



Original Research

A Curricular Framework for Discipline-Specific Acquisition, Teaching, and Assessment of Values in Higher Education

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Received: 07/24/2023; **Accepted:** 02/13/2024; **Published:** 08/02/2024

Abstract: This study aimed to determine the extent to which values are assessed to create and propose a framework intended for stakeholders to develop and apply outcomes for the acquisition, teaching, and assessment of values. The research on assessing values frequently emphasizes general issues and pays little attention to the unique discipline circumstances that influence the creation and implementation in practice. Though that the assessments and analyses that concentrated on values necessary to fulfill the demands of the modern workplace are sparse. This is the gap in the literature that this study intends to contribute. Bloom's taxonomy was used as a theoretical framework to determine how values assessment might provide solutions to this problem. The question posed was "How can Bloom's taxonomy's values domain be used to build a framework for assessing the values at the study university?" A quantitative approach was used to examine the relationships among variables by collecting and analyzing numeric data expressed in numbers or scores using the self-developed Trilogy Assessment Affective Domain Inventory on the extent to which values were assessed in higher education. This instrument was completed by 268 lecturers from various disciplines at the South African University of Technology in the Gauteng province. Data were analyzed using SPSS version 28.0 descriptive statistics. The reliability was tested using Cronbach's alpha as a high value for internal consistency. The results revealed that seventy-four percent of the lecturers were not assessing the values domain. These results highlight the need for a framework to help solve the problem. The utilization of the proposed framework may assist stakeholders in improving learning outcomes design, acquisition, teaching, and assessment of values.

Keywords: Assessment, Bloom's Trilogy, Discipline-Specific, Teaching, Values

Introduction

The research on assessing values frequently emphasizes general issues and pays little attention to the unique discipline circumstances that influence the creation and implementation in practice (Quinlan and Pitt 2021). There is an ongoing debate about how values are taught and assessed by the stakeholders who prepare present and future professionals to succeed in today's workplaces (Frisque, Lin, and Kolb 2004). Furthermore, a comparative lack of assessments and analyses focusing on values that fit the expectations of today's workplace is revealed by Ridgway, McCusker, and Pead (2004). However, De La Harpe, David, Dalton, and Thomas (2009) noted that while there appears to be consensus that organizations should address the issue of values,

there is uncertainty about how to address this. The assessments and analyses that concentrate on values necessary to fulfill the demands of the modern workplace are sparse (Quinlan and Pitt 2021). This is the gap this study intends to contribute to with the focus on the data provided by the participants as well as the literature. Values domain assessment has “gained momentum as a topic of discussion in the literature and therefore provides a test bed of measurement in and of itself” (Bitok 2020, 27). This implies that universities should try to define and conceptualize the set of values accurately, which should be incorporated into the learning outcomes that learners should be able to achieve by the end of their studies (Ananiadou and Claro 2009). In this regard, Birbeck and Andre (2009, 40) argued that learners must “be asked to engage in the development and understanding of their motivations, attitudes, appreciation, enthusiasms, emotions, interests, and feelings as professional citizens.” These behaviors should be assessed to meet the requirements of the industry (Bitok 2020; Popham 1999).

According to Popham (1999), values assessments in higher education are usually poor, implicit, and unsystematic. The assumption that values assessment is unsystematic, implicit, and inadequate was deemed problematic by the researchers and thus served as the context for the research problem. Therefore, the results from the instrument that was used in this study, the researchers contend that lecturers at the study university are unable to assess values systematically and unambiguously. This concept has helped to enhance the justification for this study, which aims to make values evident in learning, teaching, and, most importantly, assessment processes. Research on assessing values frequently emphasizes general issues and pays little attention to the unique discipline circumstances that influence the creation and implementation of values (Quinlan and Pitt 2021). This was demonstrated in a study conducted in New Zealand, Canada, and Poland, which revealed that value assessments were not organized and that other countries claimed to have integrated them into learning and teaching programs, but when asked to identify them, none could provide details (Ananiadou and Claro 2009).

Lasakova, Bajzikova, and Dedze (2017) argue that higher education institutions should consider revising the curriculum model by focusing on developing the appropriate values to comply with innovation—for example, complementary training so that graduates could be assisted in reducing the gap between academic education and industry requirements (Büth et al. 2017). Therefore, learning theories should be utilized to shape the design of assessment processes (Baird et al. 2017). In today’s fast-paced and ever-changing work environment, employers look for graduates with the necessary knowledge, skills, and work-related values (De La Harpe et al. 2009). However, “assessment of values does not measure the content that learners know or the skills they can perform, but their dispositions or values” (Hall 2011, 7-8). “Learning and teaching outcomes in the affective domain should be considered and explored” (Birbeck and Andre 2009, 41). “Working with, and in, the values domain must not be ignored simply because it presents difficulties and is more contentious than the knowledge domain” (Birbeck and Andre 2009, 42).

