Situating Learning Through a Module on Critical Reflection

Kacey L. Wochna

Purdue University

Introduction

A central tenet of constructivist learning theories is that learners must engage in critical reflection about their own perspectives and the perspectives of others. The ability to reflect critically is broadly considered an aim of higher and adult education (Mezirow, 1997). In fields such as teaching, medicine, and law, critical reflection is a typical component of professional education. For occupations that require less specialized education, however, critical reflection may be entirely absent from training and development, though these positions may depend similarly on analyzing and interpreting information, working with others, and problem solving. As Mezirow (1997) identifies in his work on transformative learning, descriptions of common workforce competencies imply that, "the essential learning required to prepare a productive and responsible worker for the twenty-first century must empower the individual to think as an autonomous agent in a collaborative context rather than to uncritically act on the received ideas and judgments of others" (p. 8). If we neglect critical reflection as a subject of instruction, we do not capitalize on this area for growth.

Critical reflection is not an easily developed capacity. Popular instructional strategies require repeated revisiting of situations, problems, and thinking patterns over a prolonged period, with regular aid from a coach and in conversation with other learners engaged in the process of inquiry (e.g., McDowell, Nagel, Williams, & Canepa, 2005, Schön, 1987). In professional education, an entire course may be dedicated to this purpose. In other contexts, the impractically of providing such instruction, combined with an emphasis on action over reflection, may be perceived as a barrier to incorporating critical reflection at all (Daudelin, 1997). Given the importance of critical reflection, it seems worthwhile to seek alternative opportunities to cultivate this skill.

This project proposes an instructional module that can be used to add elements of critical reflection onto an existing instructional program through retrospective reflection on the instruction itself. It can also be used to debrief after a project, conference, or other group enterprise. The module is domain-general, easily adaptable for different learning contexts, and inexpensive in time and resources. The lesson is closely based on the Critical Moments Reflection Methodology of McDowell and colleagues (2005), combined with elements of reflective note-taking (as described by Smith, 2011), but can be implemented in only one additional hour of instruction. Due to the abbreviation of what is usually an intensive process, learners will differ in their ability to benefit from the module, and some learners may engage in only superficial reflection. My premise is that engaging in even a small degree of reflection has the potential to make learners amenable to more substantial reflection in the future.

Review of the Literature

The basis for critical reflection is found in the work of Jon Dewey (e.g., 1933), who described it as the inquiry that is spurred by a feeling of doubt. Research on critical reflection overlaps with a number of related concepts involving critique, including critical analysis, reflective practice, and reflexivity, and numerous schemes have been proposed for categorizing types of reflection based on content or level of complexity (Mezirow, 1998; Smith, 2011; Ryan, 2012). A suitable general definition is that critical reflection means questioning and examining the influences and the consequences of our thoughts and actions. Critical reflection facilitates changes to our frame of reference, the collection of assumptions through which we interpret our experiences (Mezirow, 1997). Critical reflection can be can be anticipatory, contemporaneous, or retrospective in relation to action, (Loughran, 2002).

According to constructivist learning theories, critical reflection is a key component in constructing and updated personal knowledge from experience (Driscoll, 2005). The abilities to appreciate multiple perspectives and to engage in social negotiation also depend directly on critical reflection (Ertmer & Newby, 2013). Constructivist instructional strategies often aim to foster critical reflection. Methods for explicitly fostering critical reflection, such as the techniques from Donald Schön's (e.g., 1987; with Chris Argyris, 1974) extensive work on reflective practice, are inherently constructivist in nature, and tend to particularly exemplify situated learning theory.

Situated learning theory posits that people learn through engagement with others working towards expertise in a shared domain (Driscoll, 2005). Optimal learning from practice, either our own or another person's, involves making explicit the tacit knowledge used during skillful performance. Examining this knowing-in-action (a label coined by Schön) requires some form of critical reflection. One reason critical reflection is so prized in professional fields such as education and health is that it can expose the characteristics of expert performance (Schön, 1987). Although constructivists argue that we always learn from experiences in a context, the learning that results is not necessarily productive. A second reason critical reflection is valued in professional fields is because practitioners can easily begin to treat unique and challenging problems in a routinized fashion or view them as outside of their purview (Loughran, 2002). Critical reflection enables divergent learning outcomes rather than those that simply confirm our existing frames of reference.

