

# CULTIVATING HIGHER ORDER THINKING SKILLS IN TEACHING LAW: A DIRE NECESSITY

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**ABSTRACT:** Educational curriculum should not be exam oriented. Exam oriented educational curriculum does not cultivate thinking outside the box, i.e. higher order thinking skills (HOTS). The author's concern however is of the law program in Malaysia. The author presupposes law students lack the cognitive skills because the emphasis of teaching law has been to feed the students with black letter law in a secular and self-contained paradox. Assessment prioritizes summative methods. Hence, higher order thinking skills lags among law students, whereas it is the tool of the trade of a lawyer. To cultivate higher order thinking skills, cognitive apprenticeship and situated cognition should be incorporated in the curriculum of teaching law where the study of law becomes a learning process correlating with humanities and social sciences. Cognitive apprenticeship and situated cognition should be the way forward to cultivate HOTS among law students so that upon graduating they can apply the law to real life situations. Applying doctrinal analysis and empirical data obtained through observational study, the author discourses, what is cognitive apprenticeship and situated cognition, why it is significant in teaching law and how it should be utilized to cultivate HOTS among law students.

**Keywords:** Cognitive Apprenticeship, Higher Order Thinking Skills, Situated Cognition

## 1. INTRODUCTION

One of the common complaints and predicaments by law students once they are in practice, is, they do not know how to evaluate and apply the black letter law to real life situations. The authors twenty-four years of teaching law experience in Malaysia blames the law students' complaints and predicaments, on the traditional teaching pedagogy used in most law schools i.e. lecture method. This teaching pedagogy merely transfers large volume of information regarding the law to the students, i.e. the lecturer plays the role of a sage on stage. Furthermore, the role of a lecturer is to undertake the responsibility to complete the content in the syllabus. In this process, cultivating and developing cognitive skills are neglected. The priority is on imparting the black letter law as in the syllabus. Completing the syllabi on time to be ready for the final exams is the ultimatum of teaching law. Consequently, firstly, law students are engulfed in recording and retaining the knowledge which is the black letter law imparted to them and secondly, most of the time the students are memorizing rather than appreciating and understanding the significance of the law in a society. Haas and Keely, 1998, posits, the reason for academics' resistance to teach critical thinking is simply because most academics have been taught the traditional method i.e. lecture method [1]. They therefore lack the training to teach critical thinking. Whereas, law students should be taught to think like a lawyer which according to Ruggero, Clowney, & Peterson, 2008, means employing logic to construct arguments [2]. No doubt the lecture method is a convenient method to give law students as much as possible about the black letter law. However, when law students complete their formal undergraduate studies and move on to practice law, they face the crisis of being unable to analyse and comprehend the black letter law to real life situations. The author blames it on the culture of teaching law, i.e. the lecture method. The lecture method imparts as much of the black letter law to the students, but placing little or no emphasis on higher order thinking skills (HOTS). The author contends through her observation that generally in Malaysia and other countries such as the United States of

America, the common complaint is, law is taught in abstract orders and it is not correlated to humanities and social sciences. Hence, the author argues, the teaching pedagogy for law in the Malaysian universities offering the law programme needs reformation. The current teaching pedagogy commonly used is the age old lecture method, is not a model of maturation and modernization; it is stated to be older than the telephone, the game of basketball, blue jeans and Coca-Cola and it does not cultivate HOTS in law students [3]. Whereas HOTS is the ultimate skill utilized by lawyers when in practice. HOTS should be cultivated with cognitive apprenticeship pedagogy based on situated cognition. Situated cognition is a theory of instruction that suggests learning is naturally tied to "authentic activity, context and culture [4]. In other words, as Driscoll, states, "Knowledge is constructed by learners as they attempt to make sense of their experiences,". Whereas, cognitive apprenticeship, is a model of learning based on situated cognition theory. This model advocates teaching through guided learning and situated learning facilitates this idea. Building upon the authors own experience as a law teacher at Universiti Teknologi Mara, Shah Alam, Malaysia, the authors argues that HOTS should be cultivated in teaching law. Cognitive apprenticeship under situated cognition theory should be utilized to cultivate HOTS and it should be the way forward in teaching and learning the law.

