

# The Impact of Different Types of Journaling Techniques on EFL Learners' Self-Efficacy

El impacto de diferentes tipos de diario en la autosuficiencia de estudiantes de inglés como lengua extranjera

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This article reports on an investigation of the impact of different methods of journaling on self-efficacy of learners of English as a foreign language. Sixty upper-intermediate Iranian English language learners were randomly assigned to three experimental conditions, namely no-feedback, teacher-feedback, and peer-feedback, and one control group—no-journal condition. The no-feedback condition learners kept reflective journals but could not share their reflective notes with other learners or their teacher, while the teacher-feedback condition learners used collaborative reflective journals with their teacher. The peer-feedback condition learners shared collaborative reflective journals with their peers, and the no-journal condition learners did not use reflective journals throughout the treatment period. An analysis of variance showed that the students with the two feedback conditions seemed to have gained a higher self-efficacy at the end of the treatment period.

*Key words:* Collaborative journals, reflection, reflective journals, self-efficacy.

En este artículo se presenta una investigación sobre el impacto de la utilización de diferentes tipos de diarios en la autosuficiencia de estudiantes de inglés como lengua extranjera. Sesenta estudiantes iraníes con nivel de inglés intermedio superior fueron asignados al azar a tres condiciones experimentales: sin retroalimentación, con retroalimentación docente y con retroalimentación de par. Hubo, además, un grupo de control —sin utilización de diarios—. Los estudiantes bajo la condición “sin retroalimentación” escribieron diarios de reflexión, pero no podían compartir sus notas con otros estudiantes o el profesor; mientras que los estudiantes de la condición “retroalimentación docente” escribieron diarios de reflexión en colaboración con el docente. Los estudiantes de la condición “retroalimentación de par” compartieron diarios de reflexión colaborativos con sus compañeros y, finalmente, el grupo de control no utilizó diarios de reflexión a lo largo del periodo de investigación. El análisis de las variaciones evidenció las dos condiciones de retroalimentación que más permitieron a los estudiantes adquirir autosuficiencia.

*Palabras clave:* diarios colaborativos, reflexión, diarios de reflexión, autosuficiencia.

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## Introduction

Originally coined and conceptualized by Bandura (1977) as a person's belief in his or her capability to successfully perform a particular task, the term *self-efficacy* was defined by Wood and Bandura (1989) as "beliefs in one's capabilities to mobilize the motivation, cognitive responses, and courses of action needed to meet given situation demands" (p. 408). A similar account was given by Eden (1988), according to whom self-efficacy represents beliefs about one's ability to achieve desired outcomes. Sherer and Adams (1983) also identify self-efficacy as "the belief that one can successfully perform a behavior" (p. 899). Self-efficacy theory states that self-efficacy can influence behavior and behavioral change to a great extent. The findings of research in educational psychology introduce self-efficacy as one of the most important factors influencing education-related success (Clemes & Bean, 1990; Diseth, 2011; Gist & Mitchell, 1992; McCoach & Siegle, 2001a, 2001b; Siegle & McCoach, 2007; Zimmerman, 2000) and a strong determinant of individuals' attempts, perseverance, strategizing, and subsequent performance (Heslin & Klehe, 2006). Moreover, considerable correlation has been found between self-efficacy beliefs, achievement motivation, and self-regulated learning strategies (Yusuf, 2011).

Siegle and McCoach (2007) argue that, in the case of learners whose under-achievements result from their personal characteristics, pedagogical programs should primarily aim at designing interventions that help the educators change students' attitudes and views in order to increase their self-efficacy. The results of studies in the field of educational psychology support the fact that, among the four main characteristics of self-efficacy, environmental perceptions, goal orientation, and self-regulation, high achievers mainly possess the first. In fact, high achievers have widely been reported to be self-efficacious, believing in their ability to perform well in academic contexts (Bandura, 1986; Schunk, 1984). This quality can be

attributed to the fact that highly self-efficacious people invest more effort and persist longer than those who are low in self-efficacy (Schwarzer, 1997). Moreover, when they are held up, self-efficacious individuals recover more quickly, commit to their goals, select challenging settings, explore their environments, and create new environments (Bandura, 1977; Heslin & Klehe, 2006; Schwarzer, 1997). Those considered underachievers, in contrast, reportedly had low self-efficacy (Reis & McCoach, 2002; Supplee, 1990), which led them to view a negative outcome as verifying the incompetence they identified in themselves.

