The Effect of using Learning Journals on Developing Self-Regulated Learning and Reflective Thinking among Pre-Service Teachers in Jordan

Dr. Saleh Mohammad Abu Jado
Associate Professor Educational Psychology,Faculty of Educational Sciences and Arts/UNRWA
P.O Box 541304 Abu-Nusair 11937,Amman-Jordan
s.abujado@unrwa.org

Abstract
This study aimed to investigate the effect of using learning journals on self-regulated learning and reflective thinking among a sample of pre-service teachers enrolled in Educational Psychology course at the Faculty of Educational Sciences and Arts (FESA) in Jordan. The study sample consisted of (61) participants. To achieve the purpose of the study, the self-regulated learning and reflective thinking scales were applied after verifying their psychometric properties on the study sample. The findings of the study showed that there are statistically significant differences between the means of the subjects' responses on the domains of the reflective thinking scale in the pre and post-tests in favor of the experimental group. The results also revealed that there are statistically significant differences among the means of the subjects' responses on the domains of self-regulated learning in the pre and post-tests in favor of the experimental group. The study concluded with some recommendations the most important of which are using learning journals in teaching and learning, especially for pre-service teachers, and training them on using learning journals, and finally conducting further research studies to examine the effect of learning journals on other variables such as students' achievement, self-confidence, professional development, and attitudes towards the teaching profession.
Keywords: learning journals; self-regulated learning; reflective thinking; educational psychology, pre-service teachers.

Introduction
Reflection is the path to self –knowledge and to greater personal efficacy. Although there are many ways to reflect, the learning journal is concrete evidence of one's evolving thought processes, documenting valuable, often fleeting glimpses of understanding. This tool is central to the pursuit of more thoughtful life. Journal writing is a powerful form of reflection and a well-established method for examining our lives. Reflection is the process whereby we construct and make meaning of our experience (Stevens & Cooper, 2009).

Francis (1995) suggested that pre-service teacher' attitudes towards reflective writing together with their writing skills need to be carefully developed. A number of approaches have been used in teacher education to promote reflectivity, one of which is journal writing (Cole, Raffier, Schleicher, & Rogan, 1998). For its distinguished history in providing a locus for reflection and enhancing learning in many cultures, journal writing in classroom instruction or in the day to day work in higher education is not as widely used as it could be (English & Gillen, 2001).

Probably all adults reflect, some more than others, and for those who do reflect, being reflective can represent a deeply seated orientation to their lives. For others, the process would seem to come about only when the conditions in their environment are conducive to reflecting, perhaps when there is an incentive to reflect, or some guidance or a particular accentuation of the conditions. A learning journal represents an accentuation of these right conditions-some guidance, some encouragement, helpful questions or exercises and the expectation that journal writing can have a worthwhile consequences, whether during or at the end of the process (Moon, 2006, p. 1). Lee (2008) proposed that journal writing is a kind of reflective writing that requires prospective teachers to construct knowledge through questioning their own assumptions about teaching and learning, which goes in line with the general spirit of the education reform in the United Nations Relief and Works Agency (UNRWA) schools in Jordan.

This paper describes a study that uses the pedagogy of reflective journal writing as a tool for fostering two important variables considered by a wide range of scholars and researchers (Hatton & Smith, 1995; Lee, 2008; Porter, Goldstein, Leatherman, & Conrad, 1990; Loughran, 1996) as key elements in teacher education; reflective thinking and self-regulated learning in a pre-service teacher preparation program in Jordan.

Theoretical Background
The literature on education stresses the importance of reflection and self-regulated learning in developing the competencies of prospective teachers, and proposes writing learning journals as a means for achieving them. Accordingly, our theoretical background will shed light on learning journals, self-regulated learning, and

reflective thinking, as follows:

Learning Journals

Research on teachers' knowledge, beliefs, and thoughts has shown that teacher candidates approach teaching with a wide range of initial beliefs and ideas about teaching. Their knowledge, however, tends to be used on simplistic views of teaching and learning in the classroom, and hence may not be "well adapted to teaching" (Calderhead, 1991, p. 532). It is only when they reflect upon their knowledge systematically that they can transfer what they have learned in initial teacher education programs to the real classroom situation. Reflection enables student-teachers to construct knowledge through asking questions, critiquing, evaluating, and helping them bridge the gap between imagined views and the realities of teaching. Therefore, it is important, to prepare teacher candidates for teaching by enhancing professional learning that stresses reflection, so that their knowledge and beliefs interact with the teacher preparation program to facilitate development of more sophisticated conceptions of the teaching and learning process, help them identify variables that are important to them, serve as tools of generating questions and hypotheses about teaching and learning (Lee, 2008; Richards & Ho, 1998).

Moon (2006) claimed that there are many different terms used in defining "learning journals." They may be called "diaries", but not the type of diary that notes dates for events, though they might do this as well. They may be called "logs" or "learning logs," however they are not logs only in the sense of recording. She added that scholars use journal log, dialectical notebooks, and work book to describe reflective writing. Cottrell (2003) suggested that learning journal is a systematic way of documenting learning and collecting information for self-analysis and reflection. When used in an adult education class, it can be more or less structured according to the purpose, goals and level of self-direction (Kerka, 1996).

Stevens & Cooper (2009) defined a journal as a sequential, dated chronicle of events, issues, and ideas. As stated by Schneider (1994), learning journals are closet to natural speech, and writing can flow without self-consciousness or inhibition. They reveal thought processes and mental habits; they assist memory, and provide a context healing and development. Journals are a safe place to practice writing without the limitations of modality, audience, assessment and evaluation (Sommer, 1989). They are less formal, less threatening for students to approach writing in a way they might not in a class (Grennan, 1989).

Hatton & Smith (1995) proposed four levels of reflection in pre-service teacher's journal writing. The lowest level, descriptive writing, is not reflective at all, but involves a pure description of a situation or an issue. Descriptive reflection provides justifications for the events, situations or issues described, based on personal judgment, experience, and/or self-understanding of classroom input. Higher up level of reflectivity is dialogue reflection, which is characterized by an exploration and consideration of differing reasons. Finally, critical reflection which implies not only possible reasons but also consideration of the broader historical, social and political contexts of the reasoning.

Porter, Goldstein, Leatherman, & Conrad (1990) suggested four kinds of journals that are commonly used in initial teacher preparation: dialogue journals, response journals, teaching journals, and collaborative/interactive group journals. Dialogue journals include teachers and students writing and exchanging their writing in mutual response, and are found to carry benefits like promoting autonomous learning, enhancing confidence, and helping students connect course content and teaching. Response journals involve students in recording their personal reactions to, questions about, and reflections on what they read, write, observe, listen to, discuss, do, and think (Parson, 1994, p. 12). Teaching journals serve a similar purpose but they are written reflections based on teaching experiences that pre-service teachers keep during the practicum (Richards & Lockhart, 1996). Collaborative/interactive group journals involve teacher candidates in writing and exchanging journals (Cole et al., 1998).

