A PSYCHOGOGIC PERSPECTIVE OF LESSON STUDY FOR SPECIAL EDUCATION TEACHERS

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ABSTRACT

Psychogogy – the Greek words psycho means 'mind' and gogy means 'to lead' – literally refers to 'leading the mind'. First coined by Oswald Schwartz in 1925 to describe process for helping people to become self-actualized, the term has since evolved and today it means a different thing. According to Chia and Ng (2011), it is an instructive theory that includes psychological influence on a learner's mind in terms of his/her learning and thinking abilities, feelings and will to perform or act and whose behavioural traits interlinked by various senses through different sensory processes in order to establish his/her own perception and belief through interaction with others within a given socio-cultural context. With this perspective in mind, Lesson Study (LS) becomes a kind of collaborative inquiry tool that can be used by the special education teachers to observe their students with special needs, explore how the student learning, thinking and behaviour change as a result of the lesson planned, taught, observed, evaluated, re-planned and re-taught.

Keywords: Learning, Lesson Study, Psychogogy, Special Education, Teaching

INTRODUCTION

Generally, students with moderate to severe learning and behavioral challenges do not benefit from mainstream education unless special provisions are created to cater to their needs. There are several types of special education (SPED) services for such students depending on their learning and behavioral challenges and the varying degrees of severity: deferment, exclusion, inclusion, integration, mainstreaming, retention, and segregation (see Chia & Kee, 2013a, for more detail). Whichever type of SPED service most appropriate to help students with special needs, SPED teachers need to be aware that regular pedagogy is often inappropriate for these learners. An alternative approach – be it corrective, remedial, assistive or compensatory – is needed to help such students. Chia and Kee (2013b) use the term *psychogogy* – a cross-mix between psychogogy (study of mind) and pedagogy (art or science of teaching) – as the instructional approach with psychological influence on a learner's learning and thinking, feeling and will to act and whose behavioral traits interlinked by various senses through different sensory processes in order to establish his or her perception and belief through interaction with others within a given socio-cultural context (National Clearinghouse for Professions in Special Education/NCPSE, 2008).

Briefly, the term *psychogogy* – the Greek words *psycho* means "mind" and *gogy* or *gogia* means "to lead" – literally refers to "leading the mind". It originated from Germany and it was first coined by a German author of *Psychogenese und Psychotherapie Korperlicher Symptome* (1925), Oswald Schwartz, who used the term to describe a possible process for helping people to become self-actualized. This is a contradiction in terms. . If we help people to actualize their potential, they are other actualized, not self-actualized. We are concerned here, however, with changing the norms of society and then letting *people* actualize their potential within that new society. Later, Abraham Maslow borrowed that term *psychogogy*

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for his classic treatise on *Eupsychian Management* (1965). In one of his short essays *The Farther Reaches of Human Nature* (1971), Maslow defined psychogogy as the education of the psyche.

In fact, long before Maslow came into the picture, another person, Dr Roberto Assagioli (1988-1974), an Italian psychiatrist and pioneer in the fields of humanistic and transpersonal psychology, defined *psychogogy* as a way for the investigation, domination and the use, and above all for the harmonious integration of all elements of the personality. His attention was always focused on normality and the evaluative and growth processes in the subject so as to draw him towards *psychopedagogy* more than towards psychology. The former term was later shortened into *psychogogy* in his classic book *Psychosynthesis: A Collection of Basic Writings* (1965/2000).

The most recent usage of *psychogogy* can be found in a paper presented by two German professors at the European Conference on Educational Research held at the University College, Dublin, Ireland, from 7-10 September. Dr P. Viktorija and Dr R. Nijole used the term *psychogogy* here to describe "curing with the help of fairy-tales is one of the oldest methods of psychology and pedagogy, i.e., psychogogy" (para.27) in their paper presentation *Correction of Behavior and Cognitive Activity of Children with AD/HD by Story Telling: Case Study* (2005).