Lesson Title: Incorporating Critical Reflection for Richer Learning

Learner Audience

The intended learners are adults or late adolescents who have recently undergone a program of instruction/training or have otherwise had a shared experience with the potential to generate learning, such as a collaborative project. Learners are not familiar with critical reflection or reflective practice and/or do not regularly engage in critical reflection as part of their education/practice.

Learning Objectives

After completing the lesson, learners will be able to

- Identify examples critical moments within an experience

- Evaluate multiple factors that can influence personal interpretation of an event

- Deduce guiding principles for practice from specific experiences

Learning Context

The intended learning environment is face-to-face group instruction, but the plan may be modified for synchronous or asynchronous online instruction. The lesson is for groups of five to 20 learners, although modifications are suggested for larger groups.

Time Required for Lesson

One hour, with suggested modifications to decrease instruction time and/or accommodate a larger group of students

Prior Knowledge

Learners must be able to recollect details of the shared experience. Learners ideally have some prior ideas about how the experience is relevant to a general future goal (e.g., learning a new skill, earning certification, developing more artful practice, resolving a problem).

Required Resources

- White board, chalkboard, bulletin board, or other method of visual presentation that will be visible and physically accessible to all students (e.g., poster board or chart paper which can be taped to a wall)

- Writing utensils appropriate for the above surface

- 20 - 40 Index cards

- Tape or pushpins

- Individual Reflection on a Critical Moment handout (see end of plan)

Instructional Procedure: Strategies and Activities

Preparation

Before lesson, draw/post a timeline of the experience on the board/wall. If using an experience taking place on a single day, number different activities as a way of dividing time (for example, 1) Before class, 2) Recap, 3) Presentation, 4) Exercise, 5) Closure, 6) After class). If using a longer experience, use dates and/or major events that can be easily identified by all participants and concretely located in time (for example, "First Meeting with Partners." "Received approval for the plan." "Started Pilot Implementation").

Pass out two index cards and an Individual Reflection on a Critical Moment handout (see end of plan) to every learner.

Modification: If fewer than ten learners, more index cards per learner can be used.

1. Introduction   *Time:* 2 minutes

Summarize the shared experience that will be the focus of the lesson (e.g., course module, class, training program, team-building exercise, meeting, project, meeting).

Identify the general shared goal of the learners during that experience (e.g., improving academic writing, participating in policy debates, establishing better relationships with clients, satisfying the demands of stakeholders).

Introduce the concept of using critical reflection to make explicit what was learned and to examine what more could be learned from the experience.

2. Generating Inquiry Questions   *Time*: 10 minutes

Instruct learners to write down one question raised for them during the experience that they are interested in discussing.

Collect index cards and organize cards on the board/wall into groups of similar questions. For each group, articulate the overarching question that connects the questions within a group.

Modification: If fewer than ten learners, learners can generate two questions each.

Modification: If group is large and/or time is short, skip this step and propose a list of possible inquiry questions instead. Examples of possible inquiry questions include:

- What tensions or conflicts emerged during the experience?
- How did our backgrounds influence our interpretation of the experience?
- What assumptions were made about the experience?
- Whose perspectives may have been excluded from the experience?
- Which were the main factors that made experience successful?
- Which situations put the experience at risk?
- What value have we brought to our partners with our participation in the experience?
- Who might gain from what has been done, and who might lose out?

3. Selecting Inquiry Questions   *Time*: 2 minutes

Instruct learners to consider which questions they are most interested in discussing. Have learners vote on each question using a show of hands and select the two most popular questions. Write/post questions on the board/wall.

4. Creating Critical Moments   *Time*: 5 minutes

Explain the timeline as a representation of the time course of the experience.

Ask learners to recall one moment from the experience that seemed significant or

meaningful to them. Some examples of critical moments include:

- Occurrence of surprise (good or bad),
- Emergence of an opportunity
- Emergence of a threat
- Realization of a difficult problem
- Solution of a difficult problem
- Conflict with a strong belief
- Achievement of an objective
- Change in an important part of the context
- Insight into though or behavior

Present some or all of the above examples to learners either verbally or in writing. Ask learners

to consider the moment as they perceived it at the time it occurred.

