

**PRACTICE NOTE**  
**AUDITING: LIFELONG LEARNING**

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June 2021

**FAR Project 2020B03**

**Learning and Performing in Audit Firms: The Role of the Organizational Context**

*The authors thank the Foundation for Auditing Research (FAR) for their grant 2020B03. The views expressed in this document are those of the authors and do not necessarily reflect the views of other involved parties. Furthermore, we thank Luc Quadackers for helpful comments and suggestions.*

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## PRACTICE NOTE

### AUDITING: LIFELONG LEARNING

#### Executive Summary

It is essential that auditors continuously learn. The need for continuous learning is fostered by the changing expectations from society and stakeholders, rapid technological developments, and the increasing complexity of information systems. Auditing regulators and oversight bodies are concerned that certain aspects of the auditing profession may form barriers to effective learning. To gain a better insight in how auditors can effectively learn, it is important to identify and distinguish the different learning processes in the auditing profession. Based on our recent literature review we differentiate between seven learning processes. In this *FAR Practice Note*, we highlight the most important insights from the academic literature for each learning process. Based on this, stakeholders can develop tools to facilitate auditor learning processes in practice.

#### Key take-aways

- Although education provides an important foundation, auditors indicate that most learning occurs on-the-job. The need to continuously learn has increased due to developments in the profession, and on-the-job learning will become more important in the future.
- A large part of auditors' on-the-job learning occurs unconsciously. Learning from experience can be improved by simple interventions, such as by self-explaining why certain choices have been made.
- Especially junior auditors have difficulties to raise issues during an audit engagement. This hampers learning. The academic literature identifies several ways that help to increase auditors' willingness-to-speak.
- In performance evaluations, effective learning may be hampered because auditors have difficulties in accurately evaluating others. Auditors tend to use their own knowledge as an anchor to evaluate others. This results in overestimation of the evaluatee. This overestimation is larger when the knowledge gap between evaluator and evaluatee increases.

**Keywords:** Auditing, Learning Processes, Development

## 1. Introduction

Auditors need to continuously learn about their field to uphold levels of knowledge and skills necessary to conduct a high-quality audit. The importance of learning is reflected in almost every article, masterclass, and course, and is also stressed by audit firms (e.g., Deloitte, 2015; EY, 2015; PwC, 2015a; 2015b). Accountancy education offers important, necessary, and fundamental knowledge for the auditor. However, auditors indicate that they acquire most knowledge on the job (Hicks, Bagg, Doyle, & Young 2007, Westermann, Bedard, & Earley 2015). Nowadays, the need for continuous learning is fostered by the changing expectations from society and stakeholders, rapid technological developments, and the increasing complexity of information systems.

In a recent literature review, we analyze different on-the-job learning processes within the audit profession (see Dierynck, Kadous, & Peters (2021)). In this literature review, we also provide a summary of the current scientific knowledge about each learning process, and provide insights on how to improve each learning process in practice. The goal of this *Practice Note* is to share these insights with auditing professionals. Based on these insights, auditors, audit firms, professional bodies, and regulators can take actions to foster learning in the auditing profession.

## 2. Framework

Our literature review builds further on the *workplace learning framework* by Jacobs & Park (2009). We differentiate between seven learning processes in the audit profession, based on three dimensions. These three dimensions are (i) the location of the learning process (*on-the-engagement* or *off-the-engagement*); (ii) the extent of planning in the learning process (*structured* or *unstructured*); and (iii) the role of the supervisor or trainer in the learning process (*active* or *passive*).

Based on the dimensions of our framework, a distinction can be made between different learning processes. The way in which learning takes place differs between learning processes. For instance, when auditors conduct tasks, they mainly focus on finishing their tasks, instead of learning. That is, learning from conducting tasks happens mainly unconsciously, and as a by-product of working (Eraut 2007). This is in contrast with learning from training. In a training, learning is the main activity and happens much more consciously. Given these differences in learning, a distinction between different learning processes is important. Across learning processes, there may be different learning strategies, and different facilitators and barriers to learning.