One must take note that the term *psychogogy* is evolving over time. Different disciplines have defined the term differently to mean different things. The term *psychogogy* can be inferred from other writings, too, e.g., Goldstein and Mather (1998) and Zinkevic-Jevstignejeva, (1998). In fact, we have noticed that the East European academicians use the term more often that their western counterparts. This is just one of the many terms that many are not very familiar and tend to reject them as quickly as they come to read or hear about it. Another example is the term *oligophrenia* (western equivalent term will be mental retardation or to be politically correct, mental challenges). A third example is *heilpedagogie* (western equivalent term will be special education or educational therapy).

Psychogogy: To Lead the Mind

In its original coinage, psychogogy is not meant to rectify special educational needs, i.e., learning and/or behavioral challenges, per se. Learning and/or behavioral difficulties may be experienced by any student, neurotypical or not, some of the time throughout life. Psychogogy also can be used to enhance or enrich students in their learning performance as well as behavioral profile in order to attain self-actualization. However, the term has since evolved and today it means a different thing.

Chia and Ng (2011) have defined psychogogy as an "instructive theory that includes psychological influence on a learner's mind in terms of his/her learning and thinking abilities (cognition), feelings (affect) and will (conation) to perform or act and whose behavioral traits interlinked by various senses through different sensory processes (sensation) in order to establish his/her own perception and belief through interaction with others within a given socio-cultural context" (p.2). Cognition, conation and affect form what Chia and Wong (2011) called it "the foundational block because it provides the support system for all our children's learning" (p.1). All the three cornerstones are linked up by the sensory-perceptual-motor processes which are collectively known as sensation.

Psychogogy across Teaching-Learning Process

Psychogogy cuts through all other forms of teaching-learning approaches, beginning at birth through childhood and adolescence to adulthood at ripe old age (see Figure 1): from antegogy (i.e., before formal learning begins to take the lead) and/or autogogy (i.e., spontaneous

learning or learning is *caught*) through pedagogy (i.e., to lead the child or learning is *taught*) and andragogy (i.e., to lead the adult as in vocational training and development, for instance) to gerontogogy (i.e., to lead the old adult) (see Chia, 2011, for further reading).

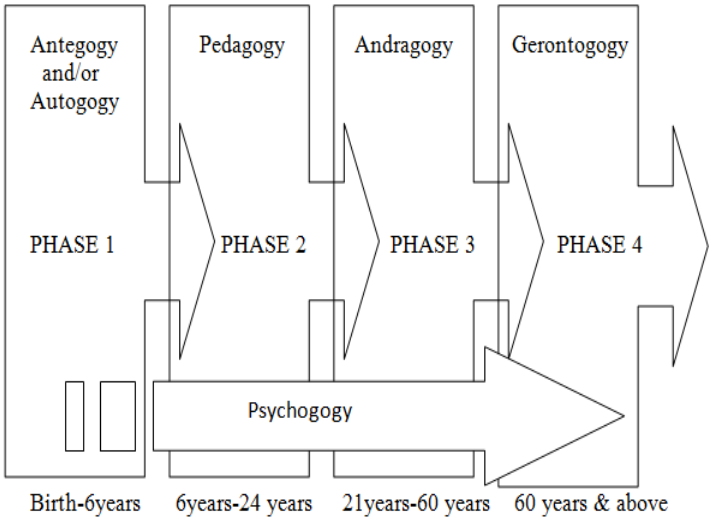

Figure 1. Psychogogy across the Ages (Chia, 2011)

In psychogogy, the most important step to be taken to impart knowledge and skills to atypical learners is to know their strengths and weaknesses in terms of the following hierarchy of building blocks of abilities and skills (see Figure 2) that should be assessed properly by qualified professionals such as psychologists, therapists and counselors (Chia, 2008):