Approaches to journal writing in teacher education vary form the unstructured methodology of writing what one thinks about an experience or a stream of consciousness through semi-structured tasks which require a response to given prompts or cues, to highly structured formats which require the writer to adhere to prescribe criteria. The purpose of journal writing is to help the writer look back on an event in the hope that it will be a catalyst for reflection and improvement (Loughran, 1996).

Writing journals provide learners with a unique means of self-representation (Pavlenko, 2002). They offer opportunities to negotiate socially available possibilities for selfhood (Ivanic, 1998, p. 27). Learning journals encourage students to write personal reflections about their learning processes. They have positive effects on learning and reflective learning, and promote critical thinking skills (Orlang-Barak, & Yinon, 2007). Although writing journals are often for private use, the pre-service teachers know that they might be sharing their entries, both for continued dialogue with the tutor and peers and for assessment purposes (Ghaye, 2011).

Ediger (1997) suggested five advantages in using journal writing in supporting students to communicate effectively, these include: (1) each student has ownership of his/her written reflections. This student then chooses what to write about (2) students then may feel that writing is individualized in that each may select, organize, and

sequence content to write about (3) writing here is personalized in that the learner writes about feelings, subject matter, attitudes, and values about what is prized in the curriculum (4) learners may choose to write in an intrapersonal or interpersonal manner, and (5) self-evaluation of the journal is possible as well as to use qualified learners to assess journal entries. Anderson (1993) added that journal writing can improve students' writing, enhance critical thinking, and encourage observational and creative skills. It helps students develop their writing skills as they are encouraged to experience writing that may be highly personal, and relatively unstructured (Anderson, 1993).

Recording thoughts and professional experiences in a journal as a means for reflection and analyzing different learning and teaching approaches is meant to assist candidate teachers to explore the principles guiding their practice. It supports learners to pro-actively identify and evaluate issues, seek solutions and implement them. Using these crucial skills could help prevent them from becoming overwhelmed by the challenges they encounter (Graham, Lester, & Dickerson, 2012). They are designed to encourage student-teachers to document their thinking about learning and teaching. It is anticipated that by writing about experiences, actions and events, they will reflect on and learn from those episodes (Loughran, 1996).

Reflective writing in teacher preparation is an ongoing and developmental process, performed before, during, and after teaching episodes. The power of writing journals as a learning tool is perceived as mediating between existing and new knowledge, enhancing the development of meta-cognitive abilities, self-exploration and work out solutions to problems (Kerka, 1996).

Self-Regulated Learning

A major goal of higher education is to create lifelong learners; independent and self-regulated learners who can acquire, retain, and retrieve knowledge on their own. Turning our students into lifelong learners no longer translates into producing widely read cultural elites, but rather equipping our graduates with basic survival skills (Nilson, 2013). At one time, it was thought that intelligence is the main factor determining academic success. After years of research, educators found that students can learn how to become more successful learners by using appropriate strategies to manage their motivation, behavior, and learning (Dembo & Seli, 2013).

The idea of self-regulated learning is probably older than the late 1980s. Perhaps the first person to introduce the idea of self-regulated learning was Gardner who recognized in 1963 the importance of personal initiative in learning (Zimmerman, 1990). Late in the 1970s, Rosenthal and Zimmerman introduced the terms "arrangement of thoughts" and "improvement of memory" in what they called observational learning (Rosenthal & Zimmerman, 1978). Since then, self-regulated learning has been the topic of a wealth of research projects in different fields of education.

Generally, self-regulated learning is viewed as a combination of skill and will. Skills refer to students' use of different cognitive and metacognitive strategies that include planning and organizing for learning, goal setting, self-monitoring, self-evaluation, time management and resource-management strategies (Corno, 1986). Will refers to students' motivational orientation in terms of goals, value, and expectations (Garcia, 1995; Woolfolk, Winne, & Perry, 2000).

According to Zimmerman (1994) students who use self-regulated learning skills actively have different cognitive strategies that help to configure knowledge and memorize it. Students can concentrate on their lessons by self-motivating and solve emotional adversities reasonably, and overcome the emotional failure in a rationale manner through self-motivation. The main idea behind self-regulated learning is to enable learners to constructively regulate their learning to gradually learn how to manage their learning (Zimmerman, 2000; 2002). Self-regulation of cognition and behavior is an important aspect of student learning and academic performance in the classroom context (Corno & Rohrkemper, 1985).

Pintrich & Linnenbrink (2000) assert that self-regulated learning particularly concerns the model of regulation in academic learning in school or classroom. According to Zimmerman (1998), academic self-regulation is not a mental ability, such as intelligence, or academic skills, such as reading proficiency; rather it is the self-directive process through which learners transform their mental abilities into academic skills.

Despite considerable research in the field, definition of self-regulation remains a difficult issue, as a multi-dimensional construct composed of motivational, cognitive, behavioral, and affective functions (Grolnick & Farkas, 2002). Berger et al. (2007) described self-regulation as the ability to monitor and modulate cognition, emotion, and behavior, to accomplish one's goals and/or to adapt to the cognitive and social demands of specific situations. Flavell & Miller (1998) added that Self-regulation is the process whereby learners systematically direct their thoughts, feelings, and actions toward the attainment of their goals; it is a total engagement activity involving multiple parts of the brain. Zimmerman (2002) pointed out that this activity encompasses full attention and concentration, self-awareness and introspection, honest, self-assessment, openness to change, genuine self-discipline, and acceptance of responsibility for one's learning. Boekaerts & Cascallar (2006) indicated that skills and strategies of self-regulation have been proffered as being utilized in social relationships as well as in learning

In view of this conceptualization, "self-regulated learning" is seen as a mechanism to help explain achievement differences among students and as a means to improve achievement (Schunk, 2005, p. 85). However, three components seem especially important for classroom performance; First, self-regulated learning includes students' metacognitive strategies for planning, monitoring and modifying their cognition (Zimmerman & Pons, 1988). Students' management and control of their effort on classroom academic tasks has been proposed as another important component. For example, capable students who persist at a difficult task or block out distractors maintain their cognitive engagement in the task, enabling them to perform better (Corno & Rohrkemper, 1985). A third important aspect of self-regulated learning that some researchers have included in their conceptualization is the actual cognitive strategies that students use to learn, remember, and understand the material (Zimmerman & Pons, 1988).

Zimmerman (1986) mentioned that self-regulation comprises three major components: (a) metacognitive processes (b) motivational processes, and (c) behavioral processes. The role of these processes is clearly stated by Zimmerman (2001) who argues that students are self-regulated to the degree that they are meta-cognitively, motivationally, and behaviorally active participants in their own learning processes.

In recent years, a number of models have been developed so as the processes and the sub-processes of self-regulation to be defined. These models, regardless their different theoretical perspectives, tent to have common characteristics (Koutsouba, 2012). Zimmerman (1998, 2002) proposed a three-phase model of self-regulation. The first phase, forethought, refers to the skilled and strategic processes that precede and set the stage for performance in learning. These processes would include but are not limited to goal setting, attribution, self-efficacy of eminent tasks, and the intrinsic motivation to perform the learning task.

