Chapter 3

REVIEW OF RELATED LITERATURE

3.1 Studies on Self directed learning
3.2 Studies on Creativity
3.3 Studies on Geography education
Introduction

A research literature review is a systematic, explicit and reproducible method for identifying, evaluating and synthesizing the existing body of completed and recorded work produced by researchers and practitioners. Mertens, (2010) notes that review of literature establishes historical perspective on the intended research, provides a vision of the need for additional research and enables the researcher to develop a conceptual framework for the research. In the present chapter, investigator reviewed an immense quantum of prior research works related to the present study that have been done in India and abroad out of which only a small portion of studies in close proximity to the present study has been presented in this chapter as a representation of the entire field. The studies and literature have been reviewed and systematically classified under the following sections:

- Studies on Self directed learning
- Studies on Creativity
- Studies on Geography education

3.1 Studies on Self Directed Learning

1. McCarthy and James (2018) conducted a study on Are the teachers Self directed? An examination of teacher’s professional learning. This survey research was conducted to better understand the informal professional learning practices of mathematics teachers. The study shows that mentoring or coaching activities had the most statistically significant results. The findings of the study emphasize the need for policy and finding changes at the federal and state
levels, and bolster support for more self directed learning in teacher development programs.

2. Hus, Chang and Liu (2018) say that there is a positive correlation between peer assessment and higher learning achievement. This study investigated the peer assessment attitudes of the participants and found that they possessed highly positive attitudes towards and understanding of peer assessment. It is found that when the students were more concentrated on the peer assessment, their evaluated results were closer to those of the two experts and provided the student designers with additional important eye-tracking feedback from the peer assessment activities.

3. Teal, Vess, and Ambrose (2015) discuss the development and utility of the self directed wellness model based on Seligman’s well-being theory. The authors discuss about the development of the model and its conceptual connections to research on positive psychology and education with theory from both positive psychology and self directed learning to illustrate areas of inquiry and practical application. They conclude with the limitations of the model and suggestions for areas of further research.

4. Aliponga, Koshiyama, Gamble et al (2015) examine the perceptions of learner autonomy dimensions held by Japanese high school teachers of English. The study shows that Japanese teachers perceived their students as not being capable of being more involved in their own learning.

5. Morrison and Premkumar (2014) studied about practical strategies to promote self directed learning in the medical curriculum. In this paper the authors
figures a logical set of practical strategies to promote and sustain self directed learning in the undergraduate medical curriculum.

6. Payne, Rocks, and Schaffner (2014) tried to determine whether the learning profile of undergraduate athletic training and nursing undergraduate students related to self directed learning and academic motivation changed across their respective curricula. The study concludes that athletic training students increased their scores from each year and the results warrant the use of PRO-SDLS to assess self directed learning in health profession students.

7. Strods (2014) tries to explore relationship between use of the cooperative learning process and development of self-directed learning by comparing self directed learning readiness and self assessment of students participating in cooperative and traditional studies formats. Results suggest that self directed learning readiness improves through cooperative learning process for students at all levels of readiness.

8. Prabjandee and Inthachot (2013) investigated about self directed learning readiness of college students in Thailand. The study tries to investigate the level of self directed learning readiness of Thai college students and compares the readiness across years of education and majors. The results showed that college students in Thailand possessing a moderate level in two dimensions of self directed learning readiness, creativity and openness to learning. Other six dimensions were at a high level.

9. Hiemstra (2013) explored about self directed learning and describes about why most of the instructors of adults use a teacher directed approach in spite of self
directed learning. The author adds his own ideas and suggests various ways of better advocate for self directed learning processes, techniques, and instructional approaches in classroom. The author also highlights that the instructor or facilitator should stimulate a learners creative and critical thinking skill through various ways of real-life experiences.

10. Boyer, Edmondson, and Artis (2013) conducted a meta-analysis of self directed learning research studies used to explore the moderating effect of the measurement tool between self directed learning and constructs from adult education. The author illustrates that the type of measure used to assess self directed learning moderates the relationship between self directed learning and age, life satisfaction, self directed learning competence, self efficacy and support.

