Chapter 2

Literature Review
1. Introduction

The context of Educational Psychology and Language Pedagogy has seen profound changes over the last 30 years. Due to these concurrent changes over the time, self-regulated learning has become a current focus for research and is one of the essential areas of educational practice. Self-regulated learning (SLR) is recognized as an important predictor of student’s academic motivation and achievement. This process requires learners to plan, monitor and assess their learning independently. The assessment phase includes a high level of self-reflection practices employed by the learners to their learning. Self-reflection is an important evaluation and assessment tool that helps the learners to self-reflect over their learning and performances for any improvements or editing. Both self-regulation and self-reflection practices have deep roots in the Cognitive and Behavioral Psychology where the learner and his mind are the sole actors and are responsible for their learning processes. There is an emphasis on the use of various tools for testing and evaluating self-regulated learning and self-reflective practices in writing.

The present chapter presents a review of all the studies and researches that have tried to present the relevance of self-regulated learning and self-reflective practices in the classrooms to facilitate the teaching and learning of writing skills, where the learners are taught and encouraged to utilize self-regulation and self-reflection in their learning processes. Zimmerman and Schunk’s (2007) major contributions in this field has made a great deal of research on self-regulated learning and these researches have paved the path for other studies and researchers to keep exploring this area of learning pedagogy.

Taking all these and other studies and researches as our reference, this chapter puts forward the main concerns being addressed in the following studies on self-regulated learning, including the self-reflection as a pedagogy and practice. The future directions and implications have been provided by the studies in the field of self-regulated learning and self-reflective practices in writing, i.e., its future implications that might guide future researches in this field.

Second language writing is a uniquely characterizable specialty area that has ties with but does not completely overlap with the fields of first language writing instructions (Kroll, B, 2003). The formal study of L2 writers and writing instruction has a relatively short but fruitful history going back to 1960s. Research in second
language writing has grown exponentially over the last 40 years and during the 1980s and the early 1990s. Studies on Second language writing began to evolve into an interdisciplinary field of inquiry with its own disciplinary infrastructure (Matsuda, P; Canagarajah, A; Hyland, K; 2003).

The works in second language writing were spread throughout in the forms of various sources like journals, monographs, edited collections, book series, annotated bibliographies, graduate courses and conferences, as well as, symposia. All these sources began to spread knowledge of various second language researches globally. Scholars started to pick interesting areas under the second language field and started developing their researches by generating different ideas, opinions, and models of second language writing. Various researches have been part of history which brought out all the new perspectives and focus in the field of second language writing.

It has been known that the field of second language writing is culturally driven. Culture and the social environment have had a major impact on the workings of L2 writing. As the L2 writing field has evolved gradually, it has also been faced criticisms on its dynamics and of how it works. The socio-cultural of second language writing makes it issue-driven as its research practices are inextricably situated in complex socio-cultural, institutional and disciplinary contexts so change in this case becomes inevitable and also desirable.

2.2. The Dynamics of Second Language Writing Researches

The researches over the past 40 years have been developing rigorously to tackle the dynamics of second language writing field and these changes have diversified the second language writing field and have brought it to the fore front. The changing currents in the field of second language writing are driven by various extemporaneous changes in demographic, technological, disciplinary and L2 writing researchers’ efforts to respond to those changes.

The dynamism that the field of second language writing offers is due to its combining nature. The field combines with the other changing currents such as technology and culture. Second language writing gets influenced by coming in contact with these currents. The field of L2 writing is therefore, adaptive in nature. It takes with it the changing environment around it and incorporates its changes and developments. Using technology to teach writing has become a new area of study.
which is widespread and outstanding. Given the dynamic nature of L2 writing research, each area of research joins the and influences the direction of the field while being transformed itself. It becomes a responsibility and a challenge to explore these changing currents in the second language writing research and of providing an understanding of the dynamics in this field.

There have been many researches and studies explore the L2 field and its dynamic nature. Some of the recent developments and researches developed and worked out by some researchers who have discussed some of the important currents under the field of second language writing exploring the self-regulation and self-reflective practices and strategy development in writing and some other important studies have, over the last decade, shaped the field of second language writing. Every researcher has represented various important and intellectual currents in the field, focusing on the context of its emergence, the existing research, and directions for future research.

2.2.1. Emergence of L2 Writing Studies and Researches

There is an effort to rejuvenate the complex literate traditions that once accommodated paintings, words and speech in the texts of traditional communities (De Souza, 2002; Matsuda. P; Canagarajah. A; Hyland. K; 2003). After the colonialization, there has been a clash of cultures and their ideologies which includes the literacy policies they follow. The clash of cultures then created adaptations from each other. Clash of these cultures has further produced new literacies.