The second phase, the performance control, consists of the skilled and strategic processes. These skilled and strategic processes include but are not limited to attention, affect, and monitoring of action. Self-regulated learning skills and strategies such as time management, task strategies, and help seeking, are associated with the performance control phase. In the third and final phase, the self-reflection phase, individuals react and respond to their self-regulated efforts in the learning process by evaluating the outcomes of their performance. During the final self-regulation phase, the individual will self-evaluate based upon social comparisons and adjust the implementation of skills and strategies (Zimmerman, 2008).

Zimmerman & Schunk (1989) explain that self-regulation help student' becoming "masters of their own learning". In the same context, Zimmerman (2000) maintained that Self-regulated learning corresponds with independently generated thinking, feeling, and connecting to the adaptation of personal objectives. According to social cognitive theory, self-regulation is context specific.

Reflective Thinking:

In a world where a huge amount of information is available, it is important to know how to manage this information. Knowledge in today's society soon becomes obsolete and students need to be able to do more than simply know facts and information. They need to be able to sift through information and select what is relevant and authoritative, and be able to critique, analyze and apply it. They need to be able to respond to situations that are complex and continually evolving (Larkin & Pepin 2013). Reflection is a form of mental processing that we use to fulfill a purpose or to achieve some anticipated outcome. It is applied to gain a better understanding of relativity complicated or unstructured ideas and is largely based on the reprocessing of knowledge, understanding and, possibly, emotions that we already possess (Moon, 2005).

The definition of the term reflective thinking, originates with a proposal from John Lock in 1690 (Hsieh & Chen, 2012), and subsequently John Dewy transformed this concept into an operational principle, which asserts that reflective thinking can result true, purposeful, and meaningful learning (Dewy, 1933). According to Fischer & Pruyne (2003) reflective thinking is a complex form of cognition almost exclusively associated with adult development. It was first defined by John Dewey (1933) as active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends. The key elements of Dewey's definition—the use of evidence and reasoning, the questioning of knowledge and beliefs, and the active pursuit of justifiable conclusions—constitute the basis for most contemporary theories that address the development of reflective thinking.

Reflective thinking is the process of making informed and logical decisions on educational matters, then assessing the consequences of those decisions (Taggart & Wilson, 2005). Campbell-Jones & Campbell-Jones (2002) described reflection as an inner dialogue with oneself whereby a person calls for experience, beliefs, and perceptions (p. 134). There has been a concerted effort among universities and institutions in higher learning to incorporate reflective thinking into their curriculum (Choy & Oo, 2012).

Dewey (1933) characterized reflection as comprising five phases. The phases need not necessarily occur in any particular order but should fit together to form the process of reflective thinking. The five phases are: suggestion, problem, hypothesis, reasoning, and testing (Loughran, 1996). Reflective process is neither a solitary nor a relaxed meditative process. To the contrary, reflective practice is a challenging, demanding, and

often trying process that is most successful as a collaborative effort. Reflective practice is viewed as a means by which practioners can develop a greater level of self-awareness that creates opportunities for professional growth and development (Osterman & Kottkamp, 1993).

Dewey (1933) suggested that reflective thinking, in distinction from other operations to which we apply the name of though, involves (1) a slate of doubt, hesitation, perplexity, mental difficulty, in which think originated, and (2) an act of searching, hunting, inquiring, to find material that resolve the doubt, and settle the perplexity. He suggests that reflective thinking is an active, persistent, and careful consideration of a belief or supposed form of knowledge, of the grounds that support that knowledge, and the further conclusions to which that knowledge leads.

Despite its power to improve learning and practice, reflection does not seem to be a spontaneous activity in our professions or everyday life as we need to actively dedicate time and efforts to make reflections (Gelter, 2003). Learners who think reflectively become aware of and control their learning by actively accessing what they know, what they need to know and how they bridge the gap (Sezer, 2008). An important role of reflective thinking is to act as a means of promoting the thinker during problem solving situations because it provides an opportunity to step back and think of the best strategies to achieve goals (Rudd, 2007).

Research Problem and Hypotheses:
Learning journals are designed to encounter prospective student-teachers to document their thinking about learning and teaching. It is anticipated that by writing about their experiences, actions and events, student-teachers are empowered to reflect on and learn from those episodes (Loughran, 1996). Accordingly, the current study attempts to investigate the following main hypothesis: There are no statistically significant differences between the mean scores of the respondents' of the control and experimental groups among pre-service teachers enrolled in the educational psychology course attributed to using learning journals, and more specifically it attempts to investigate the following sub-hypotheses which emerged from this main hypothesis:

1. There are no statistically significant differences at level ($\propto$ = 0.05) between the mean scores of the experimental group (which was taught by using learning journals), and the control group (which was taught traditionally) on the self-regulated learning scale.

2. There are no statistically significant differences at level ($\propto$ = 0.05) between the mean scores of the experimental group (which was taught by using learning journals), and the control group (which was taught traditionally) on the reflective thinking scale.

Significance of the Study:
The use of journal writing enhances what teachers tend to reach by directing their attention toward introducing the facilitation of students' understanding and conceptualization of relevant learning. This study is one of the few studies in Jordan that have examined the effect of using journal writing on enhancing students' reflective thinking and self-regulated learning at university level. The fundamental purpose of this study is to provide the prospective teachers with a complete and balanced tool to develop their reflection and self-regulation performance skills. Thus, the results of this study will benefit students and the teachers not only in educational psychology course but also in other courses. This study will serve as the basis for future plans of educational practioners, school principals, educational supervisors and other stakeholders by the school with regard to the necessary actions for the education reform initiatives. Furthermore, this study will serve as a theoretical model for future studies of the same nature and will provide future researchers with the facts needed to compare their study during their respective time and usability.

The Study Limitations:
Although the content analysis of students' responses indicates the value of learning journals in promoting self-regulated learning and reflective thinking, these findings are limited by the small sample of students from educational psychology course, at one teacher Education College. In addition, this research did not explore the role of the author of this research study in providing quality feedback to students. Moreover, the results of this study may be related to the scales of self-regulated learning and reflective thinking that were used in this study; however, using different scales may lead to different results. Finally, the findings of this current study may be connected to the methodology used by the author in designing and using the learning journal technique in organizing pre-service teachers' teaching and learning, which means that using different approach may result in different findings.

Research Definitions:
The following definitions are adopted for the purpose of this study:
1. Learning Journals: a learning journal typically is a hand written in a notebook or on a pad of paper as a

means for recording thoughts, reflections, feelings, personal opinions, and even hopes or fears during an educational experience (Hiemstra, 2001).

2. Self-regulated learning: self-regulated learning is a process in which learners are metacognitively, motivationally, and behaviorly active participants in their own learning process. Hence, self-regulated learning is a complex process which involves numerous dimensions of human information processing (Zimmerman, 1989; Zimmerman, 2008). Procedurally, self-regulated learning is measured in this study using a self-regulated learning test which was prepared by Purdie and adapted by Ahmad (2007).

3. Reflective thinking: a complex form of cognition that can result true, purposeful, and meaningful learning. It is an active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it, and the further conclusions to which it tends, through the use of evidence and reasoning, the questioning of knowledge and beliefs, and the active pursuit of justifiable conclusions (Fischer & Pruyne, 2003; Dewy, 1933). Procedurally, reflective thinking is measured in this study using a reflective thinking test which was prepared by Shdaifat (2007).