11. Francis and Flanigan (2012) shed light on Self Directed Learning and Higher Education Practices, and tries to identify the relationship between levels of self directed learning, learning preferences and academic motivation in college students. The study says self directed learning is not directly related to academic performance or preferences for instructional techniques. The relationship between levels of self directed learning and preferences for learning activities associated with high levels of instructor control suggests the two are not directly related.

12. Edmondson, Boyer, and Artis (2012) conducted a meta-analytic study examining the relationship between self-directed learning and five constructs in education like academic performance, future aspiration, creativity, curiosity, and life satisfaction in marketing education. The results show that self-directed
learning is significantly and positively related to creativity and other four constructs that may improve student learning and self directed learning is an important construct for marketing education.

13. Boyer and Usinger (2012) conducted a study that supports strategic planning efforts, with a focus on student self direction to improve the success of an academic institutions distance education programming, to moderate the gap in failure and withdrawal rates between course delivery formats and to provide tailored support mechanisms to the diverse student population the college serves. The study suggests the need to increase student support across several indicated areas. (needed/not?)

14. In an article Mettler and Karte (2012) share some of the practices and conditions they implemented in their classroom in order to facilitate self direction in learning. The authors concludes that there are many factors that contribute to self directed learning in early childhood, self initiated creativity and free exploration are crucial for developing the habits of mind which will allow students to engage in self directed learning throughout life.

15. Hyland and Kranzow (2012) investigate about faculty and students perceptions of the use of digital tools, specifically e-text and e-libraries, to encourage students in their self directed learning and critical thinking. The results indicated that e-text and e-libraries offers potential to increase positive learning behaviors including critical thinking and self directed learning.

16. In an investigation, towards a distance learning environment that supports learner self direction Jezegou (2012) describes the essential features of the
model of presence in e-learning and the possible effects of presence on learner self direction. The author says this model can be applied to any form of distance education and empirical research is needed to confirm the relevance of this model and identify its strengths and weaknesses.

17. Caree (2012) proposed a dual model of self directed learning grounded in the dynamic interaction of self determined motivation and self regulated learning strategies. This model was used to design an interactive 24hr course for masters students that was organized for three different groups over a three year period. The present paper analyses students’ end-of-course evaluation forms and proposes a research option for testing the model further on a large empirical scale.

18. Glaubman, Glaubman, and Ofir (2012) tries to find the connection between the quality of the questions asked and academic achievement in story comprehension and in self directed learning were explored. The study concludes that Theory based training was more effective, and the metacognitive based method was superior to the active processing method, especially in generating quality questions and in self directed learning.

19. Young and Gerber (2012) described about the conceptions of self directed learning of social studies teachers in Singapore. The study investigates how the teachers learn at their workplace which is very different from the environment of the private company. The results indicate that the teachers conceptualize self directed learning from their learning and the purpose of learning.
20. Rager (2009) explored about the role of emotion in self directed learning. The paper address the emotional components of self directed learning and present an interactive model of self directed learning that positions emotion in changed context of health care. Support for the model is presented by integrating information from diverse bodies of literature that contribute to understanding the link between learning and emotion. The essential premise of the model is that context, content, learning and process. The model provides a more comprehensive and practical tool for understanding self directed learning.

21. Liyens, Magda, and Rikers (2008) conducted an empirical study on self directed learning in Problem based learning and its relationship with Self regulated learning. This study investigated the role of self directed learning in problem based learning and examined how self directed learning (SDL) relates to self regulated learning (SRL). Results suggested that SDL and SRL are developmental processes, that the “self” aspect is crucial, and that PBL can foster SDL. It is concluded that conceptual clarity of what SDL entails and guidance for both teachers and students can help PBL to bring forth self directed learners.

22. Lafrenze and Murray (2005) conducted a study on Fostering self directed learners through competitions. The results of the study suggested that participants perceived that they developed high skill levels as self directed learners as a result of completing projects for competitions and recognized the benefits from entering competitions.

