

# Extant Corpus on Intentional Learning Skill and Reflective Learning Log

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## Abstract

Intentional learning consists of the ability to learn how to learn, develop critical self-awareness and exercise full accountability for learning. It is highly effective in producing effective learners in a loosely structured learning environment in line with today's student-centric teaching-learning paradigm. Intentional learning equips students with the necessary skills to actively participate in, self-direct, and regulate their learning so they can fulfill their goals. Through this metamorphosis, students develop intrinsic motivation and self-efficacy for learning, laying the groundwork for lifelong learning capability. The foundational framework of intentional learning is: (1) Learner's trust and confidence in their learning capacity; (2) Learner highly engage in one learning and possessed critical awareness of what and how to learn; (3) Learner begins with the learning outcome in mind, realize the efforts required to unlearn, learn and unlearn with high valence; (4) Learner able to master the learning content and learning objectives; and (5) Learner able to exercise self-regulation and accountability in learning.

**Keywords:** intentional learning skill, reflective learning log

## 1. Background of the Study

Formal learning programs offer only a small fraction of the learning that professionals/students need during their careers/studies. Daily interactions and work experiences present a wealth of learning opportunities, but only if individuals deliberately view every situation as a learning moment. While acknowledging their desire to learn, intentional learners do not view learning as an additional burden or task. Instead, it is an almost automatic sort of reflexive activity. Intentional learners always engage in learning as a mode and mentality. Even though they go through the same daily experiences as everyone else, they benefit more from them because every opportunity—every event, conversation, meeting, and deliverable—brings with it a chance to advance and grow (Christensen, Gittleson, & Smith, 2020). Intentional learners take ownership of their education as independent, self-starters, and self-regulators, (Hung, 2014). In order to build these qualities, intentional learning considers the person's learning efficacy, emotions, and motivations (Spector & Kim, 2014; Hanham, Ullman, Orlando, & McCormick, 2014). An individual creates an intrinsic, internal self-establish inquiry through this active, cognitive process, which enables them to become lifelong learners (Hung, 2014), especially in the context of students of higher education. Intentional learning includes learning how to learn, developing a high level of self-awareness about learning, and exercising strict accountability and learning autonomy (Cholbi, 2007). Intentional learning when practiced in a strategic context (either in the workplace or educational settings), particularly in the democratic and student-centric learning environment, will produce tangible and effective learning outcomes. Learners with intentional learning traits will learn to inculcate a strong desire for learning and this augurs well for their future undertaking, be it in universities or business (Hung, 2014). In addition, intentional learning will enhance human capital, through the amalgamation of knowledge, abilities, and attitude that a person contributes to the workplace (Hunter, 2014). This nexus of human capital in the workplace will create a virtuous cycle by further producing even more employees that are knowledge-driven, imaginative, and change-responsive who constantly commit and engage to learning and are intentional about doing so (Hunter, 2014).

## 2. Critical Literature Review

### 2.1 Conceptual and Operational Definitions

Across several disciplines, intentional learning has been operationalized in many definitions. Complete comprehension of this concept is needed to analyze intentional learning empirically. The primary investigator (PI) and the team members conducted a conceptual analysis of intentional learning to produce specificity of the definition and its associated characteristics. Conceptual analysis establishes the characteristics that are commonly connected to the concept and shows a thorough comprehension of the concept and empirical referents, enabling researchers to identify and quantify the concept's defining characteristics (Walker & Avant, 2011). Remler and Ryzin (2015) opined that conceptualization of the constructs requires thorough and specific elaboration that one aims to measure. Thus, defining characteristics were presented, and past relevant empirical research was established for these constructs' definitions to be adopted and adapted in this review.

#### 2.1.1 Conceptual Definition

Through the metamorphosis of intentional learning, learners develop the requisite skills to actively participate in, self-direct and regulate their learning so they can master the content and achieve their objectives. The foundation of intentional learning competency is to cultivate intrinsic motivation and self-efficacy in learning and continue to develop that competency in a lifelong manner (Mollman & Candela, 2018).