Canagarajah. A (2002b) addressed multiliteracies in a more restricted sense that concerns teachers of writing in ESOL (English for Speakers of other languages) circles. Compositionists have started employing this notion to refer to text construction practices that negotiate different styles, genres and writing traditions. As multilingual writers commute between different communities and literate discourses between Chinese and English, for example, such collaboration of the communities may bring the strengths from alternate backgrounds to enrich their writing of English. The readiness of the academy to accept texts of this nature seems from the post-enlightenment questioning of the transparency of language and texts i.e., whether language of text provides direct access to the real world without any distortions. We are now more willing to accept that texts are mediated by beliefs, values and subject positions of writers.
A correlation study put forward by Paul R. Pintrich and Elisabeth V. De Groot (1990) examined the relationships between motivational orientation, self-regulated learning and classroom academic performance of 173 seventh graders. A self-report measure of student self-efficacy, intrinsic value, test anxiety, self-regulation and use of learning strategies was administered and performance data were obtained from work on classroom assignments self-efficacy and intrinsic value were positively related to cognitive engagement and performance. “Self-regulation, self-efficacy and test anxiety emerged as the best predictors of performance, however, intrinsic value did not have a direct influence on performance but was strongly related to self-regulation and cognitive strategy use” (Pintrich R. Paul, De Groot, & Elizabeth, 1990, p. 33).

2.3. Researches Exploring Self-Regulated Learning in Writing

2.3.1. The Effects of Modeling

Zimmerman and Kitsantas (2002), explored the effects of modeling and social feedback on self-regulatory writing, revision skill acquisition among writing revision skill acquisition among college students. The study took college level students and instructed them with a model. The model was administered and demonstrated revision strategy flawlessly. The students observed a model that initially made and corrected errors, but gradually, improved performance with the feedback received during their practice sessions that followed the modeling. Students were given feedback about the strategic steps that they performed correctly. The results of the study showed that observing a ‘coping model’ led to the great increase in writing self-efficacy and revision skill. The study also suggests that witnessing flawless performances does not convey the same type of information and that feedback may drive students’ capacity to move to self-controlled and self-regulated levels. Hence, research evidence shows that “through modeling, learners can effectively be taught self-regulatory skills and their self-efficacy can be raised to enable the learners in applying developed self-regulatory skills and in skill development” (Schunk & Zimmerman, 2007, p. 20-21).

2.3.2. Modeling the Self-Regulatory Strategies

Theory and research findings suggest that to develop self-regulation and self-efficacy among learners, a model of all those self-regulatory skills should be used to give practice to the students to ensure that students acquire self-regulation skills. They
must be taught and allowed to practice them. Teachers should teach self-regulation strategies along with content so that the students understand how to apply the strategies. For example, to teach literary analysis a teacher might model a strategy on sample passages for finding similes, metaphor, irony, foreshadowing and the like. Researches also suggest that an environment should be accommodated according to the differing needs of the learners. As, there are both proficient and weak learners. It might occur that some skills known by the proficient learners might be unknown to the weak learners so they might face difficulty or consume more time in incorporating or developing them. The teacher needs to provide assistance to every student with differing needs. In such a situation, teachers may divide their students into small groups sharing similar needs and then tailor self-regulation instruction according to the need of each group (Schunk & Zimmerman, 2007).

Teachers should ensure that students experience success and progress in order to build self-efficacy among learners. Learners must be instructed through modeling and should receive encouraging feedbacks from their teachers. The teacher should produce and show such models that reflect the use of self-regulation strategies in writing in the classrooms. “When students observe peer models as similar to themselves they feel self-efficacious and believe that if the peers could learn they too can do it” (Schunk & Zimmerman, 2007, p. 22).

Karen Harris, Tanya Schmidt & Steven Graham (1997) stated that self-regulation in writing process is critical. It requires the writer to be goal-oriented, resourceful and reflective. Highly skilled professional writers speak to the demanding and complex mix of composition and self-regulatory abilities involved in writing. Research on expert writers has further classified the importance of self-regulation in writing. For skilled writers, writing is a flexible, goal-directed activity which has been encouraged by rich source of cognitive process and strategies for planning, text-production and revision. Skilled authors also engage in purposeful and active self-direction of these processes and strategies. As Flower and Hayes (1980a) note, a great part of skill in writing is the ability to monitor and direct one’s own composition process.

2.3.3. Formative Assessment and Feedback
David Nicole and Debra Macfarlane (2006) assessed the building of self-regulation abilities among learners through formative assessment and feedback. This research is
re-interpreted to show how these processes like formative assessment and feedback can help students to take control of their own learning, that is to say, how these processes would help them develop as self-regulated learners. The study also discussed the issue of higher education, its needs and implications. Higher education should be built on this ability where students are self-regulating and self-reflecting their own learning process. “Students should be prepared for learning throughout their life and Learners must be provided with opportunities to develop the capacity to regulate their own learning as they progress through higher education” (Nicole & Macfarlane, 2006, p.15).

Nicole and Macfarlane (2006) critically analyzed the issue of giving full control to the learners regarding learning and assessment in the higher education scenario. It has been observed that although students had been given responsibility for learning in recent years, yet, there had been far greater reluctance to give them increased responsibility for assessment processes. Formative assessment and feedback might be used so as to support the capacity to self-regulate one’s learning among learners as they progress through higher education (Nicole & Macfarlane, 2006). The ability to self-assess and self-reflect on one’s learning is a key aspect of being a skilled learner.

