Assessment Strategies and Practices in Planning and Real Estate Education in Ghana: Experience at Central University

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Abstract

Strategies and methods of student learning and training assessment tend to be provided in study programme accreditation documents. However, accreditation processes do not include any appraisal of the learning and training assessment modes. Undertaken during the 2021/2022 academic year, the study aimed to appraise the effectiveness of the continuous and final semester assessment methods, focused on planning and real estate education at Central University, Ghana. Second, to identify any limitations and opportunities for improving the current practices, including proposing other modes of assessment, if necessary. David Kolb's experiential learning theory provided methodological framework of the study: concepts of concrete experience, reflective observation, abstract conceptualisation and active experimentation used to appraise the effectiveness of continuous and final assessment modes. Primary data derived from the self-appraisal and personal observations of the lecturer in all direct experience of learning and training assessment modes. Other primary data consisted of extracts from original examination scripts of students. Secondary data were obtained from published examination results during the 2021-2022 session for BSc Planning, Level 300 and Level 400 and BSc Real Estate, Level 200 and Level 300 student groups, apart from literature review.

Concrete experience narrated practices of the assessment methods. Reflective observation analysed, reflected on and made conclusions related to these. Abstract conceptualisation derived ideas and concepts for improving effectiveness of student learning assessment methods. Active experimentation indicated actionable experiments that could be planned, designed and implemented to improve the learning assessment strategies. First, involving students in appraising learning assessment effectiveness. Second, improving course PDF quality. Third, including more multiple answers into quizzes. Fourth, providing alternative assignment projects. Providing more sub-questions in mid-semester and final semester examinations. Sixth, a new continuous assessment mode focused on: active participation in class; student conduct and behaviour; collaborative and student-lecturer relationships; oral and written communications effectiveness; and analytical ability.

Keywords: *Student Learning and Training Assessment; Student Learning and Training Assessment Strategies; Student Learning and Training Assessment Practices; Planning and Real Estate Education; Formal Learning and Training Assessment Methods; Informal Learning and Training Assessment Methods; Experiential Learning Theory; Teaching and Learning Activities.*

Introduction

Formal academic accreditation processes and procedures include the approval of programme content and course syllabuses as well as Student Learning and Training Assessment Practices (SLTAPs), globally. Virtually, all required Teaching and Learning Activities (TLAs) include SLTAPs defined for college and university instructors, lecturers and teaching fellows, etc. However, the independence of higher education practice and practitioners also provides them the opportunity for improvisation and introduction of informal innovative approaches in their TLAs and SLTAPs, generally. So, Student Learning and Training Assessment (SLTA) praxis may include both formal and informal processes and practices. Informal pedagogical and assessment strategies may be improvised or introduced by the individual teacher, teaching or course unit team. However, both formal and informal TLAs and related SLTAPs aim to promote effective student learning and training. Although institutional teaching programme accreditation provides for formal TLAs and SLTAPs, it must be possible to justify informal practices related to these but which are not necessarily specified under national/state approved systems. Certainly, a combination of both formal and informal learning and assessment practices enrich and enhance the total student learning experience. Flexibility in using formal and informal student learning and assessment practices also tempers the tendency for accredited programmes to be tersely legislative documents. For instance, programmes and course syllabuses may be prepared by persons and agencies that do not include the teacher/lecturer, in cases. Then in the course of teaching delivery, teachers may find it necessary to adapt or update some of the topics, which may also require the use of informal assessment practices. Nevertheless, these must always be justifiable in terms of contribution to promoting effective student learning practices.

Planning institutions such as the African Planning Association and UN-HABITAT (2013) have called attention to the need to seriously decolonize planning education and practice across Africa since colonial planning laws and systems still exist in many places. In context, even by inertia, these tend to affect planning education, limiting its experiential and environmental value. Educational philosophers like Paulo Freire (1970) argued for the need to focus teaching and learning on the social-cultural context. Generally, planning and other built environment courses tend not to properly reflect the environmental conditions in urban and regional systems in Africa and other developing countries. A typical example is informality, a product of contemporary urbanisation trends across the global South (Ofori, 2024a, 2024b). So TLAs and SLTAPs should reflect such trends of urban change and the effective and realistic planning processes required for an effective transformation of the urban and regional built environments in the developing countries. This must also mean setting student learning and assessment within their genuine experiential context.

Generally, however, student learning and training assessment tends to focus on the learning activity – e.g., topics taught – than the effectiveness of the specific types or modes of assessment. The former dwells on the grades/marks achieved in ‘quizzes’ and ‘coursework’, etc., excluding the effectiveness of these in determining and promoting student learning and

training. The problem tends to be even more complicated in relation to formal and informal methods of assessment mainly because the former tends for be formally accredited, the latter hardly. And there is the tendency for academic staff performance assessment to focus on formal and accredited modes of student learning assessment than informal ones, if at all the latter.

We had the opportunity and experience of receiving formal training in higher education teaching and learning and assessment practices at Birmingham City University, England, UK in the early 1990s. Our role at the time was lecturing in urban/town and country planning. A certificated course at the time, the teaching and learning training was based on Kolb's (1984) experiential learning theory and methodology. All students were lecturers sponsored from various departments across the University. However, the Certificate in Education (Cert.Ed.) course was meant for first-time lecturers in a British university and it was not examinable by the traditional practice of sitting seen, unseen or open book examinations. Rather, we took instructions, went to teach in experimental ways and assessed ourselves in terms of the teaching learning outcomes and response of our students, based on our observations. However, apart from formal examinations and assignments of the students, we also built in informal activities, especially related to Small Group Teaching Practices (SGTPs) and we also observed their behaviour and responses in class. Bell (2010) particularly emphasized the importance of observation in field research in the social sciences, education and health studies. The present study derives from the methodological approach adopted during our participation on the higher education teacher training programme in Birmingham, UK. It is focused on assessment/grading processes and strategies in built environment education, generally, planning and real estate programmes, in particular, at high education level in Ghana.