Literature Review:

Langer (2002) carried out a research study to report on the use of learning journals as vehicles for encouraging critical reflection among non-traditional students and to compare variances with studies among traditional students. An objective of the study was to understand how adult students in a 'technical' computer class responded to the requirement for learning journals. This qualitative research focused on whether learning journals prove to be an effective teaching tool in science-based, adult learning. The study was conducted at Columbia University's Computer Technology programme in Continuing Education. Results suggest that non-traditional students are more skeptical than traditional students about using learning journals and more likely to use them as study tools. An implication of this study is that student perception and skepticism of the assignment can affect the objective of developing reflective thinking. This implication stresses the need to account for student perception in studies on learning journals and critical reflection.

Theoret & Luna (2009) used combined qualitative and quantitative techniques to investigate two different types of writing assignments in an introductory undergraduate statistics course. The assignments were written in response to the same set of prompts but in two different ways: homework journal assignments or initial posts to a computer discussion board. A survey at the end of the semester elicited student reactions to writing in a statistics course, as well as to the two different types of writing they were asked to do. A majority of the students felt that the addition of writing to the course was beneficial to their learning. Student writing was analyzed to identify the types of writing found. Both forms of writing investigated allow students to engage in reflective thinking about statistics and to communicate their questions to their instructor.

Ezati, Ocheng, Sentamu, & Sikoyo (2010) implemented a study to explore the role of journal writing in enhancing student teachers' learning during school practice. It analyses data from 22 student teachers' journals and 23 questionnaires. The study focuses on the areas that student teachers reflected on most, the nature of their reflection and the extent to which previous experiences informed their subsequent reflection and learning. Findings showed that student teachers frequently reflected on handling indiscipline issues, procedures and outcomes of supervision, but less on their own learning. Inadequate reflection on their learning suggests that journal writing has not yet sufficiently promoted student teachers' professional growth. Generally, the examination and cultural orientation in the Ugandan society influence student teachers' journal writing.

Arsal (2010) examined the effect of diaries on self-regulation strategies of the pre-service science teachers. The participants of the study were 60 pre-service science teachers, 30 of which were in the experimental and the remaining 30 were in the control group. The Pintrich's self-regulation model was taken as a basis in the study. In the study, the pre-service science teachers in the experimental group reported the self-regulation strategies they used for daily learning activities by writing the diary-report form for fourteen weeks. The data of the study were collected by the motivated strategies for learning questionnaire. At the end of the study, the intrinsic motivation, task value, meta-cognition, time management strategy usage status of the experimental group which reported their self-regulation strategies were significantly different from those of the control group.

Guvenc (2010) conducted a study to investigate the effects of cooperative learning and learning journals on teacher candidate students' self-regulated learning. Eighty-four university students (52 girls and 32 boys) participated in this research. A quasi pre-test/post-test experimental design with control group was utilized. Both groups were taught by cooperative learning. The experimental group wrote their reflection in learning journals. The research has concluded that there is a difference between the experimental and control groups in favor of the students of the experimental group who have been affected more positively on self-efficacy for learning and performance, elaboration, organization, critical thinking, and meta-cognitive control strategy dimensions of self-regulated learning.

Chung & Yuen (2011) conducted a research study to explore the role of feedback in encouraging such

regulation from social cognitive and socio-cultural perspectives. The effects and value of various influences within the social and cultural environment are reviewed. In the context of inviting schools, thought is presented to the issue of how the 'Five Ps' (People, Programs, Policies, Places, and Processes) all provide various forms of feedback and input that could encourage self-regulation. In particular, the authors discuss how a reporting system that provides detailed and personalized feedback to students in an inviting setting can be one important way of facilitating students to reach their full potential as autonomous learners. Suggestions for consideration by school staff, and for future researchers, are provided.

Andrew (2011) carried out a research study to describe the sociocultural learning of 40 second year students in a Bachelor of Arts in English as an additional language (EAL) program in Auckland, New Zealand. These learners participated in a teaching and learning intervention involving journalized community placement. The study illustrates how reflective journals can be used as a vibrant teaching, learning, and assessment tool, to reflect on their experiences of language socialization, and to become aware of their own investments. Students from the four categories of EAL learner (immigrants, international students, study-abroad students, and refugees) participated in a real-world workplace writing reflective diaries recording their observations and interactions. Qualitative analysis using discourse positioning reveals students describing themselves in relation to themes of changing perceptions of English abilities, changing identities relative to the host culture, and participation as socialization.

Sayaga & Fischi (2012) examined changes in levels of pre service teachers' reflective writing and tried to identify links between these changes and pre service teachers' success in teaching. Participants were two groups of pre-service special education teachers that taught in two different special education settings: learning difficulties classes and multiple and profound intellectual disabilities classes. Results indicated that both groups improved in descriptive levels of explanations, but only one group improved in higher levels of reflective (comparative and critical) explanations. A positive correlation was found between grades in field experience and descriptive and comparative explanations in the first semester for both groups. These results point towards a professional developmental relation between reflective writing and teaching during teacher education process.

Due attention has been recently paid to learning journals and its impact on preparing prospective teachers. The present study is to add a complementary investigation into learning journals in the Arab World where such a line of research has not enjoyed vogue. It is an attempt to identify the learning journals and their vital role in developing some critical features of pre-service teachers. It should, therefore, be taken to enrich practice of using learning journals to promote pre-service teachers' self-regulated learning and reflective thinking skills.

Method and Procedures:
Population:
The population of this study consisted of 132 students of the Faculty of Educational Sciences and Arts (FESA) who were enrolled in the educational psychology courses during the first semester of the academic year 2013-2014.
Sample:
The sample of the study was selected randomly and distributed into an experimental group which was taught by using learning journals and a control group which was taught by the traditional method, as shown in table (1).

Table (1): Number of Participants and percentages of the distribution of the sample subjects

Group	Number of Participants	Percentage %
Control Group (Traditional method)	31	50.82%
Experimental Group (Learning Journals)	30	49.18%
Total	61	100.00%

Equivalence of the Study Groups:
To ensure that the study groups are equivalent, the researcher applied the study instruments (the reflective thinking and the self-regulated learning scales) before the implementation of the study procedures as follows:
The Reflective Thinking Scale:
The researcher applied the reflective thinking scale before the implementation of the study procedures. Then he computed the means, standard deviations and (t) test of the subjects' responses on the pre-reflective thinking scale according to the group. The results are shown in table (2).

Table (2): Means, standard deviations and (t) test of the subjects' responses on the pre-reflective thinking scale

The Domains	Groups	Mean*	Std. Deviation	df	(t) Value	Sig.
Knowledge Generation	Experimental Group	3.11	.33	59	0.722	0.476
	Control Group	3.04	.40			
Reflective Dialogue	Experimental Group	3.08	.25	59	0.391	0.697
	Control Group	3.05	.36			
Reflective Planning	Experimental Group	3.12	.23	59	1.309	0.196
	Control Group	3.03	.27			
Total	Experimental Group	3.10	.19	59	1.045	0.300
	Control Group	3.04	.27			

- Out of (5).

