kögler, K. and Rausch, A. (2020), "The computer-based assessment of domain-specific problem-solving competence: a three-step scoring procedure", *Cogent Education*, Vol. 7 No. 1, p. 1719571.
- Virkkunen, J. and Newnham, D.S. (2013), *The Change Laboratory*, Sense Publishers, Rotterdam.
- Wang, T., Ramdeo, J. and McLaughlin, C. (2021), "Experiencing and experimenting: an exploration of teacher agency in an international collaborative teacher professional development programme using experiential learning", *Teaching and Teacher Education*, Vol. 104, p. 103389.

Further reading

- Engeström, Y. (2003), "The horizontal dimension of expansive learning", in Achtenhagen, F. and John, E.G. (Eds), *Milestones of Vocational and Occupational Education and Training*, Bertelsmann, Bielefeld, pp. 30-47.

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