Aims and Objectives

The study aimed to assess and reflect on the assessment/marking strategies and methods in planning and real estate education at Central University, Ghana. One objective was to appraise and reflect on the accredited assessment modes, including student 'attendance', 'quizzes', 'assignments', 'mid-semester examinations', and 'end-of-semester examinations'. Second, to identify, appraise and reflect on the effectiveness of other and informal assessment strategies and practices, including teacher observation, student behaviour in class, group/teamwork, communications performance, etc., which are not necessarily defined or provided for in the accreditation document. Third, to identify problems of the assessment practices and recommend ways of improving these for promoting more effective future student learning and training assessment. Rest of the paper is focused on the conceptual framework and related literature, applications of experiential learning theory in in learning and training assessment practices, institutional context and accredited modes of student learning and training assessment, informal and non-accredited modes of student learning and training assessment, actual analysis and results and discussion, covering the application of Kolb's (1984) experiential learning theory structured into 'concrete experience', 'reflective observation', 'abstract conceptualisation' and 'active experimentation' concepts to student learning and training assessment strategies and practices. Final conclusions are drawn, including recommendations for improving the student learning and training assessment practices.

Literature Review and Conceptual Framework

Origins of Experiential Learning Theory and the Learning and Training Assessment Culture

Lev Vygotsky, a Russian experimental and cognitive psychologist is said to have initiated experiential learning in his concept of 'situation cognition' (Baldwin and Rosier, 2016). Vygotsky argued that knowledge, understanding and thinking happen in and derive from socio-cultural contexts (Michael Cole and Sylvia Scribner, 'Introduction' in Vygotsky, 1978: 2). Thus Baldwin and Rosier (2016) indicated that socio-cultural theorisation and constructivist knowledge build upon situated cognition through analysis of teaching and learning that take place outside the formal classroom/lecture hall in the real-world context, e.g., work place. Kurt Lewin (1951), a contemporary of Vygotsky's, Jean Piaget (1954, 1970) and Paolo Freire (1970) also believed in the socio-cultural context of knowledge and learning as did John Dewey (1938: 29), who in paraphrasing the words of President Abraham Lincoln, in his book, *Experience and Education*, wrote that education is 'of, by and for experience'. Piaget (1954, 1970) emphasised both environmental and cultural contexts of social learning. However, the earliest known seed of experiential learning was actually sown by Aristotle in about 350 BCE. In book 2 of *The Nicomachean Ethics of Aristotle*, translated by D. P. Chase (2011), Aristotle had written that 'For the things we have to do before we can do them, we learn by doing them'. Underlying all these social-cultural contexts is the testing and appraisal of knowing and knowledge derived through the assessment of the learning and training gained by those who go through these: students, trainees.

David Kolb's Experiential Learning Theory

Modern ideas of experiential learning derived from David Kolb (1984) who developed his own conceptualisation through distilling the ideas of John Dewey, Jean Piaget and Kurt Lewin (Ofori, 2000). Kolb (1984: 38, 41) defined experiential learning as 'the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience.' Kolb (1984) propounded a four-stage experiential learning process consisting of: 'concrete experience', 'abstract conceptualisation', 'reflective observation' and 'active experimentation' (Figure 1). Kolb (1984), like Luft (1970), emphasised the importance of adaptation and transformation of experience in learning processes. Originally, however, Kolb (1984: 38; 2014) focused more on individual learning processes and was also limited in the reflective aspect, both of which constituted the strength of Luft (1970) and Boud et al. (1985), among other writers. Schon (1991), Schon and Rein (1992) also reputedly argued that experiential learning, accordingly produces reflective professionals who learn in action by doing and reflecting on the knowledge so generated instantly, with the ability to appraise it on the spot. These also tend to emphasise group/team learning, which perspective was reflected in Kolb's later works this (Kayes et al., 2005). Indeed, individual and direct experience, itself, may not be enough to foster mental development or learning, except mediated through a collaborative process as originally emphasised in Vygotsky's (1978) concept of 'zone of proximal development' (Watson, 2002). But these underline the importance of both individual learning and the relationship between this and collaborative engagement with competent peers: I and the team or group cultures. In the present study, both individually based 'experiential learning' and 'experiential education' focused on any group size, involve tacit, enacted and outdoor learning (Knowledge Alliance and Advanced Urbanism, 2016: 9; Parry and Allinson, 2019), which are all highly valued and considered central to total learning and training processes. However, both individual and group learning

involve assessments to test the learning and relevant training experience gained: how we get to know what students know, having learned and been trained.