#### 2.1.2 Operational Definition

In this review, intentional learning is operationalized as (1) an individual's trust and self-efficacy in their learning capacity; (2) a learner highly engages in one learning and possessed critical awareness of what and how to learn; (3) a learner begins with the learning outcome in mind, realize the efforts required to unlearn, learn and unlearn with high valence; (4) learner able to master the learning content and learning objectives; and (5) learner able to exercise self-regulation and accountability in learning (Mollman & Candela, 2018).

### 2.2 Extant Corpus

#### 2.2.1 Language Acquisition

Cumming (1986) used a case-study methodology to examine the evidence of intentional learning among students from various cultural backgrounds, and this was the pioneer study. Cumming postulated that successful students in ESL writing domains demonstrated intentional learning qualities, such as choosing their own learning objectives, practicing, and mastering the tasks towards the attainment of the learning objectives, and measuring the progression toward the stated learning objectives. Cumming (1986) concluded that students would learn ESL writing more effectively if they set their own learning objectives rather than following instructions. Researchers found that learning with intention as opposed to accidental learning had a significant, favorable impact on 40 university students' acquisition and recognition memory in 1990, thus supporting the use of intentional learning (Noldy, Stelmack, & Campbell, 1990).

Although these studies positively established the advantages of intentional learning, a more recent study of 50 ESL learners did not reveal any advantages for intentional learning over incidental learning. The incidental group outperformed the intentional learning group statistically for both receptive and productive vocabulary knowledge; nevertheless, both groups outperformed the pretest on the posttest, indicating successful language learning (Noori, Gholami, & Rajabi, 2014). Positive results on intentional learning have been established in many studies on vocabulary acquisition or memory.

Kuhnert et al. (2013) found that intentional learning improved verbal memory in a sample of thirty-three participants, twenty of whom were healthy and thirteen of whom had epilepsy treated with anticonvulsants. A wider range of research was possible since subjects who were taking anticonvulsants for chronic epilepsy, which is known to impair cognitive function. Only those in the intentional learning group—who were told they would have to recollect the words that were presented to them—were shown to exhibit statistically significant word recall across all participants.

Although this landmark study supported the benefits of intentional learning, a more recent study on English as Second Language (ESL) learners did not discover any advantages for intentional learning over accidental learning. The incidental group outperformed the purposeful group statistically for both receptive and productive vocabulary knowledge; nevertheless, both groups outperformed the pretest on the posttest, indicating successful language learning (Noori, Gholami, & Rajabi, 2014). Positive results on deliberate learning have been seen in several studies on vocabulary acquisition or memory, even for participants with learning difficulties.

### 2.2.2 Higher Cognitive Levels

The study of 45 students by Van Asselen et al. (2006) empirically established that intentional learning does promote higher cognitive thinking. They found that spatial information required intentional processing or intentional learning. The experiment conducted found that those students who have intentional learning capability and did realize they are being tested on the route; were quick to reverse the path and recreate the route course compared to those who did not possess the intentional learning capability. This finding was significant due to the fact higher cognitive thinking is the domain of not only cognitive but also the self-created purpose of doing something intentionally. In order to apply the learning effectively, students/professionals need to learn it in the intentional mode and that can lead to higher cognitive levels. An intention is a powerful tool in the arsenal of the cognitive domain in the learning process, be it formal or informal learning settings.

### 2.2.3 Executive Development

In 2006, Knight, Tait, and Yorke conducted two studies in an institution of higher learning involving executive development activities. The empirical findings concluded that intentional learning can be implemented successfully either in a formal or informal learning environment. The formal learning process involved the official faculty learning objectives and learning outcomes to guide the intentional learning process. The informal learning process involved the work environment, the corporate culture, mentorship, and the own set of initiatives undertaken by the intentional learner themselves. The researchers also found that for certain executive development programs, the intentional learning that takes place in formal learning settings could be more effective, notably those involving quantitative methods subjects like accounting and finance. Yet, for those qualitative subjects like marketing and sales, intentional learning in an informal learning environment would be much more effective (Knight et al., 2006). The corporate always evolving and challenging, thus intentional learning capability among the executives will make sure they are well equipping with a change-responsive attitude and always updated mindsets, skillsets, and toolsets.

