CURRENT PRACTICES AND ISSUES IN PROFESSIONAL ETHICS INSTRUCTION BY TECHNICAL EDUCATORS IN HIGHER LEARNING INSTITUTIONS

***Siti Nurhuda Abd Wahid[1 2]**
Rafiza Abdul Razak[1]
Siti Hajar Halili[1]
[1] Department of Curriculum & Instructional Technology, Faculty of Education, Universiti Malaya
[2] Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia
*snawahid@gmail.com

Abstract: Ethics education and professional conduct are inextricably linked for people entering the labour market and professional practice in their professions. Despite the importance of teaching ethics, there is considerable uncertainty on how ethics and professionalism should be taught in institutions of higher learning, owing to a lack of directives and guidelines for instructors, delivery techniques, and instructor ability for teaching ethics. In this light, this article intends to investigate the current practices and issues in professional ethics instruction by technical educators particularly in the higher learning institutions. Relevant materials related to instructional activities practiced by selected technical educators are reviewed through document analysis. Successively, interviews are conducted with the technical educators to identify the issues pertaining to professional ethics instruction. The data collected are analysed and presented according to the common themes established. Review of pedagogical approaches in ethics education revealed that educators in higher education institutions adopted a variety of pedagogical approaches in teaching ethics, which include lectures, service learning, and project-based learning. Interviews with technical educators have clarified three main issues in professional ethics instructions: (i) instructional design strategy, (ii) content delivery and (iii) curriculum design issues, which resonate from the document analysis.

Keywords: ethics education; professional ethics, higher learning, pedagogy

INTRODUCTION

Ethics in a nutshell, is how one act is perceived as right or wrong. The systematisation, rationale, and implementation of various guiding theories are needed to answer the questions that arise from this reflective process (Deigh, 2010). In general, ethics is moral philosophy derived from Greek word, 'ethos' which means custom, character (Prasad, 2019). In his study, Prasad (2019) suggested that there are two forms of ethics, namely theoretical ethics and applied ethics also known as professional ethics. Professional ethics is defined as a process of logical thought that seeks to determine which values should be protected and promoted inside an organisation (Dehghani, 2020). Additionally, professional ethics entails a set of acceptable ethical acts and reactions that facilitate the development of favourable social interactions for individuals performing professional obligations. In other terms, it is a sense of moral obligation and conscientiousness toward any type of job, duty, or responsibility (Dehghani, 2020). Arguably, professional ethics differs from general ethics as it covers the context of interaction between practicing professionals and their clients and the society at the same time adhere to codes of ethics governed by affiliated professional bodies (Ibrahim et al., 2019). Ethical competency or the ability to work in a manner as defined by professional ethical codes of conduct is one of the most important competencies required by the industry (Sands & Pearce, 2014; Adnan et al., 2012).

Notwithstanding, they are exposed to progressive changes due to innovations in the industry which often challenge their personal and professional stance (Balakrishnan et al., 2019). Latest survey by PwC Malaysia (2020) on fraud and corruption reveals that there is significant increase of bribery incidents from 2014 (19%) to 2020 (35%) mainly committed by internal perpetrators within the organisations. Although there is no indication that these offenders are professionals, however they are considered vulnerable due to their designation and authority in decision making (Monteiro et al., 2020; Sharma & Bagozzi, 2021). One of the steps to overcome ethical misconduct is through ethics education (Abdul Rahman et al., 2016) as asserted by Kohlberg (1976) and Rest (1986) who emphasize the role of education in assisting individuals to progress from one cognitive stage to another. Such endeavour is seen taken by higher education institutions both local and international. A comparative study on engineering ethics education in

Malaysia and Japan by Balakrishnan et al. (2019) highlighted the significance of preparing future engineers as professionals to act responsibly. Coldwell et al. (2020) in a study on the efficacy of ethics course in South African universities suggested that formal education at tertiary level is the catalyst in developing ethical managers. This also supported by a plethora of studies (Kidd et al., 2020; Dziubaniuk & Nyholm, 2020; Balakrishnan et al., 2019; Bairaktarova & Woodcock, 2017; Song et al., 2017; Marzuki et al., 2017; Miñano et al., 2016) on ethics education at undergraduate level where professionals receive their formal training in their respective fields. This study is conducted by taking into account the importance of ethics education as part of personal development of future professionals at undergraduate level, especially of the technical field. The process begins with explanations of ethic education in higher learning institutions based on review of literature, followed by discussions on the current practices in ethics education particularly professional ethics through expert interviews to identify issues and opportunities for improvement in terms of teaching and delivery by technical educators.