Based on keyword searches related to the concept of 'learning', we review published literature in five prominent academic accounting journals. In total, we identified 129 papers in our literature review. These papers were subsequently allocated to one of the learning processes based on our framework.<sup>1</sup> In the next sections, we describe practical insights for each learning process. Figure 1 graphically shows the *Auditor Learning Framework*. The full version of our literature review is available [here](#).<sup>2</sup>

## 3. On-the-engagement learning

On-the-engagement learning typically occurs as a by-product of working and typically happens unconsciously (Eraut 2000, 2007). In our framework, we make a distinction between four learning processes that occur on the engagement: learning from *experience*, learning from *clients*, learning from *peers*, and learning from the *audit review process*. All these learning processes are not structurally planned and two out of the four learning processes (experience, clients) occur mainly without an active role of the supervisor.<sup>3</sup>

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<sup>1</sup> These learning processes were determined based on an initial reading of the academic literature on learning in the auditing profession.

<sup>2</sup> <http://dx.doi.org/10.2139/ssrn.3496805>

<sup>3</sup> Although the audit review process is structurally planned, learning from the audit review process is not structurally planned.

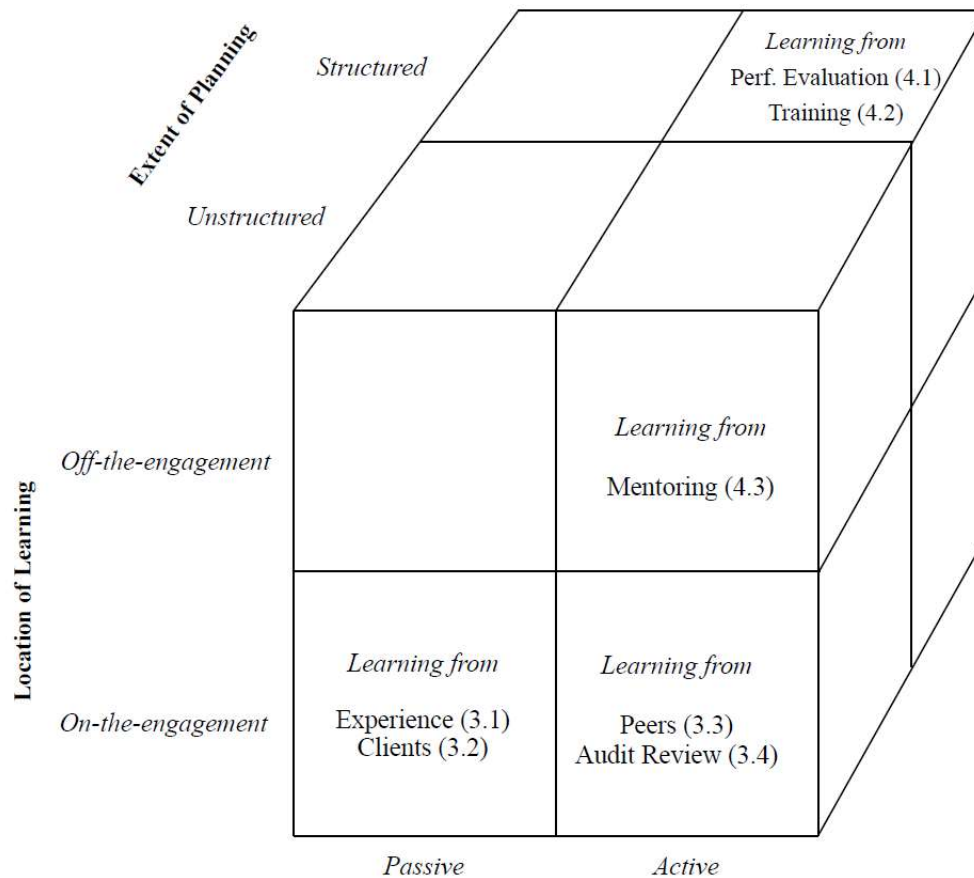


FIGURE 1: The *Auditor Learning Framework* (Dierynck et al., 2021), paragraph numbers are added between brackets.

### 3.1. Learning from experience

Learning from own experience is one of the most important learning processes for auditors. Hicks et al. (2007) show that accountants rank “*I learn from completing new tasks in my work*” as their most effective learning strategy. Research about learning from experience is mainly based on a framework that was developed during the early 1990s. A significant literature investigated determinants of auditors’ judgment performance. Bonner & Lewis (1990) identified knowledge and ability as key determinants of judgment performance. Moreover, Libby & Luft (1993) added that knowledge is mainly determined by ability, experience, motivation, and contextual factors. Next to that, motivation and contextual factors have a direct effect on auditors’ judgment performance. Experience is thus an important determinant of knowledge, and knowledge results in better judgment performance.

