

Study Smarter, Not Harder: Development and Preliminary Validation of a Diagnostic Tool to Support Academic Success

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Abstract

A common complaint among first-year law students is that they spend a significant amount of time and effort studying, yet this does not always translate into academic success. Empirical research suggests that this may be due to learning strategies adopted during their undergraduate years that do not correlate with improvement of law school grade point averages (GPA). Other studies highlight the adoption of self-regulated learning strategies for law students to help them succeed in school. However, law schools lack accessible diagnostic instruments to help students identify deficits in their study habits. This study presents the development and preliminary validation of a diagnostic tool to measure the cognitive and metacognitive study habits of first-year law students, specifically for a law school based in the Philippines. The design is grounded in the HowULearn Framework of the University of Helsinki (Parpala & Lindblom-Ylänne, 2012) and Schwartz's Expert Learning Cycle (2008). The diagnostic tool used a 5-point Likert scale. Legal education faculty and high-performing upper-level law students were engaged for content validity. The tool was piloted with a cohort ($n = 50$) to assess internal consistency using Cronbach's Alpha, exploratory factor analysis, and confirmatory factor analysis. The results show a valid and reliable diagnostic tool that can also be used for empowering students. The process can help first-year law students improve their learning strategies and provide educators with a data-driven framework for early academic support in higher education contexts.

Keywords: academic support, legal education, study habits, learning strategies

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Introduction

Compared to other graduate school programs, legal education is considered one of the most performance-based curricula (Christensen, 2009). It is also described as a rigorous and stressful experience for students, requiring support in the transition to the first year of law (Field et al., 2013). Apart from the stressful environment, the cognitive transition is also difficult, as many students enter law school ill-prepared for the rigors of legal education and lacking strong critical thinking skills that law educators can build on (Cooper, 2016).

Some students enter law school having succeeded in undergraduate environments that largely reward information retrieval. However, they have not been properly educated, trained, or equipped with the analytical skills required to study law (Viator, 2012). They overestimate their writing and research skills and enter law school inadequately trained in information literacy. (Gallacher, 2007). Additionally, studies predicting law school success also show that previous grades of students in undergraduate programs are less likely to predict their first-year law academic performance (Knezevich & Camara, 2019; Thomas, 2003).

Undergraduate Study Habits and Academic Success

Research also shows that study habits from undergraduate years that are carried over to law school do not translate into success in the first year of law. Cooper and Gurung (2018), in their study on law learning strategies, found that students who apply undergraduate study habits, such as re-reading and memorizing cases, fall into a learning trap, and these habits negatively correlate with academic success in law school. Traditionally, first-year students are encouraged to spend more hours studying law. However, Kimball, Farmer, and Monson (1981) found that students' increased effort was less strongly associated with improved first-year grades. Instead, their ability to handle legal materials and their Law School Admission Test (LSAT) results are much more significant to their performance. An earlier research on study habits of law students (Loftman, 1975) supports this, as behaviors that first-year law students think help improve their grades (e.g., habitual reading and note-taking) are not statistically significant for their academic performance.

Law School Paradox

Law school demands analogical reasoning, issue-spotting, and the synthesis of legal doctrines. Thus, when students apply undergraduate effort to law school mechanics, they often encounter a paradox wherein their high effort yields low academic performance. This paradox can be understood through two established educational frameworks:

Student Approaches to Learning (SAL)

Originating from Marton and Säljö (1976), this framework distinguishes between “Surface Learning” and “Deep Learning.” The surface approach to learning focuses on learning facts to pass a course and involves preoccupation with unreflective strategies such as memorizing and reproducing the learning material (Prosser & Trigwell, 1998; Spada & Moneta, 2012). Many students enter law school inadequately prepared, relying on surface approaches to studying and with illusions of competence (Cooper, 2016).

Self-Regulated Learning (SRL)

Zimmerman's (2002) model of SRL focuses on the cyclical nature of learning: forethought (planning), performance (action), and self-reflection. Schwartz (2008) proposes that law schools should help first-year law students become self-regulated learners, as this leads to better student outcomes.