LITERATURE REVIEW

Ethics Education in Higher Learning Institutions

In higher learning institutions, ethics courses are taught in relation to professional code of conducts of various fields. The courses aim to provide students the realisation and understanding of ethical issues surrounding their professionalism and the skill to make ethical decision as future professionals in their respective fields (Prasad, 2019). For medical programmes, Sim et al. (2019) in their study on ethics education particularly bioethics in the Malaysian medical schools revealed that ethics courses are compulsory and taught either as independent/stand-alone course or integrated in the curriculum, or as a subtopic in other courses. In terms of ethics course content,

Magalhães-Sant'Ana (2016) in his study on medical ethics education stated that teaching ethics for medical programmes emphasise on not only the transmission of professional and social principles that students should not violate, but also the provision of the necessary skills to address real issues. For future medical professionals, skills in dealing with real life scenarios which sometimes can be life-threatening situations, for example, determining the type of treatment for patients while taking into account the ethics and professionalism as a medical practitioner is paramount (Dehghani, 2020; Safari et al., 2020).

Apart from medical programs, ethics education in business and accounting are also widely discussed in the literature. Magrizos (2020) stated that business schools in higher education institutions are perceived accountable for developing graduates who operate ethically and responsibly. Studies on business ethics education have suggested ways to sensitise and educate undergraduate business students about ethical norms which include the introduction of formal teaching and learning into undergraduate business ethics courses, the use of experiential learning (Sholihin et al., 2020; Baumtrog et al., 2019), peer learning (Ohreen et al., 2022), and case studies (Jonson et al., 2015) to help students develop their decision-making abilities, and the implementation of code of ethics training. In terms of content, West & Buckby (2020) in their study on accounting ethics education concluded that there is no consensus on the particular specifics of what topics should be included (or should not be included). The topics covered may vary according on the general strategy used in incorporating ethics into the curriculum whether as stand-alone subject or embedded topics in other subjects. Descriptions of possible curricula and topics for accounting ethics in particular have been proposed, either based on personal experience or a review of the literature related to ethics particularly in accounting and business (West & Buckby, 2020).

Other professional fields, such as management and public relations, have also experienced the same issues in ethics education. Neill (2017) in her research on ethics education in public relations has identified that ethics is seldom taught as a stand-alone course but is more frequently included into courses such as public relations campaigns or an introductory public relations course. On the other hand, Berkovich and Eyal (2020) suggested that embedding ethics discussions in academic leadership curriculum could offer practical application of ethics in all facets of professional life. However, other studies (Magrizos, 2020; Sexton & Garner, 2020) have proposed on establishing stand-alone ethics courses as a way to communicate to students the importance of ethics to the academics and the field ascribed to the subject.

Teaching Professional Ethics in Technical Education

In Malaysia, the importance of ethics education particularly in higher learning is recognised in national curriculum development through inclusion of ethics and professionalism as part of the learning outcome (MQA, 2019). As a leading agency for accreditation and recognition of academic programs in any institutions of higher learning, the Malaysia Qualification Agency (MQA) has detailed the degree of attainment of relevant abilities, including ethics and professionalism, for various levels of education, such as Diploma, Certificate, and Advanced Diploma, in the Malaysia Qualification Framework 2nd Edition document. The teaching of ethics at this level of study is very important as it is an initial exposure for prospective professionals to the issues related to ethics that they will face during their practice as professionals of their respective fields (Balakrishnan et al., 2020; Prasad, 2019). The directive, however, did not specify or outline the content and methods on how ethics and professionalism should be taught.