On their index cards, learners should record

- Their name
- A brief description of the event
- An indication of the their emotional response to the event (+ for positive, - for negative, O for neutral)
- The time the event occurred using the unit of the timeline.

Modification: If fewer than ten learners, learners can generate two moments each.

5. Organizing Critical Moments   *Time*: 2 minutes

Ask learners to place their index cards on the board/wall at the appropriate location on

the timeline, with positive moments above the line, negative moments below the line, and neutral

moments on the line.

Modification: If group is large and/or time is short, collect moments from learners and place

them or recruit a few volunteers to place moments.

6. Identify Patterns in the Timeline   *Time*: 3 minutes

Make observations about patterns revealed by the moments, such as moments relating to the same issue, phases resulting from similar moments, or moments that were meaningful for particular groups of learners. If time allow, elicit suggestions from the learners. Create a brief narrative.

7. Reflect Individually   *Time*: 10 minutes

Instruct learners to examine and question the relation of their critical moment to the experience using the questions from the Individual Reflection on a Critical Moment handout, and to take notes in the chart as they reflect. Encourage learners to start by focusing on their own view of the moment and the reasons for that view before considered other interpretations or perspectives.

8. Match Moments to Inquiry Questions   *Time*: 10 minutes

Instruct learners to repost their index cards by the inquiry question most related to their critical moment. Ask learners to briefly explain why they are grouping their moment that way (If group is large, have only a selection of learners share).

9. Connect Moments to Inquiry Questions   *Time*: 15 minutes

Facilitate while learners discuss how the moments might be useful for answering the inquiry questions. Ask learners to identify themes, and to posit assertions or principles about their learning/practice based on the critical moments.

10. Conclusion   *Time*: 1 minute

Thank learners for being willing to engage in critical reflection on the shared experience. Briefly synthesize any takeaways and ongoing questions that arose during the discussion

Individual Reflection on a Critical Moment

Reflective Questions	Observations/Opinions	Questions and Hypotheses
What about the moment strikes you as important? What influenced your thoughts and feelings in the moment?		
How were interactions with other people relevant in the moment? Did other people's perspectives affect your interpretation of the moment?		
How do aspects of your disciplinary background lead you to focus on some aspects of the moment and not others? How might someone with a different perspective or approach than you frame the moment?		
How does the moment relate to your life outside of this experience? What assertions can you make about your learning or your practice based on the moment?		

References

Argyris, C., & Schön, D. A. (1974). *Theory in practice: Increasing professional effectiveness*. San Francisco, CA: Jossey-Bass.

Daudelin, M. W. (1997). Learning from experience through reflection. *Organizational Dynamics*, *24*(3), 36-48.

Dewey, J. (1933). *How we think*. Lexington, MA: DC Heath.

Driscoll, M.P. (2005). *Psychology of learning for instruction*. (3rd ed.). Boston, MA: Allyn & Bacon.

Ertmer, P. A., & Newby, T. J. (2013). Behaviorism, cognitivism, constructivism: Comparing critical features from an instructional design perspective. *Performance Improvement Quarterly*, *26*(2), 43–64. doi:10.1002/piq

Loughran, J. J. (2002). Effective reflective practice: In search of meaning in learning about teaching. *Journal of Teacher Education*, *53*(1), 33–43. doi:10.1177/0022487102053001004

McDowell, C., Nagel, A., Williams, S. M., & Canepa, C. (2005). Building knowledge from the practice of local communities. *Knowledge Management for Development Journal*, *1*(3), 30-40.

Mezirow, J. (1997). Transformative learning: Theory to practice. *New Directions for Adult and Continuing Education*, *1997*(74), 5–12. doi:10.1002/ace.7401

Mezirow, J. (1998). On critical reflection. *Adult Education Quarterly*, *48*(3), 185–198.

Ryan, M. (2012). The pedagogical balancing act: Teaching reflection in higher education. *Teaching in Higher Education*, *2517*, 1–12. doi:10.1080/13562517.2012.694104

Schön, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco, CA: Jossey-Bass.

Smith, E. (2011). Teaching critical reflection. *Teaching in Higher Education*, *16*(2), 211–223.

doi:10.1080/13562517.2010.515022