## 2. WHAT IS 'HOTS'?

Higher order thinking skills include critical, logical, reflective, metacognitive, and creative thinking. HOTS discourage students to memorize i.e. rote memory. Students taught the HOTS should be able to comprehend the facts or concepts taught, deduce from them, inter-relate and correlate them to other facts and concepts, synthesize them, manipulate them and apply it to real life situations. HOTS would involve both analytical thinking and creative thinking. Analytical thinking includes "judging, evaluating, comparing, contrasting, critiquing, explaining why, and examining. Creative thinking involves creating, discovering, imagining, supposing, designing, "what if-ing," inventing and producing.

Forming creative ideas means coming up with an unusual, novel, or surprising solution to a problem. People who have creative ideas are able to apply problem-solving skills in a new situation” [5 – 7]. The theory behind HOTS stems from Blooms taxonomy. A committee under the leadership of Dr Benjamin Bloom created the Taxonomy in 1956. Bloom’s aim was to promote higher forms of thinking in education, such as analysing and evaluating, rather than just teaching students to remember facts (rote learning). Learning was divided into three domains of educational activity:

1. Cognitive: mental skills (*Knowledge*)
2. Affective: growth in feelings or emotional areas (*Attitude or self*)
3. Psychomotor: manual or physical skills (*Skills*)

All the three domains according to Bloom’s are important for a ‘rounded’ person. However, the author’s focus is on the first domain which is the cognitive skills. The cognitive domain involves ‘knowledge and the development of intellectual skills’ [8]. Blooms taxonomy however has been revised. In the revised order the abilities and skills within the domain are listed in six major categories starting from the simplest thinking behaviour to the most complex;

1. Knowledge: rote memorization, recognition, or recall of facts
2. Comprehension: understanding what the facts mean
3. Application: correct use of the facts, rules, or ideas
4. Analysis: breaking down information into component parts
5. Synthesis: combination of facts, ideas, or information to make a new whole
6. Evaluation: judging or forming an opinion about the information or situation

It is generally accepted that each behaviour needs to be mastered before the next one can take place. Students should be taught to work up the taxonomy i.e. from knowledge base to HOTS which is to be gradually developed from remembering the knowledge; understanding the knowledge; applying the knowledge; analysing the knowledge which goes beyond knowledge and application and actually see patterns that they can use to analyze a problem; synthesis given facts to create new theories or make predictions; and evaluate, to assess information and come to a conclusion such as its value or the bias behind it. The taxonomy is stated to be hierarchical, in that each level is subsumed by the higher levels. In other words, a student functioning at the ‘application’ level has also mastered the material at the ‘knowledge’ and ‘comprehension’ levels” [9]. In the revised taxonomy, knowledge is at the basis of these six cognitive processes, but the authors of the revised taxonomy created a separate taxonomy of the types of knowledge used in cognition which are [10] :

- Factual Knowledge
- Knowledge of terminology
- Knowledge of specific details and elements
- Conceptual Knowledge
- Knowledge of classifications and categories
- Knowledge of principles and generalizations
- Knowledge of theories, models, and structures
- Procedural Knowledge

- Knowledge of subject-specific skills and algorithms
- Knowledge of subject-specific techniques and methods
- Knowledge of criteria for determining when to use appropriate procedures
- Metacognitive Knowledge
- Strategic Knowledge
- Knowledge about cognitive tasks, including appropriate contextual and conditional knowledge
- Self-knowledge

Law teaching should be exploring this compartmentalized knowledge taxonomy. In the author’s view, every subject taught under the law programme should incorporate Blooms in learning the law which most law schools do but the syllabi should give equal footage to all the levels under Blooms taxonomy instead of emphasising on the lower three taxonomies which are remember, understand and apply. All levels should be exposed from the very first year a law student embarks on her/his studies. The Bloom’s levels should be taught gradually and at all times relating the taxonomy to real life situations. Practical situations should be developed to cultivate the HOTS.