Beliefs in one's self-efficacy have not been reported to be static and stable, but rather, to "be sensitive to subtle changes in students' performance context, and to interact with self-regulated learning processes" (Zimmerman, 2000, p. 82). Thus, learning conditions can be manipulated in favor of improving self-efficacy in individuals, and instructional presentations and teacher/student interactions can be designed in such a way as to maximize the influence of the soon-to-be-discussed four sources of efficacy, as identified by Bandura (1977). Hence, given the prominent role of self-efficacy in individual learning processes and outcomes, looking for techniques to develop and increase students' self-efficacy is not only reasonable, but also even essential. Furthermore, empirical studies aimed at shedding light onto ways in which teachers can help their students feel more self-efficacious seem to be warranted. Therefore, as empirical studies investigating the role of reflection in the improvement of self-efficacy remain sparse, the present study aims to investigate whether using reflective journals in general and collaborative dialogue journals in particular can increase students' self-efficacy. The current study, then, intends to address the following questions: (a) whether journal writing increases a cohort of upper-intermediate Iranian English learners' self-efficacy beliefs; (b) whether journals can increase the learners' self-efficacy when written collaboratively; and (c)

whether collaborative reflective journals yield a differential impact when the feedback is provided by an instructor or a peer.

### **Theoretical Framework for the Present Study**

The purpose of this study was to determine the impact of different types of journaling techniques on the feelings of self-efficacy among a group of upper-intermediate Iranian English language learners studying at a private language school.

Bandura (1977) identified four sources of self-efficacy: performance accomplishments, vicarious experiences, verbal persuasion, and emotional arousal. Performance accomplishments can be encouraged by demonstration and mentoring, followed by self-instructed successful performance. In other words, students who have been successful in the past are more likely to believe they will be successful in the future. Vicarious experience can be induced by observing others performing an activity (e.g., a task considered to be difficult by the individual). Such observation can generate a feeling in the observers that they will also be able to perform difficult tasks if they demonstrate ample persistence in their efforts, as observers can learn about or visualize themselves performing successfully. Having observed others perform a task, these learners can also avoid making the mistakes other learners had made in similar activities. Exhortation and positive suggestions have also been proven to contribute to self-efficacy. Verbal persuasion can build self-efficacy when individuals are praised for their competence and consistent efforts that have enabled substantial improvements (Bandura, 1977). Finally, emotional arousal and undesired physical conditions have been reported to correlate negatively with self-efficacy (Bernadowski, Perry, & Del Greco, 2013; Leganger, Kraft, & Røysamb, 2000; Luszczynska, Gutiérrez-Donã, & Schwarzer, 2005). To highlight the links between reflection

and self-efficacy, this study focuses on the ways by which the use of collaborative and non-collaborative reflective journals can evoke self-efficacy beliefs by tapping into the aforementioned different sources of self-efficacy in learners. This paper also investigates how performance accomplishments, vicarious experiences, and verbal persuasion can be embedded in each particular type of journal as a pedagogical tool to increase learners' self-efficacy.

### **Increasing Students' Self-Efficacy: A Historical Overview**

Over the past few years, much research (Dunlap, 2005; Siegle & McCoach, 2007; Van den Boom, Paas, & Van Merriënboer, 2007; to name only a few) has focused on the ways by which educational programs can help learners feel better about themselves; in particular, researchers investigating first and second language acquisition have tried to identify mechanisms by which self-efficacy can be increased among learners and/or teachers (Kohn, 1994). Thus, in these two scopes (i.e., generality or specificity), self-efficacy has been the focal point of many studies in education and psychology (Eden, 1988; Judge, Erez, & Bono, 1998; Judge, Locke, & Durham, 1997; Lee & Bobko, 1994). A review of the relevant literature revealed that many researchers (Bray & Kehle, 2001; Kehle, Bray, & Chafouleas, 2002; Schunk & Hanson, 1985, 1989; Sherer, Maddux, Mercandante, Dunn, Jacobs, & Rogers, 1982) have aimed to find and/or adjust pedagogical techniques contributing to the development and improvement of self-efficacy in students in order to maximize the four sources of self-efficacy originally introduced by Bandura (1977).