The review of this section revealed the ways in which self direction embarks into the diverse fields of educational system and pointed out the need for developing
Review of Related Literature

self oriented frame of mind among learners. Some of the studies emphasize the development of a self directed learning environment in teaching learning process assuring the gradual adoption of self direction within the domain of learning to rejuvenate geography learning. Review of the research literature in this section shows that one cannot be self directed in vacuum and point towards the hindrances and challenges to be overcome and accentuate the need for generating an atmosphere that facilitate self directed learning which motivate students to think in creative ways.

3.2 Studies on Creativity

1. Kettler, Lamb, Willerson and Mullet (2018) analyzed about teachers perceptions of creativity in classrooms. The authors analyzed about teachers implicit understandings of creativity may not align with current research based understanding of creativity and characteristics associated with creative students. The results generally confirms previous studies and suggests that teachers grade level, subject, experience, and age have no effect on their perception of creative characteristic.

2. Czerwonka and Karwowski (2018) explored about whether differences in self-rating of the creative self-concept (creative self efficacy and creative personal identity) are related to the sequence in which self report measures are applied: the order of effect. The results shows that people who were first asked about their previous creative activities reported a lower level of creative self efficacy and creative personal identity than those asked about their creative self concept first.
3. Nogueria, Almeida, and Lima (2017) presented their findings based on a Structural Model of the Test for Creative Thinking-Drawing Production (TCT-DP). The aim of this research was to assess the factorial structure of the TCT-DP for graduates and post graduates Portuguese students. The 2-factor model exhibited good and acceptable indices of fit. The factor represented innovativeness and adaptiveness. Its structure suggests the importance of both non-conventional and conventional thinking for the creative process.

4. In a study Aptitude-Treatment interactions during creativity training in e-learning Yeh and Lin (2015) discuss about meaning-making, self regulation, knowledge management and its relationship to each other. The study aims to understand whether the aptitudes of meaning-making, self regulation, and knowledge management would interact with the treatment of training and then influence creativity in e-learning. The study suggests that KM is a mediator between meaning-making, self regulation and the learning of creativity in an e-learning environment, and aptitude-treatment interaction exist during the training, and also provides a new approach – KM-based training – to improve student’s creativity in an e-learning environment.

5. Hoseini, Mozafar and Azimi (2013) presented their findings based on the study using visual display to stimulate creativity. This include a brief literature on the engineering design process, activities performed during its stages, various methods that can enhance creativity in different steps and describes analogy as a powerful tool for creative design and presents the process of using visual displays in design. The study concludes that practicing with a large diverse number of visual displays can help engineering designers and for enhancing
their design abilities. It is crucial and essential for generating creative ideas and therefore creative products.

6. Leong and Qiu (2013) examine the relationship between teacher’s conceptions of creativity and their conceptions of assessment in art education. The authors developed and validated a measurement scale in creativity and assessment for art education. For that a sample of 285 pre-service teachers enrolled at a teacher accreditation programme in Hong Kong were participated. The questionnaire survey was conducted to assess their views about nature of creativity and assessment practice in art education.

7. Bjorner and Kofoed (2013) presented their research findings based on the work How academic teachers perceive and facilitate creativity? The authors argue the importance of including the social context in the definition and use of creativity in engineering education. It includes that there was a very possible attitude to supporting Medialogy to be as creative as possible without being like art school.

8. Munakta and Vaidya (2013) come out with a work focusing on the philosophy of creativity and suggest certain guiding principles for how the undergraduate curriculum can embrace scientific and mathematical creativity. The authors postulate that creativity is a necessary component of scientific thinking, producing students that are motivated, passionate, skilled, adaptable, and responsible. In conclusion, the authors emphasize the strong need to shift the focus of the undergraduate curriculum towards the development of the creative individuals.
9. Gilhooly, Georgious and Devery (2013) investigate about interactions between the type of creative task and the type of incubation activity on creative performance. The authors outline four main approaches to incubation effects and explain about the similarity effects. It concludes that work during incubation periods in creative thinking tasks and did not support the hypotheses that incubation effects are due to selective forgetting or attention shifting.