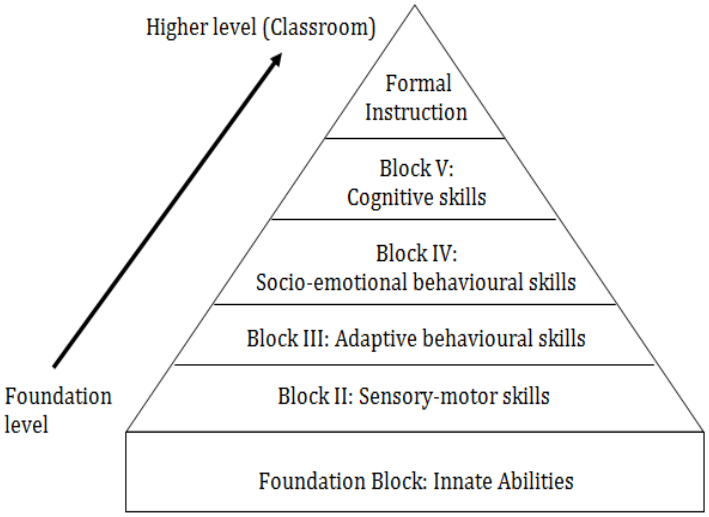

Figure 2. Hierarchy of Building Blocks of Abilities and Skills (Chia, 2008)

Hierarchy of Building Blocks of Abilities and Skills

Block I: Foundation

Learning is built on the innate abilities which are inherited and genetically coded at birth. The innate abilities cover abstract thought, understanding, communication, reasoning, learning, planning, emotional intelligence, and problem solving (Chia, 2008). Although a child's upward ceiling performance is defined by innate abilities, how near the child comes to

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performing at those upper limits is determined by other elements such as interest and motivation necessary to learning (Franken, 2002). It is these innate abilities that the child is assessed using an IQ test to determine if he/she is highly-able, able, less-able or disabled in his/her performance as a learner.

Block II

Sensory-motor skills are developed on the foundation of the child's innate abilities. It covers sensory and motor skills which are partially determined by genetic code and partly acquired through repeated interaction with the environment (Chia, 2008). Such skills can be improved with proper practice. Sensory skills can refer to exteroceptive senses (e.g., vision, hearing, touch, smell and taste) and interoceptive senses (i.e., vestibule and proprioception). They are most essential for receiving information. Motor skills relate to muscles and movement, and include crawling, walking, handwriting and speaking. Motor skills give expression to the information our senses receive and process. If there be any deficiency in any of these skills, the psychological approach should include sensory integration therapy, occupational therapy and/or physical therapy (Chia, 2008).

Block III

Adaptive behavioral skills as an essential learning process refer to "the effectiveness or degree with which an individual meets the standards of personal independence and social responsibility expected of his/her age and social group" (Grossman, 1973, p.11). A wide range of skills are covered at different developmental stages (Chia, 2008): sensory and motor skills, social skills, self-help skills, home living skills, independent living skills, language concepts and academic skills. During infancy and early childhood, the adaptive behavioral process of learning covers sensory-motor skills, communication skills, self-help skills and socialization skills. During the late childhood and early adolescence, it covers application of basic academic skills in everyday life activities, application of appropriate reasoning and judgment in mastery of the environment, and social skills. Finally, during late adolescence and adulthood, it concerns vocational and social responsibility and performance. For any child with adaptive behavioral deficits, an assessment such as the Vineland Adaptive Behavior Scales needs to be administered. The psychological treatment will include "applied behavior analysis that involves systematically arranging environmental events to produce desired changes in his/her behavior" (Chia, 2008, p.30).

Block IV

Socio-emotional behavioral skills are concerned with good people skills. They include adaptive behaviors, internalizing and externalizing behaviors. According to Kratiwohi et al. (1964), the socio-emotional domain encompasses qualities that are pre-requisites for socially acceptable behaviors in children, such as desirable interests, attitudes, values, and character development. Learning in this domain is often challenging because of its subjective nature. "Unlike sensory-motor and cognitive skills that can be evaluated by written examination or practical testing, socio-emotional behavioral skills are difficult to identify, quantify, and assess" (Chia, 2008, p.30). The psychological approach to remedy deficits in this area of concern includes social skill training, behavior modification, play therapy and counseling.