## 2.1 SITUATED COGNITION THEORY

Situated cognition is a theory of instruction that suggests learning is naturally tied to “authentic activity, context and culture [11]. Knowledge should not be taught in a self-contained and discrete manner i.e. abstract. It is a misnomer especially in teaching law that knowledge can be adequately transferred from teachers to students independent of the activities in which knowledge might normally be used. Learning by ‘knowing’ and ‘doing’ is situated cognition because knowledge according to is embedded in the social and physical world [12]. This theory emphasizes that learning is by doing. For example, it would be more beneficial to students to observe how a practitioner utilizes the knowledge (black letter law) in practice instead of being taught with some uprooted conceptual ideas of a domain and typical textbook examples and exercises and presuppose that law students should be able to relate to real life situations. Comparing the curriculum of law and the curriculum of medical education, clinical study is part of their curriculum. Medical students attend to patients with a guidance of a qualified doctor as early either second or third year into their studies. Likewise, the curriculum of law should embed clinical education as part of the curriculum which should expose students to real life situations with a guidance of a law practitioner. The author contends that, abstract concepts and self-contain examples are not sufficient in teaching law. Sharing this view, states that, “it is impossible to capture the densely-interwoven nature of conceptual knowledge completely in explicit, abstract accounts, which he calls description [13].” Furthermore, viewing Bloom’s in the purview of situated theory, the author reiterates that Blooms taxonomy is not realized if the emphasis of teaching law is going to be on abstract concepts and self-contain examples. From the situated theory perspective, “cognition is not an internal process, knowledge is not an object and memory is not a location; instead cognition, knowing, and learning takes place as interactions between people and their environment. Therefore, aptly put by, “A traditionalist information

processing theorist might talk about ‘the world inside the head’ but in the purview of situated theory, the theorist would prefer to discuss “the ‘head inside the world’ [14].

## 2.2 WHAT IS COGNITIVE APPRENTICESHIP?

Cognitive apprenticeship is a model of learning based on the situated cognition theory. Cognitive apprenticeship focuses on four dimensions that constitute any learning environment: [15]

1. Content: Domain knowledge, Heuristics strategies, Control strategies, Learning strategies. Domain knowledge consists of conceptual knowledge which are facts and procedural knowledge needed to solve problems. Heuristics strategies are the tricks of the trade needed to solve problems. Control strategies are metacognitive processes that a problem solver uses to monitor and regulate the course of problem solving and learning strategies are procedures of acquiring new knowledge when the available knowledge is insufficient. The expert or mentor should possess the ‘content’ knowledge to guide the students to be able to apply this knowledge to real life situations.
2. Method/Way of learning: Modelling, Coaching, Scaffolding, Articulation, Reflection and Exploration. The three teaching methods that are the core of cognitive apprenticeship are modelling, coaching, scaffolding. These methods are designed to help students acquire and integrate the four kinds of expert knowledge just enumerated. Much of this knowledge cannot be described abstractly, and can only be observed during problem solving. Therefore, students need the opportunity to see experts perform and to practice problem solving themselves. In cognitive apprenticeship, this opportunity is provided through the teaching activities of modelling, coaching and scaffolding. Modelling consists of a demonstration by an expert of the process of solving a problem. This demonstration must make the use of cognitive and metacognitive processes explicit. Modelling allows students to obtain a complete mental picture of the process they are learning. By talking aloud or writing on a chalkboard while solving problems, the teacher demonstrates how heuristic and control strategies work. Modelling also reveals that sometimes experts must try many strategies to solve unfamiliar problems. Coaching involves observing students in action and providing immediate feedback. The feedback is not general or abstract, but refers to specific actions of the students as they solve problems. By watching students in action, teachers can identify and correct misconceptions involving concepts and procedures. Scaffolding refers to providing assistance so that students can accomplish a task that they would not be able to carry out without help [16]. The assistance can be cues such as suggestions or questions from the teacher or tools such as calculators. Although students may carry out only pieces of the task, the mental model of the entire process provided by the teachers modelling allows students to understand where their pieces fit. Fading consists of gradually removing assistance so that students perform the entire task on their own.
3. Sequencing: Increase diversity and practice in a variety of situations to emphasize broad application. The sequence of

lessons should be chosen to support student needs at different stages of learning. Initial tasks are selected so that students acquire an overview before learning details. This is accomplished by initially selecting either a simple problem that students solve alone or a more complex and asking students to carry out only a simple part of the solution. Increasing diversity is an additional method of sequencing tasks. Initial tasks are similar to provide an opportunity for practice. More diverse tasks are gradually added so that students learn to recognize the conditions under which certain skills are useful.

