Reflective Diaries as a Tool for Promoting Learning and Teaching in Higher Education

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Abstract

The concept of reflection has become increasingly prevalent in higher education over recent decades, particularly in the domains of teaching and learning. Being a reflective learner means that students can critically evaluate their learning, determine areas of their learning that need further development and make themselves more independent learners. This paper discusses a case study where reflective diaries were used to facilitate and assess both learning and teaching methods. As an assessment method, reflective diaries can assess students' comprehension of the course content and can also promote critical self-reflection and enhance self-awareness (Biggs, 1999; O'Rourke, 1998). The data were collected through individual interviews and reflective diaries written by undergraduate students at the University of Dhofar. Data analysis indicates that the use of reflective diaries proved beneficial for enhancing both teaching and learning experiences. This is because the process of writing the diaries requires students to reflect on the learning activities that have taken place in class, analyze their own learning and express it in a personal way. Reflective diaries can also enable teachers to evaluate their teaching methods and generate feedback for improving their classroom practices.

Keywords: reflection, reflective diaries, reflective teaching, self-assessment, self-regulation

1. Introduction

Reflection is a vital element of human life, involving the deliberate evaluation and analysis of our actions, both current and past. While reflective learning is founded on the principle that we can enhance our learning methods by systematically recording and reflecting on our experiences, the definition of 'reflection' varies widely among researchers and academics. Dewey (1933) was among the first to consider reflection as a specialised form of thinking. According to Dewey (1933, p.3) reflection is 'a kind of thinking that consists of turning a subject over in the mind and giving it serious and consecutive consideration'. He explained the concept of reflection as

'the active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and further conclusions to which it leads...it includes a conscious and voluntary effort to establish belief upon a firm basis of evidence and rationality' (Dewey, 1933, p.9).

Expanding on Dewey's work, Schön (1983, 1987) argued that reflective practice should be more tied to action. Consequently, he proposed his theory of reflective practice which encompasses two types of reflection: reflection-in-action, defined as "...a reflective conversation with the situation" (Schön, 1983, p.163), in which individuals think about what they are doing while still immersed in the situation; and reflection-on-action which entails evaluating what has been done after the activity has concluded. Thus, it seems that the process of reflection requires students to question what they see, hear, read and experience and this in turn can enhance their critical thinking abilities and promote a deeper, more meaningful approach to learning, rather than a superficial one.

The purpose of this paper is to describe and evaluate the implementation of reflective diaries in an undergraduate course at Dhofar universities in order to explore the potential of diaries for promoting students learning and improving teaching. In the following sections, we first give an overview of the idea of learning diaries in some detail. Subsequently, we present the study: participants, procedure and the results of the study. The results will be illustrated using extracts from the diaries and interviews. Furthermore, some recommendations for structuring journal-writing activities in undergraduate courses will be offered at the end.

2. Literature Review

It is crucial for students to become autonomous learners and develop the ability to reflect on their own learning processes. University students, in particular, must work independently and self-regulate their learning: they need to manage their own study routines and learning habits. Due to the pivotal role of independent and reflective learning skills in education, substantial research has explored methods for fostering these skills among learners (e.g., Chen, Chavez, Ong & Gunderson, 2017; Pintrich, 2002; Zimmerman, 2002). Introducing reflective diaries as a writing tool for students is one of the approaches to promote self-regulation. Diaries can be used to probe students' learning and can also be used "...as a research method to better understand students' learning processes" (Wallin, Adawi & Gold, 2016, p.155). As we shall see below, using carefully designed prompts can help students focus their diary responses. The prompts

help them engage in self-reflection and this in turn can promote students' learning (Boekaerts, 1999; Fabriz, Dignath-van Ewijk, Poarch & Bütner, 2014; Jarvis, 2001; Wallin et al., 2016). Furthermore, diaries provide teachers with a deeper understanding of how students are learning: educators can gain insights into students' thought processes, challenges, and areas of understanding or misunderstanding. This enables teachers to effectively address any misconceptions or gaps in learning, thereby improving their teaching strategies and fostering better educational outcomes for students (Connor-Greene, 2000).