2.3.4. Students’ Writing and the Epistemology beliefs
Lynne Hammann (2005) investigated writing beliefs, self-regulatory behaviors and epistemology beliefs of pre-service teachers in academic writing tasks. Hammann (2005) presented a clear understanding of the relationships among students’ writing and epistemology beliefs and their self-reported self-regulatory behavior. “A clear knowledge of these relationships and their importance could serve to inform instructors of pre-service teachers in planning course writing tasks and instructions” (Hammann, L, 2005, p. 16). “The instructors who have a clear understanding of their own and their students’ beliefs about writing, learning and self-regulation have the potential to produce strong skilled writers who can write and communicate effectively in their learning communities” (Hammann, L, 2005, p. 16).
2.4. Self-Efficacy and Self-Regulation

Bandura’s (1997) socio-cognitive theory states that self-efficacy and self-regulation affects learning performance and achievement of learners. Schunk & Zimmerman (2007) focused on improving self-regulatory competence and self-efficacy through modeling among learners. Their study takes in children’s learning needs and achievements. The study incorporates Zimmerman’s four phase socio-cognitive model. Modeling, according to Zimmerman (2007) is an effective means of building self-regulatory and academic skills which helps in raising self-efficacy. Schunk & Zimmerman (2007) worked on the influence of modeling in developing self-efficacy and self-regulation with regard to the reading and writing skills of the learners. Schunk & Zimmerman (2007) also focused on improving reading and writing skills through encouraging self-regulatory skills and self-efficacy of learners through modeling. Self-efficacy refers to learners’ perceived capabilities for learning or performing actions at designated levels (Bandura, 1997). However, self-regulation refers to self-generated thoughts, feelings and actions that are systematically designed to affect one’s learning of knowledge and skills (Zimmerman, 2000, 2001). Modeling has a positive influence on the development of self-efficacy and self-regulated learning of the learners. The learners are motivated as they adapt the skills more proficiently through modeling of strategies, skills and tasks. Such types of modeling influence the capabilities of the learners. Learners develop a self-belief through observation and practice of the modeled instructions. Self-belief is a belief to perform a task efficiently. Therefore, it is important to adopt a standard model for instruction and observation, so that, learners adapt effective skills and strategies by observing and practicing it.

Congjun Mu (2007) proposed a study on three Chinese post-graduate students in an Australian higher education institute to investigate the writing strategies used by them. Chinese students were employed to deal with the rhetorical, metacognitive, cognitive and socio-affective strategies in their writing practice. Silva (1993) stated that L2 writing process is strategically, rhetorically and linguistically different from first language (L1) writing process. Therefore, different set of strategies and skills are employed to write effectively in L2. A self-regulated writer would adapt and transfer these strategies and skills and would self-direct his writing process.
2.4.1. Incorporating the Self-Regulation Strategies in the Composition Class

Glaser, Cornelia Brunstien, Joachim (2007) took forward the Graham & Harris’s (2000) SRSD model and extended it to see the improvements in 4th grade students’ composition skills by incorporating self-regulation procedures in conjunction with composition strategies. Learners who were taught both composition strategies and self-regulation practices outperformed the learners who were taught composition skills. Moreover, students trained in using the composition and self-regulation strategies, wrote complete and qualitatively better stories than the untrained learners (Glaser; Cornelia; Brunstien; Joachim, 2007).

2.5. Social Cognitive Model

Antonia, Evangeline & Kong Kah Mun Clara (2007) worked on teaching of expository writing by applying a social-cognitive model to its teaching in the writing classroom. In their study, they instructed their learners with a social-cognitive model. Their study focused on incorporating a social-cognitive model in the teaching of expository writing. “The model were integrated in a social-cognitive framework for guiding the planning of learning activities and the writing of instructional materials in a research project to teach expository writing in two Singapore secondary schools” (Chandrasigaram, Evangeline and Kong Kah Muh Clara, 2007, p.2).

Social-Cognitive theory stresses that modeling is an important variable that helps in promoting students’ self-efficacy and self-regulation. A review of literature on how to encourage self-regulated learning in the classroom was presented by several educators, namely, Sharon Zumbrunn, Joseph Tadlock & Elizabeth Danielle Roberts (2011). The concept of self-regulation provides a detailed review of the literature including the definition of SRL (Self-regulated learning) and an explanation of the relationship between SRL and motivation in the classroom. “Specific SRL strategies for student use, approaches for encouraging student SRL and a discussion of some of the challenges educators might encounter while teaching students to be self-regulated lifelong learners are some issues in self-regulated learning” (Zumbrunn, Tadlock, & Roberts, 2011, p.3).