4. Sociology /Social context of instruction: Situated learning, Community practice, Cooperation. The social context of instruction should foster interaction between students and experts so that students do not merely watch an expert perform a task, but are drawn into the problem-solving process. One way of achieving this interaction is through cooperative problem solving in which students work together to solve a complex problem. Computers according to M.Scardamilia and can also encourage students to share their ideas by posting them on electronic bulletin boards [17]. Another strategy for encouraging interaction is peer tutoring, in which students take turns teaching each other [18].

There is no fixed formula for implementing a model based on the dimensions of cognitive apprenticeship. “It is up to the teacher to identify ways in which cognitive apprenticeship can work in his or her own domain of teaching” [19]. It is a model for teaching thinking skills in a contextualized way. Apprenticeship method of learning is generally learning a job in exactly the same context it will be performed in real life. In a law teaching paradigm, all four dimensions of cognitive apprenticeship should be utilised in teaching law as follows: -

- i. Content; conceptual knowledge which includes both substantive and procedural law will be imparted by the content expert who is the lecturer.
- ii. Method/Way of learning [20] : In teaching the law, the learning process of cognitive apprenticeship should be practiced. Once knowledge is imparted, the lecturer should demonstrate i.e. (modelling) the process of solving a problem using the law that has been imparted to them. This will allow students to obtain a complete mental picture of what they have learnt and its significance. Heuristic strategies should be utilised by the lecturer to reflect versatility and meta cognition intellectual. Once the students have observed the experts modelling, problem base questions can be assigned to them and through guided teaching the students can be coached in solving problems with immediate feedback. The feedback should not be general or abstract as to right or wrong, but refers to specific actions the students can improvise problem solving. By watching students in action, lecturers should identify and correct misconceptions of the law. Scaffolding refers to cues or tips that lecturers can give students in the process of coaching and in the fading process, students should be able solve problem base questions independently.
- iii. Sequencing; Once the method of learning is digested by the students, students should be exposed to diversified factual problems, real life situations.

iv. Sociology /Social context of instruction; Under this dimension, clinical study should be exposed to students, where students are given the task of handling advice to clients.

In applying the dimensions of cognitive apprenticeship, HOTS will be cultivated and Bloom's taxonomy should be conformed.

### **3. HOTS, SITUATED COGNITION THEORY, COGNITIVE APPRENTICESHIP AND LEARNING THE LAW**

Authors personal experience of teaching law for the last twenty-four years opines that the academic skills among most law students is lacking. Embarking on an observational study among first year undergraduate and postgraduate students (masters level), the findings were as follows:

Students' knowledge of the law is on the surface despite undergoing fourteen weeks of lectures and tutorials. Students main interest and objective is to pass the courses mandatory under the law program to graduate as a lawyer. The notion of studying for knowledge is not prioritized. Case analysis and appreciation has taken a downturn. Most students memorize the summarized and compressed cases from text books. Students complain that cases to be read in law reports are too lengthy and time consuming. Hence, most can't be bothered to read or has not read cases from law reports. The students find the lecture method boring and hard to understand. Most of them suggested innovative teaching. A group of 35 students were divided into seven groups. Each group was assigned a topic and asked to present it in any other teaching pedagogy apart from the lecture method. The pedagogy used by the students were; (i) presentation of the topic through a sketch; (ii) Prezi presentation; (iii) power point presentation; (iv) animations, songs and acting were incorporated in the power point presentation; (v) recordings of examples correlation with the law. These various methods indicate that students want some form of entertainment and usage ICT tools in the learning process. Once the students had grasped the knowledge, questions to cultivate HOTS were assigned to students. The students could not apprehend HOTS type of questions. Though they could answer questions that test their memory. Questions with 'why do you think' or give suggestions or how the law can be different that could not be apprehended by students. Whereas Blooms compliance requires synthesizing, evaluation and creation. Consequently, at the postgraduate level, students seem to have the same mindset. They find it hard to comprehend the upper level of Blooms. What is even more worrying are the law students studying law through online or distance learning. The author is concerned whether Blooms taxonomy is achievable. The authors reservations are not within the scope of this article. Research findings of the author's observational study as stated, necessitates a review of the teaching pedagogy for law and the significance of inculcating HOTS is paramount. The teaching pedagogy to be expounded is cognitive apprenticeship. Under this method, the lecturer plays the role of the content expert and a lawyer who mentors the students the four dimensions of cognitive apprenticeship and guide students to independent learning i.e. modelling, coaching, scaffolding, articulation, reflection, and exploration. Through