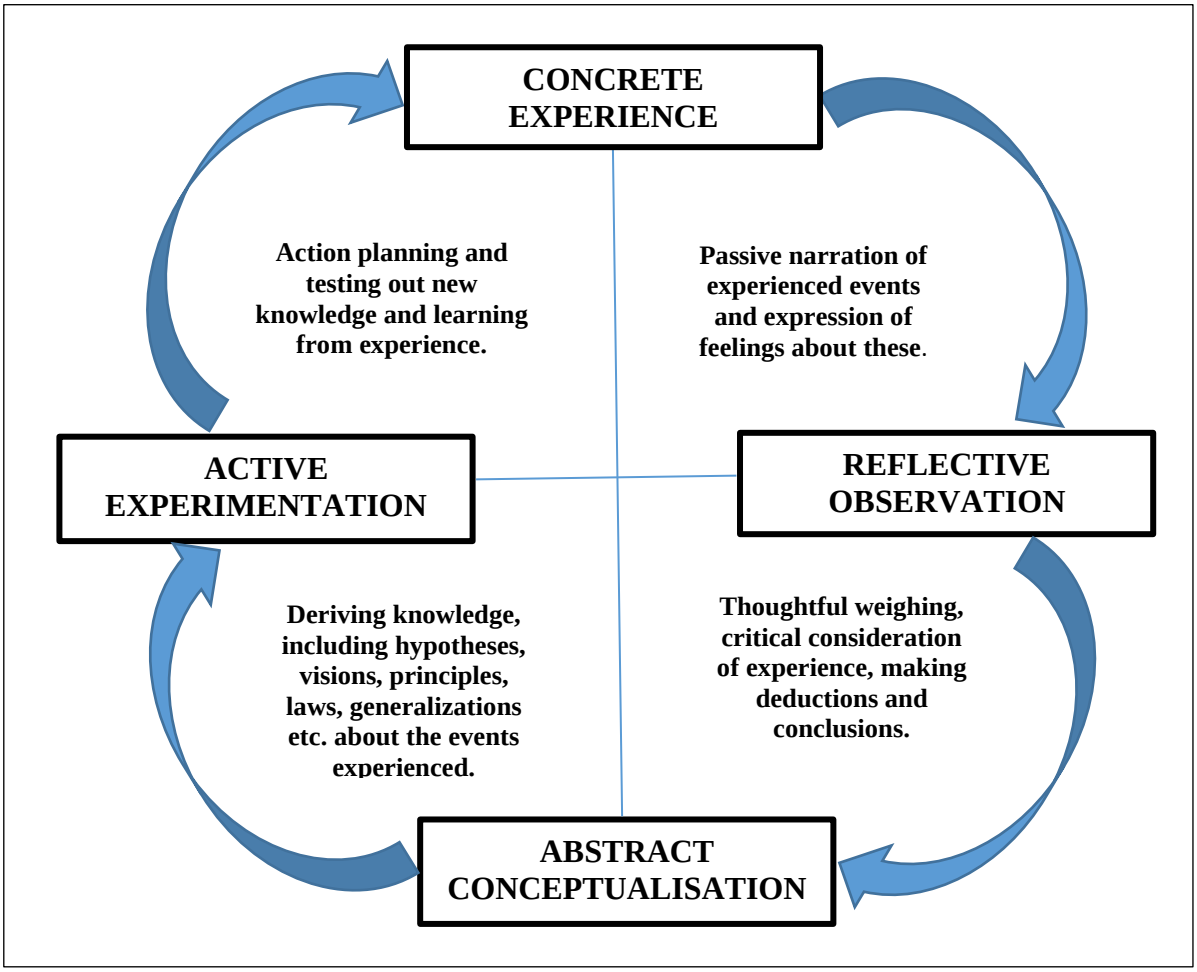


Figure 1. Illustration of Kolb's experiential learning theory
Source: Author's design (after Kolb (1984) and Ofori (2000).

Concrete experience

Stage 1 of Kolb's model is basically passive, with the learner only recalling or recounting what happened or what was done, what activity/event took place and what one saw/witnessed; what new experience was encountered or existing experience reinterpreted; an emotional and sensory encounter with some activity or event (Baldwin and Rosier, 2016). Included are any feelings or intuitions one had about the event/activity experienced and what data and information were collected about these, if any? No conclusions or judgments are made in this stage (Lewin, 1951) as in childhood/infancy or early stage of learning in the structured context of human development (Piaget 1954, 1970).

Reflective observation

Stage 2 involves observation and reflection, through watching, listening, discussing, analysing and understanding the experience from as many angles as possible, identifying inconsistences, if any, between experience and understanding. This consists of making assessments, judgments, and conclusions and providing explanations of the event/activity. Identified problems and experience are thoughtfully weighed, aimed at deriving new learning/knowledge, making sense of experience. Reflective observation, therefore, involves affective and cognitive learning. The learner also assesses one's cognition, affective learning, habits, skills in relation to the recognised problems and experience. So, reflection is an interactive process between feelings and cognition because when the learner has negative feelings about themselves, these can hinder learning.

But the learning person's intent to use the learning is important. Such intent is related to one's own characteristics and aspirations (Boud et al., 1985), which include one's previous experience of a situation/event, its intensity, emotions and feelings one derived from it. Different writers emphasise either the cultural or psychological state of the learner. Critical intent of the learner is set within the tendency to finding out about situations/event and reorganising the valued aspects of the social and moral environments (Habermas, 1984). Reflective learning may take a 'deep'/'deeper' form when the learner gains a disintegrated and detailed meaning, insight into perceptive understanding and intrinsic quality of the subject. Otherwise, it may take a 'surface-based' form (Ofori, 1998), which is descriptive and passive learning, without an essential intrinsic nature or structuring of the experience and intent to bring about any change, based on the new knowledge.

Abstract conceptualisation

Stage 3 consists of in-depth thinking, identifying new concepts and theories or revising existing ones; integrating these into overall learning; making generalisations, based on the event/situation of experience. According to Kolb (1984), learning involves acquiring concepts that can be flexibly applicable in a range of situations, aimed at supporting practical and strategic action for change. So, new experiences provide the development of new concepts. Abstract conceptualisation, therefore, aims to constitute ideas, visions, principles, even laws that underpin, inform and drive subsequent learning and action. It also involves a critical reflection on the quality and relative effectiveness of these knowledge forms, whether these are abstract or material in nature, theoretical or observation-based. Stage 3 may, therefore, include comparisons, deductive reasoning and component analysis as a basis for holistic construction of knowledge.

Active experimentation

In stage 4, we plan and test/try out what we have learned; formulating a hypothesis, planning an action and implementing it. Action plans must have clarity of objective and strategy for practical implementation. Active experimentation includes plan/action monitoring, review, testing and evaluation. But monitoring should also cover the first 3 stages of the experiential learning process. Evaluation, therefore, includes the experiential learning-based planning processes and plan implementation. Functional feedback on plan conclusions to the planning activity should, therefore, be built-in (Lewin, 1951). Stage 4 thus includes speculating about or foreseeing likely implementation challenges and how these might be mediated. Thus active experimentation provides a foundation for future and continuous/lifelong learning and action.