“Self-regulated learning is an important predictor of student’s academic motivation and achievement. This process requires students to plan independently, monitor and assess their learning” (Zumbrunn, Tadlock, & Roberts, 2011, p.3).
Zumbrunn (2011) explained the aspects and requirements that a learner needs in order to become a self-regulated learner. Motivation is one aspect that directly compliments how self-regulated a learner is. To develop self-regulation one needs to be highly motivated towards one’s learning goals and its achievement. If students do not see value in learning tasks, then they are less likely to spend much time setting goals and planning strategies to accomplish those tasks. How motivated one is means how much self-efficacy one has. Efficacy belief is the confidence in one’s ability to successfully complete tasks. Moreover, “Efficacy also plays a role during the forethought, planning and performance monitoring phases” (Zumbrunn, Tadlock, & Roberts, 2011, p.8). Researchers have found that self-efficacy and the use of self-regulation strategies have a reflexive positive impact on one another, that is to say, higher the self-efficacy, higher will be the self-regulation strategy use (Usher and Pajares, 2008a, 2008b). Furthermore, the use of self-regulation strategies can lead to increases in self-efficacy beliefs and academic achievement (Bouffard- Bouchard, Parent, & Larivee 1991; Schunk, 1984; Schunk & Hanson, 1985; Zimmerman & Martinez-Pons, 1990).

To promote self-regulation (SRL) in a classroom, a teacher must take the responsibility to give her students abundant practice and encouragement to incorporate and implement various SRL strategies. Teachers must raise the SRL strategy awareness among her students by making them learn various self-regulated processes that facilitate learning. These include: goal setting, planning, self-motivation, attention control, flexible use of learning strategies, self-monitoring, appropriate help-seeking and self-evaluation.

2.6. SRSD and Strategy training
Mastan & Maarof (2014) explored the writing strategy use of ESL learners which they employ in their expository writing. Their study investigated the effect of writing strategy training on learners’ expository writing performance.

2.6.1. Identifying the key self-regulatory strategies
Gerard Effeney, Annemaree Caroll and Nan Bahr (2013) identified the key self-regulated learning (SRL) strategies and their services among nine-school-aged adolescent males. The self-regulated learning interview schedule (SRLIS) was used along with semi-structured interviews to carry out the analysis and findings of the study (Effeney, Carroll, Bahr, 2013). Effeny (2013) identified the types of academic
self-regulatory skills deployed by learners and the sources for developing these SRL skills among the learners. It was found that the more academically capable participants seemed to have a preference for strategies associated with self-directed and self-initiated processes that do not involve or rely on other person. However, less academically capable participants prefer SRL strategies associated with social sources such as seeking assistance from peers, teacher and adults. Teachers were identified to be the reliable source of various SRL strategies but it was found that the less academically capable were more reliant on their teachers for self-regulatory guidance than the academically capable students. This study puts forward the view that it becomes important to focus on the self-regulatory skill development of the students and as all the students are not academically alike in nature. It becomes the duty of the teachers to give proper guidance to their students according to their needs.

Sanad (2014) emphasized on the use of SRSD model for using self-regulation strategy development (SRSD) to develop EFL reading and writing skills. SRSD is a good instructional tool for changing and developing EFL learners’ writing skills in a writing classroom. Sanad (2014) followed a descriptive approach which viewed the previous works and studies on the use and importance of self-regulation and SRSD model. The study took the social-cognitive model and research in learning as the focus of explanation for SRSD and self-regulation practices and its effects on the writing of EFL learners. The study followed the various studies developed for Saudi EFL students that incorporated SRSD model and self-regulation practices in the form of a tool for developing writing skills of Saudi EFL learners. Sanad (2014) presented the recent trends in teaching English as a foreign language, self-regulation and its relationship to EFL writing and reading. There is a need to give importance to the development of EFL skills as most of the EFL learners are low in proficiency of English language skills. One of the reasons is the negligence of active student participating in the classroom activities. In order to obtain the desired results, students should participate in the learning processes themselves. Self-regulated learning focuses on students’ motivation, attitudes, interactive learning and active collaboration. As stated by Graham & Harris (1994), Troia (1998) writing is a well directed action and writers direct the process from start to finish, utilizing their personal observations, judgments and reactions as a guide. Success in writing requires a substantial amount of self-regulation and efforts.
Nawar & Sulaiman (2015) presented their study on the effects of self-regulated learning strategies. Their study focused on the development of self-regulated learning strategies through a reflective science journal. The study incorporates the use of reflective journals in the classroom. The 10th grade students were asked to reflect on their writing through writing a reflective journal of every class lecture they attended. The students who were asked to write reflective journals outperformed students who were not writing reflective journals. Students of the experimental group were provided a model for journal which they wrote after they had completed their science lessons. They reflected on their dialogues with their teacher and classmates. They also reflected on their scientific observations, their main conclusions, their evaluation of their level of understanding of the science concepts presented in the lesson, their achievement of the lesson goals and their personal feelings regarding what was taught in the lesson. Journal writing can improve self-regulation strategies if it is structured around self-reflections in terms of learning goals, learning strategies, observations, understanding, feeling and dialogues with oneself and others.