Past studies have shown that there are several methods or approaches taken by instructors in teaching ethics. Apart from conventional methods such as lecture, studies in ethics education have discussed other teaching methods including project-based learning (Lönngren, 2020; Balakrishnan et al., 2019; Lapuzina et al., 2018), service learning (Balakrishnan et al., 2020) and case study approach which are widely discussed by recent studies (Balakrishnan et al., 2021; Bombaerts et al., 2021; Martin et al., 2020; Balakrishnan et al., 2020; Valentine et al., 2020; Balakrishnan et al., 2019). However, the teaching of ethics including professional ethics using instructional design is still underdiscussed therefore the potential use of this method is not fully identified.

Educators of higher learning institutions who are not normally trained in instructional design, are left to decide to their knowledge and experience. Such decision is influenced by the way they were previously taught by their predecessors and does not necessarily applicable in current circumstances. Based on that premise, this article will look into the potential of designing instructional framework for professional ethics education specifically for technical educators. The framework will be based on existing instructional design models (i.e., A-S-S-U-R-E) (Analyse; State objectives; Select strategies & teaching methods; Utilise technology; Require participation; Evaluate) with the consideration of incorporating learning theories to scaffold teaching and learning activities within the framework. Learning outcomes expected under ethics and professionalism as suggested by the MQA (2019) as the guiding principles in designing instructional framework for professional ethics education. For the purpose of this article however, the discussions will be limited to presenting key findings from document analysis and interviews of experts on professional ethics courses in higher learning institutions in Malaysia.

METHODOLOGY

The study begins with the identification of research issues and review on literature related to ethics education particularly on professional ethics in terms of pedagogical strategies adopted by technical instructors. Interview protocols are then developed to identify current issues and practices in professional ethics education from the perspectives of technical instructors. This in-depth interview process was supported by teaching-related documentation including course information, assessment report, teaching plans and other relevant materials. The findings of this interview sessions served as the basis for interviews with experts in ethics education however, not limited to professional ethics. These experts are those who have substantial experience in curriculum development and also instructional designs and technology, especially related to ethics education. Documents such directives and curriculum design manuals, were included during this stage as supporting materials. The input gathered from both series of interviews were analysed accordingly using thematic analysis which will then formulate the elements of professional ethics education.

Document Analysis

This research employed a qualitative document analysis to compile secondary data to explore the current practices in teaching professional ethics in technical education. This method was chosen because it enabled the researcher to answer the research question: how professional ethics are taught in technical education? Documents related to teaching and learning which include course information, teaching plan, project or assignment briefs, students' feedback and assessment reports have detailed information about the practices in professional ethics education. This methodology allowed for the analysis of secondary data and enabled the researcher to make her own analysis on the practices in teaching professional ethics as documented by the educators.

A set of rubrics was formulated as a tool to assist the process of data collection. The rubrics in this data collection process were designed using references from literatures reviews on professional ethics education and theoretical framework of this study. Subjects listed in the rubrics included how learning outcomes relate to ethics and professionalism were phrased in the course documents. The courses reviewed are part of programmes accredited by accreditation bodies, followed by Krathwohl's affective learning domains to explore the significance of this learning domains in guiding the methods of delivery and assessment of students' attainment of the intended learning outcomes. The rubrics continued to the methods of delivery of professional ethics courses identified from the literature review. Each method is described briefly to assist in identifying the specific methods employed by the course lecturers if the documents did not specify the teaching methods used. Definitions of each method are guided by the literature review.

Following this, the course content is also listed to identify whether ethics, professional ethics or professional practices are taken into account as topics taught to students. Finally, the rubrics list students' learning experience during the teaching of the professional ethics course as drafted based on the learning theories adopted for this study which include social constructivism and pragmatism. The formulated rubrics were then validated by subject experts and their suggestions for improvement were incorporated during the interview sessions as further discussed in the following section.

