

A KM-driven Formative Assessment Framework to Problem-Solving for Law Academics Teaching First Year Non-Law Students

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ABSTRACT

This conceptual paper discusses the need for Knowledge Management (KM) intervention in strategising formative assessment for non-law students studying law. It proposes a unique approach through formative assessment to tailor an effective response to the challenges faced by law academics teaching first year non-law students. The research culminates with a formative assessment framework hereafter referred to as KM-IRAC. The conceptual framework embodies tenets of KM manifested in two distinct stages, Stage 1 being the IRAC equation to problem-solving and Stage 2 being the critical elements of authentic assessment. Both stages 1 and 2 are aimed at assisting and providing law academics with a toolkit in teaching first year non-law students.

Keywords: Knowledge Management (KM), formative assessment, problem-solving, first year non-law students.

I BACKGROUND

Generally, the impression non-law students have in studying law for the first time is that they come with this perception that law is a domain that is beyond their scope to even comprehend, somewhat like learning a foreign language. It is never easy to pick up a foreign language. More often than not, this perception is passed on from seniors to juniors as they tend to believe that the subject is heavy-going with a huge amount of facts to remember. Especially for the students coming from the accounting and finance background who are more interested in figures rather than facts, the volume in itself weighs them down. With this mental block already formed in their mind, it is an uphill task to reverse this notion and get them interested in the subject. When interest is lost, all is lost. It feels more like a burden than a pleasure to study law.

Unlike non-law students, law students have a genuine liking for the subject. Unfortunately, the same does not apply to non-law students who are forced to study law as part of their degree as they do not have the same interest (Owens & Wex

2010). These students also fail to understand the importance of this subject to their profession. As educators, we must have realistic expectations with regards to non-law students studying law in terms of assimilation of legal terms and the required mindset commonly expected of a typical law student. Students are always wanting their learning to be made easy by giving good examples related to the subject and by guiding them on how to answer questions. It is on this note that the researcher feels that something can be done to make it easier for these students to acquire an interest in the subject by creating learning opportunities that are closely connected to their vocation through problem-solving. The objective of the paper is to formulate a KM-driven formative assessment framework for law academics teaching first year non-law students albeit limited to problem-based learning.

II LITERATURE REVIEW

A. Teaching Law

The scope of this research focuses on planning and creating a problem-based formative assessment for first year non-law students studying law. Hence, it is imperative that adequate attention is placed towards understanding the intricacies involved in teaching law from the perspective of content (knowledge), skills development and practice (problem-solving). The ensuing discussion will focus on best practices availed from the literature that can be infused in the teaching and learning of law particularly with regards to problem-based formative assessment.

In teaching law, both knowledge and skills are necessary, as illustrated in Figure 1 below. For the transfer of knowledge to take place, it necessitates construction of meaning and understanding by the learners of the material. The transfer of knowledge revolves around the contents of a subject whereas the development of skills requires the use of knowledge in order to solve a given problem. Therefore it is important to have problem-based learning which facilitates learning either on one's own or through teamwork where students are able

to learn about the subject on their own or by supporting each other in applying their knowledge and skills to solve a problem. An interesting view of the same was espoused by Bloxham and West, 2007. They argued that for there to be engagement with the material, a single act of reading can in no way suffice. They advocated that repeated exposure to the material is paramount and central to understanding and engagement. On the same token, for the development of skills in problem-solving, practice over time is required (Walker & Hobson 2014). Research has also shown that problem-solving is a commonly used approach in teaching first year law students (Braye, Preston-Shoot & John 2005; Claydon 2009).

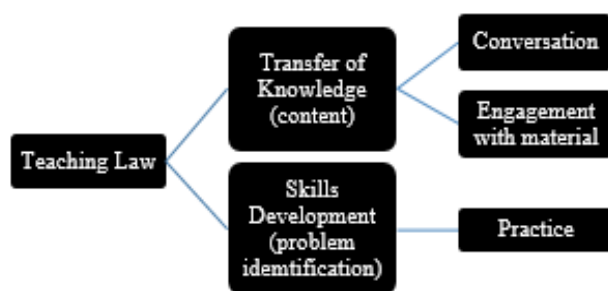


Figure 8. Tools for Teaching Law (adapted from Walker & Hobson 2014)

White (2005) outlined a four step equation which is simple enough for even first year non-law students to use as a guide for answering problem-based questions as illustrated in Figure 2 below.