With regard to the first source, performance accomplishment and past experience, it has been theorized that, when individuals endure difficulties and successfully overcome setbacks to accomplish a task, the success offers support for the belief that they can succeed again, yielding a perception of

self-efficacy (Bandura 1977; Sherer et al., 1982). Therefore, a contribution of self-appraisal after a task's accomplishment to developing self-efficacy seems plausible. Because reflection has been reported to aid the development of metacognitive processes, including self-appraisal (Katz, 2001), it seems plausible to view one's beliefs on self-efficacy as potentially structured by reflective thoughts on past achievements (Bandura, 1997).

In the literature on learning, the second identified source of self-efficacy, vicarious experience and observing others perform a task, was identified by Schunk and Hanson (1985) as a hugely influential boost to self-efficacy during skill acquisition. In the literature of child learning and acquisition, it has been found that children with the chance to observe a model performing a task will develop a higher sense of self-efficacy, particularly if the role model is considered to be similar to or on par with the observer (Bandura, 1982).

Similarly, in a study investigating the links between self-efficacy and cognitive achievement, Schunk (1989, p. 17) reported the use of models having a "similar or slightly higher" level of competence was effective in promoting observers' self-efficacy.

Self-modeling, in which an individual is video-taped while performing a task and then later given the chance to watch the edited version, which does not include her/his unsuccessful behaviors and attempts, was also reported by Bray and Kehle (2001); Kehle et al. (2002); and Schunk and Hanson (1989) as effective in increasing students' self-efficacy. Teachers have been confirmed as helpful models in learning contexts (Schunk & Hanson, 1985).

The literature on self-efficacy improvement has specifically focused on feedback from teachers, investigating the role of verbal guidelines and feedback as the third source theorized by Bandura (1977). Having amply reviewed the literature on the impact of teacher feedback on self-efficacy, Siegle and McCoach

(2007) regarded the research on teacher feedback as mainly suggesting that teachers plan their feedback with the following considerations: to aid students as they try to come up with explanations for their lack-of-effort when they perform poorly; to focus on students' abilities to succeed at reasonably difficult tasks; and to approach any offers of unsolicited help with caution.

Finally, the present literature review suggests that a desirable emotional and physical status have been reported to contribute positively to feelings of self-efficacy (Bandura, 1977; Leganger et al., 2000; Luszczynska et al., 2005).

### Reflection and Self-Efficacy

Self-reflective skills have been reported to contribute to self-efficacy beliefs (Bandura 1989, 1997; Dunlap, 2005; Katz, 2001). As suggested by Bandura (1989), self-efficacy judgment gradually replaces external guidance as cognitive self-reflective capabilities develop. Researchers, such as Bandura, have introduced reflection as a positive contribution to an individual's self-efficacy.

Nevertheless, studies providing empirical support for the impact of reflection on self-efficacy beliefs are scant. The rest of this section of the paper describes two such studies.

Aiming to investigate the impact of problem-based learning (PBL) on college student self-efficacy, Dunlap (2005) conducted a study in a computer-supported learning environment. In Dunlap's study, thirty-one undergraduate university computer science learners in a software engineering course collaborated, reflected on their work, and were provided with regular feedback by their instructor for 16 weeks. The learners' self-efficacy was measured both prior to the treatment and at the end of the course using the General Perceived Self-Efficacy Scale, ultimately increasing significantly. Although Dunlap's study provides valuable insight into the role of reflection

and feedback on reflection in the development of self-efficacy beliefs, the study could not offer a complete image of the issue, as it does not accommodate the potential effects of peer feedback on reflection.

