Journaling: A Learning Tool for Project Management Training and Team-building

Robert Loo, The University of Lethbridge, Faculty of Management, Lethbridge, Alberta T1K 3M4 Canada

Teamwork and managing teams can be very stressful because of interpersonal and task conflicts, the pressures of deadlines, performance standards, and resource scarcity, among other disagreements that typically threaten team effectiveness and success. Project managers control such threats to team effectiveness partly through measures such as timely training in leadership skills, conflict management skills, communication skills, and the like. Another method to manage such threats is through the implementation of various administrative procedures and practices such as team meetings and performance reviews.

This paper focuses on the usefulness of reflective learning journals as a method of promoting both individual and team performance in the context of project management training and team-building (Fleming & Koppelman, 1997; Goodge, 1998; Zimmerer & Yasin, 1998). Critical reflection upon project team experiences through journaling should facilitate learning specific skills including interpersonal communications, conflict management, managing effective meetings, managing stress, and leadership skills. The nature of reflective learning, the use of reflective learning journals, and their application in teamwork are illustrated along with recommendations for the effective use of journaling in project management.

Theory and Practice of Reflective Learning

Boyd and Fayles (1983) define reflection as "the process of internally examining and exploring an issue of concern, triggered by an experience, which creates and clarifies meaning in terms of self and which results in a changed conceptual perspective" (p. 100). Reflection is embedded within several theoretical frameworks (Hutchinson & Allen, 1997; Kember, Jones, Loke, McKay, Sinclair, Tse, Webb, Wong, F., Wong, M., & Yeung, 1999; McCaugherty, 1991; Riley-Doucet & Wilson, 1997; Scanlon & Chernomas, 1997). This paper used Scanlon's and Chernomas's (1997) three-stage model because it is a relatively simple model that easily can be communicated and used. As seen in Figure 1, the first stage of reflection is awareness, where awareness might be stimulated by some uncomfortable or positive thoughts or feelings about a learning situation or event. Without such awareness, reflection cannot occur.

In the second stage, the individual critically analyzes the situation, bringing to bear his or her relevant knowledge and experiences as well as the application of new knowledge resulting from the analysis process. This stage should involve critical thinking and evaluation and self-examination with accompanying growing self-awareness.

Abstract

This paper describes the application of reflective learning journals to promote critical self-awareness. This technique improved both individual and team performance among members in nine management undergraduate teams conducting project management research projects. Qualitative analyses of entries in the journals revealed seven major themes: interpersonal relationships, team communication, stress-time pressures, team vs. individual work, personal criticisms and improvement, lessons learned and future actions to improve one's performance, and evaluation and comments about journaling. Analyses of the journaling evaluation data showed that participants found journaling a useful learning tool. Recommendations are presented for using reflective learning journals as one tool in project management training and team-building.

Keywords: learning journals; team-building; training

©2002 by the Project Management Institute 2002, Vol. 33, No. 4, 61–66 8756-9728/02/\$10.00 per article + \$0.50 per page The third and final stage involves the development of a new perspective based upon one's critical analysis and the application of new knowledge to the (learning) situation under reflection. The new perspective may be marked by affective, cognitive, and behavioral changes. The author expects that such changes are adaptive in the sense that the individual becomes more effective as an individual and team member; clearly then, learning has occurred.

Essentially, this view of reflective learning fits well with several theoretical frameworks such as Schon's (1987) reflective practitioner and "knowing-in-action" and the empowerment literature (Shulman, McCormack, Luechauer, & Shulman, 1993; Spreitzer, 1995) because journaling is a process whereby learners take a great deal of control over their own learning experiences and give meaning to their learning. Reflective learning journals are an important tool in translating theory into practical action, i.e., praxis.

Applications Example

The present example illustrates the use of reflective learning journals in project teams, specifically, in four-student teams in a faculty of management undergraduate project management course. The 35 management undergraduates formed their own four-student teams for a total of nine teams at the beginning of the semester to work on a major term paper worth 30% of their final grade. The team worked together over a period of about 10 weeks. Peer evaluations were used at the end of the assignment to apportion marks among group members.