This study aimed to determine the extent to which values were assessed to create and propose a framework intended for stakeholders to develop and apply outcomes for the acquisition, teaching, and assessment of values. In doing this, the self-developed Trilogy Assessment Affective Domain Inventory (TAADI) was used to establish the extent to which values were assessed. The inventory was developed due to the lack of a framework in the field that addresses the assessment of values. This was accomplished because effective stakeholder involvement in the assessment of the learners is essential for producing timely, useful results that demonstrate the impact of continuous improvement (Thompson-Dyck and Schalewski 2023). The stakeholders that this study intends to assist comprised of learners, lecturers, parents/guardians, employers/industry, public sectors, professional societies, associations, councils, curriculum developers, representatives from local communities, and organizations such as the local chamber of commerce where applicable, to utilize the proposed framework. Furthermore, the stakeholders would be able to plan, organize, implement, and accomplish the acquisition, teaching, and assessment of discipline-specific values in higher education.

Literature Study

Assessment of Values

Assessment of values is an important component of measuring a learner's aptitude to meet the demands of the modern workplace (Clarence, Quinn, and Vorster 2015). Assessment could be defined as the systematic collection, review, and use of information about educational programs and services for quality improvement, planning, and decision. Furthermore, it could be described as the "process used to identify, gather, and interpret information and evidence against the required values to make a judgment about a learner's learned values" (SAQA 2022, 17). The involvement of not only the lecturers but all stakeholders in the design of the assessment would significantly improve the assessment of values (Thomas and Ambrosini 2021).

Discipline-Specific Values

Discipline-specific values are important, as different fields have their unique values and challenges (Thomas and Ambrosini 2021). Discipline-specific values refer to the values that guide decision-making and behavior in an academic discipline or profession and subsequently the work environment (Kitto and Knight 2019). Values are essential and enduring beliefs or ideals shared by stakeholders or members of society about what is desirable or undesirable (Popham 1999). Learners need to engage in discipline-specific values to ensure that they can navigate complex ethical situations and make informed decisions (Kitto and Knight 2019). The researchers argue that lecturers in higher education must identify, gather, and interpret information and evidence when assessing discipline-specific values. However, the values

domain in Bloom's trilogy is the least applied and understood (Sideeg 2016). Simply because the values domain offers challenges and is more disputed than the intellect or performance domains, does not mean that it should be disregarded (Birbeck and Andre 2009). Therefore, if the goal of teaching were to encourage the learning and assessment of values rather than imparting knowledge, then the learning outcomes should be organized to advance through the levels of the values domain (Micklich 2012). It is for these reasons that this study developed a framework to support various disciplines to acquire, teach, and assess the values.

Values and Professional Practice

Values and professional practice refer to the ability to recognize, deal with, manage, account for, and put into practice the prescribed organizational and professional values and practices, including, where necessary, monitoring and assessing the results of decisions taken (Keevy 2012). Regarding the South African level descriptors (Keevy 2012), upon completion of NQF level 5, learners should be able to adhere, seek guidance, and account for their actions related to discipline-specific organizational, professional, and practice values. Subsequently, at NQF level 6, learners should be able to answer and apply complex discipline-specific values for professional decisions and actions. At NQF level 7, learners should be able to identify, assess, and defend decisions that are founded on discipline-specific principles. Furthermore, for NQF level 8, learners should be able to identify and report on discipline-specific values and contrast them to various other value systems. In terms of NQF level 9, learners should be able to autonomously contribute to the development of complex discipline-specific values standards. Concerning NQF level 10, learners should be able to identify, report, manage, monitor, and evaluate emerging discipline-specific values.

