

The Let Me Learn Process® : A robust theory with practical implications

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Abstract

This paper reviews a learning system that has withstood empirical tests of its theoretical and psychometric robustness. The system includes both an instrument that serves as an important tool to launch the process as well as a system of skills that empower learners to interact effectively with the learning environment and ensure successful learning. This article traces critical reviews of published learning styles models and juxtaposes them with research conducted on the Let Me Learn Process to test the robustness of the theory that supports it. The author contends that the Let Me Learn Process has a strong theoretical and psychometric base thus giving what it claims to give, namely, a robust and inclusive theoretical foundation, a comprehensive lexicon of terms that provide a means of communicating one's experience of learning, an explanation of learning which fosters a learner's responsibility, and finally empirical evidence revealing a measurable difference in the behaviour of learners.

Mezirow explains that:

“A practical implication of the theories ... (theories of learning) is that knowledge for the learner does not exist in books or in the experience of the educator. It exists *only* (emphasis added) in the learner's ability to construe and re-construe the meaning of an experience in his or her own terms” (Mezirow, 1991b, p. 20)

A prerequisite for personal transformation and, therefore learning, is that a learner be actively involved in the creation of his/her own process of unpacking the knowledge and fit of it within his/her system of meaning perspectives. Mezirow also suggests that learning, as identified as cognitive and intelligence styles, are factors

that shape the meaning perspectives and structure of “assumptions within which one’s past experience assimilates and transforms new experience” (Mezirow, 1991b, p. 42).

Notwithstanding the important role this factor holds in the process of personal transformation, the field of styles is riddled with “a high degree of concern with almost all of the published learning styles models...” (Maher & Slotnik, n.p., p.4).

A Critical Review of the Studies Assessing Major Learning Style Models

A number of studies produced critical analyses of some of the most prevalent learning style models that have been constructed (Bedford, 2004; [Cassidy, 2004](#); [Coffield, Moseley, Hall & Ecclestone, 2004a](#)). The study by [Coffield et al \(2004a\)](#) is the most comprehensive study. This work started by analysing 71 learning style models and later focused on 13 major models based on, either theoretical importance, widespread use, and/or the impact on the overall field of learning styles.

Coffield’s team applied a systematic review of the selected models with the results emerging being quite disappointing since “overall, the results revealed serious psychometric weaknesses indicated by varying degrees of validity and reliability”(Maher & Slotnick, n.p.). Coffield et al also complain that research associated with learning styles has been “small scale, non-cumulative, uncritical, and inward-looking” (Coffield et al, 2004c, p. 4). Coffield et al join earlier observations by Curry (1990) and draw attention to what Curry already highlighted namely, confusion in definitions, weakness in reliability and validity of measurements (p. 51). The findings of Coffield and his team state that the proliferation of concepts is the source for “confusion, serious failure of accumulated theoretical coherence, and the absence of well-grounded findings tested through replication” (p. 4).

Bedford (2004) reached similar conclusions independently on more contemporary learning styles used in higher education. Bedford in his literature review confirms that the application of learning style models lacked proof that learning styles had significant impact on learning. Bedford raises concern that due to the diversity of conceptualizations and differing models no coherent theory, consistent data and analysis is present.

Cassidy (2004) draws attention on the ambiguous terminology and the lack of a robust theory of learning. This led him to caution practitioners about the selection of learning style model due to the “volume, diversity and apparent dissociation of writing, theory, and empiricism in the field” (p. 440).

What is interesting in these independent studies is that all three seem to agree in their conclusions. It is also interesting that these studies also agree with earlier studies (Sewall, 1986; Curry, 1990). In the research conducted by Timothy Sewall and Lynn Curry respectively, both raised serious concerns regarding the theoretical coherence and validity and reliability of the models they reviewed.

In the study by Sewall (1986) we find an extensive analysis of four most popular learning style instruments, Gregorc’s Style Delineator, Myers Briggs Type Indicator, Kolb’s Learning Style Inventory and Canfield’s Learning Style Inventory. In his analysis he found serious issues with their validity and reliability. He also raised concerns with the lack of satisfactory results when these instruments were applied in the learning environment.