Student/Learner Qualities and Transformation Assessment

Throughout, the learner must be personally willing to get involved in the event/situation experienced; be able to reflect on it and employ relevant analytical skills to conceptualise the experience, including decision-making and problem-solving skills in order to use the new ideas gained. Baldwin and Rosier (2016) indicate three emphases of experiential learning. First, learning is a process rather than an outcome and is grounded in experience related to the personality of its user. Second, learning is transformative, knowledge being created and re-created, requiring the need to address opposing perceptions and holistic adaptation to the real world. This also emphasises the mediated/collaborative mode of experiential learning as indicated previously (Watson, 2002; Kayes et al., 2005). Third, it is transactional between the learner and their environment, in which they interpret experience both objectively and subjectively. Further, Baldwin and Rosier (2016) argue that such learning by doing, *combined with effective assessment of student activities*, potentially encourages positive attitudes to lifelong learning. A student or learner can enter the experiential learning cycle at any stage and follow through its sequence (Kolb, 1984; McLeod, 2013).

Experiential Learning Theory in Learning and Training Assessment Contexts

Experiential learning has strongly emerged as pedagogical and practical learning and training approaches, especially in the global North (Tyson and Low, 1987; Kayes et al., 2005; Sepe, 2014; The City University of New York, 2016; Veohl, 2018; Mehmood et al., 2019), particularly in the built environment disciplines, notably planning (Tyson and Low, 1987; Watson, 2002; Watson and Odendaal, 2012; Odendaal, 2013; Baldwin and Rosier, 2016). The African Planning Association and UN-HABITAT (2013) and Association of African Planning Schools (AAPS) (Watson and Odendaal, 2012; Odendaal, 2013) have advocated for the active adoption of experiential learning in planning education and research (Watson and Odendaal, 2012: 102). Intent in this section is to emphasise its usefulness in student learning and training assessment practices.

Undergraduate and graduate students are increasingly being exposed to real-life and practical involvement in urban and regional planning processes through experiential learning education, including pedagogical and training assessment in many places, especially in the global North. Examples include in Calgary, Canada (Tsenkova, 2008), East Lansing, Michigan, US (Kotval, 2010), several other partner planning institutions in Australia (usc.edu.cu/explearning, 2013); in integrated urban development management education in Delft, The Netherlands (Chen et al., 2019); and other built environment and urbanisation studies, etc. Indeed, it is highly valued in the global North countries that have similar planning education philosophies, particularly the United States, Canada, United Kingdom and Australia, aimed at embedding employability in the curriculum and providing work-based learning activities, competence and practitioner input (Baldwin and Rosier, 2016), *including the periodic and terminal assessment related to these*, the focus of the present study. Kotval (2010: 297-299) and Baldwin and Rosier (2016: 43-44, 46-47) indicated other benefits of experiential learning in learning and training processes. For tutors/lecturers, it promotes small-group teaching and outdoor learning. For students, small group learning, team/group work, better mentoring, problem-solving, skill transferability, self-motivation and confidence building, community development skills, outreach and conflict resolution, meaningful decision-making, leadership and personal development; communication skills, including written, verbal and design skills; and facilitated inclusion of public service into the lecture room. Similarly, in 2015, New York State, US, introduced a mandatory budgetary policy that required the City

University of New York and State University of New York to develop and make experiential learning compulsory for all students (The City University of New York, 2016: 2). At the former, this was also expanded and consolidated to cover all faculty and departmental activities and lifelong learning. Experiential learning is also valued in other contexts, including advocacy and community empowerment in urban regeneration initiatives (Dawley et al., 2005), sustainability studies through transformation learning, experiencing of place, regenerative action and social innovation (Mehmood et al., 2019), urban tourism in the evaluation of visitor/tourist and customer perception, reflections on the built environment and the planning of city trajectories in Italy (Sepe, 2014).

In Ghana, study programme accreditation is the direct responsibility of the Ghana Tertiary Education Commission (GTEC), under the Education Regulatory Bodies Act, 2020 (Act 1023)(Republic of Ghana, 2020) and aspects of the Act give clues to the value of experiential learning through real-world placements, internships and benchmarking opportunities for students, *including learning and training assessment practices*. One of its objects is the 'advancement and application of knowledge through teaching, scholarly research and collaboration with industry and public sector' (section 2, paragraph (c)). And one of GTEC's functions is ensuring that tertiary institutions 'promote a culture of independent life-long learning and of scientific and technological inquiry among staff, students and wider society' (section 4, paragraph (d)).

Most notable African initiatives in the application of experiential learning in planning education and research have come from the African Planning Association and UN-HABITAT (2013) and AAPS (Watson and Odendaal, 2012; Odendaal, 2013). Both emphasised the disconnection between the skills, knowledge and values that are taught at African planning schools and the actual issues that confront practising planners. Partly, this stemmed from the colonial history of urban and regional planning in Africa, otherwise the poor resourcing and generally weak development of planning education, law and practice across the continent. Both institutions, therefore, aimed to decolonise planning education, promote its improvement and actual practice in Africa and valued experiential learning as a medium for achieving these through both effective planning education and research, much based on case study strategies and effective learning and training assessments. They pointed out the challenge of informality, and urbanisation of poverty mostly in Africa and the potential of experiential learning epistemology and methodology for responding to such urban change.

For instance, AAPS (Watson and Odendaal, 2012: 101; Odendaal, 2013) signed A Memorandum of Understanding (MOU) with Shack/Slum Development International (SDI) and its affiliates in November 2010, which aimed to change students' mindsets and experientially expose them to informal settlements and slums. Apart from the exposure of future planners to such conditions, the African Planning Association (APA) and AAPS underlined how planning practice might address these and other malaise in African towns and cities. AAPS emphasised experiential learning as one of the teaching methods in its proposed masters' programme in planning, especially in combination with community-based studio projects (Watson and Odendaal, 2012: 108). Indeed, Watson and Odendaal (2012: 104) emphasised, the need to value both the "experiences of the marginalized" and the 'processes of their knowledge, theories and explanation' and relationship between knowledge and power, which must require relevant learning and training evaluation strategies. This also promotes epistemological pluralism and democracy (Ofori, 2000). Watson (2012), Watson and Odendaal (2012) and Odendaal (2013) strongly emphasised and espoused the importance of experiential

learning in planning education in Africa, generally. However, they tended to sail on the main notion of experiential learning than structuring it out as, e.g., in Baldwin and Rosier (2016).