A number of studies across a range of disciplines in higher education have shown that diary writing enable students to be creative and questioning and thus help them to be critical and reflective about their learning (see Erdman, 1983; Flower & Hayes, 1981; Gipe & Richards, 1990, 1992; Ifenthaler, 2012; Jarvis 2001; Ozan & Kincal, 2018;; Tang, 2002; Wallin & Adawi, 2018; Yinger & Clark, 1981). Therefore, reflective diaries are beneficial to both students and teachers as they can positively influence students' educational experiences in the following ways:

- Diary writing encourages students to reflect on and articulate their thoughts and problem-solving strategies (Fogarty & McTighe, 1993)
- It helps students to become better at identifying and analyzing their difficulties (Clarke, Waywood & Stephens, 1993)
- Diaries support effective acquisition and transferability of cognitive and metacognitive skills across disciplines (Perkins, Simmons & Tishman, 1990)

For these reasons, reflective journals have been adopted in several discipline areas in higher education such as early childhood education (Cornish & Cantor, 2008), psychology (Hettich, 1990), nursing (Jensen & Joy, 2005; Richardson & Maltby, 1995; Thorpe, 2004; Wong, Kember, Chung, & Yan, 1995), business (Pavlovich, Collins & Jones, 2009), physical therapy (Plack, Driscoll, Blissett, McKenna & Plack, 2005; Williams & Sundelin, 2000) and literature (Cole, 1994).

However, it should be noted that although reflective journals are widely used across a range of disciplines in higher education, some studies present a less optimistic perspective, highlighting several issues associated with journal writing. For example, some students may not be used to engaging in self-reflection and this may result in superficial or incomplete reflections; the overuse of journal writing can lead to burnout and the evaluation of diaries might not be an easy task (Chandler, 1997; Crème, 2005; Dunlap, 2006; Dyment & O'Connell, 2010; Mills, 2008).

However, while these concerns are valid, several studies have revealed that the majority of students' diaries contain highly reflective accounts (e.g., Sumsion & Fleet, 1996; Williams, Wessel, Gemus & Foster-Seargeant, 2002). It is possible that some students may present merely descriptive entiries (e.g., Minott, 2008; Dyment & O'Connell, 2010; O'Connell & Dyment, 2004; Wessel & Larin, 2006) but this could be minimised or controlled if the purpose and expectations of the reflective diaries are well-explained to students. This emphasizes the significance of having carefully designed prompts in reflective diaries. Instructors should articulate the importance of diary writing to students before they begin, offering them guidance and support throughout the process (Fisher, 2003; Nesoff, 2004; Thorpe, 2004). Thus, clear communication of the diary's purpose from the outset is crucial for ensuring its effectiveness. This approach helps students understand the intended outcomes of diary writing, encourages deeper reflection, and minimizes the risk of students producing superficial or descriptive entries.

The assessment of learning journals, on other hand, can be difficult and controversial. According to Kember et al. (1996), students are unlikely to participate in written reflective practice unless it is explicitly required as part of their coursework. Other researchers suggest that grades can keep students motivated to write deeply critical journal entries (Creme, 2005). Therefore, "...when lecturers design their assessment criteria and standards for the journal writing assignment, they might choose to reward students who write more deeply and critically with higher grades" (Dyment & O'Connell, 2010, p.239). Nevertheless, this is problematic as grading the diaries may encourage students to write to the criteria (i.e. for the marks) at the expense of genuine reflection (Chandler, 1997). Thus, we believe that grading the diaries should be avoided because it can lead students to write content that aligns with what they believe the teacher expects, rather than fostering genuine reflection and exploration of personal learning experiences. Instead of grading, instructors can foster student reflection on their learning journey through providing meaningful feedback. It is important to note that teachers should reinforce the value of the reflective diaries by responding to students, either individually or collectively. "...When you as an instructor respond to the students' journal entries it establishes your commitment to the process and sends a clear message that you care about what they have to say" (Dunlap, 2006, p.24). This will probably motivate the students and encourage them to be more serious about the diary writing.