### 2.3 Strategies to Enhance Intentional Learning

The study of seventy-one adult learners in an online learning setting with different learning orientations was conducted concerning intentional learning. There were four dependent variables (DVs) involved and there is (i) course achievement, (ii) learning efficacy, (iii) performance on intentional learning, and (iv) learner satisfaction (Martinez, 2000). Course achievement, learning efficacy, and performance on intentional learning variables were self-reported by the adult learners themselves. This study highlighted significant and direct correlations between course success and higher learning orientations (e.g., performing and transforming learners). Further, a learning setting that corroborated with their learning orientation and overall intentional learning desire also impacted significantly on the dependent variable; which is learner satisfaction (Martinez, 2000).

Jiang, Parent, and Eastmond (2006) polled one hundred and thirty master's degree candidates and the results indicated that twenty-eight percent of the samples were transforming learners, sixty-five percent were performing learners, and seven percent were conforming learners. The findings demonstrated that the degree of the success rate was determined by student-led competency or instructor-led competency, and was highly correlated with the students' levels of learning orientation. This study concluded that the optimal learning strategy for the online learning program is to let the instructor-led learning process to establish first and then gradually meta morphed into a student-led learning process. Further, Jiang et al. (2006) concluded that a high level of instructor contact was required early in the course to help the students make the transition to independent study. Even after the program was over, some mentoring was still required for student-driven activities (Jiang et al., 2006). This study sheds light on the extent to which university students stand regarding the intentional learning continuum and recommends proven methods to mold learning experiences to support students' progression along the intentional learning continuum.

### 2.4 Motivation

McComb and Kirkpatrick (2016) examined 1,167 undergraduate nursing and engineering students from their first to last year to identify their motivation and cognitive complexity over their course of study and majors in response to the demand for better nursing and engineering education. Cognitive complexity was defined as the distinction between learning information in class and applying it to assist the metacognition process. They reported that the sophomore year is when motivation levels and the cognitive difficulty of the content are at their lowest. This finding suggests that the students were recalibrating their learning objectives and methods, adjusting to the academic load, or assessing how relevant the material was to their professional practice. For professors, the sophomore year is the ideal time to create student-centered remedies to address the reduction in sense of cognitive complexity and motivation to study (McComb & Kirkpatrick, 2016). In addition, it was found that intrinsic

motivation showed an upward trend among nursing and engineering students; whereas extrinsic motivation such as grades showed a downward trend. This outcome signaled that the objective of producing graduates who are lifelong learners is being met (McComb & Kirkpatrick, 2016).

### 2.5 Reflection

It is highly advised by Herrington, Parker, and Boase-Jelinek (2014) that reflection is critical for deep and intentional learning and essential for service professions, which regularly use reflection in their line of work. Herrington, et al. (2014) wanted to understand reflection as an intrinsic cue to engage students in intentional learning rather than relying on extrinsic cues for learning. According to the study's reflection results, students are a nervous and perplexed group who struggle to learn freely. It was concluded that for students to move to autonomous learning, there needs to be scaffolding in the form of student tasks and coaching (Herrington et al. 2014). Reflection is a powerful learning tool, as seen by the reactions to the reflection exercises, which ranged from disdain to satisfaction. Reflective writing has been described as self-fulfilling, significant, and a technique for some students to find learning characteristics they weren't conscious of possessing (Herrington et al., 2014). This study highlights the significance of enabling the transfer from instructors to students and gradually giving over control of the learning process to students.

#### 2.5.1 Critical Reflective Learning

Writing down our thought processes in a form of reflection is difficult, but it should be done during learning because it makes learning much more meaningful. The usage of reflection journals can aid to capture thought processes, which in turn enables teachers to make judgments about the student's learning progress. It's possible that writing itself in some way pushed students to consider what they had learned in class and so helped them learn more. Cowan (1998, p. 16) describes a student practicing critical reflection when... *"she notes that there is something different about the case that she is considering, in comparison with the examples she has encountered in class; and when she also identifies what the difference is, and what she should do about it."* Dewey (1933) defined reflective thought as *"an active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and further conclusions to which it tends"*.