Block V

Cognitive skills involved in learning are essential to children processing sensory information they receive. These include their ability to analyze, evaluate, retain information, recall experiences, make comparisons and determine action (Giles, 2005). Although learning as a cognitive process has an innate component, its bulk of cognitive skills are learned or deliberately acquired. "When this development fails to take place naturally, cognitive

weaknesses are the result and they diminish a child's ability to learn, and are difficult to correct without specific and suitable psychogenic intervention" (Chia, 2011b, p.38). Cognitive skills can be practiced and improved with the right teaching. Using the appropriate strategy, the brain of a struggling learner can actually be 'rewired' and cognitive function can be restored or enhanced (Goswami, 1998). Feuerstein et al. (2002) have termed this ability as cognitive modifiability. While weak cognitive skills can be strengthened, normal cognitive skills can be enhanced to increase ease and performance in learning. That is why enrichment programs such as phonics, speech and drama offered outside the regular school system still play an important role in educating the child.

All the building blocks of abilities and skills for successful learning and socially acceptable behavior briefly discussed above are essential of a child studying academic subjects such as Mathematics and Science in formal instruction or pedagogy. Although the knowledge base of each academic subject can be expanded, without the proper foundation of earlier learning and behavioral skills, academic progress can become a difficult and frustrating challenge, especially to the child with special needs. Hence, psychogogy, involving remedial teaching and intensive coaching, is dependent on an accurate psycho-educational assessment of these building blocks to design an appropriate individualized education plan to help such a learner.

For example, after a battery of tests has been completed and results obtained, the single most important factor in planning for a child with a learning disability is an intensive diagnostic study. Without a comprehensive evaluation of his deficits and assets, the treatment may be too general, or even inappropriate (Johnson & Myklebust, 1967). The learner's psycho-educational profile is established, i.e., taking his/her chronological age (CA) and mental age (MA) as benchmarks, all the other equivalent ages will be recorded and compared with these two age benchmarks. If the learner's CA is 7 years 6 months and his MA is found to be 8 years 6 months, it means the learner's intellectual capacity is one year ahead of his CA. He should be able to perform academic tasks (e.g., reading and mathematics) at 8½ years old despite being a 7½-year-old child. However, if the learner's equivalent ages for academic tasks/skills are at his CA, it suggests that the learner's potential has not been maximized. If these equivalent academic ages are two years below MA or CA, we can say that there are some suspected learning challenges such as dyslexia and dyscalculia.

Psychogogy as Diagnostic Assessment

Psychogogy involves a comprehensive developmental, dynamic, directional and multi-dimensional psycho-educational assessment in order to accurately determine a child's developmental status in the cognitive, conative and affective domains. It searches for the cause(s) of the delay and/or impairment. However, in most instances, the causes of the developmental problems remain uncertain or idiopathic in etiology even after the best possible search. A thorough psycho-educational assessment is a complex procedure besides being time-consuming and expensive.

Depending on the findings of the psycho-educational evaluation and profiling, an appropriate intervention plan is needed and must be designed according to the assessment results in order to meet the learner's learning and behavioral needs. All intervention strategies and activities have to be carefully selected to be put into the learner's individualized education plan (IEP). Current research has yet to identify one *best* instructional approach that works for and benefits all learners, typical and/or atypical. Whatever these chosen strategies and activities are, they form the blueprint for the learner's treatment. This is psychogogy, i.e., leading the mind: for students with special needs, I term the instructional approach as *psycho-pedagogy*.

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The diagnosis and confirmation of a child's learning and behavioral problems should be followed by the procedure for treatment (i.e., intervention and rehabilitation) strategies that should be individualized and customized specifically to meet the child's needs. Any eventual long-term treatment program (in turn, it consists of several short-term treatment plans) must involve the parents as a focal point, so their participation in the overall process is of paramount importance. This is followed up by an evaluation to monitor the child's and his/her family's progress in order that care and support is provided continuously.