Table (2) shows that there is no significant difference between the means of the subjects' responses on the pre-reflective thinking scale according to the group.

The Self-regulated Learning Scale:

The researcher applied the self-regulated learning scale before the implementation of the study procedures. Then he computed the means, standard deviations and (t) test of the subjects' responses on the pre self-regulated learning scale according to the group. The results are shown in table (3).

Table (3): Means, standard deviations and (t) test of the subjects' responses on the pre self-regulated learning scale

The Domains	Groups	Mean*	Std. Deviation	df	(t) Value	Sig.
Planning and Goals	Experimental Group	2.95	.34	59	0.931	0.356
	Control Group	3.02	.29			
Monitoring	Experimental Group	2.92	.33	59	1.246	0.261
	Control Group	3.08	.30			
Understanding	Experimental Group	3.03	.28	59	0.411	0.683
	Control Group	3.06	.31			
Social Helping	Experimental Group	2.95	.27	59	1.593	0.134
	Control Group	3.06	.28			
Total	Experimental Group	2.96	.12	59	1.005	0.303
	Control Group	3.05	.14			

- Out of (5).

Table (3) shows that there is no significant difference between the means of the subjects' responses on the pre-self-regulated learning scale according to the group.

Instruments of the Study

1) Learning Journals: During the period of the research application, students were asked to fill in learning journal, about several aspects related to the teaching and learning process, such as: journal writings about students' understanding of the ideas and knowledge, the learning process, and the difficulties of learning the subject. The students were also asked to write journals about their attitudes and feelings about learning, such as: what were the interesting things in today's lesson? What are the reasons that made you like/ dislike today's lesson? The filling of journal varies, according to the learning process; some of them were at the beginning of the lesson, about the previous students' knowledge of the new subject, some of the journals at the end of the lesson, about the achieved knowledge and the students' impression about the lesson. Some of the journals were filled in the classroom, and others were filled at home. Students' works were checked by the instructor, and notes about their writings were taken, some of these notes helped the instructor assess the teaching and learning process, which helped him to modify his teaching decisions, according to students' notes and impressions, so the journal writings supply the instructor with feedback he did not get in the classroom.

Initially, reflection papers were not numerically graded, based upon literature that identified a model of low-stakes writing where grading may interfere with the learning process (McKeachie, 2006). They were evaluated on a pass/fail basis and extensive feedback was given to encourage the reflection process; however, this approach seemed to be a concern for some students who preferred more specific performance guidelines and scoring.

2) **Self-regulated Learning Scale: Scale Validity:** This scale was prepared by Purdie and adapted by Ahmad (2007). It comprises (28) items distributed equally into four domains; Setting goals and planning, keeping records and monitoring, recitation and memorization, and asking for social assistance. Purdie sought to validate the scale using a sample of (254) secondary school students, which revealed the aforementioned domains, after deleting the items below saturation for (0.30). All the factors have interpreted (51.477) of variation. Ahmad verified the apparent validity through specialized judges in language and psychology, considered their comments, and made the necessary adaptations. He carried out the factor analysis validity of the scale on a sample consisting of (160) students of the Faculty of Education at Al-Mansoura University in Egypt. The scale maintained the domains and items of the original version. He also computed the coefficient of each item with the dimension it belongs to, using a sample comprises (80) students, the values ranged from (0.389-0.782), which were significant at ($\propto$ = 0.05). To confirm these results for the purposes of this study, the researcher investigated the apparent validity of the scale through specialized judges in language and educational psychology, who proposed some linguistic modifications to suit the Jordanian environment. The construct validity of the scale was carried out using a sample of (34) students to compute the correlation coefficient of each item with the domain it belongs to. The values ranged from (0.51-0.86), and the correlation coefficient of each domain with other domains was also computed. The values ranged from (0.61-0.89). All results were significant at ($\propto$ = 0.05)

Scale Reliability: Purdie investigated the scale reliability using the test-retest method. The values of the scale reliability ranged from (0.69-0.81). Ahmad (2007) investigated the scale reliability using the test-retest method after two weeks of the first application, the results ranged from (0.81-0.93).

In the current study, the author investigated the scale reliability also through the test-retest method after two weeks of the first application using a sample of (34) students. The reliability coefficient ranged from (0.81-0.90). The reliability coefficient was also computed through Cronbach alpha test which revealed that the internal consistency coefficient ranged from (0.79-0.89). Accordingly, all the aforementioned results showed that this scale enjoys credible reliability coefficients for the purposes of this study.

3) **Reflective Thinking Scale:**
 Scale validity: This scale was prepared by Shdaifat (2007). It consisted of (32) items distributed into three domains; generating meaningful knowledge, reflective dialogue, and connecting the elements of knowledge and reflective planning. The researcher aimed to validate the scale through content validity test, by asking a committee of judges to assess the appropriateness of the items to each domain. Moreover, the linear correlation coefficients (Pearson) between each item and the domain it belongs to were computed. The results showed that the value of correlation coefficients varied from (0.22 - 0.85), and were significant at ($\propto$ = 0.01). The overall score of the scale ranged from (0.12-0.80), and were significant at ($\propto$ = 0.01). To confirm the validity of the scale, the researcher applied it on the exploratory group which comprises (34) students similar to the participants of the current study in cultural, economic, and social characteristics. The correlation coefficients between the item score and the overall score of the domain were computed. The results showed that the value of correlation coefficients varied from (0.42 - 0.84), and were significant at ($\propto$ = 0.01), and also the overall score of scale which ranges from (0.54-0.87). Accordingly, all the items of this scale were accredited, and the correlation coefficients between the domains of the scale and the overall score of the scale (0.73, 0.59, 0.75) respectively.

Scale Reliability: Shdaifat investigated the scale reliability through applying it on a sample of 8th graders, the Pearson correlation coefficient was computed on the sample's pre and post results. The findings showed that the overall reliability coefficient was (0.77), while the coefficients of the domains were (0.47, 0.70, and 0.50) respectively. The reliability of the overall homogenization using Cronbach alpha test was (0.92). To confirm the reliability of the scale, the author of the current study used the same validity sample, and computed the scale reliability using two methods: (1) Internal consistency, through computing Cronbach alpha coefficient as a whole and of each domain. (2) Then the reliability was computed through the half-split method. The Chronbach alpha coefficients ranged from (0.72-0.91), while the half-split reliability coefficient ranged from (0.76-0.93), and all results were significant at ($\propto$ = 0.01). Accordingly, the scale is credible for the purposes of this study.

Methodology and Procedures:
Variables of the Study
This is a quasi-experimental study including the following variables:
1. The independent variable: The teaching method has two levels: (Journals Learning method and traditional method).
2. The dependent variables: Self -regulated learning and Reflective thinking.

Procedures of the Study:
1. The study sample was selected according to its variables.
2. The tool of the study was distributed to the individuals of the sample, and there was a follow up of the filling procedures and the handing back process.
3. The information was computerized and processed by using the statistical parcel (SPSS) in order to answer the questions of the study.