RESULTS AND DISCUSSION

Current Practices in Professional Ethics Instructions

The document analysis process begins with verification that the documents are of technical undergraduate programmes; and checking whether the documents are for the professional ethics course or courses that include professional ethics as one of topics covered. Five courses are selected where all are courses for technical programmes offered in public universities. Documents analysed for this study include course information, teaching plan, assignment or project brief and assessment report. One course also comes with students' feedback on the delivery of the course. Table 1 shows the background of courses included for this study.

Table 1
Background of courses for document analysis

Assigned name	Criteria	Background
C1	Professional ethics is part of the topics covered	The course is offered to 3rd year students and is a pre-requisite course for industrial training with 3 credit hours.
C2	Professional ethics is part of the topics covered and one of the course learning outcomes.	The course is offered to 3rd or 4th year students depending on the students' study plan with 2 credit hours.
C3	Professional ethics is part of the topics covered and one of the course learning outcomes.	The course is offered to 4th year students with 3 credit hours.
C4	Professional ethics is part of the topics covered and one of the course learning outcomes.	The course is offered to 1st year students with 3 credit hours.
C5	Professional ethics is one of the course learning outcomes.	The course is offered to 4th year students who have gone through industrial training with 3 credit hours.

All courses included in this study is part of accredited programmes by respective professional bodies. The reason for identifying the accreditation status here is because such programmes are closely monitored by the professional bodies thus the inclusion and coverage on professional ethics are mandated. All courses are taught by professionally certified educators with more than five years' experience in the industry and education.

i) Learning objectives

Under this category, there were two aspects listed in the rubric, which include learning outcomes and affective learning taxonomy. Learning outcomes are statements that describe what students will be able to perform upon completion of a course or unit which are typically observable and measurable. Ethics and professionalism are one of the required learning outcomes outlined by the Malaysia Qualification Agency (MQA) in the recognition of academic programs in institutions of higher learning (MQA, 2019). MQA has detailed the degree of attainment of ethics and professionalism, for various levels of education, including bachelor's degree, in the Malaysia Qualification Framework 2nd Edition document. All courses are part of vetted and validated programmes by the MQA as well as respective professional bodies.

Three courses (C2, C3 and C5) clearly stated the attainment of professional ethics as one of the course learning outcomes. In the case of C2 and C5, the learning outcome statement is in line with at least one of the learning outcomes suggested by MQA. For course C3, the statement of learning outcome was not in keeping with the standard set by MQA. Nevertheless, the statement is relevant with professional ethics whereby students are expected to adapt professional ethics and attitude of a professional architect. Learning taxonomies are also assigned to the course learning outcome. For three courses (C1, C2, C4), no affective learning domain assigned as the learning outcomes for the courses are more focused on the attainment of cognitive learning taxonomy.

On contrary, two courses (C3, C5) have allocated affective learning domains. Specifically for course C3, the affective domain is assigned for the course but not for the learning outcome on attainment of professional ethics. Students are assessed on their affective learning taxonomy on contractual and legal issues in the profession. On the other hand, for course C5, the learning taxonomy assigned is Affective Level 5 which constitutes that all levels are covered up to the highest which is Level 5, internalising professional code of ethics into personal belief system.

ii) Course delivery

In the second part of the rubric, the analysis is focused on the course delivery which divided into three sub-headings namely, methods of delivery, course content related to professional ethics and students' learning experience. From the analysis, evidently, lecture is the main method of delivery for every topic for course C1, C2, C3 and C4. For C1, C4 and C5, at least one external speaker was invited to deliver on selected topics however, not specific to professional ethics. The invited speakers are either professionals with working experience of more than five years in their respective fields or governing bodies officials who are well versed in the professions. All courses except course C2 encouraged discussions between lecturers and students during learning sessions. Discussions are conducted weekly however not necessarily on professional ethics.