Methodology

Every student and trainee works to achieve a score, mark or grade as a basis for assessing their performance and achievement. So, assessment is fundamental to all educational and training processes and is, itself, meant to promote effective student learning. Experiential learning theory was used as the methodological framework or knowledge realm of the focus on assessment practices in built environment education, planning and realist in particular. One of the methods used was literature review relating to assessment processes and practices in built environment education, generally, planning and real estate in particular. Literature review also focused on theoretical and applied works in experiential learning theory, globally and applications to learning and training assessment, yielding mostly qualitative secondary material. Approved and published marks and grades – results sheets – also provided secondary data. Primary data consisted mainly of student attendance records, compiled by the author for the period under study. Other primary data were the examples of some of the answers/responses that students gave in their various assessments, including quizzes, assignments, mid-semester and end-of-semester examinations. An attempt was also made to address informal and non-accredited but related student learning and training assessment practices. Another set of primary data took the form of lecturer observations of the student attitudes, conduct and behaviour in class, including teacher-student interactions and relationships. However, the study was based on a self-appraisal by the author of all the relevant student assessment experiences. Kolb's experiential learning theory was used to analyse, appraise and reflect on the use and effectiveness of the various assessment strategies and methods.

Institutional Context and Modes of Student Learning and Training Assessment

Central University, Ghana is largely an institution of science and technology, legal and business education, with some coverage of humanities and social sciences. Based across 3 campuses in inner-Accra, Miotso-Prampram and Kumasi, the University has 8 schools and faculties. These are Faculty of Law, Faculty of Arts and Social Sciences, Central Business School, School of Pharmacy, School of Architecture and Design (SADe), School of Engineering and Technology, School of Medicine and Health Sciences and School of Graduate Studies. SADe offers 4 main undergraduate programmes: Bachelor of Architecture (B.Arch) and Bachelor of Science (BSc) in Planning, Real Estate and Design. BSc Design programme offers specialisation in Fashion Design, Interior Design, Landscape Design and Graphic Design. All programs are organised under the Department of Architecture, with creation of other individual departments subject to improvement in student admissions. The study focused on the author's roles on the BSc Planning and BSc Real Estate programmes. The substantive courses that we taught on the programmes and the related formal modes of assessment are indicated in Table 1. Across the whole University, as is the practice in other Ghanaian and some other African Universities, the standard accredited modes of assessments are indicated in Table 2. Assessment modes are categorised into continuous and final assessments.

Table 1 Central University: Formal Assessment Modes in Planning and Real Estate Courses

Semester	*Programme, Course Code and Course Unit*	*Credits*	*Accredited Modes of Assessment*

1	BSc Planning Programme		
	PLAN401 Ethics in Planning and Professional Practice	3	Attendance; assignments; quizzes; mid-semester examination; final semester examination.
	PLAN403 Project Work/Dissertation 1	5	Attendance; assignments; quizzes; mid-semester examination; final semester examination.
	PLAN407 Urban Systems	3	Attendance; assignments; quizzes; student presentations; mid-semester examination; final semester examination.
	BSc Real Estate Programme		
	REES311 Urban and Regional Development and Management 1	2	Attendance; assignments; quizzes; mid-semester examination; final semester examination.
2	PLAN103 Geography of Ghana	2	Attendance; assignments; quizzes; mid-semester examination; final semester examination.
	PLAN306 Planning Law and Administration	2	Attendance; assignments; quizzes; mid-semester examination; final semester examination.
	PLAN312 Spatial Planning II (Urban Design)	5	Attendance; assignments; quizzes; student presentations; mid-semester examination; final semester examination.
	PLAN324 Urban Economics	3	Attendance; assignments; quizzes; student presentations; group work; mid-semester examination; final semester examination.

Source: Author's tabulation from Central University (2017, 2022b).

Table 2 Structure of Student Assessments in Planning and Real Estate Courses

Modes of Assessments	*Mark Allocations (%)*
1. Continuous Assessment:	
(a) Attendance at Teaching and Learning Activity	5
(b) Quizzes	5
(c) Assignments*	10
(d) Mid-Semester Examinations	20
Sub-total	40
2. Final Semester Examinations	60
Total	100

Source: Author's tabulation; *includes 'student presentations' and 'group work' in Table 1.

Analysis and Results and Discussion

Concrete Experience of Student Learning and Training Assessment Methods

Attendance at teaching and learning activity

Concrete experience of student attendance performance was based on 3 course units – PLAN401, PLAN407 and REES311 – because these indicated the general rates and achievements for all 8 course units we taught during the two semesters. Usually, we recorded attendance performance in terms of the *presence* or *absence* of the students in class. However, the lecturer also decided to structure out attendance performance further by including *lateness* to class and for the purpose of the present study, actual attendance *score/mark* achieved was added to the performance criteria. Attendance at PLAN401 was between 66.7 per cent and 91.7 per cent, with 8.33 per cent lateness and overall absence between 8.33 per cent and 33.3 per cent. Sessional absence, i.e. morning or afternoon classes as part of a whole day's learning activity was 16.7 percent, in which case a student attended in the morning or afternoon only. At PLAN407, attendance rates ranged between 61.54 per cent and 92.3 per cent, with over 7.69 per cent lateness. Overall absence was between 7.69 percent and 38.46 per cent. For REES311, attendance rate was between 66.7 per cent and 83.33 per cent, absence between 16.67 per cent and 33.3 per cent, with no lateness. Actual attendance scores for all 3 course units ranged between 3 per cent and the full marks of 5 per cent.