Dewey (1933) proposed that being reflective allows oneself to immerse in critical thinking to obtain a profound grasp of something, changing ambiguity into comprehension which leads to action. According to Moon (1999), reflection involves mental activity related to the processing of complicated notions that are frequently encountered in the learning process. Students should be facilitated to reflect and write in a reflective log, in order to completely benefit from reflection and be able to comprehend the significance of the learning activities they have undertaken. Writing is a display of thinking and writing the reflection log will therefore reveal the thinking (Luidens, 1997). Additionally, because knowledge must be presented in numerous ways during the reflection writing process, ideas are clarified and modified. Therefore, it is anticipated that the learner will be able to gain fresh insight and see the material from a different angle via this critical writing process (Yinger & Clark, 1981).

Learning happens at all stages of life, according to constructivists like Dewey (1938), Vygotsky (1962), and Piaget (1969), and information is acquired through extensive adaptation. Knowledge is compiled and organized following a person's cognitive terrain (Entwistle & Walker, 2002). Due to the exponential growth of technology, society's equilibrium state is always shifting, and to adapt, each member of society needs to keep up with new knowledge, especially in the sphere of professional work. In this case, reflection transforms academic practice and is essential to a person's lifelong learning development (Schon, 1973). Reflection has proven successful in establishing a meaningful connection between theory and practice, which has helped many higher education institutions achieve their goal of fostering deep learning in their students (Biggs, 1999; Hinett, 2002).

### 2.6 Intentional Learning Continuum

In 2005, Martinez developed the Learning Outcome Quotient (LOQ), which is a continuum of learning orientation by categorizing each type of learner; resistant learners, conforming learners, performing learners, and transforming learners. The intentional learning continuum depicts the degree of intentional learning that takes place from the very least involved, namely resistant learners to the very much involved, transforming learners. By reframing the learner mindset to more curious and with growth orientation, exerting more initiatives and accountability, and setting actionable goals for learning outcomes, learners can advance along the continuum (Martinez, 2005).

#### 2.6.1 Resistant Learners

Due to prior learning experiences, resistant learners become frustrated by competing goals, values, or, ambiguity, or unappreciated learning efforts. This irritation is likely to recur, and it could eventually lead to resistance to learning. These difficulties lead to self-doubt regarding one's capacity to study or accomplish others' goals, as well

as regarding whether academic learning has any personal value or if it can help one attain personal goals (Martinez, 2005). There are very few students that are averse to learning in a college environment (Cholbi, 2007). Approximately one to four percent of participants in the study were categorized as reluctant learners (Martinez, 2005).

### 2.6.2 Conforming Learners

Conforming learners favor regimented, structured learning environments. These students can recall information for assignments and/or exams and are externally driven, but they struggle to think critically or abstractly to achieve demanding objectives (Martinez, 2005). About fifteen to fifty percent of the study participants are conforming learners, according to studies (Martinez, 2005). However, this group of students can advance their standing along the LOQ continuum by assuming more initiatives for their own learning with the help of intentional support, direction, and a conducive learning environment (Martinez, 2005).

### 2.6.3 Performing Learners

Between forty-two to sixty-three percent of participating students are performing learners, with the university setting having a higher proportion of these pupils (Martinez, 2005). The reason why performing learners do not go above and beyond criteria is frequently because of stated time and/or interest limits. Performing learners fulfill the grades of standards, expectations, and benchmark Performance-oriented learners frequently exhibit extrinsic motivation, are task-focused, and favor semi-structured learning situations. Although they meet with many difficulties in the theories domain and are risk-averse, they are very much receptive to teamwork and collaboration for effective learning. They selectively practice learning autonomy and engage deeply in studying things that interest them or that they think would be helpful. The transition from performing learners to transforming learners can be facilitated by opportunities to practice critical thinking, problem-solving, and abstract cognition (Martinez, 2005). Most college students are performance learners, and faculty frequently hear from students that they struggle to study because of time and/or interest restrictions. Once more, these students can progress to a higher level of the continuum with instructor input, direction, and assistance (Martinez, 2005).