In his review of the data concluded “it seems apparent that there are significant measurement and related technical problems present in all of the instruments reviewed” (Sewall, 1986, p. 60). He pointed out that firstly none of the instruments “have established an appropriate normative base for the valid interpretation of scores” (p. 61). Secondly he questions the theoretical constructs underlying the instruments. He points out that while Myers-Briggs’ has minimal evidence supporting the construct validity, the remaining three have no evidence whatsoever. He further suggests that this is indicative of problems with both the construction of the instruments and the lack of the learning style paradigm.

Sewall also questions the reliability provided. He claims that the scores produced may not be reliable indicators of learning style preference. Finally he concludes that “the combination of normative and ipsative frames of reference currently provided in the test manuals makes the interpretation of scores very difficult and less meaningful than would be the case with a consistently ipsative or consistently

normative approach” (p. 63). Thus he suggests, “no learning style measure by itself provides an adequate basis” (p.63).

Curry (1987, [1990](#)) questions the quality of the published evidence offered by studies in the field. She points to what she calls external threats to validity, which she claims researchers in the field systematically ignore in their research design. The first threat can be termed as the accommodation of the vested interest of members of the faculty who guide their doctoral students to substantiate a particular learning style conceptualization. The second problem regards research design in which comparative groups are selected on the basis of extreme scores, with the statistical potential consequence of regression towards the mean thereby biasing the interpretation of results. Thirdly, Curry points to the effects of the pretesting which in her words “may sensitise students to experimental instructional conditions” (p. 52). Finally “students may also be reacting to the experimental arrangement instead of to the experimental variable (Hawthorne effect)” (p. 53).

Curry also points to three pervasive general problems to the operationalisation of learning style theory, namely:

1. confusion in definitions,
2. weakness in reliability and validity measurements, pointing to the “tendency... has been not to pursue the necessary iterative pattern of hypothesis – investigation – modification but rather to rush prematurely into print and marketing with very early and preliminary indications of factor loadings based on one data set” (Curry, 1987, p.52)
3. accuracy in identifying which of the possible micro- and macro-adaptations within educational settings will be effective in interaction with which range of learning styles (p. 52) and

Curry (1987, 1990) makes a strong claim that while those involved in the learning styles field “promise to deliver the power for students, teachers, and parents to take control of learning environments and interactions,” the foundation upon which they base the development of their instruments are weak, and thus in her own words “researchers and users alike will continue groping like the five blind men in the facile

about the elephant, each with a part of the whole but none with full understanding” (1990, p. 54)

An Advanced Learning System

Concerned with this lack of clarity and sound theoretical base, Johnston and colleagues (Johnston 1994; [1996a](#) and [1996b](#); 1997; 2002; 2004; 2005; 2006; 2007; [Calleja & Borg, 2006](#); Buchanan, 2005; Calleja, 1998; Dawkins, 2008; Freese, 1999; Hayes 1996; Henry, 2003; Johnston & Johnston, 1997; Kottkamp, 2002; Kottkamp, 2006; Kottkamp and Silverberg, 1999; 2006; Marcellino, 2001; McSweeney 2005; Nichols, 2002; Osterman & Kottkamp, 2004; Pearle 2001; Maher & Slotnick (in print)) sought to understand the learning process as a function of the brain-mind connection, and accessible to the learner to be used with intention (Johnston, 2009).

This model builds on the latest research in cognitive psychology, the brain-mind connection, and metacognition. Its theoretical foundation is followed by a practical process to help educational practitioners and learners to enhance learning success (Johnston, 2009).