The Eight Principles of Psychogogy

How well learners with special needs are going to perform and benefit from specialized instruction to be provided by SPED teachers and/or allied educators depend heavily on evidence-based practices. There are eight principles and they are briefly described below (Wendling & Mather, 2009):

Principle #1: A learner performs best when he is actively engaged in a given task.

Principle #2: Every activity should incorporate build-in success to motivate a learner to produce positive learning outcomes.

Principle #3: More opportunities to learn content should be created to raise the potential for learning.

Principle #4: Direct teaching or close supervision is needed if a learner is to achieve more.

Principle #5: Instruction should be deliberately and carefully scaffolded so that a learner can become independent and self-regulated.

Principle #6: Instruction should focus on three forms of knowledge:

a. Declarative knowledge: know the facts;
b. Procedural knowledge: know how to use knowledge in specific ways; and
c. Conditional knowledge: know when and where to apply the knowledge.

Principle #7: A learner should be taught study and organizational skills to aid him/her in recording, storing and retrieving knowledge as and when is required.

Principle #8: Instruction is imparted strategically and explicitly through associating new information with previously learned concepts.

Psychogogy observes the above 8 principles so as to bring out the best in an atypical learner's behavioral development and to maximize his/her learning potential. Not only is psychogogy appropriate and beneficial to atypical learners, it enhances the development of typical learners and sharpen their learning mind. Psychogogy might well become the teaching-learning approach of the 21st century for all typical and atypical learners of all ages.

From Psychogogy to Lesson Study (LS)

The orientation of psychogogy is student-based or learner-centered. Its focus is on working with the learner's mind to come up with the best possible approach to teach and to learn so that the learner's potential is maximized. Figure 3 summarizes the application of 8 principles of psychogogy covering learning and teaching processes, their respective involvements and the attainment of learning and/or teaching goals.

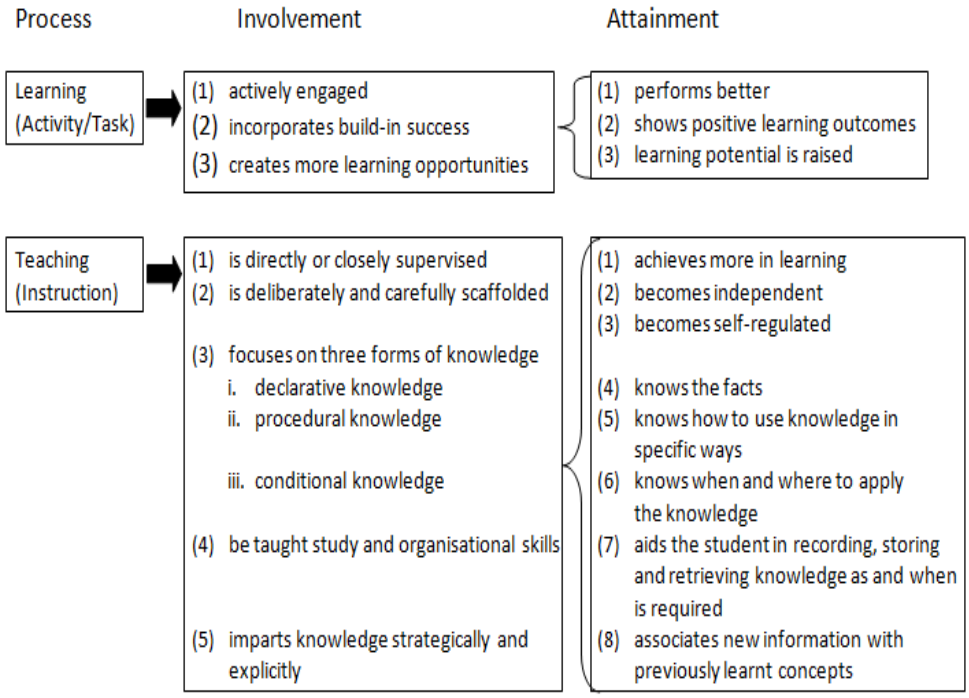

Figure 3. Principles of Psychogogy

A student learns best when the teacher is able to deliver effectively his/her instruction such that the student knows what is expected of him/her to be able to perform. Good instruction requires sufficient time to plan a proper lesson plan with clearly articulated learning/teaching goals or objectives. After a lesson has been taught, it must be evaluated in terms of the attainment of the lesson objectives as well as the teacher's personal reflection on his/her lesson delivery.