As discussed above, there is substantial evidence indicating that diary writing encourages students to deeply analyze and evaluate their experiences, which helps develop critical thinking skills and a better understanding of their thoughts and actions. The current study seeks to investigate further how reflective diaries can facilitate in-depth exploration of students' learning experiences and enhance teaching practices. Additionally, it aims to identify the challenges associated with the use of reflective diaries in higher education and propose strategies to address these challenges.

3. Method:

3.1 Participants

24 undergraduate college students participated in the study. They were all native speakers of Omani Arabic and were studying English in the department of English Language and Literature at Dhofar University. There were 14 first-year students: 2 males and 12 females; and 10 third-year students: 3 males, 7 females. It should be noted that participants were not assigned grades for their diary entries. Rather, they

were encouraged and informed that the diaries constituted an essential component of the course, benefiting both students and instructors. Furthermore, the diaries were not graded to encourage students to freely express their genuine feelings and thoughts. Participants were also notified that their diaries would not be kept entirely private and therefore they all gave their informed consent that the written journals could be used for research purposes.

3.2 Study Context and Design

The context for this study is an introductory course on linguistics. The aim of this module is to introduce students to the core concepts, terminology, and technical apparatus of the structural parts of linguistics (phonology, morphology, syntax, semantics), as well as the conceptual underpinnings of the discipline. The aims were to promote and probe students' learning and also to evaluate the use of reflective diaries and teaching activities.

Students were asked to keep reflective diaries of their learning every week: diaries were written regularly over a period of a whole semester, starting from week 3. Students kept diaries following guidelines provided by the lecturer, reflecting on their class activities/experiences/problems. They were told in class, and in a handout, that they could write about what happens in classes and how they feel about their progress. Since students had no previous experience of the process of reflection, it was explained to them in class at the beginning of the semester. Furthermore, they were given the following questions to reflect upon when writing diaries:

- a) What topics did you study? And What activities did you do?
- b) How are they related to topics covered in previous classes?
- c) What are your feelings about what you have studied? Was it interesting/boring? Easy/difficult? useful/Useless...etc.? and why?
- d) How did you approach the challenge?
- e) Are you happy with your work last week? Why/Why not? Would you do anything differently?

Participants were informed that the diaries could be either typed or handwritten. They were also given the freedom to write as extensively or succinctly as they preferred. Furthermore, in order to encourage participants to express their genuine feelings and thoughts, they were instructed not to include their names in the diaries. Additionally, to support participants in enhancing their reflective skills, we provided feedback on their reflections. Certain diaries containing exemplary reflective sections were showcased in class to illustrate the desired criteria and deepen students' understanding of the teacher's expectations. Finally, individual interviews were conducted at the end of the semester in which students were asked about their perceptions and experiences with the writing of the diaries.

4. Results

In this section, the results of the study are presented. As mentioned above, the study is based on two tasks: reflective diaries and individual interviews. Firstly, we look at data taken from the diaries using excerpts from these diaries to illustrate how they are useful in promoting teaching and learning activities. In the second part, we look at the interviews.

When selecting the diaries, our focus was on how the diary content addressed the suggested questions and in particular we focused on the self-reflection part: whether participants understand the class content; whether they can make connections between different parts/topics; and how the topics covered can be useful in other courses or in future. We also examined how the diaries could help identify challenges that students face, enabling us to provide support to those who may be struggling.