During the past 18 years, Johnston and colleagues have converged earlier thoughts on learning including Piaget (1952), Jung (1923), Flavell (1980), Kant (1988), Snow & Jackson (1992), Keefe & Languis (1983); MacLearn (1978) and others (see Johnston, 1996) as the work of Bruer (1994), Dien et al (2008), Flavell et al (2000) who have sought to decipher the brain-mind connection. The work of Johnston et al has yielded “insights into intentional learning... the development of a unique set of learning tools, and an array of practical skills, and a set of terms to equip learners of all ages to communicate to others about their individual learning process” (Johnston, 2009, p. 1). What follows is an examination of the theoretical, psychometric and practical application of this model.

Originally Christine Johnston (1994, [1996a](#), [1996b](#)) and Johnston & Dainton, 1997) conceptualized a model of learning built on the tripartite theory of the mind (cognition, conation and affectation), an aspect that received attention from various perspectives and fields of study. Philosophers, Plato and Kant, cognitive psychologists (Philip, 1936 and [Snow & Jackson, 1992](#)) and research in brain-based learning (MacLean, 1978) are a few examples.

Johnston (1994) developed a set of theoretical constructs which emphasizes the interactiveness of the mental operations i.e. cognition, conation and affectation

respectively, and attributes specific behaviours to their internal interaction within each of four discrete operational processes termed learning patterns, and designated as Sequence, Precision, Technical Reasoning and Confluence (LCR, 2005).

According to Johnston's conceptualization cognitive processing occurs within each of the four operational patterns in the form of mental activity, memory, range of experiences, and level of abstraction and concreteness. Within these same four operational patterns is found conative performing which manifests itself as autonomy, pace, and engaged energy. Finally the four operational learning processes consist of affectation from which comes a sense of self worth as a learner and all attendant emotive responses to learning.

Johnston (1996b) further refers to these operational patterns as "patterned action tendencies", a phrase borrowed from Philips (1936). Johnston (1994) also posits that it is, "a composite of all four of these operational processes which make up an individual's interactive learning process".

In later presentations (2005, 2006b) and publications (2009, 2010) Johnston has continued to refine the theoretical underpinning of the model through an explanation of the brain-mind connection. This development or amplification of the theory attempts to clarify further the role of the patterns as filters that sift the data channelled through our sensory stimuli (see figure 1). According to this representation the journey begins with the senses that serve as the first line receptors that initiate learning. According to Johnston's representation, stimuli enter the brain travelling through its complex neuro-circuitry. Within the brain's electrochemical processing, the stimuli are processed ultimately entering the brain-mind interface where the stimuli are filtered by an individual's operational learning processes. Depending upon the make-up of the operational processes, the stimuli are either blocked, welcomed, or given limited access to continue on their way to operate within the mind and memory. The stimuli that make it through the interface are then translated into symbolic representations and passed to our working memory to become a part of our consciousness (declarative memory) or sub-consciousness (non-declarative memory) (Johnston, 2009; Squire & Zola, 1996).

These observable, individually patterned, stable-over-time learning behaviours help an individual “take in the world around them and make sense of it” (Johnston, 2007, p. 1). In order to be able to empirically determine which operational pattern(s) we choose to Use First; which one(s) we Avoid (do not use unless force); which one(s) we Use As Needed. Johnston & Dainton (1994c) developed a 28-item, self-report instrument, the Learning Combination Inventory (LCI), later renamed the Learning Connections Inventory. This instrument uses the scale scores derived from the Likert force-choice responses and the open-ended responses to provide qualitative confirmation of the respondent’s level of use of each pattern (Johnston, 2004, p. 7). Johnston contends that it is this knowledge of one’s own learning processes that makes it possible for an individual to develop personalized strategies that direct the path of his own learning. Such knowledge is also important for strategized and intentional learning (Osterman & Kottkamp, 2004).