Quizzes

The number of quizzes per course unit depends on the teacher/lecturer and nature of the course, also minded by the fact that these, after all, earn 5 percent of the total marks. For all the course units we taught during the 2 semesters studied, we organized only one quiz per course. Second, there was no specific format for quizzes; it all depended on the teacher and nature of the particular course unit. However, a quiz may consist of a set of questions that require a one-word to a few-words, phrase or sentence of answer. For instance, in PLAN103, quizzes took the form of 'What is another name for a homogenous region?'; 'Indicate another name for a biophysical region', ' "Regionalization" and "regionalism" have the same meaning, Do you agree or disagree?'; 'Indicate two similarities between functional and nodal regions'. Examples in PLAN306 included 'What is the main difference between "planning law" and "environmental law" '; in PLAN312, 'Who is reputed to be the father and pioneer of urban design?', in PLAN324 Urban Economics, 'Who was the originator of the Economics Base Theory?' and 'What made the originator of the theory introduce it?', 'What are the main components of the economic base theory?'; 'What do you understand by "urban economic development"?', etc.

As the internal examiner, the teacher/lecturer allowed 45 minutes for 5 quizzes and 1 hour for 10. The former scored 1 mark per quiz, the latter one-half (0.5) of a mark. Generally, quizzes took the form of a written paper. However, in the case of PLAN103, some students failed in the overall examination, scoring just below the pass mark of 50 per cent. So, the Departmental Board decided that the lecturer gave them a quiz for the candidate to top-up on their overall mark. We decided on an oral quiz, results of which improved on the grades of the affected students. Generally, quiz performance of students in most of the course units ranged between 3 per cent to the full mark of 5 per cent, with the exception of PLAN324 Urban Economics, where it was relatively low, between 1.13 per cent and 3 per cent, out of 5 marks.

Assignments

Basically, assignments could take the form of coursework or take-home, including any form of groupwork, with an allowed submission period of 2 or 3 weeks but no group assignment was issued during the period under study. Usually, it was issued in the form of a project topic, close to a mid-semester or end-of-semester examination question, with issue and submission dates stated. For instance, an assignment in PLAN407 Urban Systems was issued as follows:

> 'Indicate and explain any five (5) differences in urban development patterns between the Pre-Independence era and the Post-colonial (Independence) era in Ghana.
> Assignment Issue Date: Thurs 17 Nov 2022
> Assignment Submission Date: Thurs 8 Dec 2022.'

However, students tended to delay in submission by about 1 or 2 more weeks. Sometimes, some of the students did not really understand to topic or project. Other students would interpret it differently or restate it in their own ways and provide answers that were not asked for or required. One or two students failed to submit their assignments, including one who decided to set their own assignment topic, disregarding the one meant for the whole class, for which reason the submission was the wrong one and was not accepted. However, in most of the course units, students scored averagely 5 or 6 marks out of 10 for their assignment, as was the case in PLAN103, PLAN306 and PLAN312. In PLAN324 and PLAN401, marks ranged between 1 and 7 out of 10. Outstanding cases were between 7 and 7.5 marks in PLAN403, between 4 and 9 marks in PLAN407 and in REES311, between 5.5 and 9.75, all out of 10 marks. The highest score in PLAN312 was 5 out of 10 marks and one submission remained 'To come' on the final results. An outstanding challenge to all students was their written English, which needed significant improvement.

Mid-semester examinations

Virtually, the mid-semester examination is a mock of the final semester examination and would usually include samples of the kind of questions that would appear in the latter. Generally, it contains fewer questions and has limited time duration than the end-of-semester examination. However, in the course units we taught, the mid-semester examination questions were more of essay/composition type of questions, unlike those in the final semester examination, which were required to be broken down into sub-questions, with marks distributed as such. However, student performance varied between course units as between individual students. In PLAN401, marks ranged between 8 and 16, out of 20. PLAN403 marks were between 15.75 and 17.5, out of 20 and were the highest mid-semester examination marks among all the courses we taught. PLAN407 scores were close between 11.5 and 14, out of 20. REES311 marks were much skewed between 6.5 and 17.75, out of 20. Second mid-semester examination marks were generally lower those achieved in the first semester. PLAN103 marks were below 8, out of 20. In PLAN306, the highest marks were 10 and around, out of 20. PLAN312 marks ranged between 10.5 and 13, out of 20 and those in PLAN324 between 7 and 15, out 20 marks. Generally, however, all student had considerable difficulties with written English than in the assignments.

Final semester examinations

End-of-semester examination is, of course, the major and most important mode of student learning and training assessment, including its greater marks allocation of 60 per cent. Papers tend to cover longer time allocations and offer wider choice of questions to be answered. As indicated previously, final semester examination questions, by practice, are supposed to be

broken down as much as possible and marks allocated as such, carrying greater weight in the total assessment. A limited number of the students understood the questions and aimed to answer these in their own self-expressed way, e.g. in PLAN103 Geography of Ghana, partly PLAN306 Planning Law and Administration. Generally, however, even in relation to the sub-questions, students tended to provide part answers only, earning only part of the marks, irrespective of whether they had good self-expression in written English.

Other students struggled a lot with written English. This includes issues of lexis: poor spellings, e.g. secretariat misspelt as 'secutariat', missing as 'mission', breeds as 'breads', thieves as 'thiefs', shoulders as 'sholders', separated as 'seporated' in PLAN306 Planning Law and Administration. Others, were syntax issues: e.g. 'There is no checks on the planning law at most African countries', 'land disputed has bieng another major problem of housing', still in PLAN306 (Level 300 students). Problems of syntax tended to occur more in PLAN407 Urban Systems, taken from final semester examination scripts:

> 'Elubo in the Western Region its district do not communicate to the residence in planning informations and data to the development of the communitie but seat-at-loff in the district assemblies working.'
>
> 'When it time to vote in the community, then the member of parliaments give money to vote for them without developing the community.'
>
> 'Encouragement of slums also increase urban growth if it is not upgraded or replaned.'
>
> 'Lack of amendment of roads causing holes in the road', etc.