Van den Boom et al. (2007) conducted a study to investigate the impact of reflection on the development of self-regulatory abilities. In their study, two experimental conditions, in which learners used on-line reflective activities and received prompts and feedback, were compared to a control condition ( $n = 18$ ) in which learners did not reflect on their learning process. In one of the experimental conditions ( $n = 15$ ) the tutor offered feedback which was designed to evoke reflections, while in the other experimental condition ( $n = 16$ ), peers provided the feedback. The researchers aimed to find out whether students' reflective activities, combined with suggestive feedback from a peer or tutor, would be able to improve the learners' self-regulation and learning outcomes. The results of their study showed that reflection, combined with feedback, positively impacted students' self-regulated learning. According to the findings of their study, the learners who received feedback on their initial reflections and developed reflective dialogues showed a higher development of self-regulation in general but did not demonstrate any difference from their counterparts in the control group who did not use collaborative journals in terms of the self-efficacy score.

## Method

### Participants

The participants for this study were 150 Iranian female English language learners studying at an upper-intermediate level at a language school in Iran. They were given the General Self-Efficacy Questionnaire developed by Sherer et al. (1982).

To make sure the students in the four conditions would be homogenous, sixty upper-intermediate Iranian English learners whose scores on the ques-

tionnaire (Mean = 41.49,  $SD = 16.82315$ ) ranged between 19 (one standard deviation above the mean) and 35 (one standard deviation below the mean) (Mean = 25.05,  $SD = 4.45096$ ) were chosen and randomly assigned to four conditions each consisting of fifteen learners.

### No-Feedback Condition

The learners in the no-feedback condition (NFC) were assigned to keep reflective journals and collect their reflective notes on the effectiveness of the materials covered in the classroom and the way they were presented by their teacher. They were also asked to write notes about their learning strategies, goals, and problems they encountered comprehending the lesson and internalizing the language, as well as the strategies they applied to overcome those problems and to achieve the goals. They were also required to write about the efficacy of those strategies and how they believed they led to better learning. However, the writers were not given the opportunity to share their reflective notes with other learners, nor could they benefit from their teacher's feedback. Given that Bandura (1977) introduced prior successful achievements as a source of contribution to self-efficacy expectations, keeping a reflective journal in which the strategies, their effectiveness, and how they led to better learning is documented was believed to increase the learners' self-efficacy. Such reflective journals could offer the participants a tangible record of their performance accomplishments, enabling them to remember how they had succeeded in overcoming their learning difficulties.

### The Feedback Conditions

The learners in the teacher-feedback condition (TFC) and peer-feedback condition (PFC) were asked to use collaborative reflective journals. TFC learners were briefed on how to keep a reflective journal and instructed to share their reflective journals with their teacher, while PFC learners were required to share their

reflective notes with their peers. During a one-hour briefing session, TFC learners were taught how to use collaborative reflective journals and to exchange them with their instructors; they were instructed to submit their journals to their teacher every other session, with the expectation that they would be returned with feedback from the teacher on the content of their reflective notes. The teacher commented on and, at times, asked questions regarding the use of the strategies reported by the learners in this condition, as well as on the other learning-related events and emotions documented in journals. Collaborative journals exchanged with the instructor allowed the participants not only to record their achievements but also to receive verbal guidelines from their teacher on the use of such strategies.

The learners in the PFC, in contrast, were instructed on how to use collaborative reflective journals by a peer who was chosen by the learners themselves prior to the intervention to add his or her written feedback in their journals every other session. The peers were asked to avoid adding comments regarding the structure of the reflective notes and language problem comments, instead merely focusing on the content, which was mainly supposed to include information on the use and efficacy of the implemented strategies, lessons their peers had found hard to learn, and their feelings and opinions regarding the materials and the teachers' methodology. Such collaborative journals exchanged with peers could offer the participants the opportunity to gain access to vicarious experiences and verbal guidelines. Ten entries were submitted to the teacher by the learners in each of the three experimental conditions at the end of the intervention.

### The Control Group

Finally, the learners in the no-journal condition (NJC) did not use reflective journals throughout the term; they did, however, study the same materials and were taught in the same manner as those under

experimental conditions. Moreover, the learning hours were the equal for the learners in the control group and those in the experimental groups.

### Instruments

Along with individually written reflective journals and collaborative reflective journals, the instruments use in this study included the General Self-Efficacy Scale by Sherer et al. (1982).