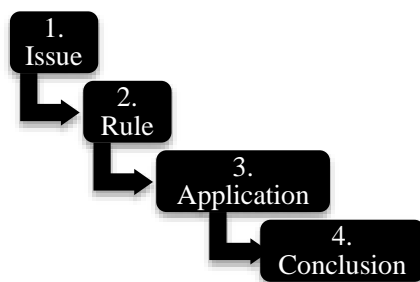


Figure 9. The IRAC Equation to Problem Solving (adapted from Nancy J. White 2005)

Problem solving can be reduced to an easily understood legal equation with IRAC which denotes:

- Issue:** What are the facts in dispute between the parties?
- Rule:** What is the law relevant to the facts in issue?
- Application:** Apply the law to the specific facts
- Conclusion:** Solve the problem

Other authors like Neidwieck was in support of the use of IRAC particularly in the realm of teaching and learning law. In the words of Neidwiecki (2006), “the IRAC is a good model for first year law students” as it helps them organize an answer to a problem-based question.

B. Assessment

In planning the formative assessment framework, Nancy’s approach discussed earlier is a useful guide for non-law students in relation to problem-based learning.

Assessment is about making judgments on the quality of a student’s performance (Knight 2006). Other authors have expanded on this idea to add that an assessment can be used to summarise a student’s achievement to award some form of certification or graded marks – referred to as summative assessment. Conversely unlike summative assessment, formative assessment is not aimed at formal grading but is set out to provide learners with timely feedback that can help in their learning (Falchikov 2005; Sadler 1989; Yorke 2003).

Other authors like Boud & Molloy (2012) have dwelled on the subject of assessment to great length. They summed up saying that the educative purpose of assessment is only achieved when students are capable of producing work that meets the standards as well as making their own judgment about the processes involved in producing the work itself. Hence, weighing on their viewpoints, it is therefore imperative that an assessment – be it formative or summative must be conscientiously tailored to meet the aforementioned aim.

Moving forward, it is important to examine elements of what would constitute authentic assessment. This is best explained by the works of Ashford-Rowe, Herrington & Brown (2014) as depicted in Figure 3.

In a nutshell, it entails the following:

- **Demonstrate knowledge and skills:** Problem-based learning is aimed at engaging students to use both knowledge of the law and skills in applying the law to solve a problem.
- **Transferable:** Students should be able to re-apply the knowledge and skills they learn from one area of discipline to a different discipline altogether.

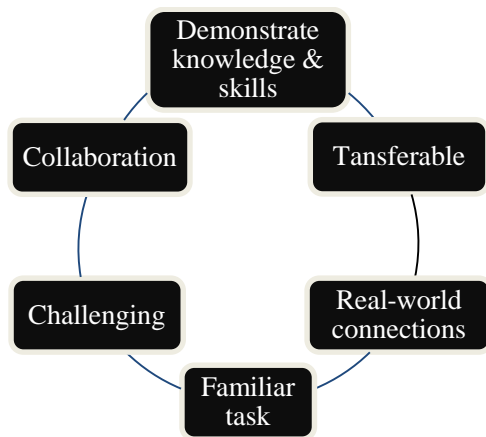


Figure 10. Critical Elements of Authentic Assessment

- Real-world connections: Students should be able to correlate the subject with relevant examples related to their daily lives.
- Familiar task: The task assigned should be a familiar one where students get a flavour of the actual challenge.
- Challenging: The task assigned should offer a challenge in testing one's ability to use the knowledge to solve a given problem.
- Collaboration: Students should be able to learn about a topic in law either on their own or by supporting each other in solving a problem.

C. Knowledge Management

Knowledge Management (KM) can be used as an alternative strategy by universities and higher education institutions to help its academic to be equipped with relevant skills and knowledge to boost learners' core competencies. However, little research has been undertaken on how KM can be applied within the academic setting let alone in teaching and learning law. Since academic staffs are key players in the knowledge creation (Nonaka & Takeuchi, 1995) process, it is imperative that the framework addresses this aspect of importance. This is compounded by the fact that key perspectives of Knowledge Management revolves around dissemination and transfer, acquisition and learning and application (Rodrigues & Pai, 2005). Hence it is imperative that measures to boost quality of teaching and learning ought to revolve around the aforementioned key perspectives.

Figure 4 explains the conceptual framework by showing the link between the KM-IRAC equation in Stage 1 and the critical elements of authentic assessment in Stage 2.