In terms of performance in the end-of-semester examinations, most students achieved 30 per cent or more, out of 60 marks, especially in PLAN103 Geography of Ghana, PLAN306 Planning Law and Administration, PLAN312 Spatial Planning II (Urban Design) and REES311 Urban and Regional Development and Management I, which equally reflected in the total marks for these courses. On the other hand, final semester examination performance was rather poor in PLAN324 Urban Economics, with most of the students achieving between 18 and 26 per cent out of 60 marks, partly so in PLAN401 Ethics in Planning and Professional Practice, PLAN403 Project Work and Dissertation I and PLAN407 Urban Systems. In terms of overall/total marks, however, the students improved in PLAN401, PLAN403 and PLAN407.

Reflective Observation on Student Learning and Training Assessment Modes

All the modes of student learning and assessment narrated previously were covered under reflective observation. Reflective observation on attendance was seen in terms of student presence, absence, lateness and marks achieved and was based on the patterns of performance in 3 semester 1 courses, which reflected the general trends of attendance in the 2 semesters. The higher rates of presence between 83 per cent and 92 per cent was due to the appreciable enthusiasm of the students and as reflected in the lowest rates of presence between 61 per cent and 67 per cent. Lateness rates were low of between 7.7 per cent and 8.3 per cent, with REES311 registering no lateness, as well as rates of absence between 7.7 per cent and 16.7 per cent. The highest rates of absence between 33.3 per cent and 38.3 per cent were around 50 per cent of the least presence rates and below 50 per cent of the maximum presence rates. Absence rates were due to the travel challenges of the students, most of who were resident off campus. Such enthusiasm also related to the emphasis on Small Group Teaching Methods (SGTMs)

used in course delivery than Large Group Teaching Methods (LGTMs). SGTMs increased student tutor familiarity with students, so absence and lateness were easily noticeable. Students tended to avoid being noticeable for the unfavourable metrics. These rates of attendance performance were equally reflected in the actual scores between 3 per cent and 5 per cent.

Quizzes tended to require less of one-word answers in PLAN306, unlike PLAN103, almost resembling sub-questions in mid-semester or final semester examinations. Second, the more one-word, phrased or very short sentence answers required, the more quizzes could be set, covering a maximum of 1 hour duration, with scores of half point (0.5 per cent) per answer. Since quizzes were held after a few weeks of starting the course, one-word to phrase-based or short-sentence answers would promote effective revision for assessment.

Delays in assignment submission may have been caused by the lack of collaborative projects, all assessments being individually based work. But submission of the former types of assignment could be as delayed as the latter. It was not our practice to explain the assignment project or question to the students because the understanding required was seen as part of the answer. However, it may be necessary to provide such explanation when the assignment is issued, a typical case being PLAN324 Urban Economics, a joint class of Level 200 and Level 300 students. On the other hand, explanation of the required answers was done in the post-assignment submission period. Because final semester examination questions were required to be more broken down, the teacher aimed to train and test students in essay type of question in the assignments. Skills developed in this form of assessment are important in the production of reports, generally, long essays and dissertations, in particular and other presentations following graduation. The noted practices could have improved marks achieved, especially in PLAN324. The high scores in the case of PLAN403 was because students worked on the assignment in class, under the guidance of the lecturer. Similar high scores were achieved in REES311, perhaps due to the fact that the particular project question was more broken down than previously. Some students had the tendency or habit of restating the assignment question and answering their own version of it, according to their preference. Perhaps, this was caused by the practice of issuing only one assignment, without choice of project topic and allowing flexibility, apart from the possible lack of understanding of the question.

The idea of training and testing students in essay type of questions and development of writing skills was also carried into the mid-semester examinations, causing similar challenges as with the assignment mode of assessment practised. The form of questions in the mid-semester examination was also aimed at developing essay-type of writing skills, which the students seriously lacked. Generally, some 95 per cent of all students performed well in the mid-semester, apart from a few individual cases: PLAN401 and REES311 (Semester 1), PLAN103 and PLAN324 (Semester 2), registering a better experience than in the assessment through assignments. Same lesson was learned about breaking down questions into sub-parts. Overall, however, all students tended to be challenged in written English and clarity of expression.

Challenge with written English was quite glaring in end-of-semester examinations, in terms of both lexis and syntax. These were partly reflected in the oral/verbal communication of most of the students. It appeared that the problem stemmed from their secondary/high school backgrounds, where the teaching of English was probably less effective. However, the practice of breaking down questions into sub-parts was more helpful to students and was visible in their build-up of marks per question. Students were also more careful in understanding examination questions and their tendency to misinterpreting or restating questions was drastically limited. However, students tended to leave some questions unanswered due to lack of understanding of

those parts and/or inability to answer these. The SGTMs used aimed to help students answer questions from their own understanding, in their own style and self-expressed language, rather than recalling exact course notes. A number of students were able to do so, others were still challenged with self-expression and effective communication in written English.

Abstract Conceptualisation on Student Learning and Training Assessment Modes

In view of the rate of student absences from classes and to further encourage overall attendance, it was considered useful to diversify the continuous assessment components. This would include extra marks, including active participation in class. It would also make the student more sensitively aware of the marks they lose when absent from class. Such an idea and practice would also further reduce or eliminate lateness to class. There is need to reorganize quizzes into questions and include more one-word and other short answers, with more alternatives provided. Increasing variety of quizzes would also support more the idea of extending these to 10 quizzes, marked at 0.5 per cent per answer, totaling 5 marks. As much as possible, there is need to offer any helpful number of alternative assignment questions or project topics, which may check the tendency of students wanting to restate/reframe or reinterpret the given assignment in their own way. Second, while there is need to reflect the broken-down pattern of final semester examination questions, in assignments, there is also need to balance this with more uniform essay-type of questions aimed at developing the report and research output writing skills in the students. Therefore, the mid-semester and end-of-semester examinations should continue to share in the broken down examination question pattern, as much as possible, i.e. the more broken down the questions, the better for the students.