When the student is a learner with special needs, more care and effort will be required in the lesson planning. It is not possible for a teacher to know everything about learning difficulties, disabilities and disorders, which are 3 different levels of learning challenges with the disorders being most challenging (Chia, 2012), in order for him/her to formulate a good lesson plan basing on the student's IEP. Working collaboratively with other colleagues is a better approach that will not only benefit the student but also the teacher's personal development as a professional. This approach must allow the teacher to explore how student learning, thinking and behavior change as a result of the lesson taught.

LESSON STUDY (LS): A BRIEF INTRODUCTION

The Lesson Study (LS) fits neatly into that approach and it was first developed as a result of a concerted effort initiated by a group of Japanese teachers to improve their pedagogy (Fernandez, 2002) during the Meiji period. It functions as "a means of enabling teachers to develop and study their own teaching practices" (Baba, 2007, p.2). Lewis (2002) has defined LS as follows:

> "*Kenkyu jugyo* means research lesson (or study lesson), and refers to the lessons that teachers jointly plan, observe and discuss. *Jugyo kenkyu* – using the same two words in the reverse order – means lesson research (or lesson study), and refers to the process of instructional improvement of which the research lesson is the core piece" (p.4).

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LS is a form of classroom inquiry in which several teachers collaboratively plan, teach, observe, revise and share the results of a single class lesson (Cerbin, 2011). It is an excellent model for constructing pedagogical knowledge and improving teaching as the teacher becomes more knowledgeable about how the student learns and thinks and how instruction affects the student's learning in the process of teaching (Cerbin & Kopp, 2006) as well as knowledge of the subject matter – particularly for topics newly added to the curriculum (Watanabe, 2002). Moreover, Wilms (2003) has found that LS provides an opportunity to learn how other teachers teach specific subject matter, and it helps connect standards with assessments and curriculum.

Besides, LS involves backward design by starting with the clarification of the goal or endpoint of the learning or teaching process and then the design of instructional experiences leading to that goal. According to Chia and Kee (2010), LS "is a process rather than a product – a mean through which teachers continuously engage in learning more about best or effective pedagogical practices in order to improve the student learning outcomes" (p.2).

Types of LS

There are several types of LS that can be conducted involving "a large number of teachers, done on many different scales and in varying formats" (Baba, 2007, p.6). The most common format is in-school training conducted at the school level. LS is conducted by developing an annual pedagogical theme and forming teams for each academic subject (e.g., Mathematics) as well as non-academic subject (e.g., Moral Education) and grade. Other formats include LS conducted by groups of teachers on a voluntary basis or LS sessions hosted by teachers' unions and professional associations or societies.

In Singapore, other than the common in-school format of LS used in mainstream schools, the modified LS (see Chia & Kee, 2011) has been adopted and implemented by some SPED schools to meet their respective needs.

The Eight Steps of LS

The principle behind LS is "to improve teaching, the most effective place to do so is in the context of a classroom lesson" (Stigler & Hiebert, 1999, p.111). Below is a summary of the eight steps of LS:

Step 1: Define the problem or main issue of concern.

Step 2: Plan the lesson. Consider how other teachers have handled the same or similar problem before. Aim to understand why and how a lesson can promote student learning. Meet other teachers to discuss about the lesson to obtain feedback.

Step 3: Teach the lesson. Invite other teachers to observe the lesson. Videotape the lesson if possible for analysis and discussion later on.

Step 4: Evaluate the lesson and reflect on its effects. Invite the teacher observers to share their views and suggestions.

Step 5: Revise the lesson and make necessary changes, which should help to resolve specific misunderstanding shown by students during the lesson taught earlier.