In addition to the information provided in the course outline, handouts (available from the authors upon request) were provided as well as class discussions held on several occasions concerning the nature and scope of the term paper, the Scanlon and Chernomas (1997) model of reflective learning, and the guidelines for the reflective learning journals.

A reflective learning journal was part of the electronic submission requirement at the end of the assignment, and each journal was worth a maximum of 5% of each student's final grade. It was emphasized that journals are not simply a "diary" or "log" but an articulated narrative that follows from the reflective and critical thinking about one's learning experiences or specific learning events. Six questions were posed to help students stay focused and make journaling a useful exercise:

- What was the learning situation/event?
- What have I learned, and how did I learn it?
- How do I feel (good and bad feelings) about what I learned?
- How could I have learned more effectively/efficiently?
- What actions can I take to learn more effectively/ efficiently in the future?
- In what ways do I need to change my attitudes, expectations, values, and the like to feel better about learning situations?

Tips also were provided to students in the handout as well as during class discussion:

- Pick a quiet place and reflective time, e.g., early evening in your room, to do your journal entries;
- Entries should be done at least twice weekly or daily when there is significant project activity, e.g., project meetings or completing the project report;

- Stated questions should help stimulate ideas and keep focused on learning in this course requirement, but feel free to discuss other questions/topics or incidents that you judge to be important to your learning effectiveness;
- Be self-aware, honest, and open in your reflection—self-delusion won't help improve your effectiveness. Go from genuine self-awareness to self-evaluation, and then to actions for improvement.

Given that these guiding questions and tips were provided to all students as part of a handout and the various occasions in which class discussion took place about journaling, the process might be described as "guided journaling." Journals were submitted in electronic form, and students received individual feedback on their journal along with their grade. Class feedback on journaling was provided when research reports were returned to the class. Last, students were asked to evaluate the journaling approach by responding to five questions (Table 1) and adding their comments, at the end of semester.

Analyses and Findings From the Reflective Learning Journals

The qualitative software program NUD*IST (Non-Numerical, Unstructured, Data: Indexing, Searching, and Theorizing) (NUD*IST, 1997) and a dictionary of codes, e.g., positive and negative interpersonal communication, interpersonal conflict, and lessons learned, generated by the investigator were used to categorize the text in the journals; each sentence was a unit of analysis. The investigator then used an iterative process to develop and refine themes and subthemes that reflect the information in the learning journals. The themes and subthemes were subject to a reliability check by the research assistant.

Seven major themes plus subthemes emerged from the journals: interpersonal relationships, team communication, stress-time pressures, team vs. individual work, personal criticisms and improvement, lessons learned and future actions to improve one's performance, and evaluation and comments about journaling.

Interpersonal Relationships

This team assignment was associated with a mix of positive and negative interpersonal interactions over the course of the assignment as indicated by a number of subthemes.

Shared Goal and Focus. Some students were quite happy with their group, mainly because team members shared a common goal, did their share of work, met deadlines, and the like.

- "The one thing that made our paper and team come together was the fact that we all had the same goals. When everyone in a group has the same group performance goals, group work is a more satisfying experience;"
- "This group I have been working with have been great. Everyone seems to be eager to work, and I like how we divided up the work load;"
- "Our group did work well together, when we were at meetings there was not a lot of idle chit chat; we got down to business."

Statements	Agree strongly	Agree	Disagree	Disagree strongly
I found the learning journal very difficult to do.	0.0%	22.2%	61.1%	16.7%
I now have a better grasp about how to do a learning journal.	5.6%	55.6%	38.8%	0.0%
I now feel that I have greater insight into my own learning.	11.8%	52.9%	35.3%	0.0%
4. I think I will use a learning journal in the future.	0.0%	33.3%	44.5%	22.2%
5. In the future, I will reflect more upon my learning experiences.	23.5%	58.9%	17.6%	0.0%

Table 1. Percent Responses to the Five Evaluation Statements

Personal Compatibility. Other students commented on the good fit of personalities or effective aspects of group interactions.