10. Miller (2012) examined the seven different theories of giftedness that include creativity as a component and explains about certain models of creativity. The three-ring model, the triarchic theory of intelligence, the WICS model of gifted leadership, the star model, the dynamic theory of giftedness, the domain-specific artistic and musical theory and the DMGT. The findings reveal that some models of giftedness are more comprehensive and consistent in terms of the creativity literature.

11. Zhu and Zhang (2011) published a research study relating to thinking styles and conceptions of creativity among university students. The study analyses university students thinking styles and the relationship with their views of creativity. The study reveals that significant relationships were identified between thinking style sand conceptions of creativity.

12. In a study Young (2009) explains about the steps involved in the developing criteria and creating rubric for creativity. In this study the author discusses about imagination and creativity, the need for assessing imagination and creativity. The study also elaborates about rubric and its significance in
assessment, and the shortcomings with the rubrics cited by the critics from the education circle.

13. The study Developing and verifying a Business-Creativity Assessment Tool: A Nationwide study in Taiwan was conducted by Kai-Wen Cheng and Yu-Fen Chen (2009). The study was indented to assess business creativity of students in Taiwan by developing a tool. The findings of the study showed that the proposed business creativity assessment tool involved 21 items under five constructs and also exhibited goodness of fit on several indices.

14. To examine the relationship between analogies and metaphors Hey, Agogino and Wood (2008) did a study on Analogies and Metaphors in Creative Design. This study focus on the relationship between metaphors and analogies, its use in the design process, and applications and implications for education. The results conclude that both metaphor and analogy are spontaneously used by student designers and metaphor dominates as the design tool for early problem-finding phases and analogy dominates as a tool for concept generation.

15. Murdock and Mathers (2008) describes about teaching and learning with the Torrance incubation model. The paper explains about integral components of creative teaching and learning on the Torrance incubation model of teaching and learning. This author focus on the thumbnail of the models’ of teaching and learning approach basic operating principles and explains about beginning creative skill base for specific use to integrate creativity and for teaching creativity in any content area.
16. Saebo, McCammon and O’Farrell (2007) analyzed about creative teaching and teaching creativity. The authors stress about the need for a new generation of workers who are creative and innovative and the value of creativity in developing a students’ capacity to learn in a wide range of educational subjects. This work presents an intricate conceptual background about creativity and teaching creatively.

17. Kaufman and Sternberg (2007) in a resource review raise four major questions most often asked about creativity- what is creativity?, is creativity just for geniuses?, is creativity an objective only in psychology?, and is the study of creativity just a western phenomenon? And they provide answers to these questions. The review concludes that there are many obstacles left to tackle, the next decades will bring creativity to the fore front of research and practice.

18. Badran (2007) in a paper focus on developing a clear concept of the term creativity and innovation in the field of engineering education. For that the author indicates the concept of creativity and innovation, different parameters of creativity- personal level creativity parameters and community level creativity parameters. The paper wind up with the views that teaching the skills of creativity and innovation and their practical applications are essential to any engineering education system.

19. In an article Creativity in time and Space, Tornqvist (2004) tried to identify characteristics of important environments where exceptionally creative individuals develop and make their abilities visible. The author concluded that individuals with unique skills and creative capacities are the main prerequisite
for invention and through renewal. Plurality and variety promote creative process but uniformity and homogeneity do not.

20. Merlo and Mann (2004) presented their research findings based on the study the relationship between individual creativity and team creativity. The study investigates how the creativity of individual team member is related to team creativity and the influence of climate for creativity in the workplace on individual and team creativity. A multilevel theoretical model is proposed, and tested the model using a sample of 54 research and development teams in Australia. The study concludes that the individual creativity that compiles into the creativity of the teams outcomes or products.

21. Craft (2003) observed about the limits of creativity in education. The author presents a conceptual dimension of creativity, four limits of creativity, social, environmental, and ethical limits to creativity and number of challenges and dilemmas for the educator to the effective implementation of creativity in education. The author also suggests a number of potential limitations to the fostering of creativity in education.