Other articles show that audit firms can foster learning from experience with interventions. A study by Earley (2001), for instance, shows that learning from experience is improved when auditors self-explain why certain choices have been made. In this way, auditors consciously reflect on what was unconsciously learned. Next to that, studies show that experience not only leads to more knowledge content for auditors but also to a different knowledge structure. More specifically, when auditors accumulate experience, they organize their knowledge based on transaction cycles or audit objectives. As a result, auditors are better able to retrieve this knowledge and can apply the knowledge in the right settings. Auditors that lack knowledge structures have more difficulties to learn from experience, as they cannot appropriately connect their experiences with their knowledge. Bonner, Libby, & Nelson

(1997) show that specific trainings in transaction cycles or audit objectives, which are conducted before experience is accumulated, improve learning from experience.

### 3.2. Learning from clients

In the beginning of their career, auditors spend the majority of their time on a client's premises. This implies that auditors have the possibility to learn *about* clients and *from* clients (Eraut 2007). To issue an impeccable audit opinion, auditors need to thoroughly understand the complexity of the environment in which their client operates. First, research shows that industry specialization results in higher audit quality (e.g., Chi & Chin 2011). This is mainly because industry-specific knowledge allows auditors to make better risk assessments (Low 2004), and better detect errors in the particular industry (Owhoso, Messier, & Lynch 2002). Second, Daoust & Malsch (2020) show that client's personnel can play an active role in developing auditors, especially when they personnel members are former auditors.

### 3.3. Learning from peers

Auditors can learn both *directly* and *indirectly* from peers. Direct learning occurs if the auditor explicitly asks something to a peer and indirect learning occurs when an auditor observes or imitates a peer. To optimize learning from peers, there needs to be room for a dialogue with the right balance between 'sharing', 'co-creation', and 'constructive conflicts' (Decuyper, Dochy, & Van den Bossche 2010). One stream of papers that researched this is the *voice*-literature. This literature shows that, especially junior auditors are often not willing to speak up when they make a mistake or detect an error, problem, or issue. While open communication about errors and audit issues increases audit quality, junior auditors are afraid of reputational damage, additional work, worsening relationships with peers, and negative emotions.

To improve auditors' ability to learn, it is thus important that audit firms have the right error management climate (TNO 2014). Gold, Gronewold, and Salterio (2014) show that an *open error management climate* increases auditors' willingness to report an error made by a peer and some errors made by themselves. Another example is the study by Nelson and Proell (2018), who investigate the reaction of audit team leaders to issues raised during the audit by team members. They find that audit team leaders show irritation during the audit when issues are raised, and the irritation is enhanced if the issue pertains to audit effectiveness (instead of audit efficiency). However, this is in contrast with the audit team leader's reaction at performance evaluation. During performance evaluations, auditors that raise issues get higher evaluations compared to auditors that do not.

Next to an *open error management climate*, there are multiple ways to increase the willingness to speak of (junior) auditors: the orientation of the team leader on team success instead of personal success (Nelson, Proell, & Randel 2016), the psychological safety in the team (Gissel & Johnstone 2017), team leadership (Dennis & Johnstone 2018), and intrinsic motivational orientation of the team leader (Kadous, Proell, Rich, & Zhou 2019). To learn effectively from peers it is thus important that auditors feel free to speak up and issues and errors are raised and addressed. The academic literature offers several practical insights to enhance this.

### 3.4. Learning from the audit review process

During the audit workpaper review process, a reviewer has two important goals. First, the audit review is an element of quality control and the reviewer needs to detect and correct errors made by the preparer (PCAOB, 2010a). Second, the reviewer needs to professionally develop the workpaper preparer through coaching (Westermann et al. 2015). An auditor can learn from both goals. If a reviewer detects and corrects errors, the preparer receives explanatory feedback that aids learning. The reviewer could go the extra mile by coaching the preparer on a process-level.

To optimally learn from the audit review process, it is important that the review process occurs as effectively as possible. Several studies have addressed different ways in which the audit review process

can occur. For instance, Brazel, Agoglia, and Hatfield (2004) investigate differences between face-to-face reviews and reviews using computer-mediated communication (i.e., e-mail). In their study, Brazel et al. (2004) find that preparers in face-to-face reviews prepare better for the review as they need to be ready to respond to any question directly. Because of this, preparers feel more accountable and focus more on audit effectiveness. In electronic reviews, preparers focus more on efficiency because when they get critical questions, they have time to address them. This suggests that the way in which the audit review is conducted affects how auditors acquire knowledge anticipating the review process.