- "As far as personalities go, our personalities coincide very well;"
- "[We] possess similar personalities, so we enjoy learning from one another:"
- "We seem to be getting along great so far this semester and I hope that it continues throughout the project."

Safe Environment. Some comments reflected a "safe environment" team in that the team climate was supportive rather than threatening.

- "What really worked well during this meeting was the fact that everyone contributed their ideas, and no one criticized ideas offered ... I have found that this group has helped me to come out of my shell;"
- "There was [sic] no criticism or accusations made ... I believe that this cohesion produced a fantastic paper and a great rapport between each of us;"
- "I found it great that we all accepted each other's feedback and made the suggested changes to our individual work."

Humor. There were a few comments about the positive effects of humor in group meetings.

■ "I have a good sense of humor and like to display that, especially in a group setting. This sense of humor helped with loosening our group up at the beginning of our meetings."

On the other hand, there were negative comments about interactions within the team.

Interactions Lacking Focus. Some students noted the frustrations when group meetings lacked focus or were discussions about unrelated matters.

"Made it difficult to get any work done because of talking about unrelated subjects, disagreements, and differing outlooks, which had to be treaded on carefully in order to keep from hurting any feelings;"

"This lack of focus was mainly due to our lack of knowledge of each other personally."

Friends vs. Colleagues. While students may believe initially that working with friends will make projects easier, they soon discover that is not always the case.

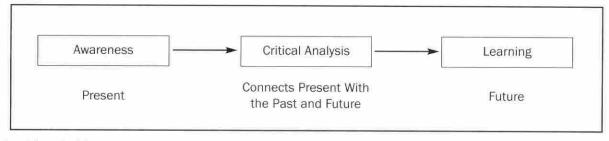
■ "I also reaffirmed my belief that having team members with whom you also share a social relationship with is not always conducive to getting things accomplished."

Interpersonal Conflict. Some students noted conflict with other group members.

■ "For the first time in my university career, I feel like getting mad every time I have a meeting in this group. It's not that I have personal differences with anyone, in fact [we] are good friends. It's just that we seem to argue over the stupidest things."

Self-Awareness and Interrelationships. Some students recognized aspects of their own personality and interpersonal style that hindered constructive interrelationships. Some made efforts to change their behaviors.

- "At these meetings, I can't help but feel that I'm taking charge too much. A nasty habit of mine, I usually try to dominate the conversation ... I am concerned that I may be offending my other group members, and I have tried to talk about it with my group members. Nobody has made any complaints so far;"
- "I have traditionally hated working in groups ... Having been let down in the past, I seem to have developed a bit of a pessimistic outlook when it comes to relying on other people for work that will directly affect me;"
- "I can get aggravated quite easily if I am under pressure and if things don't go the expected way I planned, so I need to take a deep breath, step back, and remember that my team members are in the same boat as I am with school, work, and social lives."



Note. Adapted from the Atkins and Murphy (1993) three-stage model of reflective learning.

Figure 1. Reflective Process

Group Communication

Not surprisingly, there were many comments related to communication within teams, including comments about both effective and ineffective communications.

Usefulness of E-mail as a Communications Tool. Several journal entries emphasized the usefulness of e-mail as a communication tool for the group assignment.

- "I sent an e-mail to all team members, getting folks to start thinking about the kind of project they wanted to do. We e-mailed back and forth two or three times and finally all confirmed the topic;"
- "We were all up to speed because we kept in touch through e-mail;"
- "I learned that I love e-mail!"

Effective Communication Leading to Effective Meetings. Some students noted examples of effective group communication leading to effective meetings.

- "During this meeting we had excellent communication and focus. The meeting was not long—just under an hour—but we got a lot accomplished and I think that we all came away from the meeting with a good feeling."
- "What really worked well during this meeting was the fact that everyone contributed their ideas and no one criticized ideas offered."

There also were instances of ineffective communications noted in some journal entries.