Industry Values Requirements

The literature revealed that a large majority of employers do not feel that recent graduates are well-prepared for the current world of work (Dishman 2016). This is because graduates entering the world of work fail to display the values required by the industry and comply with industry values (Patra et al. 2020). It may be argued that the graduates are in most cases well equipped with knowledge and skills in the specific discipline. However, the industry also expects the graduates to demonstrate values relating to assessing their own and other people's learning resources; reflect on their learning; manage information, work collaboratively in teams, develop personal and social values, adjust emotional values, resolve conflicts, build a constant value system and recognize the responsibility of individuals for improving human relations, be aware, conscious, cognizance, responsive and mindful (Patterson, Crooks and Lunyk-Child 2002; Charokar and Dulloo 2022). The researcher asserted that these values assist employees to be associated with the organization and build a strong commitment to its aims. Additionally, these values provide a common language for aligning the organization's leadership and employees (Ghosh 2008). There is,

therefore, a need to ensure that values become an integral part of the assessment and the need for some means of evaluating as well as comparing to sift through the complexities to offer some level of assurance to employers (Ananiadou and Claro 2009). It may be argued in this study that the values identified by industry should be included in the acquisition, learning, and teaching processes in higher education to ensure a successful assessment. The proposed framework aims to support stakeholders to incorporate industry values in learning, teaching, and assessment.

Theoretical Framework

Several taxonomies exist, including the problem-based learning (PBL) taxonomy, the pedagogical content knowledge (PCK) taxonomy, the structure of observed learning outcomes (SOLO), the taxonomy of educational objectives, and so on (Barrows and Tamblyn 1980; Veal and MaKinster 1999; Biggs and Collis 1982; Bloom 1956). Researchers in this study discovered that the PBL taxonomy lacks explicit information on issues connected to the values of learning. As a result, it was ruled unsuitable for this investigation. The PCK taxonomy proved insufficient as a theoretical framework for this study because it only considers one component of the Bloom's trilogy. The SOLO taxonomy was also not examined because it was shown to be an alternative to Bloom's "cognitive domain."

Bloom's taxonomy of educational objectives was the relevant taxonomy and a theoretical framework adopted for this study to determine how values assessment might provide solutions to the problem. In 1956, Benjamin Bloom, along with a group of like-minded educators, developed a framework for classifying educational goals and objectives into a hierarchical structure representing different forms and levels of learning (Sideeg 2016). "This framework was published as Bloom's Taxonomy of Educational Objectives and consisted of three domains: The cognitive domain (knowledge domain), the psychomotor domain (skills domain), and the affective domain (values domain)" (IACBE 2014, 2). Krathwohl (2002) stated that Bloom's taxonomy is the panorama of the range of educational possibilities against which the constrained breadth and depth of any educational program or curriculum could be measured and provides support for the opinions of the lecturers. However, this study only focused on the values domain, which is "central to every part of the teaching, learning, and assessment process" (Bitok 2020, 27).

Values Domain (Affective)

Literature indicated that if the teaching purpose were to change values rather than to transmit information, the learning outcomes would be structured to progress through the levels of the values domain (Micklich 2012). The focus of effective learning is on how students feel during the learning process and how they internalize the lessons so that they can influence their future attitudes, beliefs, and actions (Olatunji 2013). It was found in the study conducted in the USA by Schaber et al. (2010) that the value domain was applied in the blended

environment. It may be argued in this study that teaching in the digital age should not ignore the application of affective or value domain as it supports the learner's autonomy and self-resilience in online environments.

Values are gradually formed as a person or group goes through a process in phases relating to interaction with the environment, reflective thinking about the meaning of the interaction, formulating values or beliefs based on the reflective thought, and applying the formulated values to new situations based on reflective thinking (Olatunji 2013). There are five major categories typically listed in order of difficulty (Allen and Friedman 2010), which include receiving, responding, valuing, organization, and characterization (Allen and Friedman 2010). The classifications of these categories might be seen as varying degrees of difficulty (Bloom 1956). Typically, the first category must be mastered before the next one may follow (Chweu, Mji, and Simelane-Mnisi 2019). In this study, each category provides some guidelines on how they could be used in varying discipline settings.

Receiving/Attention

Receiving/attention refers to the learners' willingness to attend to values in the environment (Sideeg 2016). The learning outcomes in the receiving/attention category are the basic knowledge that something exists to the learner's ability to focus their attention selectively (Allen and Friedman 2010). The receiving/attention category is associated with action verbs such as ask, choose, describe, follow, give, hold, identify, locate, name, point to, select, sit, erect, and reply (Allen and Friedman 2010). These categories must be embedded within the learning process to achieve the learning outcomes and not be attended to during the assessment.