Step 6: Teach the revised lesson to another group or class of students. Invite other teachers to observe the lesson.

Step 7: Further evaluation and reflection. Meet other teacher observers for their feedback and suggestions for improvements.

Step 8: Share the results with other teachers. Invite other teachers to observe the teaching of the final version.

Relating LS back to Psychogogy in SPED

The wholesale implementation of LS in SPED schools can be challenging, especially when a SPED teacher has to work with a class of 6-12 students with special needs of diverse learning and behavioral challenges of varying degrees of severity. Not every SPED teacher may have a co-teacher, teacher aide or allied educator to work with collaboratively. This is the typical classroom situation in most SPED schools in Singapore due to shortage of qualified SPED professionals. The retention and attrition of SPED teachers have been a growing concern in many other countries over the last decade (Payne, 2005).

SPED will fail if the most important ingredient that will make a difference in student learning is left out: the quality of teaching (Stigler & Hiebert, 1999). SPED teachers can be experienced, highly qualified, most up-to-date in their subject matters, but they can only be as effective as the methods they are using (Stigler & Hiebert, 1999), i.e., psychogogic knowledge they possess. That means that having highly qualified SPED teachers will not necessarily lead to improved classroom practices (Jacob & Lefgren, 2004). However, if the focus is on the approach to help SPED teachers improve their instruction from the inside out that is a different story with a different result. The result is that we are more likely to achieve lasting improvements in SPED classroom teaching and learning.

LS is probably the most suitable approach to provide SPED teachers an opportunity to deepen their knowledge of subject matter as well as psychogogic knowledge, i.e., how to lead the mind of a learner with special needs in this case, through collaboration with other colleagues. Collaboration, therefore, constitutes the cornerstone of LS and alleviates the isolation of teaching and allows SPED teachers to share their experiences and knowledge with others (Stigler & Hiebert, 1999).

According to Wilms (2003), teachers participated on LS teams believe the approach is beneficial to their student learning and that includes students with learning disabilities. Moreover, since LS involves joint participation and input of everyone in the team, all team members will care about its success (Bergenske, 2008). Consequently, SPED teachers will feel less anxious about having their colleagues come to observe them teaching in their classrooms (Itzel, 2002). However, Bergenske (2008) laments the "lack of solid empirical data to support the efficacy of LS on the learning disabled student in the general education classroom and the inclusion of education specialists on Lesson Study" (p.12).

In a recent study done by Kee and Chia (2011), the modified LS was used with trainee SPED teachers to collaborate with their experienced cooperating SPED teachers to develop lesson plans, teach and observe the lesson to collect data on student learning, and use their observations to refine their lessons so that their students would benefit from their lessons. This is probably the first study ever done using the LS (albeit the modified approach used in the study) in SPED schools as the authors could not find any other studies in their literature search.

Findings from Kee and Chia's (2011) study suggested that the modified LS approach is a potential model for formative evaluation of future teaching practicum for trainee SPED teachers. Moreover, it also helps them understand the processes and products of the modified LS approach and embrace it as their lifelong professional development practice once they have completed their pre-service training to work in SPED schools.

Another closely related approach to LS is co-teaching, which has been defined as "two or more professionals jointly [delivering] substantive instruction to a diverse, or blended, group

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of students in a single physical space" (Wischowski et al., 2004, p.4). When incorporated into LS, it creates an opportunity for the SPED teacher to work side by side with another colleague sharing the responsibilities within the classroom, such as co-planning, decision making on the lesson content and how to approach it, providing accommodations that will allow students with special needs to access the knowledge and skills in order to benefit from the lesson taught (Wischowski et al., 2004).