For case studies approach, only course C3 used this method whereby as part of the assignment, students are requested to find real life case study on professional ethics from external panel of examiners (who are professional architects) designated for the course. Course C3 and C5 adopted project-based learning approach whereby the students engaged in real-life project simulation and professional ethics are to be observed throughout the project. Course C1 also adopted project-based learning approach, similarly to C3 and C5, however only one of the tasks within the project addressed professional ethics aspect. In terms of service learning, only course C2 adopted this approach specifically to address professional ethics content of the course. Students in groups are assigned with coursework on ethics and professionalism as engineers which requires them to engage with the communities on a specific issue for instance, sustainability and integrity. Students' understanding on professional ethics are assessed based on a pre-determined rubric. From the analysis, it is discovered that methods of delivery for course C2 did not involve case studies, problem-based tasks, project-based assignment, and service learning. However, for every topic, the lecturer will deliver a prepared lecture and include short role-play exercises followed by discussion between the lecturer and students.

As part of the course delivery, the rubric has also included course content pertaining to professional ethics. The content is divided into four sub-topics, namely, 1) theories or fundamentals of professional ethics, 2) roles and responsibilities as technical professionals in respective fields, 3) code of ethics which bound technical professionals in performing their roles and responsibilities and lastly, 4) professional practices which are expected from technical professionals of respective fields. For theories or fundamentals of professional ethics, only C3 and C4 incorporated in their courses with one to two weeks coverage per semester (total duration of 14 weeks). Course C3 and C4 also included the topic of roles and responsibilities as technical professionals in their courses, however C4 coverage is

almost throughout the semester compared to C3 with only two sessions per semester. For the topic of code of ethics for technical professionals, course C1, C3 and C4 covered the topic within one to two weeks classes. Course C2 on the other hand, covered topics of roles and responsibilities, code of ethics and professional practice of technical professionals within five weeks of the semester. C1 and C3 are courses focused on professional practices for quantity surveyors and architects as technical professionals, thus the coverage for professional practice of respective fields is throughout the semester. Course C4 on contrary, did not include this sub-topic as it is a course offered to Year 1 students. For course C5, professional ethics topics are addressed in weekly modules in relation to the project development stages, however the focus is more on professional practices of a quantity surveyor within project development stages.

Final part of the rubric looked at students' learning experience within the professional ethics course delivery. In course C1, students must interact with the lecturers as part of their reporting exercise on the progress of their work. Students are encouraged to share their personal beliefs and socially interact among themselves; however, the lecturers did not oversee the interaction. The lecturers, however, did conduct reflection sessions throughout the course, but not necessarily on professional ethics topics. The lecturers also interacted with the students to facilitate any misunderstanding or disputes among team members on the project-based assignment. In contrast, course C2 did not encourage students' interaction among their peers during classes. Nonetheless, the lecturers did conduct short reflection session after each topic, however, rarely can do so as time to cover the topics are limited. Apart from that, interaction between lecturers and students did take place mainly during supervision of coursework.

In the case of C3 and C5, in keeping with project-based approach, students are required to present and discuss their progress weekly to the lecturers and peers. Concurrently, the students are encouraged to share their personal experience, mainly related to their work experience prior to enrolling in the course. Students also interacted in groups on the task given (i.e., architectural studio project and development project) and the lecturers did conduct reflection sessions throughout the course, however not necessarily on professional ethics context. The lecturers interacted with the students to facilitate project-based learning especially during weekly progress presentations. On the other hand, in course C4, the students are encouraged to share their observation on real-life situations related to ethics and share them with their peers during classes. However, the lecturer had to intervene to ensure the interaction continues as the students are still new to the programme. Throughout the course, the lecturer actively interacted with the students to facilitate learning activities. Furthermore, reflection sessions are conducted consistently, but not necessarily on professional ethics aspects.