Method of Data Analysis
Statistical Package for the Social Sciences (SPSS) was used in order to test the hypothesis of this research. The data were analysed in three ways: (1) descriptive statistics, (2) Independent samples (t) test and (3) MANCOVA.

Results and Discussion:
The following describes the results of the descriptive statistics and testing the study hypotheses, after the researcher collected the necessary data through applying the study instruments.

Results and Discussion related to the First Hypothesis:
There is no any statistically significant difference at ($\propto = 0.05$) in means of students' responses on the reflective thinking questionnaire that may be ascribed to the method of instruction (Journals Learning method and Traditional method). To test this hypothesis, descriptive statistics (means and standard deviations) of the subjects' responses on the reflective thinking questionnaire on the pre and post-tests according to the groups were computed. The results are shown in table (4).

Table (4): Means and standard deviations of the subjects' responses on the reflective thinking scale on the pre and post-tests

The Domains	Groups	Pre-test Mean*	Std. Deviation	Post-test Mean*	Std. Deviation
Knowledge Generation	Experimental Group	3.11	.33	3.55	.31
	Control Group	3.04	.40	3.03	.29
Reflective Dialogue	Experimental Group	3.08	.25	3.50	.26
	Control Group	3.05	.36	3.08	.35
Reflective Planning	Experimental Group	3.12	.23	3.46	.22
	Control Group	3.03	.27	3.04	.22
Total	Experimental Group	3.10	.19	3.50	.19
	Control Group	3.04	.27	3.05	.22

- Out of (5).

Table (4) shows that there are apparent differences between the means of the subjects' responses on the reflective thinking scale in the pre and post-tests according to the groups. To test these differences the MANCOVA test was used as shown in table (5).

Table (5): MANCOVA test results for the differences between the means of the subjects' responses on the reflective thinking scale on the pre and post-tests

Source	Domains	Sum of Squares	df	Mean Squares	F	Sig.
Test	Knowledge Generation	657.925	1	657.925	7305.593	.000*
	Reflective Dialogue	657.706	1	657.706	6949.436	.000*
	Reflective Planning	643.688	1	643.688	12973.717	.000*
	The Scale	652.054	1	652.054	15217.826	.000*
Group	Knowledge Generation	4.230	1	4.230	46.974	.000*
	Reflective Dialogue	2.680	1	2.680	28.315	.000*
	Reflective Planning	2.746	1	2.746	55.347	.000*
	The Scale	3.109	1	3.109	72.559	.000*
Error	Knowledge Generation	5.313	59	0.090		
	Reflective Dialogue	5.584	59	0.095		
	Reflective Planning	2.927	59	0.050		
	The Scale	2.528	59	0.043		
Total	Knowledge Generation	667.469	61			
	Reflective Dialogue	665.970	61			
	Reflective Planning	649.361	61			
	The Scale	657.691	61			

- Significant at ($\propto$ = 0.05).

Table (5) shows that there are significant differences between the means of the subjects' responses on the domains of the reflective thinking scale in the pre and post-tests in favor of the experimental group. This result may be attributed to that learning journals help students recognize the main ideas and concepts in the various learning situations. They also help students analyze the main ideas and associate them with future learning situations. Moreover, learning journals improve students' skills in using practical applications of these learning journals in different learning situations. This, in turn, helps students generate more knowledge through discussing, analyzing and linking these ideas with other ideas. Such practical applications of learning journals improve students' reflective thinking through generating more knowledge and reflective dialogue. Analyzing and discussing the main ideas in the learning situation, identifying the strengths and weaknesses in these situations and evaluating how much a student takes advantage of learning journals demands a thorough knowledge, on the part of the student, of the objectives of the learning situations. Furthermore, using internal reflective thinking helps improve students' reflective planning. Wong, Kember, Chung, & Yan (1995) confirms that reflective journal writing involves a reflective process that is initiated when the learner documents the experience encountered, returns to the experience, recollects what has taken place and replays the experience, and re-evaluation takes place. Walmsley & Birkbeck (2006) added that reflective writing has the potential to facilitate both self-reflection and integration of theory and practice. This result confirms results of the previous study (Langer, 2002; Ezati, Ocheng, Sentamu, & Sikoyo, 2010; Andrew, 2011; Sayaga & Fischi, 2012; Theoret & Luna, 2009).

Results and Discussions Related to the Second Hypothesis:

There is no statistically significant difference at ($\propto$ = 0.05) in means of students' responses on the self-regulated learning scale that may be ascribed to the method of instruction ((Journals Learning method vs. Traditional method). To test this hypothesis, descriptive statistics (means and standard deviations) of the subjects' responses on the self-regulated scale in the pre and post-tests were computed. The results are shown in table (6).

Table (6): Means and standard deviations of the subjects' responses on the self-regulated learning scale in the pre and post-tests

The Domains	Groups	Pre -test		Post -test	
		Mean*	Std. Deviation	Mean*	Std. Deviation
Planning and Goals	Experimental Group	2.95	.34	3.44	.26
	Control Group	3.02	.29	3.09	.25
Monitoring	Experimental Group	2.92	.33	3.49	.23
	Control Group	3.08	.30	3.14	.24
Understanding	Experimental Group	3.03	.28	3.50	.28
	Control Group	3.06	.31	3.06	.26
Social Helping	Experimental Group	2.95	.27	3.43	.22
	Control Group	3.06	.28	3.14	.26
Total	Experimental Group	2.96	.12	3.47	.18
	Control Group	3.05	.14	3.11	.15

- Out of (5).

Table (6) shows that there are apparent differences between the means of the subjects' responses on the self-regulated learning scale in the pre and post-tests. To test these differences the MANCOVA test was used as shown in table (7).

Table (7): MANCOVA test results for the differences between the means of the subjects' responses on the organized learning scale in the pre and post-tests

Source	Domains	Sum of Squares	df	Mean Squares	F	Sig.
Test	Planning and Goals	86.907	1	86.907	1323.771	.000*
	Monitoring	88.960	1	88.960	1634.290	.000*
	Understanding	93.532	1	93.532	1292.682	.000*
	Social Helping	83.948	1	83.948	1445.173	.000*
	The Questionnaire	88.302	1	88.302	3118.573	.000*
Group	Planning and Goals	1.875	1	1.875	28.560	.000*
	Monitoring	1.842	1	1.842	33.845	.000*
	Understanding	2.891	1	2.891	39.960	.000*
	Social Helping	1.328	1	1.328	22.854	.000*
	The Questionnaire	1.945	1	1.945	68.708	.000*
Error	Planning and Goals	3.873	59	0.066		
	Monitoring	3.212	59	0.054		
	Understanding	4.269	59	0.072		
	Social Helping	3.427	59	0.058		
	The scale	1.671	59	0.028		
Total	Planning and Goals	655.878	61			
	Monitoring	674.918	61			
	Understanding	662.898	61			
	Social Helping	662.367	61			
	The Scale	661.932	61			

- Significant at ($\propto$ = 0.05).