22. Anna, Diakidoy and Kanari (1999) examined about student teachers belief about creativity, creative outcomes, and factors related to creativity. The findings reveals that student teachers tend to perceive creativity as a general ability primarily manifested in the context of aesthetic endeavors, and creative outcomes were thought to be novel but not necessarily appropriate or correct.

23. In 1991 Kabano and Bottger tried to analyze effectiveness of the Creative problem Solving Programme for increasing the ideational fluency, flexibility,
and originality of trainees. The authors say that compared to the control group, trainees demonstrate significant gains in originality, and both group show an improvement in fluency. It is also concluded that performance in creativity projects is positively related to performance for autonomy and creative ability, and negatively related to performance for achievement.

The above mentioned research studies throw light into the development and implementation of creativity as a learning practice that has promising implications in the teaching and learning process. These studies proved that creativity models was an efficacious method for promising a creative approach to learning by providing chances for students to inquire and explore their learning, develop creative exhibits of learning, breaking conventional method of thinking, making association between old and new knowledge, encourage problem posing and problem solving abilities framing explicit linkage between theory to practice, stimulate the upbringing of self reflection and self assessment, encourage higher level of learning than surface learning and has intense reputation for ameliorating student momentum toward learning tasks.

3.3 Studies on Geography Education

1. Paska (2018) examines Does inquiry change learning?: Geography and the C3 Framework. The work highlights the four dimensions of the framework and each of which guide students through the inquiry process. The author concludes that inquiry begins with a question, and inquiry question in the social studies heavily depend on geographic reasoning to be effective and engaging to all learners.
2. Kenna (2016) explored about Teaching and global urban geography: an international learning-centered approach. The author discusses about the recent drive for the internationalization of curricula, together with calls for the internationalization of the sub-discipline of urban geography. For that the design and delivery of an upper level undergraduate urban geography module is used as a case study. The paper shows the ways in which student learning and engagement with internationalized global urban geography can be facilitated by a learning-centered approach.

3. Harmer and Stokes (2016) discuss about Choice may not necessarily be a good thing: student’s attitudes to autonomy in interdisciplinary project based learning in first year geography, earth and environmental sciences (GEES) undergraduates in UK university. Findings suggest that while some degree of autonomy was welcomed, participants largely favored prescriptions regarding research question and group members and has implications for the implementation of PjBL to foster democratization within the GEES discipline.

4. Raselimo (2013) reports the level of knowledge integration in secondary school geography content at the micro-level of classroom practice with a view to identifying any possible change in the subject following an environmental education project-oriented curriculum reform in Lesotho. The author concludes that it is hard to achieve the kind of change envisaged in environmental education, in a school subject emphasizing disciplinary knowledge taught in fragmented themes. The power of geography disciplinary knowledge, coupled with subject-oriented curriculum in schools and other local and national contexts, undermined the LEESP idea of an integrative curriculum.
5. Tate and Swords (2013) studied about Please mind the gap: students’ perspectives of the transition in academic skills between A-level and degree-level geography. This paper explores first-year undergraduates’ perceptions of the transition from studying geography at pre-university level to studying for a degree. Student perspectives were gleaned through a first-year assignment and subsequent focus groups. Using student insights, the authors show that their main concern is acquiring the higher level skills required for university learning.

6. Scoffham (2013) says about Geography and creativity: developing joyful and imaginative learners. This article explores how primary geography teaching can be enriched by creative practice, and outlines a pedagogy which places children at the heart of learning. The author says that there is a need for a vision of primary geography teaching which respects the integrity and individuality of children as playful and imaginative learners and places them at the heart of schooling and education. The study also suggests certain creative approaches to teaching geography.