2.7. Introducing the steps to become a Self-Regulated Writer

Karen Harris (1996) introduced the steps through her study which could help young learners become self-regulated writers. The study presented and explored the problem areas of the young writers and steps and strategy training given to them in order to make them self-regulated in their writings. Writing becomes a challenge even for some efficient writers. They come face to face with the most common problems like generating content, organizing compositions, formulating goals, higher-level plans, efficiently executing mechanics, revising text and goals. For some, “understanding strategies to overcome these challenges comes more easily but for some it does not so the educators must explicitly teach the writing processes in case of some weak and young learners, who may face learning disabilities” (Harris, 2005, p.1). Learners who face significant and often debilitating challenges benefit from an approach that directly addresses individuals’ affective, behavioral, cognitive characteristics, strengths and needs. Therefore, such types of learners will provide a more extensive and structured instruction to develop skills in writing. This becomes the duty of the
2.7.1. Classroom Applications of SRL

Scott G. Paris and Alison H. Paris (2001) researched on the classroom applications of research on Self-Regulated Learning (SRL). The research takes into account the applications and implications of SRL in classrooms. Research during the past thirty years on students’ learning and achievement has progressively included cognitive strategies, meta-cognition, motivation, task engagement and social supports in classrooms. SRL has become a popular topic in research under Educational Psychology. Paris and Paris (2001) describe all the aspects related to SRL emergence, its popularity and importance in classroom teaching and learning. SRL has emerged as a construct that encompasses various aspects of academic learning like cognitive strategies, meta-cognition, motivation, task environment and social support in classrooms. Moreover, “SRL provides a more holistic view of the skills, knowledge and motivation that students acquire” (Paris and Paris, 2001). “Through direct explanations about cognitive strategies, meta-cognitive discussions and tutoring one can help increase students’ use of effective learning strategies” (Paris & Paris, 2001, p.99). Both experience and context contributes to SRL when a teacher incorporates SRL in classrooms, motivates and encourages her students to learn them, utilizes them into self-directing and self-assesses their learning process. A teacher creates a classroom environment in which students get opportunities to seek challenges to reflect on their progress, take responsibility and pride in their accomplishments. To incorporate such strategy training in class, a teacher can design open-ended instructional activities and scaffold assistance for students inquiring, by placing emphasis on group works, portfolios and ask them to assess their performance. “Practices will be helpful in motivating learners to self-regulate their learning process, link self-assessment with external standards and may help students to regulate their actions to desired outcomes” (Paris and Paris, 2001, p.99).
2.8. Adapting Microanalysis Measures for testing Self-regulation & Self-Reflection

Barry J. Zimmerman (2008) investigated self-regulation along with motivation and the study covered the historical background, methodological development and its future prospects in academics. From the past, there have been many studies that came up with analyzing the aspects of what leads the students to self-regulate their learning. The earlier studies used questionnaires and interviews but this particular study has gone beyond that. It has incorporated the development of online measures of self-regulatory processes and motivational feelings or beliefs regarding learning in authentic contexts. These innovative methods included “computer traces, think-aloud protocols, diaries of studying, direct observation and microanalysis” (Zimmerman, 2008, p.166). The findings of the study showed that “online event measures of SRL offer detailed information concerning the interrelation of the various processes in real time” (Zimmerman, 2008, p.181).

Such contextually linked information is useful when diagnosing and remediating self-regulatory dysfunctions e.g. a student who reports knowing a strategy on SRL aptitude questionnaire may not know how to adapt it to work in a particular academic context, therefore, online event measures can capture such subtle dysfunctions and changes in the learning processes at any particular learning stage (Zimmerman, 2008, p.181).

2.8.1. Microanalysis and testing of Self-regulation

Barry J. Zimmerman and Maria K. DiBenedetto (2013) assessed self-regulation among science students by adapting microanalytic measure. Microanalysis measure was put to test. The study also determined the construct and validity of a microanalytic approach in capturing the sub-processes within the three phases of self-regulated learning (SRL). However, “The sub-processes that were focused upon were the students’ use of strategic planning, meta-cognition, task strategies and self-evaluative standards” (Zimmerman and DiBenetteo, 2013, p. 30). The students were assessed on the basis of a reading and writing task given to them. The students were
asked to read a science passage given to them and then they were tested on that passage. Their performance was assessed on all the stages of the sub-processes focused on by the researchers through microanalysis measures. The microanalysis measures proved to be a good assessment and information gathering tool. The study emphasized the use of microanalysis measures. The SRL processes were assessed in detail. The case study at each sub-process level revealed that microanalysis measures could provide detailed information about SRL (Zimmerman and DiBenedetto, 2013).

2.8.2. High and Low Achievers can benefit through Microanalysis

The study by Zimmerman and DiBenedetto (2013) stated that “microanalysis when combined across the three phases in Zimmerman’s self-regulated learning model, becomes a valid predictor of students’ learning and better predictors than a well-established external teacher rating measure” (Zimmerman and DiBenedetto, 2013, p. 40). The high and low achievers were also undertaken. The study states that the high achievers engage more in SRL processes than the low achievers. These findings also suggest that microanalysis can predict the behaviors, feelings, thoughts of the students within an academic context and such type of information will be useful for the teachers to focus their attention on the particular targeted sub-processes where students are uncomfortable and weak, this assists the intermediate and low achieving students become self-regulated learners (Zimmerman and DiBenedetto, 2013).