this method of learning, the objectives of Bloom's should materialize. One other factor that needs to be incorporated in cognitive apprenticeship is the assessment methodology i.e. summative or formative. Current emphasis in the Malaysian syllabi is summative. In a law programme, summative assessments are used to evaluate student learning, skill acquisition, and academic achievement at the conclusion of a defined instructional period. The assessment is usually in the form of tests, assignments, or presentations of their assignments used to determine whether students have learned what they were expected to learn. Grades given for this formative assessment is added to the final summative assessment in the form of final examination. It is given at the conclusion of a specific instructional period to evaluate the students understanding of the course and institutional accountability. The results are often recorded as scores or grades that are then factored into a student's permanent academic record in determining their cognitive achievement by streaming them into hierarchal ranking;

- i. first class; is the highest honours classification and indicates high academic achievement.
- ii. second class; second class is sub divided to upper and lower second.
- iii. third class; is the lowest honours classification.

One the other hand, formative assessment refers to a wide variety of methods that teachers use to conduct in-process evaluations of student comprehension, learning needs, and academic progress during a lesson, unit, or course. Formative assessments helps teachers to identify concepts that students are struggling to understand, skills they are having difficulty acquiring, or the learning standards that they did not achieve. This observation will assist teachers' to make adjustments to lessons, the instructional techniques, and academic support which should be the core of cognitive apprenticeship and the prime of learning outcomes [21]. In the authors view, formative assessments should be prioritized especially for the learning process. The objective of assessment should be embraced as a method to improve the progress of the students in both content and cognition and not discriminate or rather ridicule their intellectuality according to their hierarchal ranking.

### **4. CONCLUSION**

Innovative teaching pedagogies should be ever evolving to engage the attention and imagination of the students and broadening their minds to think out of the box. There should be a breakthrough in teaching law as a mere formalistic legal rule. No doubt law is considered as grundnorms, but it should not be seen and taught in insularity. It should be taught in light of humanities and social sciences i.e. correlation of the law with society which is the basis of situated cognition theory. The intellectual identification of the thoughts or empathy needs to be invoked in teaching the law. Quoting President Obama of what he said about appointing supreme Court members, he said, "...What I want is not just ivory learning. I want somebody who has intellectual fire power, but also a little bit of a common touch and has a practical sense of how the world works...You have to have not only the intellectual to be able to effectively apply the law to cases before you, but you have to be able to stand in somebody's

else shoes and see through their eyes and get a sense of how the law might work or not work in practical day to day living,” [22]. The authors propose cognitive apprenticeship under the situated cognition theory to be the way forward to ignite the thinking skills among law students i.e. HOTS. In the authors view, reform is imminent not on ‘what shall we teach’ but on ‘how should we teach’, as promulgated by Maharg, 2007, to prepare law students for the practice world. The authors envision law schools to teach students to think like a lawyer and be able to use what they had learnt in law schools to real life problems.