First of all, it should be noted that most of the diaries were written following the suggested questions but some of them were descriptive in nature: the diarists did not show any critical reflection in their writing, especially at the beginning of the semester, as the following extract illustrates:

"Today we studied about language properties. Firstly, we discussed what we thought language properties mean... Then we looked at some of these properties... Lastly, we had to answer some exercises on the study of language..." (S3)

This was expected as the students had no prior experience of reflective practices. However, after a few attempts, most students began to produce diary entries that demonstrated better reflective thinking. As noted earlier, reflection enables students to adopt an interrogative approach to learning, encouraging them to think broadly and critically about the content they encounter in classes as the following extracts show:

"...This week We talked about the branches of linguistics (morphology, phonology, syntax and semantics). Actually when I heard about them for the first time it was hard to understand the meaning of each one of them because the terms were new for me but when we discussed about them, they become clearer... Also, when I did some research about linguistics and the branches of linguistics and read about them, I found them more easier...We studied about human language properties and I personally liked it because I cannot understand how I have not thought of this before..." (S1)

"...Phonetics was scary at the beginning but I really like it now... I found my pronunciation was wrong...I think it will help me even in my future because I want to become a teacher... This course is very interesting but sometimes it is difficult as there are so many technical terms that I cannot understand. The professor helped us a lot by focusing on these terms and giving us examples...I think that if you cannot understand these Latin and Greek terms, it would be very hard to understand the course..." (S5)

"...After three weeks of morphology and syntax, I find these fields very interesting because we learn several techniques that enable us to

analyse and describe the word- and sentence-structure of any language in the world... In morphology, we talked about word-formation processes in English and other languages as well. How affixes are attached to words and how some affixes may carry some semantic weight on their own. This was extremely helpful as it helps me to think and improve my problem-solving skills... I think understanding how we add new words to our language and the rules that govern their use is crucial for us..." (S10)

Furthermore, diaries can help students reflect on the lessons covered in class, prompting them to consider the difficulties and challenges they encountered. They also encourage students to think about potential strategies to overcome these challenges:

"In this course, topics are linked together... I mean that if you do not understand some topics or miss classes, it will be very hard to catch up later in the course... At the beginning I found it very difficult as I did not prepare well. After I started preparing for the classes, I really started to understand and enjoy the course..." (S21)

Finally, diary entries can serve as written representations of the level of understanding students have attained. They also provide teachers with feedback on the effectiveness of class activities:

"...I found the seminars very helpful as all students help each other when there is a difficult question... I also like the fact that you change the seminar group members every week... I worked with all students and learnt a lot..." (S8)

"...also you review with us the previous lecture so we don't have the chance to forget the information and that what will help us understand all the lectures..."(S13)

"...the classes are always fun to learn...you always have a different teaching activity for us....I think podcasting and our weekly seminars were the most helpful activities for me and for the other students as well..."(S2)

As the above results show, diaries appear to be effective tools for promoting reflection and fostering reflective learning among students. Through consistent diary writing, students can actively reflect on their experiences, thoughts, and learning processes. This reflective practice encourages deeper understanding, self-awareness, and the development of critical thinking skills. We now turn our attention to the data obtained from the interviews. It is important to mention that only 11 students were randomly chosen for the interviews which were conducted at the end of the semester.

During the interviews, participants were asked to discuss their perspectives on diary writing and its impact on their learning. The interviews provided insights into the students' experiences with the diaries, the difficulties they faced, and their developmental progress over time. When interviewed, most students stated that they encountered some challenges early in the semester because they did not completely understand the purpose and aim of the diaries. As one the participant noted:

"...it was very difficult for me at the beginning as I did not know what was expected from me. The questions helped me... and also when you (the teacher) showed us some samples written by our classmates, it made it fairly clear..."(S2)

Thus, it seems that most students, as expected, had some difficulties with the diary writing although it was carefully explained to them in class. In particular, students face difficulty expressing their feelings and experiences, and connecting what they have learned to previous experiences, as the following extract shows:

"For me, when the teacher explained it in class, it was easy ...but when I started writing, I found it very difficult to write about some of the questions. For instance, How are they related to topics covered in previous classes? and What are your feelings about what you have studied? Was it interesting/boring? Easy/difficult? useful/Useless? etc. and why?.... these questions were the hardest for me. I think I managed to write about these after writing three or four diaries..."(S1)

Reflecting on the value of the diary writing, students who were doubtful about the effectiveness of the diaries and thought that there was no relevance or significance in doing such a task at the beginning started to appreciate their value after a few weeks of writing. Several students reported that the diaries were very helpful:

"...diary writing helped me a lot as I had to reflect on what we learnt in class and what went well or not so well... I found this very very useful as it made think deeply of the stuff we learnt... I even started doing this in my other courses..." (S11)

"...writing the diaries makes me think and link the lessons we studied before and it helps me see my development and progress.... I found this extremely useful as it makes me think and analyse what we covered in class... I also realized that there were some problems with my current learning style..." (S6)

Therefore, the process of reflecting on and writing about what occurred in class was highly beneficial. Despite initial skepticism about the diaries' usefulness, the majority of students were able to reflect critically on their learning experiences and make effective decisions by the end of the course. It is important to note that there were some individual differences among students and these differences provided valuable insight for the teacher, allowing him to identify specific needs and preferences. This, in turn, facilitated a more targeted approach in designing and implementing new activities that catered to the diverse learning styles within the class.

5. Discussion

The results seem to be consistent with the empirical findings from other studies, indicating that reflective diaries are effective tools for facilitating and assessing reflection (e.g. Fabriz et al., 2014; Flower & Hayes, 1981; Gipe & Richards, 1990, 1992; Ifenthaler, 2012; Jarvis 2001; Ozan & Kincal, 2018; Tang, 2002; Wallin & Adawi, 2018; Walin, Adawi & Gold, 2016; Yinger & Clark, 1981).

The reflective diaries can help students identify their strengths and weaknesses, develop strategies to improve their learning outcomes, and encourage the use of metacognitive strategies (Efklides & Vauras, 1999). Furthermore, when students write diary entries and reflect on the learning materials, they can provide diagnostic feedback to instructors about the effectiveness of their teaching. In particular, diaries can inform teachers which lessons students find difficult to comprehend and which lessons they have already understood. Furthermore, through diary entries students can indicate what kind of in-class activities would benefit their learning the most. Thus, teachers can improve their practice by giving students a voice in the classroom.

However, the data presented here reveal that students require training and guidance to develop and enhance their metacognitive and self-regulation skills. Therefore, we want to highlight some crucial aspects that educators should consider when using reflective diaries. For reflective diaries to be successful, they should include well-constructed questions to help students focus their responses (Jarvis, 2001; Walin, Adawi & Gold 2016). Instructors should also vary their questions to prevent students from feeling bored or writing the diaries mechanically. However, the guided questions, as mentioned before, are not enough. The interview data indicate that students found it difficult to engage in reflective writing, particularly those who lacked prior experience in this skill. Therefore, it is important to note that simply providing carefully-designed prompts and explaining the purpose of reflective diaries is insufficient. Instructors should show the students some examples of diary responses (Dunlap, 2006; Tanner, 2012). This practice helps students understand how to effectively engage in reflective writing by providing them with models to follow in their own entries. It also clarifies expectations and encourages thoughtful reflection by illustrating different approaches and styles. Furthermore, educators should provide feedback on students 'written diaries. As emphasized earlier, students are more likely to engage seriously with diary writing when instructors respond to students either individually or collectively and in a timely manner.

6. Conclusion

In conclusion, reflective diaries are an effective tool in higher education as they can promote self-reflection and critical thinking. They can foster deeper learning and reflective thinking and enable learners to understand their own learning process. Diaries are also a great tool for evaluating and improving teaching methods. However, implementation of the reflective diaries can be challenging as some students may not be familiar with the process of self-reflection. To overcome the difficulties, instructors should provide students with detailed guidelines on how to write their diaries, along with examples of diary entries and feedback on their reflections.

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