The General Self-efficacy Scale by Sherer et al. (SGSES),<sup>1</sup> which was developed to include 17 items "to assess generalized self-efficacy expectations, consists of two subscales: general self-efficacy and social self-efficacy" (Sherer et al., 1982, p. 663). The results of a study by Sherer and Adams (1983) suggest that this general self-efficacy scale not only has construct validity, but that it also can be used "as a measure of expectancies of personal ability to initiate and persist in the performance of behaviors" (p. 899). The General Self-Efficacy Subscale has proven to be more useful than the Social Self-Efficacy Subscale. In view of the fact that Imam (2007) reported the internal consistency, temporal stability, and measurement validity of the SGSES for general self-efficacy, as well as that the New General Self-Efficacy Scale only seems to possess a slight advantage over SGSES and other measures of self-efficacy (Scherbaum, Cohen-Charash, & Kern, 2006), SGSES seemed to be appropriate for use in the present study. In the present study, Cronbach's  $\alpha = 0.81$  was estimated as the internal consistency of the New General Self-Efficacy Scale.

### Instructional Materials

The course consisted of 42 hours of general English instruction. All four of the skills—speaking, writing,

<sup>1</sup> The "s" at the beginning of the acronym stands for Sherer et al. so that the scale can be distinguished from the one developed by Schwarzer (1997).

reading, and listening—were addressed throughout the term. Most of the class activities, however, were designed to help the learners improve their speaking skills. The upper-intermediate book of the *Total English* series was taught as the main course book.

### Procedure

The scores of the four groups on the SGSES were compared using a one way ANOVA ( $F [3, 56] = 0.60, \alpha = 0.61$ ) to make sure that the groups were homogenous in terms of General Self-Efficacy prior to the treatment. Having attended a briefing session on what to include in their reflective notes and how to use a reflective journals, the learners of NFC were assigned to keep reflective journals but were not given the chance to share their reflective notes with the other learners or their teachers. These learners were instructed to include ideas about the efficacy of the teacher's methodology and the materials, the parts they had found difficult to understand, and as the strategies they used to overcome those difficulties to facilitate learning; they were required to submit their journals of at least ten entries to their teacher.

The students in TFC and PFC were instructed to use collaborative journals. TFC learners were also briefed on how to use collaborative reflective journals and to exchange them with their instructor. These learners were asked to submit their journals to their teacher every two sessions, and the journals would be returned with feedback on the form and content of their notes at the following session. The teacher's feedback was offered only cautiously, as the findings of Zimmerman and Martinez-Pons's (1990) study suggested that unsolicited advice or help can be regarded by students as signals of low ability. Thus, the teacher/researcher tried mostly to offer help and advice when students openly asked for help, posed a question, or explicitly mentioned a problem they had faced in the process of their learning.

The learners in the PFC group were asked to use collaborative reflective journals with their peers.

Throughout the term, they were encouraged to exchange their reflective journals with their fellow classmates and to add written feedback to their journals. The PFC learners were asked to comment on the strategies documented in their friends' journals and to share ideas freely on the form and content of their fellow classmates' reflective notes. They were told that their comments on their partner's reflective notes should not be mainly focused on target language errors; instead, more attention should be paid to the content of the entries. The learners were also told they could include questions to be answered by their partner. They were able to choose their partners themselves and were required to exchange their journals with their partner every two sessions with the expectation of reacquiring the journals during the following session, so that by the end of the term each journal would have ten entries.

Finally, the NJC learners were not instructed to use reflective journals throughout the term and did not benefit from the reflective techniques. At the end of the term, all of the students in the four groups were given SGSES once more, and their self-efficacy scores were calculated.

### Results

To investigate whether reflective journaling techniques have any significant effect on the performance of students on the posttest of the General Self-Efficacy scores, descriptive statistics for the SGSES score were calculated. The TFC gained a higher mean score ( $M = 70.80$ ) compared to other conditions. The learners in the PFC ( $M = 67.53$ ) also outscored the NFC ( $M = 51.13$ ) and NJC ( $M = 35.13$ ) learners. The results also indicated that the learners in the NFC outscored the learners in the NJC in the posttest.

A one-way ANOVA was run using SPSS 16.0 to probe the effect of each type of journaling on students' self-efficacy. Table 1 demonstrates the results of the analysis of the one way ANOVA.