It may be argued that in the receiving stage, the learner encounters new concepts during the "receiving" process and tries to comprehend them. In this regard, learners need to have a desire and intrinsic motivation to learn. For learners to acquire a sense of awareness, consciousness, cognizance, responsiveness, mindfulness, and familiarity with industry values, there is a need for them to learn and be asked questions about values from both the material and the process of understanding industry behavioral norms (Quesenberry et al. 2012). This would assist learners to develop their intellectual, humankind, and cultural values within the learning environment. For instance, in any discipline, such as economics, finance engineering, humanities, information communication technology, management sciences, science, arts, etc. learners should have self-motivation, have an interest in the material, and be open to learning new ideas and methods to try to understand them.

Responding/Response

Responding/response is the active participation on the part of the learner (Allen and Friedman 2010). At this level, the learner not only attends to a phenomenon but also reacts to it in some way, demonstrating new behavior because of experience (Allen and Friedman 2010).

The learning outcomes in the responding/response category may emphasize acquiescence in responding or satisfaction in responding (Allen and Friedman 2010). Naturally, this category is identifiable through action verbs such as answer, assist, aid, comply, conform, discuss, greet, help, label, perform, practice, present, read, recite, report, select, tell, and write (Sideeg 2016).

In this case, the researchers argue that responding encompasses both voluntary compliance and feeling good about fulfilling obligations. This implies that learners in any discipline might, for instance, follow the rules and guidelines of the class, do as instructed by the lecturer, and participate in class activities as needed. These are the values the industry requires and should be applied by the graduate to be employable. It is the responsibility of the accountants in the industry, for example, to value and act in the public interest, known “as the net benefits, derived for, and procedural rigor employed on behalf of all society about any action, decision, or policy” (West 2017, 27). Therefore, graduates should learn to adhere to policies as determined by the university. This will assist them in transferring the values learned to the industry. Furthermore, learners should be encouraged to build a constant value system and recognize the responsibility of individuals for compliance and improving human relations. Therefore, learners would have a better understanding of the various subcultures that comprise many cultures found in the workplace (Quesenberry et al. 2012).

Valuing/Value

Valuing is based on the internalization of a set of specified values (Sideeg 2016). The learning outcomes are concerned with behavior that is consistent and stable to make the value identifiable. (Allen and Friedman 2010). Teaching objectives that are commonly classified under attitudes and appreciation would fall into the valuing/value category (Chweu 2024). Typically, this category is reflected through action verbs such as complete, demonstrate, differentiate, explain, follow, form, initiate, invite, join, justify, propose, read, report, select, share, study, and work (Sideeg 2016). These categories should be applied when developing the learning outcomes. These will ensure that learners acquire values relating to objectivity, ethics, and honesty that will allow them to read, justify, and report on behavioral activities.

In this case, learners would be able to develop distinct values and respond more intelligently to how they emerge in their own lives (Quesenberry et al. 2012). The researchers contend that learners are engaged in values when they willingly display actions that align with their beliefs. For example, in any discipline, the learner would show kindness to others, arrive at school on time, complete assignments, and turn them in by the deadline (Olatunji 2013). This author stated that learners exhibit valuing when they regularly set aside time efficiently to fulfill their academic commitments and when they, for instance, spend time practicing the safe handling of tools and materials in a laboratory science module.

Organization

The organization is concerned with bringing together different values, resolving conflicts between them, and beginning the building of an internally consistent value system (Allen and Friedman 2010). Thus, the emphasis is on comparing, relating, synthesizing, and integrating a new value into one's general set of values, giving it some ranking among one's general priorities (Allen and Friedman 2010). The organization encompasses action verbs such as adhere, alter, arrange, combine, compare, complete, defend, explain, formulate, generalize, identify, integrate, modify, order, organize, prepare, and relate (Sideeg 2016). This means that the learning outcomes should be concerned with the conceptualization of a value that recognizes the responsibility of everyone for improving human relations or with the organization of a value system.

In this instance, the learner develops a vocational plan that satisfies his or her need for both economic security and social service. In any discipline, learners should be able to compare, contrast, and organize their values with those held by others. Learners are encouraged to gain a deeper grasp of the values associated with the workplace (Patra et al. 2020). With this understanding, learners would comply with industry values, be more accepting of diversity, and respond more rationally to values in their own lives.

Characterization/Generalization

According to Allen and Friedman (2010), at the characterization/generalization level, an individual has a value system that controls their behavior for a sufficiently long time to develop a characteristic lifestyle. Thus, the behavior is pervasive, consistent, and predictable, acting consistently with the new value. The learning outcomes at this level cover a broad range of activities, though the major emphasis is on the fact that the behavior is typical or characteristic of the learner. Teaching learning outcomes that are concerned with the learner's general patterns of adjustment would be appropriate characterization/generalization categories. Characteristically, this category is associated with action verbs such as act, discriminate, display, influence, listen, modify, perform, practice, propose, qualify, question, revise, serve, solve, and verify (Allen and Friedman 2010).