To effectively learn from errors, it is important that preparers follow up on review notes. The literature shows that some factors may hinder appropriate follow-up (PCAOB 2010b). Lambert & Agoglia (2011), for instance, show that the timeliness of a review affects the extent to which preparers follow-up on the review note. This especially holds when the notes are conclusion-framed instead of documentation-framed.

#### **4. Off-the-engagement learning**

Also outside the audit engagement there are many opportunities to learn. In our framework, we distinguish between three learning processes that occur off the engagement: learning from *performance evaluations*, learning from *training*, and learning from a *mentor*. Two out of these three learning processes involve a structured planning (*performance evaluations* and *training*), while learning from a *mentor* is often not structurally planned. In all of the off-the-engagement learning processes there is an active role for the supervisor.

##### *4.1. Learning from performance evaluations*

Auditors are often evaluated during their career: during the audit review process (see Section 3.4), engagement reviews, and annual reviews. The academic literature identifies two criteria that are necessary for effective performance evaluations. First, there needs to be consensus about the criteria that need to be evaluated. Second, evaluators need to be able to accurately assess the performance of peers. The first criterion is usually met. For the second criterion this is less likely to be the case. Tan and Jamal (2001), for instance, show that auditors that need to evaluate others use their own knowledge as an anchor in the performance evaluation. This leads to overconfidence in others' knowledge and this is increasing in the knowledge gap between auditors. This not only reduces accuracy of evaluations, but this overconfidence hampers learning. That is, evaluatees are more likely to be allocated to tasks they are not qualified for, receive less supervision, and are reviewed less intensively during the audit review process. All these consequences potentially harm learning.

##### *4.2. Learning from training*

Audit firms use training as a method to increase the knowledge of their auditors. Training may occur both face-to-face and through e-learning. In learning from training, the focus lies strongly on learning instead of working. As a result, learning from training occurs more consciously. A couple of papers focus on interventions that audit firms can implement to make learning from training more effective. We highlight two examples. Bonner and Walker (1994) compare explanatory feedback with outcome feedback and find that explanatory feedback is more effective during trainings. Explanatory feedback, however, also takes more time and is not always possible at an individual level. Therefore, Bonner and Walker (1994) also investigate whether auditors can effectively learn through a combination of outcome feedback and self-explanation. They find this is possible, but only when the outcome feedback clearly describes how all different steps are linked together. A second example is the study by Moreno, Bhattacharjee, and Brandon (2007). They compare learning from worked-out examples and learning by problem-solving. They find both types of training are effective, but only when the auditor self-explains why certain choices are made. A method that is also useful when learning from experience.

#### 4.3. Learning from mentoring

Mentoring occurs at different hierarchical levels within audit firms: on the partner-manager level, the manager-senior level, and the senior-staff level. In the beginning of an auditor's career, mentorship mainly consists of helping an auditor to get started and explaining tasks. In a later stadium, a mentor mostly functions as a role model. Scandura and Viator (1994) characterize mentorship as a triad consisting of career development, functioning as a role model, and social support. Out of these three, career development contributes the most to preventing employee turnover. Viator (2001) shows that auditors learn most from their mentor when mentorships arise in an informal way instead of formal allocations.

#### 5. Avenues for future research – How can auditors best learn on-the-job?

As part of our FAR-project, our next steps are to examine how learning can be improved in several learning processes. More specifically, we will investigate how auditor learning is influenced by (i) the use of artificial intelligence, (ii) different feedback processes, and (iii) the interaction among auditors. For the first study, we will use an experiment. For the second and third study, we will use a survey in combination with archival data.

#### 6. Conclusions and Practical Relevance

In conclusion, we show that learning within the audit profession is a broad concept and occurs in a variety of ways. The variety in learning processes in the audit profession, on the one hand, offers opportunities because the development of an auditor does not depend on one learning process. The variety of learning processes is, on the other hand, a challenge because many different individuals are involved with the development of an auditor, which make consistency between the learning processes more difficult. Future research could address how different learning processes are related to each other and how the different learning processes can be organized to optimize the development of auditors. In the next years, we aim to address this challenge through our research project for the *Foundation for Auditing Research*.

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