Off-Task Communications. Some students noted the frustrations of group meetings in which they felt that too much time was spent on discussions not relevant to the task—the group term paper.

■ "We really haven't done that much together, and when we do get together, we tend to talk a lot about unrelated topics."

Ineffective Communications. There were journal entries that noted ineffective communications in the sense that communication was not focused, ambiguous, and the like.

- "I think we must have been on different wavelengths the evening we chose our topic. It was very different than what we talked about;"
- "Today we discussed our problem, and I realized that it was pretty bad. Ironically, by talking about it, we got even further off track without addressing the real problem. I guess it would help if we had an agenda and appointed someone to be the watch dog for each meeting."

Negative Reactions to E-mail. While some students had positive evaluations of e-mail as a communications tool, others did not like using e-mail or found the communications frustrating.

- "We discussed after our first team exercise that e-mailing was a bad means of communicating ... Some team members were not as keen as others on using e-mail for correspondence;"
- "She said she would e-mail us a draft and we could look it over and send it back to her on Thursday. That sounded like a great plan, but Netscape was down most of Wednesday and Thursday so I couldn't get my mail."

Stress-Time Pressures

Some students commented on stress mainly due to time pressures.

- "We realized we started too late on this paper, and we're starting to get snappy and crabby at and with each other—unjustified actions;"
- "From the beginning, we failed to get organized. Now we are all in a panic trying to find the easiest way to produce a good paper;"
- "I have so much other work to do that I can't organize or get other people going and coordinate the proceedings."

On a positive note, one student stated:

"After a good meeting like this, my stress level just dropped two notches."

The distressful effects of time pressures also were mentioned:

- "I'm worried that we don't have enough done yet, and I'm worried that we are not going to finish this in time. We need to get going, but everyone's schedule is so limited;"
- "I think we may have been feeling the pressure because there is [sic] only two weeks before the paper is due."

Team vs. Individual Work

While the assignment was a group paper, some students commented favorably on the ability to divide the work among members, or in other words, the ability to do individual as well as group work. Other students commented that the group assignment allowed individual work too; therefore, students could break the project into individual tasks and coordinate the work.

■ "The ability for the individual team members to work individually, yet still [work] towards [sic] the common goal of the group saved everyone a lot of unnecessary meeting times and headaches in the end."

Personal Criticism and Improvement

Some students made critical self-assessments and then went the next step to identify points for personal improvement.

- "I have to learn to control my anger ... I personally can be better prepared through planning and time management; hopefully this will also make me a better communicator;"
- "I admit that I tend to procrastinate, but with this group I can't do that. That is a good thing;"
- "I have to admit when I am wrong and accept someone else's way of doing things sometimes;"
- "I made a point to listen to what people were saying and making myself more aware of their opinions."

Lessons Learned and Future Actions to Improve One's Performance

In line with the main purpose of the learning journals, many students reflected upon the team assignment and identified lessons learned as well as actions they could take to improve their own learning and team effectiveness in the future. Journal entries were grouped into four categories: management skills, the "people" side of teamwork, learning from others, and learning from "bad" experiences.

Management Skills. Comments in this category reflected basic management skills such as communications skills, planning, time management, and the like.

- "In the future I plan to take a speech class in order to help me with my communication skills;"
- In the future I am going to make a list of things I want to get done;"
- If found that the scheduling of these meetings gave us ample time to get accomplished what we needed to, as well as giving us some 'cushion time' in case of delays, missed meetings, research time, and so on. Through this, I quickly learned that a 'cushion' amount of time is just as vital as a 'cushion' amount of money in a project budget. This is extremely apparent when the weather turned bad in the final week of the project. If we had not the additional time prior to this past week, the project would have been in dire straits;"
- "... Decision-making and leadership styles are largely situational and will have to change in order to best suit the needs of the project;"
- "The one thing I really learned through the whole experience is that we need better planning and communication. The whole project would have gone a lot smoother and faster if we just planned out what we were going to do;"
- "I have learned now that I can't do as much as I want to sometimes, so I have to pace myself and realize that I can't work 24 hours a day."