Learners would be encouraged to make reasoned choices as they shape and reshape their own academic and personal values. The tasks provided should allow the learners to revise existing industry values, solve discrepancies, build a constant value system, and recognize the responsibility of individuals for improving human relations (Quesenberry et al. 2012). In this regard, learners would be able to propose contextualized value systems for future employers.

Research Question

How can Bloom's taxonomy's values domain be used to build a framework for assessing the values at the study university?

Methodology

Assessment

In this study, a quantitative (QUAN) approach was applied to develop a framework for the discipline-specific assessment of values. The QUAN data is a numerical form derived from survey questionnaires, and this is linked to natural science or a positivist perspective (Parylo 2012). The QUAN approach examined the relationships among variables by collecting and analyzing numeric data expressed in numbers or scores using standardized measurement instruments (Parylo 2012). The quantitative data was analyzed by using SPSS version 28.0, which interpreted the data through descriptive analysis and Cronbach's alpha test as a high value for internal consistency.

Participants

The participants in this study university were 268 lecturers. Table 1 demonstrates the biographical data of lecturers in a cross-tabulation format according to faculty and gender.

<i>Faculty</i>	<i>Female</i>	<i>Male</i>	<i>Total</i>
	[N (%)]		
Economics and Finance	16 (6.0)	21 (7.8)	37 (13.8)
Engineering and the Built Environment	13 (4.9)	29 (10.8)	42 (15.7)
Humanities	23 (8.6)	25 (9.3)	48 (17.9)
Information Communication Technology	11 (4.1)	16 (6.0)	27 (10.1)
Management Sciences	21 (7.8)	19 (7.1)	40 (14.9)
Science	36 (13.4)	17 (6.3)	53 (19.8)
The Arts and Design	16 (6.0)	5 (1.9)	21 (7.8)
Total	136 (50.8)	132 (49.2)	268 (100)

The results showed that more than half, 136 (50.7%) of the participants were females and 132 (49.3%) were males. More than a quarter, 36 (13.4%), were females from the Faculty of Science. From the Faculty of Engineering and the Built Environment, the results revealed that 29 (10.8%) were males. Twenty-five (9.3%) of the participants were males from the Faculty of Humanities.

Instrument and Procedure

The self-developed TAADI was used to gather quantitative data on the extent to which values were assessed. The TAADI was adapted from Bloom's Taxonomy of Educational Objectives (Sideeg 2016). In this case, the TAADI consisted of five subscales with thirty-eight items

relating to the affective domain's characterization [nine items], organization [twelve items], valuing [five items], responding [five items], and receiving [seven items]. The scales used were indicated as follows: 1 = Extremely Explicit; 2 = Very Explicit; 3 = Explicit; 4 = Somewhat Explicit, and 5 = Not at all Explicit.

Validity

Validity refers to the strength of our conclusions, inferences, or propositions, providing “the best available approximation to the truth or falsity of a given inference, proposition, or conclusion” (Creswell and Miller 2000). The validity of the TAADI was also determined utilizing content validity. To achieve this, exploratory factor analysis was determined. It was discovered that the Kaiser-Meyer-Olkin and Bartlett's test was .947, and that this value was statistically significant ($p < 0.05$). According to the literature, KMO values between 0.7 and 1 indicate that the sampling is adequate, so the researcher can proceed and compute the exploratory factor analysis (Kaiser 1974).

In determining the factor structure from the data, a varimax rotation was specified. Content validity was established as the literature reports that the TAADI affect consists of five factors (Sideeg 2016). These factors relate to (a) Characterization [ADC]; (b) Organization [ADO]; (c) Valuing [ADV]; (d) Responding [ADRES]; and (e) Receiving [ADREC]. Using a varimax rotation, the researchers started by running an analysis default eigenvalue greater than one and a factor loading value of 0.35 criterion.