Table (7) shows that there are significant differences among the means of the subjects' responses on the organized learning scale domains in the pre and post tests in favor of the experimental group. This result may be explained in light of helping students use learning journals effectively, through supporting educators and teachers aim at making them aware of all the dimensions of their learning, have self-control over their learning situations and evaluate them through sustained performance self- monitoring. This empowers students to organize their learning themselves. This result confirms results of the previous studies (Guvenc, 2010; Chung & Yuen, 2011; Arsal, 2009).

Conclusions and Recommendations:

After reviewing the results, the researcher noted that reflection assignments did not consistently yield the full range of benefits identified by the participants. Educators who want to capitalize on the potential of journal

writing must be willing to spend the time and effort to offer students feedback on the substance of their journal entries. Feedback will also help students identify their own areas of strengths and weaknesses in journal writing.

In the light of the previous results, which revealed that there was an efficiency of using journal learning in developing students' self-regulated learning and reflective thinking, the following suggestions can be recommended:

1. Using learning journals in teaching and learning educational psychology, especially for pre-service teachers.
2. Training pre-service teachers on using learning journals as a tool for reflection especially during the practice teaching stage.
3. Conducting other studies in Jordan and other Arab countries to examine the effect of learning journals on students' achievement, anxiety, self-confidence, professional development, and attitudes towards the teaching profession.

References

Ahmad, E. E. (2007). Self-regulation of learning and internal motivation in their relationships with academic achievement among students of the Faculty of Education (predictive study). *The Journal of the Faculty of Education*, Ain-Shams University, 31 (3), 69-135.

Anderson, J. (1993). Journal writing: The promise and the reality. *Journal of Reading*,36(4), 304-309.

Andrew, M. (2011). Like a newborn baby: Using journals to record changing identities beyond the classroom. *TESL Canada Journal Review*, 29 (1), 57-76.

Arsal, z. (2010). The effects of diaries on self-regulation strategies of perspective science teachers. *International Journal of Environmental & Science Education*, Vol, 5, No. 1, 85-103.

Berger, A., Kofman, O, Livneh, U., & Henik, A. (2007). Multidisciplinary perspectives on attention and the development of self-regulation. *Progress in Neurobiology*, 82, 256-286.

Boekaerts, M., & Cascallar, E. (2006). How far have we moved toward the integration of theory and practice in self-regulation? *Educational Psychology Review*, 18, 199-210.

Calderhead, J. (1991). The nature and growth of knowledge in student teaching. *Teaching and Teacher Education*, 7 (5/6), 531-535.

Campbell-Jones, B. & Campbell-Jones, F. (2002). Educating African American children: Credibility at the crossroads. *Educational Horizons*, 80 (3), 133-139.

Choy, S. C. & Oo, P. S. (2012). Reflective thinking and teaching practices: A precursor for incorporating critical thinking into the classroom. *International Journal of Instruction*, 5 (1), 167-182.

Cole, R., Raffier, L. M., Rogan, P. & Schleicher, L. (1998). Interactive group journals: Learning as a dialogue among learners. *TESOL Quarterly*, 32 (3), 556-568.

Corno, L., & Rohrkemper, M. (1985). The intrinsic motivation to learn in classroom. In C. Ames & R. Ames (Eds), Research on Motivation, Vol. 2. *The classroom milieu* (pp. 53-90). New York: Academic Press.

Corno, L. (1986). The metacognitive components of self-regulated learning. *Contemporary Educational Psychology*, 11 (4), 333-336.

Cottrell, S. (2003). Skills for success: Personal development planning handbook, London: Palgrave Macmillan.

Chung, Y. B. & Yuen, M. (2011). The role of feedback in enhancing students' self-regulation in inviting schools. *Journal of Invitational Theory and Practice*, Vol. 17, 22-27.

Dembo, M. H. & Seli, H. (2013). Motivation and learning strategies: A focus on self-regulated learning (4th Ed.). New York: Routledge.

Dewey, J. (1933). How we think, New York: Heath and Co.

Ediger, M. (1997). Social studies curriculum in the elementary school. Kirksville, Missouri: Simpson Publishing Company.

English, L. M. & Gillen, M. A. (2001). Promoting journal writing in adult education. San Francisco: Jossey-Bass.

Ezati, B. A., Ocheng, M. K., Ssentamu, P. N., & Sikoyo, L. N. (2010). Enhancing quality of student teachers' practices through reflective journal writing during school practice. *Perspectives in Education*, 28 (2), 31-40.

Fischer, K. W. & Pruyne, E. (2003). Reflective thinking in adulthood development: Emergence, development, and variation. In J. Demick and C. Andreoletti, *Handbook of Adult Development*. New York: Plenum Press.

Flavell, J. H., & Miller, P. H. (1998). Social cognition. In W. Damon (Ed.), *Handbook of Child Psychology: Cognition, perception, and language* (Vol. 2, pp 851-898). New York: John Wiley & Sons.

Francis, D. (1995). The reflective journal: A window to preservice teachers' practical knowledge. *Teaching & Teacher Education*, 11 (3), 229-241.

Garcia, T. (1995). The role of motivational strategies in self-regulated learning. *New Directions for Teaching*

and Learning, G3, 29-42. San Francisco, CA: Jossey-Bass.

Gelter, H. (2003). Why is reflective thinking uncommon? *Reflective practice*, 4 (3), 337-344.

Ghaye, T. (2011). Teaching and learning through reflective practice: A practical guide for positive action, (2nd Ed.). Abingdon & New York: Routledge.

Graham, S., Lester, N., & Dickerson, C. (2012). Discover-Deepen-Do: A 3D pedagogical approach for developing newly qualified teachers as professional learners. *Australian Journal of Teacher Education*, 37, (9), 42-66.

Grennan, K. F. (1989). The journal in the classroom. *Equity and Excellence*, 24 (3), 38-40.

Grolnick, W. S. & Farkas, M. (2002). Parenting and the development of children's self-regulation. In M. H. Bornstein (Ed.), *Handbook of parenting*: Vol. 5, *Practical issues in parenting* (2nd edition, pp 89-110), Mahwah, NJ: Lawrence Erlbaum.

Guvenc, H. (2010). The effects of cooperative learning and learning journals on teacher candidates' self-regulated learning, Educational Sciences: Theory & Practice, 10 (3), 1477-1487.

Hatton, N. & Smith, D. (1995). Reflection in teacher education: Towards definition and implementation. *Teacher and Teacher Education*, 11 (1), 33-49.

Hiemstra, R. (2001). Uses and benefits of journal writing. In L. M. English & M. A. Gillen, (Eds.), Promoting journal writing in adult education (New Directions for Adult and Continuing Education, No. 90, pp. 19-26). San Francisco: Jossey-Bass.

Hsieh, P. H. & Chen, N. S. (2012). Effects of reflective thinking in the process of designing software on students' learning performance. *The Turkish Online Journal of Educational Technology*, 11 (2), 88-99.

Ivanic, R. (1998). *Writing and Identity*. Amsterdam: John Benjamins.

Kerka, S. (1996). Journal writing as an adult learning. ERIC Clearing house on adult Career and Vocational Education Columbus, OH, ERIC Digest No. 174.