"People" Side of Teamwork. Comments included in this category reflected the interpersonal relations side of teamwork.

- "So, at this point, I learned that groups take time to get use [sic] to each other. I learned to be patient and get to know group members before tackling a big problem;"
- "I learned that it really helps when individuals allow each other to work in their [sic] areas of strength;"

"In the past, I had always been disapproving of other people that missed scheduled project meetings. What I learned was that sometimes it truly is unavoidable."

Learning From Others. A few entries reflected the usefulness of social learning and imitation.

■ "I learned a lot from just watching [him] operate in a group setting. [He] was a good chairperson or leader of meetings. From this I learned some important leadership techniques."

Learning From "Bad" Experiences. Some students recognized the value of learning from situations that were ineffective, so they learned not to behave that way in the future.

- "I have learned more from this completely ineffective group than I would have from any good group I may have worked with. Maybe not more, but different things, which I consider more important for me to know;"
- "I learned what not to do."

Evaluation and Comments About Journaling

The responses to the seven evaluation questions are presented in Table 1. Overall, the results were positive but there were participants who found journaling difficult to do or who would not consider doing journals in the future. Clearly, there is a need when using this method to communicate more convincingly to participants the usefulness of journaling in effective learning. There were several positive comments about the usefulness of journaling.

- "Overall I think this was a good experience, and I enjoyed doing the learning journal as well;"
- "I believe I learned quite a bit from my [sic] writing my journal myself. I saw definite areas that need to be polished, need to be started sooner, more structure to them [sic], set milestones, etc., and areas that I can help make these differences happen—not pass it off on others. The problems, good points, and feelings in this journal, and the possible solutions are such that they can be applied to other similar situations I may run into in the future."

Lessons Learned and Recommendations for Managers

Journaling can be a useful learning tool for managers to record and critically reflect upon their own work performance with the aim of improving their management skills and performance. Senior managers who mentor or coach new managers may find that assigning a journaling exercise is a useful way of obtaining specific work-related information for discussion and advice-giving in the mentoring/coaching relationship.

Managers can use journaling as one tool in team-building for project teams or management teams. Journaling also can help turn problem teams around because the analysis of journal entries from problem teams can identify problem areas—technical or people problems—for corrective actions.

Lessons Learned and Recommendations for Trainers

Instructors need to thoroughly and convincingly communicate to participants the purpose, value, and procedure for learning journals. Comprehensive handouts and periodic reminders to participants about doing their journaling, i.e., coached reflection, are important.

It is important to provide detailed individual and class feedback on the journals along with specific recommendations for students to improve their future learning. Instructors must ensure the confidentiality of journals so students feel secure in recording sensitive and personal information.

Instructors also should identify problem learning areas, e.g., poor communication and time management skills, or obstacles to learning, e.g., inadequate management support for training, in order to offer remedial action in training courses.

Lessons Learned and Recommendations for Learners

Learning is an active empowering process so students must be encouraged to take control over their own learning and ability to learn from experience. Reflective learning journals provide learners with an important opportunity to empower themselves and to learn if they take journaling seriously.

Learners need to hone basic project management skills, e.g., doing detailed planning, scheduling, and prioritizing of activities, including self-management skills, e.g., conflict resolution, communication, and time management skills.

Conclusions

Findings from this study show that reflective learning journals, with the guidance and support of instructors, are useful tools that can help staff learn as individuals as well as members of teams. Significantly, this group of students provided evidence demonstrating they learned that identification of their shortcomings is important and that it is essential to take steps to change behaviors to work compatibly within teams. The reflective learning journals stimulated students to contemplate how they would fit in as a contributing member of a team.

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Robert Loo, PhD, is professor of management at the University of Lethbridge. Before joining the university in 1989, he worked extensively in both private and public sector organizations since the 1960s. Loo has

held both project and program management positions in organizations such as the Canadian Department of National Defense, the Systems Division at Bell-Northern Research, and the federal Public Service Commission of Canada. He has published more than 100 journal articles and book chapters over the past 25 years.

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