2.8.3. Microanalysis vs Questionnaire and other Survey Measures

Gregory Lee Callan (2014a) used the context specific assessment tool called self-regulated learning microanalysis for testing the self-regulated learning of 83 eighth grade students during the mathematical problem solving. The students were engaged in a mathematical problem solving process and during that process their SRL was assessed through the microanalysis assessment tool. “Microanalysis is a structured interview that entails assessing a respondents’ regulatory processes as they engage with a task of interest” (Gregory, 2014a, p. ii).

Gregory L. Callan (2014a) compared the microanalysis process of SRL with the traditional measures of testing SRL, that is, the questionnaire and survey measures. “The validity and predictability of the SRL microanalysis did not relate to self-report questionnaires measuring adaptive or maladaptive SRL” (Gregory, 2014a, p. iii). The SRL microanalysis protocols have emerged as a superior predictor of all
the SRL outcomes in this study. “It has helped in explaining a significant amount of unique variations for all the SRL tasks and its outcomes” (Gregory, 2014a, p. iii). The researcher applied the microanalysis protocol in between the tasks given to the students. The students were assessed on their SRL used by engaging them into a mathematical problem solving task and the students were interviewed and their performance was assessed through the microanalysis protocol. The students, while performing the task were asked various questions related to their task and performance. Through this, all the stages of students’ strategic planning, metacognition, task strategies, self-evaluative standards, self-esteem, self-efficacy, motivational level were assessed.

Microanalysis protocols when combined with SRL questionnaire assessment tool which gave a fruitful result in explaining the SRL of learners from all the possible directions. Microanalysis goes deep into the students’ performance skills and management. It brings out the factors of how motivated and self-regulated they were while performing and how far they were able to do a management of their task (Gregory, 2014a).

Maria K. DiBenedetto, (2009) investigated the “validity of microanalytic measures that were used to assess students’ self-regulation on an academic science task, not only in terms of immediate achievement but also in terms of a well-established measure of self-regulated learning” (DiBenedetto. M, 2009, p. 2). “These measures are designed to capture enduring characteristics of learners that are evident over time” (DiBenedetto. M, 2009, p. 2). The Regression analyses of the study suggested that the microanalytic methodology is a valid measure of testing students’ self-regulation while studying and learning. Microanalysis is a well-established measure of testing self-regulation. In addition, “microanalytic measures have the additional advantage of providing a detailed account of students’ forethought, performance and self-reflection phase” (DiBenedetto. M, 2009, p. 2).

In the microanalysis study presented by Isabelle Thompson (2009), a university writing center conference with an experienced tutor and a student, he had never met before, the tutor’s use of direct instruction, cognitive scaffolding and motivational scaffolding were analyzed. Along with verbal expressions of scaffolding, this analysis also considered tutor’s hand gestures—topic gestures, which operationalize instruction and cognitive scaffolding and interactive gestures, which operationalized motivational scaffolding. As defined in this analysis, instruction is the
most directive of the three strategies and includes telling. Also, directive, cognitive scaffolding leads and supports student in making correct and useful responses, while motivational scaffolding provides feedback and helps maintain focus on the task and motivation. The microanalysis points the importance of the student’s cognitive and motivational readiness to learn and the need for the student to control the agenda throughout the conference. This microanalysis provides a glimpse confirming that intuition by showing how a particular tutor uses scaffolding to motivate students and to increase knowledge about how to revise their draft. It shows that “scaffolding strategies differ according to the tutor’s intentions and that scaffolding can influence students’ attitude and engagement as well as their learning” (Thompson. I, 2009. p. 419).

2.9. A triadic Social Cognitive Model

Zimmerman & Risemberg (1997) state that to become an efficient writer one requires more than just the knowledge of vocabulary and grammar. It also depends upon “high levels of personal regulation because writing activities are usually self-planned, self-initiated and self-sustained” (Zimmerman & Risemberg, 1997, p.73). Zimmerman and Risemberg (1997) presented a socio-cognitive model of writing which is composed of three fundamental forms of self-regulation: environmental, behavioral and covert/personal. This model is based on the socio-cognitive model presented by Albert Bandura (2001). The triadic model represents the cycle of how one self-regulates his/her learning. Zimmerman and Risemberg (2008) transformed and adapted that model into self-regulation while writing. “Each of the triadic forms of self-regulation (i.e. environment, behavioral and covert/personal) interact reciprocally via cyclic feedback loop through which writers self-monitor and self-react to feedback about the effectiveness of specific self-regulatory techniques or processes” (Zimmerman & Risemberg, 1997, p.73).