Issues in Professional Ethics Instructions

From the document analysis, the researcher has identified the current practices in teaching professional ethics in terms of learning objectives and course delivery. However, the underlying issues of teaching professional ethics are not necessarily apparent or discussed in the documents. In-depth interviews with technical instructors are conducted to identify the issues and challenges based on their experience teaching professional ethics subjects or modules as stipulated in research question two of this study, "what are issues faced by technical educators of higher learning institutions in teaching professional ethics?". Four respondents of experienced technical instructors (who are referred to as R1, R2, R3 and R4 respectively) participated in the interview sessions. The interviews were conducted via online meeting platform, recorded, and transcribed verbatim. The responses are then analysed and categorised according to four themes: namely, instructional design strategies, content delivery and curriculum design. These are discussed accordingly based on the respondents' input.

i) Instructional design strategies

One of the recurring responses given by the respondents is on the students who enrolled in professional ethics courses or modules. R1 and R2 raised their concerns on the inability of their students to identify professional ethics elements in the related topics. For both courses, professional ethics is taught as a topic and embedded in other topics as well as in selected assessments. Although the tasks and assignments are designed to address professional ethics however not explicitly and clearly defined by the instructors. R3 highlighted an interesting point, in addition to the previous issue. When asked on his insight on the students' acceptance on professional ethics, R3 responded:
It is difficult to accommodate every student's needs. Some students can relate the topic of ethics to the situation in the video shown. Some can relate through reading the articles. However, most of them, need more specific explanation from the lecturer.

This can be interpreted that students are in fact diverse types of learners. Thus, to determine the appropriate method

of teaching professional ethics, the lecturer needs to assess the learners' profile. This point is also supported by R4:

> Ethics topic is very theoretical where we teach students on acts and regulations. Students' interest in this kind of topic is low and they can't (cannot) relate to technical knowledge they learned from other subjects.

In addition, the level of existing knowledge in students regarding ethics and professionalism in related fields also plays a role. R2 stated that although students faced difficulties in identifying aspects of professional ethics, students' prior knowledge in topics related to professional practice helps to some extent in completing the given task. Another issue pertaining instructional design in professional ethics education is the selection and determination of learning objectives and taxonomies. R1 raised this issue as he found it difficult to align teaching and learning activities with the assigned learning objectives by the subject matter expert who are not necessarily knowledgeable in teaching and learning of professional ethics:

> Honestly, the learning objectives and taxonomies do not address the attainment of professional ethics knowledge and skills. But, … I can't (cannot) change them (the learning objectives and taxonomies). They were set by the subject panel, and feedback from the subject lecturer sometimes were not considered.

ii) Content delivery

All four respondents have suggested in their own words that instructors posed or faced issues themselves in the delivery of professional ethics courses or modules. R3 in particular, revealed that instructors in higher learning institutions are not well equipped with necessary pedagogical knowledge and skills as they are generally not trained in that aspects. As he explained:

> When I first started teaching this subject, I just apply teaching techniques that I have used in other courses I previously taught. I found that lecture alone is not working especially for 'dry' topics, so for the next semester I started to use role-play. Although I am not sure whether I have done it the correct way.

R4 offered a different insight in regard to the delivery of professional ethics courses, referring to his personal experience of teaching professional ethics via experiential learning exercises.

> For my subject, the students have to participate in service-learning exercises whereby they are asked to design engineering solutions addressing the issues of selected communities. The students are then assessed whether they complied to professional ethics as engineers by the lecturers.

There is also the issue of the lecturers or instructors are essentially professionals themselves. All respondents are certified professionals in their respective fields. R1 and R2 further suggested that to teach professional ethics, the instructors have to be well-versed in professional practices either from previous experience in the industry or currently attached to any industrial practices. R1 and R2 in this case, remain actively involved with the industry through collaborative consultation work. R2 in her response:

> Professional ethics has to be taught by lecturers who are experienced in the industry. Even if lecturers with PhD, with no (without) industrial experience, it is difficult to explain to the students what is actually practiced.

Apart from that, all respondents have included invited speakers or panel of experts as part of delivery strategies for professional ethics courses. R1 described the role of external expert is instrumental in addressing any misconceptions among the students especially on professional practices and ethics related topics:

> The students are always welcomed to people other than the lecturer. They are more open to ask questions and eager to know how the industry works.

iii) Curriculum design issues

All respondents addressed their issue with time allocated for professional ethics in their respective subjects. R1 and R3 felt that professional ethics should be taught as a subject not as a topic. As R1 explained:

> Only two weeks is allocated for professional ethics topic. This is not enough; everything is rushed, and students need time to understand how this topic relates to other topics and subjects.

