Modes of collaborative reflection

Martin Degeling, Michael Prilla

HAL Id: hal-00836670
https://telearn.hal.science/hal-00836670

Preprint submitted on 21 Jun 2013

Modes of collaborative reflection

Martin Degeling[1], Michael Prilla[1]

[1] University of Bochum, Universitätstr. 150, 44801 Bochum, Germany
{martin.degeling, michael.prilla}@ruhr-uni-bochum.de

Abstract. In this paper, we describe different modes of collaborative reflection as processes of learning at the workplace. We explain why reflection is a decisive means of learning and – based on the modes we describe – how groups of people can be supported in reflection together. For this, we describe how scheduled, concurrent and spontaneous collaborative reflection can be supported by articulation, guidance and synergizing.

Keywords: Collaborative reflection, modes of collaborative reflection, articulation, guidance, synergizing

1   Introduction: Learning by collaborative reflection at work

Learning at the workplace is oftentimes performed informally, meaning that people learn from their own experiences rather than being taught in dedicated session (cf. Eraut 2004). In this context, reflection – returning to experiences, re-evaluating them and learning from this process for future behavior – has been found to be a decisive mechanism for learning at the workplace (Boud et al. 1985; Kolb and Fry 1975). In this paper, we elaborate on collaborative reflection processes in which participants share their experiences with each other with the ultimate goal of learning[1].

At the workplace, collaborative reflection does not only take place in well-defined, scheduled and facilitated sessions, but also occurs during work and in many other situations, which we call **modes of collaborative reflection**. Thus, adequate support for collaborative reflection depends on the mode to be supported.

Literature on collaborative reflection provides insights such as indicators to recognize and differentiate it from other group processes (van Woerkom and Croon 2008) or situations reflection may occur in (Daudelin 1996). However, there are no sufficient insights into the processes inside these modes and their characteristics. To support collaborative reflection as a learning mechanism at work, such understanding is decisive. Therefore, we conducted three case studies in different environments and domains to better understand the characteristics of different modes of reflection.

In what follows, we describe our case studies and insights stemming from them. After that, we present a framework of three basic tasks to be supported in order to make collaborative reflection work. We conclude this paper with a brief outlook on further work.

---

[1] The work presented in this paper is part of the project „MIRROR – Reflective Learning at Work" funded in FP 7 of the European Commission, see also http://www.mirror-project.eu.

2 Case studies: Modes of collaborative reflection in practice

In order to get insights into the characteristics of collaborative reflection and its different modes in practice, we conducted a total of three case studies. This was done in different environments, domains and with people of different disciplinary and educational background in order to allow for more general results. In particular, we conducted the studies at a consulting company from Germany (case 1), a care home for elderly people in the United Kingdom (case 2) and a hospital ward in Germany (case 3). In all cases, we conducted a varying number of interviews, which were audiotaped and transcribed, and observational studies during which we either observed staff meetings or followed employees for two days. Material stemming from these studies was coded with a scheme supporting us in the analysis of different modes.

As a result of this work, we derived a differentiation of three basis modes of reflection, which will be presented below. These modes include **scheduled** reflection, which may occur in meetings and the like, **concurrent** reflection, which may take forms of continuous reflection during the day and **spontaneous** reflection e.g. happening when worker meet on the hallway after one of them experienced a certain event. It should be noted, however, that these modes describe a continuum and slightly overlap in practice. In addition, our classification is preliminary and will surely be complemented by further research. In what follows, we will describe our observations leading to these modes.

Scheduled reflection. In all cases, we observed several occurrences of reflection in scheduled meetings common in all cases. Some of these meetings were explicitly focused to reflection such as a 'reflective meeting' at case 2, while others included room for experience exchange and possibilities to collaboratively reflect on the work besides other topics.

For example, we attended a ward meeting at case 3, which takes place monthly and is often used to reflect on work processes. In this meeting, it was discussed how the organization of breaks could be changed to avoid situations in which multiple nurses are off for breaks and too few remain in charge. The head nurse multiply asked for critical feedback to trigger reflection. At case 2, we observed more explicit reflection meetings: At the care home ta senior carer unregularly initiates a reflection session by gathering other carers to what is called a 'reflective meeting' and asking them to talk about topics she recognized as problematic such as handling of difficult patients. At case 1, there are monthly meetings of consultants, in which a meeting facilitator asks participants to tell stories e.g. about how they handle certain customers or how they deal with problematic situations like complains etc. Then, the other participants start to exchange experiences about similar issues to inform themselves as well as reflecting their work.

Concurrent reflection. Oftentimes, we found collaborative reflection to be more integrated into workflows at the cases rather than being done in a dedicated session. At case 3, physicians reflected about cases and their different proposals what to do during their shifts whenever they meet, and we perceived this to be part of their work. At the care home we were told about similar case handling with the difference that the same topic is not discussed as deeply and with less sustainment, as work is more focused on current problems. However, we were told that carers ask colleagues for

proposals what to do in order to learn from them continuously. At case 1, such concurrent reflection is more triggered by career awareness (van Woerkom and Croon 2008), when consultants request feedback of colleagues after presentations at customers to compare own experiences of what happened with what others perceived.