Validation process of the Learning Connections Inventory

A common concern in the critique of learning styles discussed above is the lack of empirical evidence supporting the models’ claims and their implication for pedagogy and impact on students’ learning (Coffield et al, 2004b). Johnston too shared the same concerns, and therefore as early as 2004, she published a framework consisting of four keystone questions to be used as a means of determining the viability of an authentic learning model. The questions were the following:

1. Does the model consist of a robust and inclusive conceptualisation of the brain, the mind, and the relationship and function of each to the other in an explanation of learning – a sound theoretical foundation?
2. Does the model include a comprehensive lexicon of terms that would provide a means of communicating one’s experience of learning with others – a true pedagogical tool?
3. Does the explanation of learning foster a learner’s responsibility – Impact on the process of learning?
4. Is there empirical evidence revealing a measurable difference in the behaviour of learners who use the model– Impact on the learners?

The first criteria or aspect was reviewed and discussed in some detail above. What follows is an analysis of Johnston's model in respect to the three remaining criteria.

A lexicon of terms

The concept of metacognition as introduced by Flavell (1979) as a tool for a learner to regulate his/her learning, emphasizes three equally important categories of knowledge: knowledge of self, knowledge of the task variables, and knowledge of strategy knowledge. All three categories call for a common and comprehensive lexicon of terms that would facilitate communication between the learner and the learning environment.

According to Kottkamp (2004), the learning construct proposed by Johnston introduces the learner "to a lexicon of terms that can then be practically applied to teaching metacognitive/reflective skills" (p. ...). The lexicon of terms include the learning patterns and the psychological functions of cognition (thinking), conation (doing) and affectation (feeling) as associated to one's particular profile.

In addition to the terminology associated with the self-awareness and validation of an individual's learning profile, this advanced learning system provides related terminology of metacognition – or what Johnston refers to as the 'metacognitive drill' (LCR, 2005). This drill aims to help "learners control their four learning patterns while engaging in a learning task..." (Johnston, 2009, p. 17). This according to Maher & Slotnick "enhances the process of task analysis and the related strategic choices" (p. 14). The terms associated with the drill are: Mull, Connect, Rehearse, Express, Assess, Reflect, and Revisit. According to Johnston (2009), "all of these terms foster real-time double-loop learning" (p. 17). Therefore such a process would allow the learner to reflect on his/her response and then consciously and intentionally adjust one's reaction to the task demands. Once learners are aware of the dynamics of their personalized combination of patterns they can then manage the impact of their response to demands of each learning task or challenge (Calleja, 2009; Calleja & Montebello, 2007; Johnston, 2009).

Learner Responsibility

Johnston's main concern is whether a learning model fosters learner's responsibility to develop an awareness of one's potential for developing a learning path suited to his/her learning profile. Pearle (2001) in her research on implementing the Let Me Learn Process in higher education suggests that rather than focusing on instruction, educators should focus on "how learning occurs, and how to use understanding of learning with intention" (p. 2). Harvey (2004) also working with higher education emphasise the importance of giving the learner the skills to control *how* to make learning work, hence ensuring a more powerful and positive learning experience, regardless of the instructional approach used. For this purpose Johnston and colleagues working in K-12 and higher education classrooms, developed what is called a strategy card (LML, 2010). Through this tool a learner reflects and generates practical strategies conducted in response to a specific learning task or expectation (Maher & Slotnick). Through the strategy card, learners first describes in practical terms how they use their learning patterns basing their description on their validated LCI scale scores. In the next stage learners use the four-patterned combination to analyse a task's demands. Finally learners identify specific strategies to tackle the demands of the task as well as their own knowledge of their ability to utilize each pattern and the appropriate aspects of the metacognitive drill (Johnston, 2009). This will therefore allow learners to develop life-long learning skills and strategies while acting on the task at hand (Johnston & Dainton, 2004a).

This does not preclude the use of this awareness for a more intentional, strategized pedagogy that would help educators to plan their lessons with intention. Calleja and Montebello (2006) propose two metacognitive models based on Johnston's model – one highlighting the learner as an intentional performer, in which he/she decodes the task in terms of the operational patterns and decides whether he/she needs to intensify, forge or modify the personal set of patterns to perform a task at hand. The second model proposes a strategy for the teacher to plan with intention – thus goes through the same process as the learner but this time with an emphasis on modification to support the learner in the process of learning.