Supporting First-Year Law Students

Given these concerns about abilities, study habits, and expectations for academic performance, law schools face the challenge of effectively supporting first-year students. Often, law schools rely on self-help resources for law learning skills, often using a non-empirical and anecdotal method (Cooper & Gurung, 2018). Every law school must establish a thorough strategy to promote student success (Franklin & Christopher, 2025). Hence, this study focused on the development of a formative assessment tool and its preliminary validation to help assess first-year law students' approaches to learning, with the results of which can eventually be used as a resource to help students improve their academic performance. The tool is inspired by the HowULearn Framework of the University of Helsinki (Parpala & Lindblom-Ylänne, 2012), which examines how students study, and by Schwartz's Expert Learning Cycle (2008), which recognizes the importance of self-regulated strategies (such as organizing the learning environment) for succeeding in law school.

Methodology

Participants

This study was conducted with first-year law students of a law school in the capital of the Philippines during the first semester of the academic year. As this was a preliminary validation, fifty ($N = 50$) students were selected through purposive sampling to ensure that different types of first-year law students (e.g., working, non-working, full-time, part-time, etc.) from the population were included. The diagnostic tool was administered during Week 6 of the semester, strategically timed to ensure students had experienced various law school learning activities to form study habits, while still having time to benefit from guidance on how to improve before the final exams.

Instrument Design

The assessment tool, the Strategic Learning Inventory (SLI), was developed to measure Deep Learning (which involves rule synthesis and critical thinking), Surface Learning (passive learning approaches like re-reading and highlighting), and Organization (such as study routine). The items were scored on a 5-point Likert scale (1 = Never, 5 = Always). A continuous threshold of 3.5 was established to differentiate between "Established Habits" 3.5–5.0) and "Developing Habits" (1.0–3.4).

Instrument Reliability and Validity

Internal consistency reliability was evaluated for the three dimensions of the diagnostic tool. The 4-item Surface Learning subscale demonstrated acceptable reliability (Cronbach's $\alpha = 0.70$, McDonald's $\omega = 0.71$). For the remaining constructs, the Spearman-Brown coefficient was utilized as Cronbach's α is highly sensitive to scale length and

mathematically penalizes two-item measures (Eisinga et al., 2013). The two-item subscales demonstrated modest but acceptable reliability for a rapid-formative pilot instrument, with Spearman-Brown coefficients of 0.58 for Deep Learning and 0.50 for Organization.

Prior to the deployment of the instrument, Content Validity was also conducted. A panel of faculty and high-performing peer tutors was invited to review the items. The panel ensured that each item accurately reflected the rigor of the first year of law school. In addition, a Confirmatory Factor Analysis was also conducted to ensure the instrument's structural validity. The refined 8-item model demonstrated an excellent, robust fit to the data (CFI = 1.00, TL = 1.01, RMSEA = 0.00), confirming that all retained items loaded significantly onto their respective theoretical constructs ($p < .05$).

Results

Cohort Profile Distribution

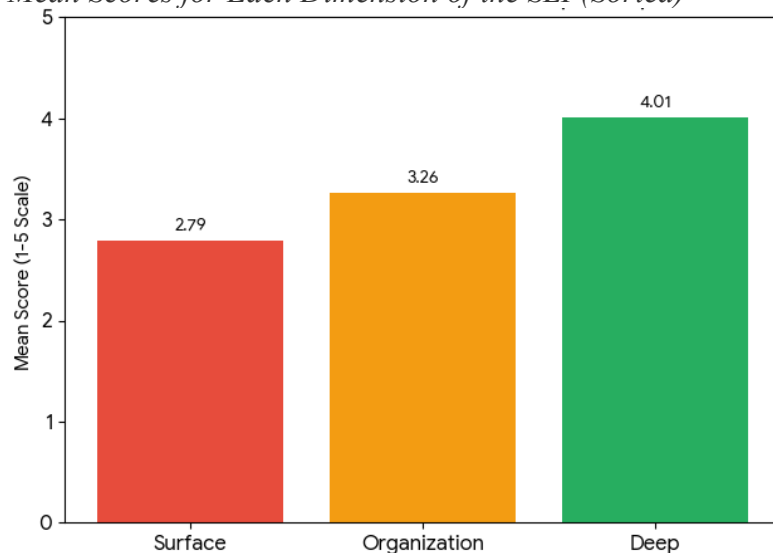
Based on the results of the SLI diagnostic, the sample was distributed into the four learning profiles as follows:

- The Strategist (High Deep / High Org): 44%
- The Box-Checker (Low Deep / High Org): 4%
- The Philosopher (High Deep / Low Org): 46%
- The Drifter (Low Deep / Low Org): 6%

Meanwhile, the figure below shows the mean for each dimension, arranged from lowest to highest:

Figure 1

Mean Scores for Each Dimension of the SLI (Sorted)



Discussion

The data show that the cohort self-reported exceptionally high cognitive understanding (Deep = 4.01, established habit) and poor structural discipline (Organization = 3.26, developing habit). It appears that the first-year law students of this group know which learning strategies

to use (Deep Learning), but lack the structural scaffolding and time-management skills (Organization) to actually execute them. It could also reflect social desirability bias.

The results can also help the law school adopt a more proactive approach in helping first-year law students based on their learning profiles. Most of the students in the cohort fall under a high deep/low organization profile (Philosopher). The students may understand the Socratic method and self-report high levels of rule synthesis, but their daily habits are chaotic. They do not follow a strict reading schedule, lack a distraction-free study environment, and rely heavily on cramming. The law school can thus support these learners through teaching effective time management, calendar blocking, and organizing their study areas.

Students with a high deep/high organization profile (Strategist) may be able to handle a massive reading volume with strict discipline while actively testing their understanding through hypothetical rule application. While they may need less academic support from the law school, they may benefit from an academic success program that has systems in place to assist them when they have acute needs or crisis (Franklin & Christopher, 2025).

Meanwhile, students with low deep, high organization profile (Box-checker) may need more academic support as they are likely to spend hours passively re-reading and heavily highlighting. They mistake physical exhaustion for intellectual synthesis, creating a dangerous “Illusion of Competence.” Due to familiarity with material, they miss the opportunities to refine, synthesize, and consolidate their knowledge (Cooper & Gurung, 2018).

As for students with a low deep and low organization profile (Drifter), the law school may need to monitor them as they are at high risk of academic probation. They lack strategic learning strategies, the capacity to synthesize the law, and the discipline to survive the volume of law school reading materials.

Conclusions

There is a disconnect between the expectations of law schools for first-year law students and their academic performance. Law schools need more reliable information to better understand how students study and learn, and to create more meaningful interventions that support their academic success.

The development and preliminary validation of a diagnostic tool is a step in the right direction. This study validated the 8-item Strategic Learning Inventory (SLI). The tool accurately categorizes first-year law students into distinct behavioral profiles. The Confirmatory Factor Analysis also indicated a good fit (CFI = 1.00, RMSEA = 0.00). Furthermore, descriptive statistics from this study’s cohort effectively identified a widespread studying vulnerability (“The Philosopher”/high deep, low organization profile), which helped identify immediate, data-driven interventions. By providing students with data on their study approaches at Week 6, legal educators can break the illusion of competence and provide the support necessary to ensure long-term academic success.

Limitations and Next Phase of Research

While the SLI’s quantitative validation yielded a structurally sound assessment tool, there is an inherent risk with self-report instruments, such as the possibility of Social Desirability Bias in the Deep Learning dimension. As such, the next phase of this research will employ a mixed-

methods approach utilizing qualitative cognitive interviews. By observing a stratified sample of first-year law students as they complete the inventory, the researchers will be able to evaluate the cognitive friction underlying their item responses, thereby reconciling what students report they do with their actual daily behaviors. Eventually, the SLI can be adopted by the law school to empower both students and faculty to optimize studying strategies early, thereby improving student retention and reducing academic probation.

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Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

The author used Grammarly for Education to proofread and check for plagiarism in this paper. The tool was used to ensure correct grammar and syntax, and to verify that the writing did not include uncredited material or AI-generated text. The author carefully reviewed all suggestions before including them in the final copy.

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