R3 concurred in this regard:

> Ideally, professional ethics should be taught as a subject. However, this is not always possible since we have to make way for other subjects. For my subject, professional ethics is taught in one week, this (which) is not enough.

R3 also believed that the topic of professional ethics should be taught continuously from the first year of study until the end of the programme:

> I believe that professional ethics should be taught at the earliest, if possible, the first semester and progress through the years of study. The topics designed must (should) be consistent with students' competencies of their field of study.

In other words, R3 also stressed that the topics taught in the respective years of study should also consider the students' level of knowledge and understanding on their professionalism and field. Consequently, R2 acknowledged the constraints of professional ethics to be addressed as a specific subject or module in the curriculum, hence, R2 felt that professional ethics can be embedded in professional practice course. As previously highlighted by R1 and R3, it cannot be offered only for one semester.

Findings from the in-depth interviews have clarified three main issues in professional ethics instructions: (i) instructional design strategy, (ii) content delivery and (iii) curriculum design issues, which resonate from the document analysis. Evidently, these aspects have been consistently highlighted in professional ethics instructions. Therefore, it is important that these aspects are integrated in the design and development of professional ethics instructional framework.

CONCLUSION

This article discusses the concept of ethics education in higher learning institutions based on experiences from Malaysia and abroad. Review of literature indicated that ethics courses have been integrated widely in medical programs and taught as a compulsory course in the curriculum both at local and international medical schools. Apart from medical programs, ethics education in business, accounting, management as well as public relations are also widely discussed in the literature since ethics is perceived as closely related to the values of accountability and responsibility when doing business and/or in conducting accountancy works and establishing good image and public relations. The authors then examined the concept of professional ethics education. In brief, the term ethics derived from Greek word, 'ethos' which means custom or character. Ethics is defined as the study of what is wrong and what is right, and researcher suggested two forms of ethics, namely theoretical ethics and applied ethics also known as professional ethics which become the focus of this research. Review on literature revealed that not many studies have been conducted discussing the inclusion of learning theories in ethics education.

This article proceeds with the formulation of rubric for document analysis. Overall, the rubrics have been divided into two categories; one, learning objectives set for the course related to professional ethics, and two, the delivery of professional ethics content for respective courses. Each category was assigned with applicable five scales. For instance, the first category i.e., learning objectives, the scales which described quality, are to assess whether or not the courses have included ethics and professionalism as part of the learning objectives. If they do, to what extent the learning objectives are addressed by the courses. In turn, the scales assigned to the second category i.e., professional ethics course delivery are to measure the frequency of specific methods of delivery, course content related to professional ethics and students' learning experiences.

Discussions of findings from the interview with experts revealed there were few challenges in achieving the intended

learning objectives as well as for the course delivery. These are including the statement of learning outcome that was not in keeping with the standard set by MQA and affective learning domain might not be assigned as the learning outcomes for certain courses since the design of the program are more focused on the attainment of cognitive learning taxonomy. As for the course delivery, lecturers are regularly inviting external speakers either professionals with working experience of more than five years in their respective fields or governing bodies officials who are well versed in the professions for sharing session with students and applying the case study method in teaching wherever necessary. As for students' learning experience within the professional ethics course, lecturers did conduct reflection sessions throughout the course and/or after each topic, but not necessarily on professional ethics topics due to time constrain. However, students are encouraging to express their feedbacks and opinions using other platforms including progress presentation and sharing their observation on real-life situations related to ethics and share them with their peers during classes. Findings from this study are vital to further understand the underlying issues and challenges faced by technical educators of higher learning institutions in teaching professional ethics and to design an improved learning framework for technical educators that teaching ethics at higher learning institutions in the future.

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