**Table 1.** One-Way ANOVA Posttest of GSE Score for All Groups

Sources	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	12166.050	3	4055.350	46.945	.000
Within Groups	4837.600	56	86.386		
Total	17003.650	59			

**Table 2.** Scheffe's Tests

NJC (Mean = 51.13)	PFC (Mean = 51.13)	TFC (Mean = 51.13)	NFC (Mean = 51.13)	Group
16.00*	-16.40*	-19.66*		NFC
35.66*	3.26			TFC
32.40*				PFC

\* The mean difference is significant at the 0.05 level.

As it can be seen in Table 1, the difference in means in the SGSES posttest was proven to be significant ( $\alpha = 0.00$ ). Moreover, the one-way ANOVA yielded a significant main effect of the experimental conditions  $F(3, 56) = 46.94$ . The effect size, calculated using omega squared ( $\omega^2$ ), was .061, indicating a medium effect.

Given that the learning hours, instructional materials, and teaching methodology were similar in all conditions and that the learners in four conditions had been chosen from a group of learners scoring within one standard deviation from the mean after the administration of a pre-test and being randomly assigned to one of four conditions, it was believed that the differences in the posttest mean scores could be attributed to the interventions and use of various types of reflective journals. Thus, the journaling technique had a significant effect on the performance of students on the posttest of the SGSES.

Furthermore, to address the question as to whether different journaling techniques had a differential impact on the learners' self-efficacy, the post-hoc Scheffe's test was run in order to locate the

exact differences among the four mean scores. Table 2 shows the results of the post hoc Scheffe's test.

As displayed in Table 2, a significant difference was found between the mean scores of the learners who were instructed to use collaborative journals with their teacher (TFC) and those in the NFC or NJC groups.

In fact, the students in the TFC ( $M = 70.80$ ) outperformed the students in the other groups on the posttest. However, the mean difference between the students in the TFC and PFC was not detected as significant, indicating that collaborative journal writing in both forms (peer and teacher) were effective. In addition, a significant difference can be seen among the mean scores of the PFC, NFC, and NJC groups.

Table 2 also demonstrates that students who used non-collaborative reflective journals and did not receive feedback from either their peers or their instructor (NFC) were still able to outperform NJC learners, showing that reflective journaling alone is also able to assist students with developing self-efficacy beliefs.



## Discussion

The purpose of this study was to answer the three previously posed questions regarding the effectiveness of reflective journals in promoting a sense of self-efficacy in students learning English.

With regard to the first question, the findings of this study suggest that journals, regardless of whether they are written collaboratively or non-collaboratively, positively affected students' self-efficacy. The results of this study show that those learners who collected their reflective notes in the form of reflective journals (NFC) gained higher self-efficacy scores on the posttest compared to those who did not use the journaling technique (NJC). This effect can be explained by the fact that those learners who kept a reflective journal had a tangible record of their performance accomplishments, which could facilitate the identification of effective strategies in different learning contexts. Further, the NFC learners possessed a written record of the ways in which they had achieved their goals, reminding them of the fact that they had succeeded in overcoming difficulties; as theorized by Bandura (1977), prior successful achievements could lead to increases in their expectations regarding self-efficacy. Thus, these data are in line with previous research on the role of prior achievement on self-efficacy, supporting Katz's (2001) idea that reflection can positively affect self-efficacy.

With regard to the second question, the results indicate that students in the TFC and PFC groups showed significant improvements in self-efficacy, regardless of the type of reflective journaling technique they used. In particular, the data suggest that students who were engaged in writing collaborative reflective journals with a peer or their teacher achieved higher self-efficacy compared to those who either did not use the reflective technique of journaling or did not share their reflective notes with others. Hence, this study confirms the findings of the previous investigations on the role of feedback in self-efficacy promotion (e.g.,

Dunlap, 2005). The present study, therefore, provides evidence on the efficacy of the collaborative journals in increasing the learners' sense of self-efficacy while proving that collaborative, reflective journals possess an advantage over non-collaborative journals regarding their effects on learners' self-efficacy beliefs.