This collaborates Coffield & colleagues' propositions that a learning model should emphasise both the pedagogy and the learning process (2004a).

Empirical Evidence

Coffield et al (2004a; 2004b) and others (Sewall 1986; Curry 1987 and Bedford, 2004) criticised the lack of empirical evidence supporting the models reviewed. These authors also insist on the importance of providing evidence that an impact on pedagogy has occurred as a result of using the advanced learning system as an intervention. Johnston presents, together with others, data to validate both the instrument and the effect of the process on the learners.

Johnston, aware of the criticism and advice of researchers in the field, ensured a rigorous process of validation and reliability throughout the development of the Learning Connections Inventory, through multiple measures of validity and reliability (Johnston & Dainton, 2004). The first pilot inventory was constructed with repeated key phrases and student reported experiences collected from three previous studies (Johnston, 1994; 1993; Johnston & Dainton, 1994a and Johnston & Dainton, 1994b) during which time the researchers observed overt learning behaviours as they related to the constructs of action control theory, self-regulated learning, and action schema.

This first draft of the instrument was field-tested with 80 students (Johnston, 1994; Johnston & Dainton, 1994a). After careful analysis of the piloted responses and refinement of the pilot instrument a second iteration was conducted with over two thousand students in thirteen private, public, and parochial school districts in New Jersey. Mean scores were calculated for each item and the item correlation matrix was factor analysed, and items, which did not load conceptually or psychometrically (with a minimum factor loading of .34), were eliminated.

A second analysis resulted in retaining four factors with Eigenvalues from 4.54 to 1.18 and explaining 47% of the variance. A second order factor analysis was then performed on the four first order factors or sub-scales. The four-factor solution after varimax rotation yielded two well-defined factors and a third factor which loaded on two subscales. While the first two were interpreted as discrete categories of learning connections with a target value of high to moderate (.83 – .55) the third factor required further analysis.

These pilot studies were followed by six separate studies at 16 sites in the United States of America (Johnston, C., 1997), Malta (Borg, 1996), United Kingdom (Hayes, 1996 and Addy, 1967) and Ireland (Johnston, J. 1996). The sites of this research ranged in size from 240 to 1900 and all covered various socioeconomic and geographical categories with a total population of 5193 participants.

The results from the second pilot study together with the other studies conducted with thousands of students and adults, both in the U.S.A and in other international sites, have led to the development of the current inventory with 28 items.

The adult LCI version including, which is often used with teachers, has undergone a correlation matrix that was then factor analysed. The results strongly support the factor structure identified in earlier pilot studies. Items loaded on the appropriate subscales and had high loadings on only one factor. The interactive dimension as well as the discreteness of each scale held as theoretically expected.

The instruments were further tested for reliability (test-retest studies) (McLaughlin & Angilletta, 1995; Johnston & Capasso, 1995). These studies confirmed not only the reliability of the instrument but also its construct validity which was first identified by the factor analysis when the items behaved as predicted confirming the cohesiveness of the constructs of sequence, precision, technical reasoning and confluence.

As for validity, three tests were conducted, one for content validity, one for construct validity and another for predictive validity. The test for content validity was carried out with 20 teachers teaching at different levels and types of schools. Each educator was given a single sheet of descriptive definitions of the four interactive learning patterns. They were asked to take the definitions, looking at each item on the LCI, and identify to which subscale the item referred. Out of 560 possible correct classifications the participants had a 95% rate of correct responses. As claimed by the researchers (LCR, 2004), “the rate of correct responses indicates that the LCI has strong content validity with readily identifiable items comprising the instrument’s scales” (p. 12).