III CONCEPTUAL FRAMEWORK

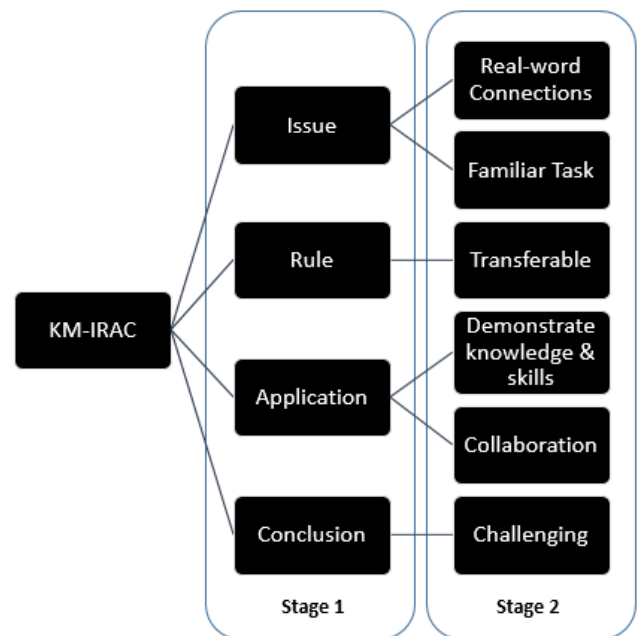


Figure 4. Proposed KM-IRAC Conceptual Framework

A discussion of how this is undertaken is provided herewith:

Issue (Stage 1)

The first IRAC equation on 'Issue' involves:

- The law academic aligning the formative problem-based assessment with the subject (module) learning outcome;
- Identifying the issue between the parties that needs to be solved. This is always in the form of a question. Example: Can X sue Y for breach of contract? There may be more than one issue between the parties; and
- Structuring the question in a chronological sequence of events according to date and time. This is important for a systematic logical flow to be established for the parties involved. The implication of this is far reaching, for instance if this were to be taken to court, the chronological order is of paramount importance.

The law academic must ensure that the case study incorporates real-world connections (Stage 2) with relevant examples related to their daily lives. Along with connecting the formative problem-based assessment to the real world, students should also be familiar with the kind of task (Stage 2) that they may be asked in the actual assessment.

Rule (Stage 1)

The second IRAC equation on 'Rule' involves stating the relevant rule of law to the issue at hand.

An example of a rule of law would be that ‘A contract is formed if there is (i), (ii) and (iii)’. At times there may be more than one rule of law that is applicable to a particular issue. Additionally, students must be made aware that the rule of law must be supported with an Act and/or case law and this must be mentioned in their discussion.

The academic law staff must make this known so that students are vigilant and aware that an issue may have one or more law related implications in real-life contexts. Basically, students should be able to use the knowledge and skills acquired for their present and future life/work opportunities where such knowledge and skills developed can be transferred/used in any field (Stage 2).

Application (Stage 1)

The third IRAC equation on ‘Application’ involves applying the relevant law to the facts of the case study. Students must reconcile these facts to satisfy the rule of law and the issue at hand. For instance, students must be able to give arguments why the facts satisfy or does not satisfy the rule(s) of law. In doing so, the student must be able to make sense of the law in establishing whether the facts of the case study has led to the formation of a contract or otherwise.

It is imperative that the law academic award marks by taking into account both sides of the argument. In facilitating a problem-based learning, students can either work on their own or through teamwork, apply their knowledge and skills (Stage 2) to solve the problem.

Conclusion (Stage 1)

The fourth and final IRAC equation on ‘Conclusion’ involves a closure by providing answers to the issue. For example: X can sue Y for breach of contract. Students must be aware of the far-reaching implications of this statement and the follow-up actions that can take place as a result of this conclusion in order for the party to be advised accordingly.

The law academic must ensure that the conclusion co-relates to the issue, rule and the application of facts in the case study. It is the culmination of all four steps in the IRAC approach that forms the basis of awarding marks. The assigned problem-based assessment should offer a challenge (Stage 2) in testing the students’ ability to use the IRAC equation in problem-solving

IV PILOTING THE KM-IRAC FRAMEWORK

Demographics of the Pilot Group:

The KM-IRAC framework was piloted with a group of 23 students undertaking the module “Business and Hospitality Law”. These students will eventually progress to degree in the field of Culinary Management and International Hospitality Management. The primary focus of this module is to introduce the participants to selected areas of law that are fundamental to the hospitality industry, and give the participants an appreciation of how the law and legal principles relate to the hospitality industry.

Lesson: Tutorial

Topic: Negligence

Learning Outcome:

To explain and apply the legal principles in negligence.