One way to account for this difference is to refer to the fact that those learners who used collaborative reflective journals with their peers and received feedback from a fellow classmate benefited from their vicarious experiences, which might have contributed to the growth observed in PFC learners' self-efficacy beliefs. Reading about the ways in which a fellow classmate has accomplished a goal, successfully carried out a task, or overcome a learning problem, learners in the PFC might have believed that they will also be able to perform these difficult tasks with more persistence and effort. Having the chance to look at a record of strategies used by their friends (journals), these learners might as well have felt more self-confident in determining which strategies would lead to success and which, to failure. Regarding the performance of the learners in PFC, the results of the present study are in accordance with the conclusions of Bandura (1982, 1994) on the sources of self-efficacy.

The fact that the TFC learners were able to outperform the learners who did not keep a collaborative reflective journal (NFC) could also be explained by this cohort of learners' having their teacher as their mentor, as he or she could model success for these students. This conclusion echoes those of Schunk and Hanson (1985), who argued that teachers can function as good role models to demonstrate the development of skill. Further, teachers provide valuable feedback on the adequacy of a student's persistence and on the effectiveness of his or her learning strategies.

Nevertheless, the results of the current study are inconsistent with those of Van den Boom et al. (2007), who reported that students receiving feedback on their initial reflections and then developing reflective

dialogues showed a higher development of self-regulation in general but did not demonstrate any difference from their control counterparts, who did not use collaborative journals in terms of self-efficacy score. One possible source of such an inconsistency could be the use of different instruments for measuring self-efficacy, as Van den Boom et al. applied a subscale for the Motivated Strategies for Learning Questionnaire to measure the self-efficacy of the participants in their study. This observed incongruence might also have resulted from the fact that the participants in the previous study were asked to generate a reflection note in a structured electronic format before receiving external feedback, which was further elaborated upon through a successive series of exchanges between the student and feedback provider. The third step, which comprised elaboration on the feedback for the reflective note, was missing in this study; this omission might have affected the impact of the students' reflections on self-efficacy. Nevertheless, because Van den Boom et al.'s study lacked an experimental condition in which learners could use reflection without receiving feedback on their reflective notes, the abovementioned reasons should be considered with caution.

Finally, regarding the third question, the analysis of the data in the present study indicated no significant difference between the scores of TFC learners and those of PFC learners. This result provides evidence for the significance of the feedback, regardless of its source. This highlights the importance of peer feedback and can act as an impetus for further research on the effectiveness of such feedback in various contexts.

### **Conclusion and Implication for Classrooms**

The findings of the current study provide empirical support for the effectiveness of reflective journals in general and of collaborative reflective journals in particular in promoting English language

learners' sense of self-efficacy. These findings should motivate instructors to encourage reflection among their learners and to appreciate the role of feedback given to the learners' reflective notes. The findings of this study could confirm theoretical arguments in the literature (Bandura, 1977, 1982, 1989, 1994) claiming that recording prior achievements and vicarious experiences could potentially increase self-efficacy. Reflective journals providing the learners with the opportunity to record their learning-related activities can offer a tangible record of their efforts towards the achievement of learning goals. Instructors are thus advised to make learners aware of the advantages such reflective notes can offer and to promote the use of such reflective techniques in their classes. It is also suggested that collaborative reflective journals exchanged by peers can make beneficial vicarious experiences available to the learners who otherwise might only encounter a list of their own previous accomplishments. This can act as an impetus for instructors to incorporate the use of collaborative reflective journals into their classroom activities so that learners can find out how classmates have striven to accomplish their goals and to benefit from vicarious experiences. Such collaborative reflective journals can also be shared with the instructor, who can then add the element of verbal persuasion by commenting on the learners' reflective notes, in turn contributing to an increase in the learners' self-efficacy.

Clearly, much more research must be undertaken to provide us with sufficient evidence to confidently state that reflection can affect self-efficacy. Moreover, more research is required on the differential impacts of teacher and peer feedback on self-efficacy beliefs. Future research in this area could also examine the impact of reflective journals in different forms on specific self-efficacy, also called contextual or situational self-efficacy, which pertains to individuals' beliefs in their ability to handle a specific task effectively in a learning context.

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