The second test, for construct validity used three identical methodologies in three sites. This involved analysis of the match between students scale scores and their written responses. Three individuals using scoring protocols with an inter-rater reliability of .92 scored the written responses. Each of the 600 respondents' three written responses were assigned numerical values and a correlation was run of the respondents' scale scores to the specific written responses. The correlation for both Form I and II occurred in the predicted directions though not significant on all scales. As the researchers explain, this might be due to students' maturation, since there were better correlations in Form II (older students) than those in Form I (younger students). One needs also to mention that in addition, two test-retest studies discussed above, were conducted with groups totalling 242 and 803. In each case the data showed that on a scale-by scale basis, significance at $< .01$ was achieved.

Finally the LCI manual (Johnston and Dainton, 2004) reports the level of predictive validity of the instrument. Two researchers (McLaughlin and Haye, 1995) sought to confirm the LCI Education Form I and II's predictive validity. Teachers from four different school sites familiar with the concepts underlying the four scales (of sequence, precision, technical reasoning and confluence), had to predict how their students would score on each of the four LCI scales. Teachers' predictions of students' performance was significant on three of the four scales. This ability of the teachers to predict the range of student scale scores, according to the researchers, suggests that the learning patterns of the students are not only observable but also definable in the terms used by the LCI scales. A reason the researchers give for lack of significance in the confluence scale is that, the school culture, "is more rule-oriented where independent or nonconforming behaviour is discouraged" (p. 14) and where confluence is often perceived as lack of attention or lack of cooperation on the part of the learner.

The manual also reports international studies which in total cover over 2000 primary school students from United Kingdom, Northern Ireland, Italy, and Malta who participated in tests aimed at confirming the reliability and validity of this instrument. The data from Northern Ireland which has been factor analyzed confirm those already described above. From this data emerging from the international sites an interesting insight emerged showing that there seems to be common phraseology

representative of the characteristics of each learning pattern across all ethnic and geographic locales (Johnston and Dainton, 2004, p. 14).

The previously cited studies address the concerns, which critics raised over the years of other learning styles instruments by illustrating that the tool (LCI) on which the Let Me Learn Process is built, is conceptually driven by a conceptually sound representation of the human learning process and address the issues of reliability and validity by employing methods which empirically test the level of delivery of the conceptualization of the learning process.

Coffield's team also emphasises the need for empirical evidence supporting the successful implementation of a learning model. While Coffield and colleagues phrase the impact in terms of pedagogical impact, Johnston, on the other hand, is concerned with evidence that learning has been positively impacted. To date numerous studies have been presented and/or published demonstrating the impact of the Let Me Learn Process on learning from a variety of educational and workplace settings. This review will report on some of these studies.

Dr. Ruth Power Silverberg (2002) in her Doctoral dissertation documents the experiences of teachers who reported a change in their thinking about students initially perceived as problematic. This study reports that there was major qualitative change in teachers' approach to these children after they had experienced the Let Me Learn Process. Nine elementary teachers of varying ages, grades, and locations provided descriptions of their experiences regarding changes in thinking about problematic students in open, in-depth interviews. This qualitative research study showed "the importance of teachers 'understanding' of their students and themselves as learners" (abstract). In her summary of the findings, Silverberg reported the teachers' thinking about students whom they defined as problematic as being heavily influenced by the interaction of their learning patterns with their students' learning patterns, before they had an understanding of the Interactive Learning Model (p. 122). Teachers, according to Silverberg, looked at their problematic students through their own unknown patterns; students who had different patterns had behaviours they couldn't make sense of, so they made attributions that led to responses that didn't work. After this initial observation the study showed that once the teachers became

aware of their own patterns and the students' patterns and how these allow for different modes of learning, it allowed "them to reach across their differences and connect with students with whom such a connection had previously seemed impossible" (p. 122).

This study discusses the transformative quality of the change process experienced by the participants, the power of understanding, and the importance of connection in the teaching and learning relationship. This study provided ample evidence that through personal development, teachers' professional development was effected.

Silverberg found that while prior developing understandings of their own learning patterns and those of their students, teachers assumed and believed that:

- Students should learn the way the teacher teaches;
- Teachers attributed lack of learning to student causes, thus, students who were not learning the way the teacher taught had a character/personality defect or deficient home situation that caused failure to learn;
- Teachers felt that the cause of the problem was outside of their ability, thus there was no point in continuing to try to help the students learn;
- Teachers marginalized students who appeared to not be learning and believed that the problematic behaviour must be modified through a system of consequences.