#### 4. REFERENCE

- [1] Haas, P. & Keeley, S. (1998). Coping with Faculty Resistance to Teaching Critical Thinking. *College Teaching*, 46(2), 63-67. <http://dx.doi.org/10.1080/87567559809596238>
- [2] Aldisert, R., Clowney, S., & Peterson, J. (2007). Logic for Law Students: How to Think Like a Lawyer. *University Of Pittsburgh Law Review*, 69(1). <http://dx.doi.org/10.5195/lawreview.2007.117>
- [3] Stuesser, L. (2009). A Reflection on the Bond Model of Teaching, 21(6). Retrieved from <http://file:///C:/Users/USER/Downloads/21BondLRevi.pdf>
- [4] Brown, J., Collins, A., & Duguid, P. (1989). Situated Cognition and the Culture of Learning. *Educational Researcher*, 18(1), 32. <http://dx.doi.org/10.2307/1176008>
- [5] Bransford, J., & Stein, B. (1984), *The IDEAL Problem Solver*, New York: W. H. Freeman
- [6] Brookhart, S. (2010), *How to Assess Higher Order Thinking Skills in Your Classroom*, ASCD, <http://www.ascd.org/Publications/Books/Overview/How-to-Assess-Higher-Order-Thinking-Skills-in-Your-Classroom.aspx>
- [7] Nitko, A. & Brookhart, S. (2007), *Educational Assessment of Students*, Pearson Merrill Prentice Hall
- [8] Norris, S. & Ennis, R. (1989), *Evaluating Critical Thinking*, Pacific Grove, CA: Midwest Publications
- [9] Barahal, S. (2008), *Thinking about Thinking: Pre- Service Teachers Strengthen their Thinking Artfully*, Phi Delta Kappan 90 (4)
- [10] Bloom B. S. (1956), *Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain*, New York: David McKay Co Inc.
- [11] *UW teaching academy*. (2003). Retrieved 2003, from <http://teachingacademy.wise.edu>
- [12] Anderson, L., Krathwohl, D., Airasian, P. et al (2001), *A Taxonomy for Learning, Teaching, and Assessing: A revision of Bloom's Taxonomy of Educational Objectives*, New York: Pearson, Allyn & Bacon.
- [13] Brown, J., Collins, A., & Duguid, P. (1989). Situated Cognition and the Culture of Learning. *Educational Researcher*, 18(1),32.<http://dx.doi.org/10.2307/1176008>
- [14] Brown, J., Collins, A., & Duguid, P. (1989). Situated Cognition and the Culture of Learning. *Educational Researcher*, 18(1),32.<http://dx.doi.org/10.2307/1176008>
- [15] Clancey, W. (1997). Situated cognition: On human knowledge and computer representations, Cambridge: Cambridge University Press.
- [16] Artino, Anthony. (2013). It's not all in your head: viewing graduate medical education through the lens of situated cognition, *J Grad Med Educ*: 177-179
- [17] Brown, J., Collins, A., & Duguid, P. (1989). Situated Cognition and the Culture of Learning. *Educational Researcher*, 18(1), 32. <http://dx.doi.org/10.2307/1176008>
- [18] Vygotsky, I. (1978). Interaction between learning and development. *Readings On The Development Of Children*.
- [19] Bereiter, C. (1991). Retrieved 19 December 2016, from <http://www.uio.no/studier/emner/uv/iped/PED4550/h14/.../scardamalia-and-bereiter.pdf>
- [20] Palinscar, A. & Brown, A. (1984). Reciprocal Teaching of Comprehension-Fostering and Comprehension-Monitoring Activities. *Cognition And Instruction*, 1(2), 117-175. [http://dx.doi.org/10.1207/s1532690xci0102\\_1](http://dx.doi.org/10.1207/s1532690xci0102_1)
- [21] Brown, J., Collins, A., & Duguid, P. (1989). Situated, Cognition and the Culture of Learning. *Educational Researcher*, 18(1),32.<http://dx.doi.org/10.2307/1176008>.
- [22] Sheela Jayabalan, The Need for Diversity in Teaching Law, International Conference on e-Learning 2015.
- [23] Richard Johnstone, Jenny Patterson & Kim Rubenstein, Improving Criteria and Feedback in Student Assessment in Law, 7 LEGAL EDUC. REV. 267, 268 (1996).
- [24] Obama Interview, C Span Interview Transcript. May 22, 2009, available at <http://www.scribd.com/doc/15766379/Obama-interview>