

Reflection/Lessons Learned

Schön (1983) describes two types of reflection: reflection-in-action and reflection-on-action.

Reflection-in-action helps us as we complete a task. It is that process that allows us to reshape what we are working on, *while* we are working on it. It is that on-going experimentation that helps us find a viable solution. In this, we do not use a “trial-and-error” method. Rather, our actions are much more reasoned and purposeful than that. If something isn’t working correctly (doesn’t seem right, doesn’t seem to move you closer to the goal) then you “reflect” (a conscious activity) in the action-present. A critical aspect is the questioning of the assumptional nature of knowing-in-action (KIA), where KIA is not the action itself, but what that action really indicates that we know. In other words, knowing-in-action is often that tacit information that we know about doing something—it is often left unexplained or unmentioned when we describe what we do. It is revealed in skillful performance. Reflecting-in-action is generally called forth when a surprise appears in the process of accomplishing the task. And that surprise causes one to question how the surprise occurred given our usual thinking process.

As you work on your projects you should reflect-in-action. Many of the “surprises” you will encounter will appear because the knowing-in-action on which you draw is largely skills that you perhaps developed in other fields. Thus, the surprises occur because your old model doesn’t work without modification for the new task. You reflect-in-action and find out what is different and how you can change your thinking to address this new task.

Reflection-on-action in our design projects is provided by final reflection papers, portions of design documents titled “lessons learned,” and also any time (written or otherwise) in which you evaluate your own process (this is actually a critical part of the design process and should well be incorporated into your design documents). “We reflect *on* action, thinking back on what we have done in order to discover how our knowing-in-action may have contributed to an unexpected outcome” (Schön, 1983, p. 26).

So, how do you reflect-on-action? How do you write lessons learned or a reflection paper?

1. Start by choosing a critical incident. This incident could be something that you believe you *finally* did correctly after much ado or it could be something that even in the end you believe you didn’t do very well (in that case, the incident is that you turned in something that you were not pleased with). This incident will likely be reflected somewhere in your process documents—maybe it is a poor learner analysis or a schedule that was never adhered to.
2. Then, think about the components of that incident from two different time frames. For example, if it’s something with which you struggled and were proud of the accomplishment in the end, try to find that “light bulb” that helped you make sense of it. Then, what was it like before that time and what was it like after that time. If it’s something that you still did not master, think about what you did and what you would have like to have done. Write up that personal discussion (a reflection paper will be a conversation with yourself in a way).
3. Next, discuss the *thinking* process that either existed, or needed to exist, between the two time frames. What was not right in the knowing-in-action? See if you can find specific examples to link in this discussion. And, draw on your resources (book, articles, etc.) that help explain the incident.
4. Finally, wrap it all up. Summarize your lesson. In other words, what have you learned so next time your knowing-in-action (or at least your reflection-in-action) will be different and will reflect your new understanding?

Reference

Schön, D. A. (1987). Teaching artistry through reflection-in-action. In Educating the reflective practitioner (pp. 22-40). San Francisco, CA: Jossey-Bass Publishers.