2.9.1. Zimmerman’s triadic model

Zimmerman, Timothy J. Cleary and Gregory L. Callan (2012) came up with a structured interview which was grounded in social-cognitive theory and research. A triadic model of SRL presented by Zimmerman was produced in order to create a microanalysis of SRL among the learners. A structured interview was processed along
with some academic and non-academic tasks and activities. Students’ regulatory processes were evaluated as they engaged in well-defined academic and non-academic tasks and activities like dart throwing, sentence combining, volleyball servicing, reading, studying, test taking and test reflection (Cleary, Callan, and Zimmerman, 2012). Zimmerman’s triadic model was designed into three different stages of self-regulation learning and reflection. The model consists of three stages through which every learner was evaluated on the three stages which included a “forethought stage” where generally the goal setting, planning and strategy planning of the task was done. The next stage was the “performance stage” where strategy use, self-monitoring, meta-cognitive awareness and meta-cognitive monitoring of the task was done. The last stage is the “self-reflection” stage where the attribution and self-evaluation of the task was done. All these aspects are analyzed and tested through a micro analytically structured interview process by engaging students in all such aspects: forethought stage, performance stage and self-reflection stage. Zimmerman, Callan and Cleary (2012, 2014) focused on five key self-regulation sub-processes (which included goal-setting, strategic planning, monitoring, self-evaluation and attribution. Although, there are no single assessment tools that can effectively capture human regulation in its entirety, assessment tools examine regulatory thought and action as they occur in real time, during a particular task. Hence, “the potential to produce more useful information can lead to contextualized individualized interventions for youth who struggle in school” (Callan, Cleary and Zimmerman, 2012, p.16).

2.10. Self-Regulated Learning Behaviors

2.10.1. Self-Regulated Learning Behaviors and the Academic Performances
Cobb (2003) investigated the self-regulated learning behaviors and their relationships with academic performance in a web-based course in his dissertation project. The data for the study was calculated through motivational strategies for learning questionnaire and demographically related items. Moreover, “The data analysis included factor analysis, multivariate analysis of variance and regression analysis” (Cobb R, 2003, p. 2). The results of the data showed a variance among the SRL behaviors of participants from the different study background. This study took students belonging to the humanities and technical courses and the data analysis of these participants showed
that the employment of self-regulated learning behaviors differed between humanities and technical courses. The analysis of the data focused on evaluating various aspects of the courses, “their time and study management, intrinsic goal orientation, the categorical analysis these aspects investigated and the academic performances of the learners enrolled in the web-based courses” (Cobb R, 2003, p. 2). Furthermore, “all these factors proved to be the predictors of academic success” (Cobb R, 2003, p. 2).

Cobb (2003) tried to address the relationship between self-regulated learning behaviors and the academic performance in web-based courses. This study worked on to develop a mathematical formula which is a function of the responses made to 28 items of the motivated strategies for learning questionnaire (MSLQ). “The MSLQ, driven by formula, assessed the potential students’ goal orientation, metacognitive self-regulation and time and study environment management leading to their academic performance and success in the web-based course which is a distance learning program” (Cobb R, 2003, p.7).

2.10.2. Benefits of Implementing SRL inside Classrooms

The study proposed by Yong May Lee and Yeo Kee Jiar (2012) stated the importance of SRL in the classroom and its benefits. The study suggests that the implementation of SRL into subjects inside the classroom put an effective impact on the teachers, as well as, on their learners. The classroom practices of SRL will not only strengthen the learning process of the learners but will also improve the teacher’s approach and practices towards the teaching and training. The study puts forward a comprehensive and detailed overview of the use of SRL processes and protocols inside the classrooms and the effects of such practices on the classroom learning and teaching. “Integrating SRL in classrooms provides a comprehensive picture and gives rich information to the teachers and policy makers to design appropriate learning contexts” (Lee & Jiar, 2012, p. 1). The main purpose of this study was to investigate the motivation, learning strategies and achievement of learners enrolled in History class.

Lee and Jiar (2012) incorporated history students in their study to check and assess their achievement level while using self-regulation strategies before and after their intervention program. The intervention program of SRL strategies in this study involved four areas of regulation, namely, which were the following: “regulation of cognitive and meta-cognitive, regulation of motivation, regulation of resource management and the regulation of learning environment” (Yong M. Lee & Yeo K.
Jiar, 2012, p. 2). The experimental design of the study was very elaborate and covered a detailed analysis of learners’ SRL. Students were taught how to plan, monitor, control and react to the changes in each context, in order to achieve their objectives. The study suggested that proper implementation of SRL strategies leads to cultivating and training the minds and abilities of the learners by helping them cultivate a positive mindset towards the learning process (Lee & Jiar, 2012).

2.10.3. Incorporating Tools for Testing and Assessing the Learning Behavior

Lee & Jiar (2012) incorporated SRLIS (Self-Regulated Learning Interview Schedule) for testing assessing and predicting students’ future learning behaviors. SRLIS is a theory guided, structured interview protocol and it is capable of measuring self-regulated learning as an aptitude. The review study suggested many ways to test and incorporate SRL among learners and their learning behaviors. The MSLQ and SRLIS are the tools for testing and assessing learners’ performances. With time and training, improvements in this learning behavior were witnessed with regard to the implementation of SRL (Self-Regulated Learning). There are many tools and ways to assess students learning process and to keep track of their performances and improvements. Such tools have been used in various studies, and these have proved to be of value in giving the apt data and information for analysis. “All the instruments are interrelated and are able to provide comprehensive and in-depth information regarding students’ learning and application of the SRL strategies in the real time classroom learning and task completion” (Lee & Jiar, 2012, p. 3). The interview technique of SRLIS is important as it provides the researcher to get further information regarding students’ effort of SRL strategies application. It is combined with questionnaire survey of the same as the study emphasizes that only through questionnaire survey it is difficult to undergo an in-depth analysis of the variables. Therefore, MSLQ should be incorporated with SRLIS techniques as it guides the researcher into detailed analysis of the students’ learning behaviors and developments in SRL.