7. Krakowka (2012) uses Kolb’s experiential learning model to discuss how students learn and how field trips can help enhance learning. Using Kolb’s experiential learning theory as a guide in the design of field trips helps ensure that field trips contribute to internalizing relevant geographical theory and concepts. Three types of field trips are presented: an informal survey of a neighborhood, a more formal scavenger hunt, and a virtual field trip using Google Earth. The feedback from students is positive and they seem to greatly enjoy and benefit from being outside a traditional classroom environment.
8. Friedman and Patterson (2012) say about two different studies that assess the impact of writing as a learning tool in an introductory level geography course. Student attitudes toward writing and their performance on exams were analyzed to determine the impact of writing for comprehension and application of geographical concepts. Student perceptions were mostly positive and there was no significant improvement in grades. The results underscore the need to develop alternative methods of assessment and additional studies to quantitatively determine the impact of writing on learning.

9. Huang (2011) designed a GIS-interface website for students to experiment with exploratory learning for geography curriculum. Here learners interact with maps to retrieve related information and actively organize what they read to develop their own cognitive models. The experimental design use an exploratory learning Web site and a structured learning Web site to compare learners’ comprehension of the content and behavior when browsing the Web site. The results show that learners using the exploratory learning Web site performed better in content interpretation than learners exposed to the structured Web site when employing diverse strategies.

10. Kerawalla, Littleton, Scanlon and et al (2011) designed a Personal Inquiry Project which includes web-based tool kit nQuire that support through the inquiry process. The authors found that nQuire successfully resourced and supported the students’ learning journeys or trajectories. The results concludes that nQuire can be an effective tool for supporting teachers’ and students’ understanding of the nature of inquiry and how to design and implement inquiries of their own.
11. Renshaw (2011) analyzed about creative thinking and geographical investigation. This article is a result of a workshop by GA’s Secondary Phase Committee at the 2009 Annual Conference. This article suggests four methods with supporting rationales which can be used to promote creative thinking within geography: re-expressing ideas in an alternative forms, breaking traditional rules, adapting existing successful ideas and obtaining inspiration from unusual sources. The findings provide an example of how students can be encouraged to begin to think creatively in school geography.

12. In 2010 DeMers describes about coyote teaching for geography instruction. The author introduced the concepts and techniques of coyote teaching and provided some simple examples from author’s educational experiences to demonstrate, through simple examples, the utility of integrated learning technologies within geographic education. It also demonstrates how each of the components of coyote teaching can be readily employed, enhanced, and, more importantly, integrated into geographic education and inculcated into multiple generations of geography educators.

13. Yeung (2010) studies about problem based learning for promoting student learning in high school geography. The study determines the impact of problem based learning on a pre university geography class. Learning activities include problem analysis, information collection, and an examination of concepts, oral presentations, and group summaries in relation to current and perennial geographical issues. Results showed that students could analyze problem statements and present their understanding systematically but varied considerably in organization, argument, and quality of thinking.
14. In a paper Moore and Gilmartin (2010) discusses the transformation of an introductory human geography module at University College Dublin using a blended learning approach. Moore and Gilmartin highlight how blended learning can aid the achievement of a range of objectives in relation to student engagement and the promotion of deeper learning. Analysis draws out a more complex relationship than anticipated between blended learning and student retention that will require further examination.

15. In an article teaching and research in geography Butlin (2010) discuss about the issues arising from balancing the demands of teaching and research and the degree of correlation between teaching and research and the role and value of pedagogic research. The author provides examples from three UK geography departments, each with different strategies for learning and teaching and for research and illustrates the range of departmental strategies.

16. Algeo (2007) analyzed about Teaching Cultural Geography with Bend It Like Beckham (2007). This article will demonstrate how the British film *Bend It Like Beckham* can be used in cultural geography classes to illustrate core concepts and engage students in critical analysis. It provides background on Sikh religious belief, culture, and migration history to help readers to understand the rich cultural milieu depicted in the film and also includes suggestions for engaging students in critical analysis of the film in ways that highlight core cultural geography concepts.

17. Naik and Teelock (2006) conducted an examination on enhancing the teaching and learning of history and geography through information and communication technology. The researchers developed a CD-ROM to provide teachers and
students varied source of information and to encourage teachers to experiment with new ways of teaching and learning and provides an overview of the feedback received from the use of the prototype multimedia CD-ROM.