Prior Knowledge/Coverage:

Negligence (covered during lecture)

Case Study:

Mr Loke was driving his Peugeot 508 when it knocked into Mrs Mandy, a pedestrian, who was walking across the road. Mrs Mandy could have easily seen Mr. Loke’s car approaching but she was busy texting on her mobile. Mr. Loke saw Mrs Mandy walking across the road but he was so excited with his car that he did not brake on time. Neither Mr. Loke nor Mrs Mandy took any precautionary measures. Advise Mrs Mandy whether she can succeed in suing Mr Loke in an action based on negligence.

Instruction to Students:

- *The problem-based question should be attempted in groups of 3-5.*
- *You are expected to post your answers on Padlet® by using the IRAC approach.*
- *Padlet® link:*
<http://padlet.com/kanchana/negligence>

Stage 1

The researcher has included an example of how a formative assessment tutorial was tailored using the IRAC structure with the pilot group. A detailed breakdown of how IRAC was used to good effect with the pilot group under Stage 1 of the proposed framework is explained in the table shown in Appendix A. This breakdown is consistent with the explanation in Section IV of this paper.

Stage 2

Padlet® was used to engage in student collaboration where students could express their thoughts on a virtual wall (a common platform) from any device including their mobile phones (Stage 2). Here students were required to map real-world connections by engaging in familiar task and transferring knowledge learnt (negligence in this case). Students were also required to engage in collaborative work and challenged to demonstrate application of knowledge and skills acquired in the process.

The outcome of this exercise is shown here: <http://padlet.com/kanchana/IRAC>

V DISCUSSION

It is important to emphasise the settings or environment where the KM-IRAC framework would exhibit its most impact. It is obvious due to the structure of IRAC (Stage 1) that it works best for only problem-based questions or case based scenarios. Essay questions are generally obvious and relatively straightforward as it focuses only on the rule of law and the explanations of the law.

A problem-based question, on the other hand, involves a hypothetical set of facts which creates issues that need to be addressed by reference to the relevant law in advising a party. Critics however, may argue that there is no stopping in using the IRAC approach in essay-based questions as well, as the discussion of the rule of law or case law can still revolve around the IRAC approach. It must be said however, that the benefits of the KM-IRAC framework is fully realised when Stage 1 is applied in coherence with Stage 2 as shown in the outcome of the pilot study.

Finally, given that the proposed framework is conceptual in nature, there exists the need to further evaluate the framework with other higher education institutions and across different cohorts and academic settings.

VI CONCLUSION

This research discusses challenges and obstacles encountered when teaching law to students from non-legal backgrounds. It is evident that a theoretical framework is necessary to meet the challenges highlighted in the research. The KM-IRAC framework caters for problem based formative assessment and it encapsulates two distinct stages. The first stage being the IRAC equation and the second stage being the critical elements of authentic assessment.

The paper infuses a KM approach in structuring the KM-IRAC framework. The KM-IRAC framework is essentially a toolkit for law academic to devise an effective problem based formative assessment. This is a paradigm shift that law academics must embrace in their quest towards making law relevant towards non-law students. It is hoped that the proposed KM-IRAC framework will be a game changer and influence the preparation of formative assessment amongst law academics in the future.

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Appendix A - IRAC Structure to Problem-Solving

IRAC (Elements)	Duty of Care (DOC)	Breach of DOC	Causation	Remoteness
Issue (Facts)	Was there a duty of care owed by the wrongdoer to the victim?	Did the wrongdoer breach his duty of care?	Did the wrongdoer's act cause harm to the victim?	Was the harm suffered by the victim foreseeable?
Rule (Law)	State the law relevant to DOC. Cite relevant Cases/Act.	State the law relevant to breach of DOC. Cite relevant Cases/Act.	State the law relevant to causation. Cite relevant Cases/Act.	State the law relevant to remoteness. Cite relevant Cases/Act.
Application	Apply the law to the facts. Identify the parties by name & the relevant facts related to the issue	Apply the law to the facts. Identify who the particular wrongdoer is & whether the wrongdoer's conduct amounted to a breach	Apply the law to the facts. Question to address: 'If not for the wrongdoer's actions, would the victim have suffered harm?' If 'YES', wrongdoer is not liable. If 'NO', wrongdoer is liable.	Apply the law to the facts. Consider if the victim's harm is a type that can be expected from the facts.
Conclusion	Establish whether the wrongdoer owed the victim a DOC	Establish whether the wrongdoer was in breach	Establish whether the harm victim suffered was caused by the wrongdoer	Establish whether the harm victim suffered was a foreseeable result of the wrongdoer's action