The issue of written and spoken English skills is beyond the individual lecturer because the University provides a University-wide Proficiency in English course for all first year students aimed at addressing the noted challenge. However, this may be helped by making course PDF and other support materials for students more facilitated, flexible and open, using simple but appropriate English., that these may create demonstration effects for them. However, in all the strategies and methods of student learning and training assessment, it would be helpful to the lecturer to encourage student feedback on the appraisal of the methods by which their learning and training is assessed.

Active Experimentation in Student Learning and Training Assessment Strategies

While focusing on the modes of student learning and training assessment, therefore, it is the view in this study that the student should have an opportunity to appraise the standard assessment methods and practices. In this regard, one experiment would be to prepare a brief informal or internal assessment form for the student to register their view of the continuous and final semester assessment practices. Issues of appraisal would include: student preference of assessment modes and reasons in a ranked order; their view of the assessment modal details and reasons; and suggestions for improvement of the various modes of assessment. This would be practised on semester-by-semester basis. Such innovation would also be helpful to the lecturer in their own performance appraisal and review conducted by the University annually. Second, to improve the quality of PDF material to students by making these simpler, facilitated and open in all course units/courses to help students with their communication skills. Third, to provide more multiple answers, including one-word and phrased answers in quiz assessments. Fourth, to provide alternative assignment projects and improve choice for students than issue a single work only. Fifth, to put in more sub-questions as necessary in mid-semester and final semester examinations per question, i.e. more broken-down questions.

Various student learning limitations and assessment indicated the need to structure in other criteria into the continuous and final assessment components. It is suggested that such additional criteria should include or be focused on: (a) observed active student participation in class; (b) observed student conduct and behaviour; (c) collaborative and student-lecturer relationships; (d) oral and written communications effectiveness; and (e) analytical ability. These could be assessed overall or as constituted in particular modes of assessment (Table 3). However, these would attract extra or new marks. Therefore, it is suggested that 5 marks are taken out of the mid-semester examinations marks of 20 per cent, reducing the regular marks allocation to 15 per cent. The 5 marks would constitute a 'new' mode of assessment within the continuous assessment component. It is suggested that the 5 criteria constituted should fall under a title such as 'Quality Appraisal of Student Learning', etc.

Table 3 Quality appraisal of student learning and training assessment in planning and real estate courses

Quality Appraisal of Student Learning and Training	*Application of Quality Appraisal Criteria to Particular Modes of Assessment*	*Proposed Mark Allocation*
Observed active student participation in class	Part of attendance, quizzes and assignments	1
Observed student conduct and behaviour	Part of attendance	1
Collaborative and student-lecturer relationships	Part of quizzes, assignments, mid-semester and final semester examinations	1
Oral and written communications effectiveness	All courses, generally	1
Analytical ability	All courses, generally	1
Total	-	5

Source: Author's tabulation.

Conclusions

Experiential learning epistemology has increasingly become a popular pedagogical methodology and practice, including student learning and training assessment. In the present study, it was applied to an appraisal and analysis of student learning and training assessment methods, focused on experiences in Planning and Real Estate education at Central University, Ghana.

Concrete experience was used to narrate and expose what was done or happened in attendance, quizzes, assignments, mid-semester and final semester examinations. Attendance indicated a high level of presence but with an appreciable level of absence and to a minimal extent, lateness. For quizzes, alternative or multiple answers tended to be more than one-word or phrased answers. Similarly, concrete experience exposed the rigidity of assignment issuance in limiting this to one take-home topic/work, with no alternatives provided to allow students some choice, making assignments more flexible. Mid-semester and final semester examinations shared a common characteristic of questions not being broken down enough to provide more sub-questions. Overall, however, concrete experience also consistently exposed the challenge of students with English, especially the written form.

Reflective observation indicated the appreciable enthusiasm of students that accounted for the high levels of presence and as indicated by their scores. Absence and lateness were explained by the challenged travel experiences of students who were mostly not resident on campus and had to depend on the uncertain private buses, completing their daily journey by walking from the main route to the University. Limitations of quizzes, assignments, mid-semester and end-of-semester examinations were reflected in the lecturer's own practices, which included less flexibility in the setting, framing and structuring of questions, generally. Delays in assignment submission was a bad attitude and habit on the part of students that needed to be addressed. It was also apparent that students tended to be more descriptive and far less analytical and discursive, where necessary, in their answers, a limitation that stemmed from their background education, especially in the pre-University period.

In the face of all the noted challenges of the modes of assessment, abstract conceptualisation brought up the idea of diversification of the continuous assessment component in a way that would address some of the attitudes, conduct and behaviour of students. It also suggested the usefulness of student involvement in the semester-based review or appraisal of the effectiveness of the mode of assessment. Third, abstract conceptualisation indicated the potential of more flexibility, facilitated, open and simplified course PDFs, contributing to improvement in written English of students. Fourth, it emphasised the importance of enhancing the University-wide practice of breaking down questions as much as possible. But it asserted the need to balance this with training in report writing and essay type of projects, including the assessment of these.

Consequently, a number of active experiments were designed to be implemented. First, to design and introduce a simple 'informal' form for students' appraisal of and feedback on the effectiveness of the modes of assessment of their learning and training. Second, to make course PDFs and other supporting materials more flexible and simpler to aid improvement in the oral and written English skills of students. Third, to improve the quality of quizzes by requiring more multiple and one-word or short phrased answers. Fourthly, to provide similar flexibility in assignments by building in alternative projects and increasing choice for students. Fifth, to break down mid-semester and final semester examination questions and include more sub-questions, with related mark allocations. Sixth, to create a new mode of assessment, with a score of 5 marks taken out of the 20 marks for mid-semester examinations and allocate these to 5 criteria at one mark each, subject to approval by SADe and Departmental Board of Studies. The criteria are: student active participation in class; student conduct and behaviour; collaborative and student-lecturer relationships; oral and written communications effectiveness; and analytical ability. Results of the study indicated that the experiential learning epistemological and methodological approach is useful and effective in appraising student learning and assessment modes.

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