Spontaneous reflection. Our observations indicate that in contrast to an intuitive understanding, collaborative reflection is oftentimes done spontaneously and in a short timeframe. At the hospital (case 3) we observed spontaneous reflection in cases in which nurses asked each other for feedback concerning treatment given to a patient several times during the day. At case 2, there were similar occasions e.g. when a carer reflected on incidents with residents getting aggressive. At case 1, spontaneous reflection occurs after tasks such as telephone calls with customers, when others are involved to rethink and reflect interaction with the customer.

3   Means to support

Early in our work, we identified **articulation** as a means to capture experiences and communicate reflection outcomes, **scaffolding and guidance** as means to support the reflection process and **synergizing** mechanisms to converge reflection into outcomes to be three basic and decisive tasks to be supported in order to make collaborative reflection work (Knipfer et al. 2011). As argued above, supporting these tasks must include support for the modes in which they are to be applied. In this section, we elaborate on our considerations how this can be done (see **Table 1** for an overview).

Articulation. To support the exchange of experiences and to sustain outcomes there is a need for articulation (Knipfer et al. 2011). This may take forms such documented text (e.g. a story about an experience) or annotations to existing documents contextualizing them. Articulations may also serve as an input for reflection sessions to trigger reflection in form of rebuilding of context. In addition articulations of reflection outcomes can be used to trigger follow up reflection session and make the context of previous session more sustainable. As it can be seen in **Table 1**, especially in or after situations of spontaneous reflection (e.g. after an incident with a resident at case 2), documentation of outcomes should be as easy and quick as possible e.g. by noting down what happened (a carer could document how she behaved during the incident) in order to use these notes later as an input for reflection. In concurrent reflection mode, e.g. when consultants continuously reflect on a project's state, participants should be able to link their articulations to the right context (e.g. slides presented during the project) to focus feedback given. For scheduled situations and also for the other modes, it is necessary that articulation is accepted as valuable e.g. for reflection to make it happen.

Scaffolding. Reflection oftentimes lacks a structure and reflection participants need guidance in what to do and which data to use to support reflection. Providing a scaffold for collaborative reflection and guiding participants may bring together the right people and roles and point them to the right tools and data. In scheduled modes of collaborative reflection, there is a need for traditional meeting support such as facilitation to sustain the shared context and make progress. In concurrent mode, reflection has to be kept up and the context has to be preserved, as interaction might occur over a longer period of time. Spontaneous reflection needs support in

recognizing recurring topics and quickly finding data to support for short-term interaction. All modes need support to produce a "big picture", including access to the right content and the rebuilding of context

Synergizing. In several situations we saw a lack of common understanding in collaborative reflection sessions that lead to no or no sustainable outcome. In schedules meetings, visualization might help to diminish this problem by providing a shared reference. In more general settings, there is also a need for linking this data to each other and making it accessible e.g. by tagging it. However, adapted support for the different modes needs further work in exploring synergizing processes in practice.

Table 1 Modes of collaborative reflection and means of support.

	Pre-scheduled	Concurrent	Spontaneous	All
Articulation	Articulation of context documents	Articulation integrated into workflows	On-the-fly documentation	Culture of documentation; accepted as valuable; enable sharing
Scaffolding	Sustainment of context and rebuilding; next steps	Keeping up the process and preserving a shared context	Recognizing recurring topics, finding data	Producing a big picture, accessing right context, rebuilding of context
Synergizing	Visualization			Linking, Tagging

4 Conclusion and Outlook

Our differentiation shows the complexity of supporting collaborative reflection at work and points out the need for further work on this aspect. It also shows that reflection cannot be reduced to planned meetings, but occurs in manifold forms. Thus, our further work will strive to better understand these forms and build adequate and (hopefully) generic support for different modes of reflection.

References

1. Boud D, Keogh R, Walker D (1985) Promoting reflection in learning: A model. Reflection: Turning experience into learning. pp 18–40
2. Daudelin MW (1996) Learning from experience through reflection. Organizational Dynamics 24:36-48.
3. Eraut M (2004) Informal learning in the workplace. Studies in continuing education 26:247–273.
4. Knipfer K, Prilla M, Cress U, Herrmann T (2011) Computer Support for Collaborative Reflection on Captured Teamwork Data. Proceedings of the 9th International Conference on Computer Supported Collaborative Learning
5. Kolb DA, Fry R (1975) Towards an applied theory of experiential learning. In: Cooper C (ed) Theories of Group Processes. John Wiley, London, pp 33-58
6. van Woerkom M, Croon M (2008) Operationalising critically reflective work behaviour. Personnel Review 37:317-331.