After developing awareness and skills the teachers

- Became aware of their teaching and that they teach the way they learn. They also realized that since students might learn differently, their teaching might hinder a student's learning thus they came to the realization that they need to teach the way they learn it, or work with them to discover a way that they can learn it.
- Became aware that "if a student is not learning the way I am teaching, it is because the students needs strategies to provide access to the curriculum through his/her learning patterns" (p. 129). Thus the

attribution of cause turned on the process and not any longer on the individual.

- Realized the complexity and uniqueness of the students learning patterns, but felt empowered for the fact that they are “knowable when the student said I share tools and vocabulary for communicating about our own learning patterns” (p. 129).
- Finally the research reported better engagement with students observed change in behaviour – students that were previously problematic are reduced and the student and his/her peers develop ways to turn disruptive behaviours into valuable contributions.

This study thus showed that the LML process allows teachers to discover their own combination of learning patterns and places themselves in “the problematic experience with the student” (p. 131), thus the problem is not in the actor but in the learning/teaching interaction. Also the participants indicated that understanding of students and understanding of themselves were linked in their change process.

The study also claims that in line with Mezirow’s transformative learning theory, teachers have “described an experience that went beyond a change in thinking about students or a change in perspective. All the participants talked about how important it was to them that their changes in thinking and perspectives led to an ability to make a connection with students. Eight teachers described a change in their ways of learning about all aspects of their lives” (p. 145).

Terri McSweeney carried out another doctoral study at Hofstra University in 2005. This study reports on the author’s action research project in which she investigates the relationship among teacher beliefs, student achievement, and the development of teacher and student metacognition through the implementation of the Let Me Learn process.

By grounding the Let Me Learn process within the social cognitive theory, the researcher showed how this process aimed to “develop meta-level processes and empower learners with sophisticated learning strategies” (abstract). This study, which span over a scholastic year, concluded that while admittedly one year was insufficient

to implement the process in its entirety, notwithstanding, it was observed that teachers, through reflection and growing knowledge of their own learning process, improved their understanding of themselves and their students as learners. The study concludes that “teachers’ self-confrontation with previously formed beliefs about teaching and learning was pivotal in re-conceptualizing their classroom role, a state reached by 80% of them”.

Another study offers insight on the effect of this process on the learner. Gregory Haviland Dunham’s doctoral study focuses on “the emancipation of the learner” through a change in perspective of one’s leadership and shows how this new understanding of the theories forming the style of leadership for learning help the leader “create an environment that would allow me to emancipate those learners that I believed were being held captive by an insensitive and uncaring system” (p. 115). Through the process of emancipation of the learner, the researcher realized yet a personal emancipation:

“The emancipation that I thought I was going to experience for the students in Cycle I, actually turned out to be my own. I was emancipating myself from the previous relationship that I had with the instruction process. This is why I was able to view these learners through a different lens. This revelation inspired me. I had to do something” (pp. 115 – 116).

The above quote from this study shows how a study which initiated with the aim of emancipating the students, ended with a realization of self-emancipation which in turn brought about a change in the learning environment and the whole learning scenario.

Concluding Thoughts

The studies reviewed in this article, suggest a systematic, careful testing process was conducted throughout the development of the advanced learning system known as the Let Me Learn Process. Both the tool (LCI) used to identify learners’ characteristics, and the theoretically robust basis of Let Me Learn suggest that the issues raised about learning styles can be addressed. Claims and critiques calling for the need for strong measurement of reliability and validity in the design and development of a process for studying learning within individuals within educational settings, have been in my opinion vindicated. The Let Me Learn Process has

withstood both the empirical testing which helped design and develop the instrument and the test of time when practitioners consistently reported positive transformations in their teaching and learners' empowerment to learn.

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