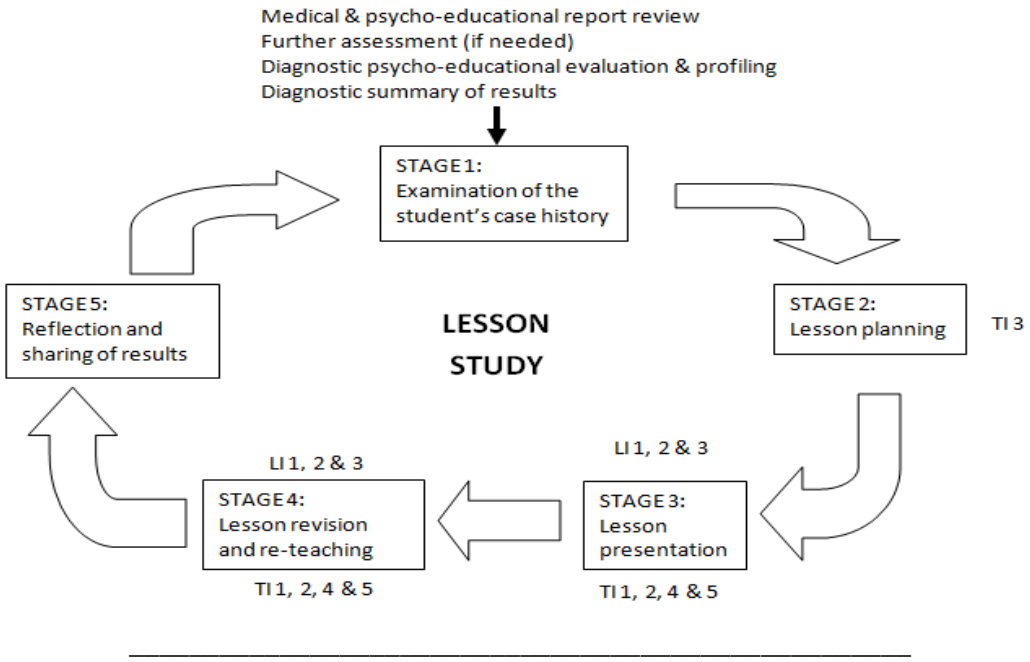
Table 1 shows the to be steps taken in the different stages of modified LS in correspondence to the actions taken by the LS team in its pre-lesson preparation in terms of learning and teaching involvements. The pre-lesson preparation involves the LS team in two ways: Firstly, it is to review the medical and psycho-educational reports of the student concerned and see if there is a need for a further assessment basing on the hierarchy of skills and abilities. Secondly, it is to prepare a diagnostic summary by evaluating the medical and/or psycho-educational information gathered to create the student's profile. This will allow the team to decide on the essential skills and abilities that should be covered in the lesson.

Table 1. Actions taken in the modified LS and Psychogogic Approach

Modified LS	Psychogogic Approach	
	Learning Involvement (Student)	Teaching Involvement (Teacher)
Stage 1: Examination of the student's case history	Review the student's medical & psycho-educational reports. Further assess the student if necessary basing on the hierarchy of skills and abilities.	Prepare a diagnostic psycho-educational evaluation report and profile of the student. Select the skills & abilities that are to be the main focus of the lesson.
Stage 2: Lesson planning		Teaching Involvement (TI): TI (1)
Stage 3: Lesson presentation Stage 4: Lesson revision & re-teaching	Learning Involvement (LI): LI (1), (2) & (3)	Teaching Involvement (TI): TI (1), (2), (4) & (5)
Stage 5: Reflection & sharing of results		

Note: Also refer to Figure 4 for LI and TI.
See Figure 3 under Involvement for description of activity represented by a number in ( ).

The aim of this paper is to illustrate how LS as a collaborative inquiry tool can be used by the SPED teachers to observe their students with special needs, explore how the student learning, thinking and behavior change as a result of the lesson planned, taught, observed, evaluated, re-planned and re-taught within the psychogogic framework. Figure 4 summarizes how the modified LS can be incorporated into psychogogy to empower SPED teachers in their collaborative effort to maximize the potential of their students with special needs.



LI: Learning Involvement; TI: Teaching Involvement
See Figure 3 under Involvement for description of activity represented by a number in ( ).

Figure 4. Principles of Psychogogy

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