Using student interviews, teacher ratings, and achievement test outcomes, Zimmerman & Martinez-Pons (1988), validated a strategy model of student self-regulated learning as a theoretical construct. Learners were asked to describe their use of 14 self-regulated learning strategies in six contexts. Teachers were asked to rate these students for their Self-Regulated learning during class. This structured interview
was developed to assess 14 classes of Self-Regulated Learning Strategies. The strategies were: self-evaluation, organizing, transforming, goal-setting, planning, seeking information, keeping records, monitoring, environmental structuring, self-consequences, rehearsing, memorizing, seeking assistance and reviewing.

Six different learning contexts were described to each student which were the following: in classroom situation, studying at home, completing writing assignments, completing mathematics assignments, preparing for and taking tests and completing homework with little motivation, for each learning context, students were asked to indicate the methods that they used to accomplish the task at hand (Zimmerman & Martinez-Pons, 1988, p. 284-285).

Furthermore, “If the student mentioned one or more strategies, the interviewer asked him or her to rate the consistency with which each strategy was used according to a visually presented 4-point scale” (Zimmerman & Martinez-Pons, 1988, p. 284-285). Initial research on various scoring systems for the SRLIS indicated that a consistency-weighted score for each reported strategy was optimally predictive of students' achievement. Those results were reported along with definitions and examples of each of the 14 strategies by Zimmerman and Martinez-Pons (1986).

“The Rating of Student Self-Regulated Learning (RSSRL), is a scale for measuring the self-regulatory behavior of students after teachers have observed students’ self-regulatory behavior for a period of time” (DiBenedetto. M, 2009, p. 2).

**CONCLUSION**

Second language is a uniquely characterizable specialty area and it overlaps with second language writing. The increasing researches and studies in the field of second language writing have made it the most discussed and researched area. It offers various aspects of second language writing for example the teaching of second language writing including both the EFL and ESL contexts. Furthermore, it includes teaching and building up certain writing strategies in order to improve the writing skill of the learners. Most of the studies have emphasized and have put forward the
idea of giving learners training in the use of writing strategies, as this knowledge of writing strategies will help a learner to excel and improve his or her writing skill. There are numerous ways of implementing strategy training inside the classrooms and adapting different ways to train the learners in learning and implementing the writing strategies. The studies in the second language writing and its incorporation of the self-regulated learning and self-reflective practices in a writing classroom for the academic purposes are numerous. The direction of its emergence has been studied and has been focused by these research studies.

Second language writing researches focuses on the researches of second language writing strategy training, its use and implementation. Under the teaching and learning of writing strategies, the area of concentration is on the self-regulated learning and self-reflective practices. These two, when applied in teaching and learning of the second language writing, are considered by many researches and studies, as the most important and effective strategies till date which facilitates writing. This implies that to become an efficient writer one should know how to self-regulate and self-reflect one’s writing.

Following the present approach to teaching where the focus is laid upon learner centeredness, it becomes important for a learner to be able to self-regulate and self-reflect his or her writing and learning processes. The learner who knows how to self-regulate and self-reflect would self-monitor, self-assess and self-evaluate his or her performance. Moreover, being self-regulated and self-reflective means that one is taking the full responsibility and ownership of one’s work.

Most developed and accepted researches in the field of self-regulated learning and self-reflective practices in writing, have discussed at length, the step-by-step gradation of the self-regulated learning and self-reflective practices. There are various studies, developments and changes going on in the field of second language writing, strategy training, self-regulated learning and self-reflective practices that are centered on writing. Second language writing pedagogies prevail and introduce new measures and techniques of teaching writing in an effective manner adapting effective strategies. The new and effective ways of teaching and building of writing skills and different measures are adapted and focused to generate an effective pedagogy for second language writing. There are various effective measures of incorporating self-regulated learning and self-reflective practices in the classrooms and the learning and teaching of second language writing by learning to self-regulate and self-reflect.
Zimmerman, Bandura, Risemberge (1997, 2001) has made big contributions in the field of Self-regulation and Self-reflection in writing. All of them came up with the model of writing which is socio-cognitively structured. The Triadic model presented by Zimmerman and Risemberge (1997) worked on finding out the ways a learner self-regulates one’s writing. Zimmerman & Risemberge (1997) transformed and adapted this model from Albert Bandura’s (2001) Socio-Cognitive Model of writing. Other models include the SRSD (Self-Regulatory Strategy Development) model. The effective nature of SRSD model and its applications in the classroom have been stated under ample amount of studies that have worked on emphasizing and discovering the efficiency of the SRSD model in a writing classroom. To sum up, there are various works covering the field of second language writing, its pedagogy, strategy training, self-regulated learning and self-reflective practices. Lastly, there are various tools and methods used to test the levels of SRL and Self-Reflection among students and teachers in their classroom practices.