18. Anthamateen and Ziegler (2006) mention about Teaching Geography with 3-D Visualization Technology. For that the authors developed and presented 3-D visualization exercises and explain the principles of 3-D visualization technology, the history of GeoWall in detail. A written survey was used to determine student’s reactions to the use of developed technology and to evaluate its effectiveness. Study reveals that several students were interested in the technology and wanted to work on their own 3-D visualization projects.

19. In 2005 Smith analyses about Implementing a Problem-Based Learning Approach for Teaching Research Methods in Geography. The paper has three main objectives: to describe problem-based learning, to describe how to teach a research methods course in geography using problem-based learning, and to discuss student and staff experiences of problem-based learning approach. The paper concludes that by the adoption of the PBL approach the course ratings have shown a steady improvement with significant gains in terms of stimulating interest, overall course quality and the benefits to students in terms of lifelong learning.

20. Korze. (2005). conducted a study on Transition and Transformation: The Influence of a Learning Package on Student Performance in Soils Geography Studies. The study details about a 10-year project that try to make the learning of soils geography more effective to geography undergraduates and shows that the package has augmented learner’s knowledge recall, the quality of acquired
knowledge and interest in soils geography. Finally the result of an appraisal survey shows a statistically significant difference between PGP-using and non-PGP using groups.

21. In 2004 Healey, Kneale and Bradbeer explored about learning styles among geography undergraduates: an international comparison. The authors assess whether geographers have a predominant learning styles and whether this varies between and within countries of Australia, New Zealand, UK and the US. The results shows there are international differences in proportion of students in the UK and the US whose predominant learning styles are diverges. In Australia and New Zealand there are significant international variations between the universities studied.

22. In 2003 Klein studied about Active Learning Strategies and Assessment in World Geography Class. The work describes several active learning strategies that can be used in geography courses to foster development of a spatial perspective in students through the analysis and interpretation of spatial data. It also delineate about the general principles of active learning, Atlas Warmups, Concept Discoveries, and Issue Analysis. The author concludes that active learning strategies can effectively reach students who need to learn how to think geographically and reminds that active learning is essential.

23. In a study attitudes to geography in Australia, Gerber (2001) focus on the perception of the role of geography in contributing to wider social goals relating to lifelong learning and living. The study surveys the attitudes toward geography held by the groups of business people, government representatives, professional people, educators and members of the general public. The results
centers on the perception of the importance of geography to Australian society; important knowledge, skills and values that are learned while doing geography; and the importance of geography for work and offers considerable support for geography within Australian society.

24. Healey and Jenkins (2000) studied about Kolb’s Experiential Learning Theory and its Application in Geography in Higher Education. The study mainly focus on the main features of Kolb’s experiential learning theory and also aims to describe and assess different ways of the application of the theory to geography in higher education. The study details Kolb’s experiential learning theory, pictorial depiction of the learning cycle, characteristics of Kolb’s learning styles and the relationship between learning styles and learning conditions.

The literature on geography education reveals that there is a need for restructuring the curriculum transaction practices in geography education through appropriate instructional practices in order to develop creative skills and self directed learning competencies to produce higher academic achievements to meet the necessities and requirements of the global world. Certain studies claim that for invigorating geography learning environment students should provide the opportunity to learn by themselves and to find a path to reach the solutions to the problem. Hence teachers have to challenge and encourage the students toward self search for various methods to the solutions, develop imaginations and creativity, convergent and divergent thinking as well as to develop the ability to set, plan, implement and evaluate their learning process following better geography learning capabilities.
In this chapter the researcher tried to collect, analyze, and explore about certain studies that are in close proximity with the areas of self directed learning, creativity and geography education. A thorough analysis of the above mentioned related literature reviews set the stage for planning the present study of its nature and for developing a model of teaching based on the objective ‘create’ for promoting Self directed learning among the geography students at higher secondary level which in turn helped the investigator in planning an appropriate methodological approach for the present study.