### 2.6.4 Transforming Learners

Learning settings that are loosely structured are more in line with the desires of transformative learners who aim to be accountable for and in charge of their learning. They are committed, persistent learners who employ internal motivation to accomplish their learning objectives. They are holistic, abstract thinkers. Learning settings that are interesting and encourage creativity, problem-solving, the development of expertise, and taking calculated risks are essential for transforming learners. These students need assistance and time management abilities to guide their learning. Transforming learners pay close attention to detail and concentrate on carrying out and finishing tasks (Martinez, 2005). From this explanation, transforming learners are the best college graduates because they are knowledgeable about how and what to study, how to assess their learning, and how to place value on learning. Through both formal and informal lifelong learning, transformative learners will stay current.

## 2.7 Underpinning Theory

The constructivist learning theories advanced by Dewey (1938), Vygotsky (1962), and Piaget (1969), which reject the premise that knowledge is learned without adaptation, serve as the foundation for reflective learning. According to constructivists, learning occurs in all facets of life and is individually assembled and arranged for each person to fit their specific cognitive maps (Entwistle & Walker, 2002, p. 20). Schon (1973) recognized the need for reflection in learning as well as the reality that technological advancement causes societies to continuously lose their stable state, which results in continuous learning. He then examined the process of professional learning, refuting the notion that it was based on "technical rationality," and claiming that reflection in action and reflection on action were crucial elements of the procedure (Argyris & Schon, 1974).

Many constructivists learning theories, including experiential learning (Kolb, 1984), multiple intelligences (Gardner, 1983), and emotional intelligence (Payne, 1986; Salovey & Mayer, 1990; Goleman, 1995), incorporate reflective learning. These theories have broadened the definition of learning and altered academic practice. Through reflection, which is increasingly being incorporated into many higher education degrees, students make a connection between theory and experience. This promotes deep learning (Biggs, 1999; Hinett, 2002). Vygotsky (1978), noted, "*the adolescent, to recollect means to think*" (p. 51). The learner must pause, ponder, and reflect as part of Vygotsky's "*perception of psychological growth as a dynamic process full of upheavals, unexpected changes, and reversals*" (p. xxix). We argue that thinking should include reflection for college students. Mezirow (1990) asserts that the purpose of reflection is to "*review the reason for one's beliefs... and to reassess the usefulness of the tactics and procedures used in issue solving*" (p. xvi). The two phases that lead to critical thinking

are reflecting on one's learning and developing meta-awareness by "*reflection on one's thoughts, feelings, and behaviors*" (Taylor, 1992, p. 15).

Students must engage in critical self-reflection if they are to change the way they learn (Mezirow, 1990), and learning should take place in an environment that promotes these activities. Reflective writing encourages the metacognitive interaction that will enhance what Brockbank & McGill refer to as the "*conditions for critical reflective learning*," which Mewborn claims is "both an individual and shared experience" (1998, p. 5). In this project, we opted to use a reflective writing log to bring the reflective process into our various academic settings. Once learned, the ability to reflect can be used in a variety of fields. If a student learns to reflect in a biology class, they can use the same set of reflective skills or concepts for online shopping. Reflection is an impartial process. We became aware that we were all engaging in reflective practices as we started to convey to one another how we were seeking to help students go beyond a topic's surface level to deeper comprehension. Whether we were instructing in biology, e-commerce, or educational principles, it made no difference. Our understanding and reflection were deepened as a result of how the concept of reflection cut across disciplines.

### 3. Conclusion

An approach to learning that produces the best learners is known as intentional learning. The ability to scaffold learning experiences, assist students as they take ownership of their learning, and coach them as they do so are of the highest importance in developing the abilities and qualities of intentional learning. Strong evidence was produced by most of the intentional learning research, which used quasi-experimental approaches. In summary, this review stated that intentional learning is positively related to higher-order thinking, learner satisfaction, efficacy, autonomy, learning how to learn, and self-evaluation of learning skills.

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