Koutsouba, M. I. (2012). Support and promotion of self-regulated learning through the educational material at the Hellenic Open University. *Turkish online Journal of Distance Education,* Vol. (13), No, 3, 226-238.

Langer, A. M. (2002). Reflecting on practice: Using learning journals in higher and continuing education. *Teaching in Higher Education*, 7 (3), 337-351.

Larkin, H. & Pepin, G. (2013). Becoming a reflective practioner. In K. Stagnitti, A. School & D. Welch (eds), *Clinical and fieldwork placement in the health profession*, (2nd ed), Melbourne: Oxford University Press.

Lee, I. (2008). Fostering pre-service reflection through response journals. *Teacher Education Quarterly*, 35 (1), 117-139.

Loughran, J.J (1996). *Developing reflective practice: learning about teaching and learning through meddling*. New York: Routledge Falmer.

McKeachie, W. (2006). *McKeachie's Teaching Tips: Strategies, research, and theory for*

college and university teachers (12th ed.). Boston and New York: Houghton Mifflin Company.

Moon, J. (2005). *Guide for busy academics No. 4: Learning through reflection*, Higher Education Academy.

Moon, J. A. (2006). *Learning journals: A handbook for reflective practice and professional development*. New York: Routledge.

Nikolaki, E., & Koutsouba, M. I. (2012). Support and promotion of self-regulated learning through the education material at the Hellenic Open University. *Turkish Online Journal of Distance Education*, 13 (3), 226-238.

Nilson, L. B. (2013). *Creating self-regulated learners: Strategies to strengthen students' self –awareness and learning skills*. Sterling, Virginia: Stylus Publishing, LLC.

Orlang-Barak, L. & Yinon, H. (2007). When theory meets practice: what student teachers learn from guided reflection or their own classroom discourse? *Teachers and Teacher Education*, 23 (1), 957-969.

Osterman, K. F. & Kottkamp, R. B. (1993). *Reflective practice for educators: Improving schooling through professional development*. Newbury Park, California: Corwin Press Inc.

Parsons, L. (1994). *Expanding response journals in all subject areas*. Portsmouth, NH: Heinemann.

Pavlenko, A. (2002). Poststructuralist approaches to the study of social factors in L2. In V. Cook (Ed.), *Portraits of the L2 user*, pp. 277-302. Clevedon, UK: Multilingual Matters.

Pintrich, P. R. & Linnenbink, E. (2000). The role of motivation in international learning. Paper presented in symposium at American Educational Research. Association convention, New Orleans.

Porter, P. A., Goldstein, L. M., Leatherman, J. & Conrad, S. (1990). An ongoing dialogue: Learning logs for teachers. In J. C. Richards & D. Nunan (Eds.), *Second language teacher education* (pp. 227-240). Cambridge, UK: Cambridge University Press.

Richards, J. C., & Ho, B. (1998). Reflective thinking through journal writing. In J. C. Richards (Ed.), *Beyond training* (pp. 153-179). Cambridge, UK: Cambridge University Press.

Rosenthal, T. L. & Zimmerman, R. J. (1978). *Social learning and cognition*. New York: Academic Press.

Rudd, R. D. (2007). Defining critical thinking. *Techniques*. 82 (7), 46-49.

Sayaga, E. C. & Fischi, D. (2012). Reflective writing in pre-service teachers' teaching: What does it promote? *The Australian Journal of Teacher Education*, 37 (10), 20-36.

Schneider, P. (1994). *The writer as an artist*. Los Angeles: Lowell House.

Schunk, D. H. (2005). Self-regulated learning: The educational legacy of Paul R. Pintrich. *Educational Psychologist*, 40 (2), 85-94.

Shdaifat, M. R. (2007). *The effect of a training program based on Quranic stories on developing reflective thinking among 8th graders*. Unpublished Ph.D. dissertation, Faculty of Education, Yarmouk University, Irbid, Jordan.

Sezer, R. (2008). Integration of critical thinking skills into elementary school teacher education courses in Mathematics. *Education*, 128 (3), 349-362.

Sommer, R. F. (1989). *Teaching writing to adults*. San Francisco: Jossey-Bass.

Stevens, D. D. & Cooper, J. E. (2009). *Journal keeping: How to use reflection for effective teaching and learning, professional insights & positive change*. Sterling, Virginia: Stylus Publishing, LLC.

Taggart, G. L. & Wilson, A. P. (2005). *Promoting reflective thinking in teachers: 50 action strategies.* California: Corwin Press.

Theoret, J. M & Luna, A. (2009). Thinking statistically in writing: Journals and discussion boards in an introductory statistics course. *International Journal of Teaching and Higher Education*, 21 (1), 57-65.

Walmsley, C. & Birkbeck, J. (2006). Personal narrative writing: A method of values reflection for BSW students. *Journal of Teaching in Social Work*, 26 (1/2), 111-126.

Wong, F., Kember, D., Chung, L. & Yan, L. (1995). Assessing the level of student reflection from reflective journals. *Journal of Advanced Nursing*, Vol. 22, 48-57.

Woolfolk, A. E., Winne, P. H & Perry, N. E. (2000). *Educational Psychology*. Scaborough, Ontario, Canada: Allyn and Bacon.

Zimmerman, B. J. (1986). Development of self-regulated learning: Which are the key sub-processes? *Contemporary Educational Psychology*, 16, 307-313.

Zimmerman, B. & Pons, M. (1988). Construct validation of a strategy model of student self-regulated learning. *Journal of Educational Psychology*, 80, 284-290.

Zimmerman, B. J. & Schunk, D. H. (1989). *Self-regulated learning and academic achievement: Theory, research, and practice*. New York: Springer-Verlag.

Zimmerman, B. J. (1990). Self-regulated learning and academic achievement: An overview, *Educational Psychologist*, 25 (1), 3-17.

Zimmerman, B. J. (1994). Dimensions of academic self-regulation. In D. H. Schunk & B. J. Zimmerman (Eds*.), Self-regulation of learning and performance: Issues and educational applications (pp.3-21)*. Hillsdale, NJ: Lawrence Erlbaum.

Zimmerman, B. J. (1998). Academic studying and the development of personal skills. A self-regulatory perspective. *Educational Psychologist*, 33 (2), 73-86.

Zimmerman, B. J. (2000). Attainment of self-regulation: a social cognition perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13-39), San Diego, CA: Academic Press.

Zimmerman, B. J. (2001). Theories of self-regulated learning: An overview and analysis. In B. J. Zimmerman & D. H. Schunck (Eds), *Handbook of self-regulation* (pp. 13-39). San Diego, CA: Academic Press.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice*, 41 (2), 64-70.

Zimmerman, B. J. (2008). Investigating self-regulation and motivation: historical background, methodological developments, and future prospects. *American Educational Research Journal*, 45 (1), 166-183.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:
http://www.iiste.org

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: http://www.iiste.org/journals/ All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: http://www.iiste.org/book/

Academic conference: http://www.iiste.org/conference/upcoming-conferences-call-for-paper/

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library , NewJour, Google Scholar