The rotated matrix produced a five-factor solution that explained 76.1 percent of the total variance. Here, factors ADV25 (make the value consistent, stable, and identifiable), ADRES28 (how the learner attends to a particular phenomenon), ADRES27 (active participation on the part of the learner), ADRES29 (how the learner reacts to it in some way), ADREC34 (willingness to address phenomena of stimuli), ADO20 (developing a job-related plan that satisfies social service need), ADO19 (developing a job-related plan that satisfies economic security need), ADC7 (emotional patterns of adjustment), ADC9 (building behavior that is characteristic of the learner), ADV26 (attitudes and appreciation), ADRES30 (compliance in responding) and ADRES31 (compliance in reading assigned material) cross-loaded. After that, we ran a five-factor solution with a cut-off point of 0.35.

The results revealed that ADRES27, ADRES28, ADRES29 and ADO19 cross-loaded in this criterion. We then ran a five-factor solution with a cut-off point of 0.5. In this case, the five-factor solution resulted in an improved eigenvalue of 76.2 percent total variance. Similarly, the scree plot in Figure 1 revealed the presence of a five-factor solution.

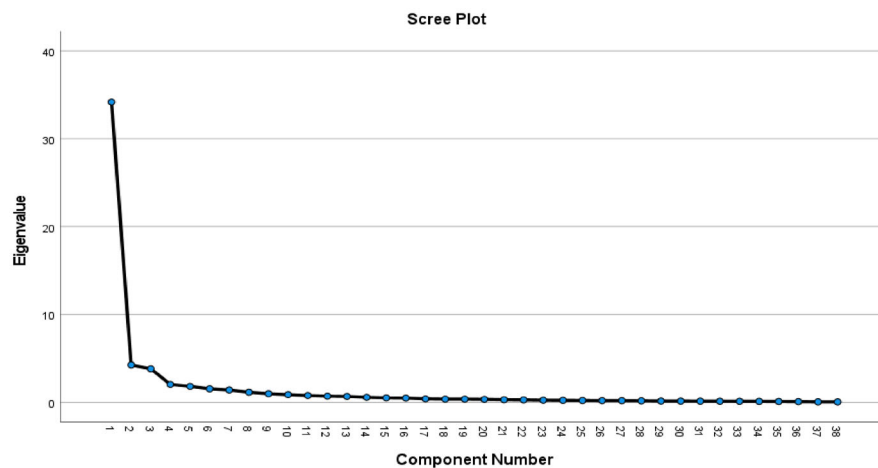


Figure 1: Scree Plot Depicting the Number of Rotated Factors TAADI

Reliability

Reliability is the degree of consistency with which instances are assigned to the same category by different observers or the same observer on different occasions (McMillan and Schumacher 2010). This implies that the instrument consistently measures the same thing. In this study, the reliability of the TAADI was determined by computing Cronbach's alpha (Cronbach 1951). The alpha value for the TAADI was found to be ADO and ADREC = 0.96, ADV = 0.94, ADRES = 0.93, and ADC = 0.89. which suggests that the scores from this inventory were internally consistent (reliable). This was deemed reliable because researchers, such as Tavakol and Dennick (2011), point out that a score of alpha above 0.90 is the best score.

Results

This study aimed to determine the extent to which values were assessed to create and propose a framework intended for stakeholders to develop and apply outcomes that are relevant to the acquisition, teaching, and assessment of values. Descriptive statistics utilizing the frequency distribution and percentage were also used to analyze these data. Due to the study's application of TAADI, the stakeholders would be fully informed about all factors that need to be considered for a thorough assessment of values. Table 2 demonstrates the results for the five sub-constructs of the values domain with thirty-eight items.

The first sub-construct, Values Domain Characterization (VDC) contained nine items. The results showed that below three-quarters of the lecturers (73.1%), were somewhat to not at all assessing VDC3 (predictable values that develop a characteristic). It was also found that below three-quarters of the lecturers (70.5%) were somewhat to not at all assessing VDC4 (general pattern of adjustment), VDC5 (personal patterns of adjustment), and VDC6 (social

patterns of adjustment). This suggested that over half (65.5%) of the lecturers did not at all assess the character value of higher-order levels that required the learners to control their behavior for a sufficiently long time for their development in lifestyle.

The second sub-construct, Values Domain Organization (VDO) consisted of twelve items. The results revealed that below three-quarters of the lecturers (74.3%) did somewhat to not at all assess VDO10 (bringing together different values). It was also found that below three-quarters of the lecturers (73.5%) also did somewhat to not at all assess for VDO18 (organizing value system). This was followed by (72.0%) of the lecturers who did somewhat to not at all assess VDO17 (responsibility of the learners to improve human relations), 70.9 percent of the lecturers VDO12 (building of an internally consistent value system), and VDO13 (comparing values).

Table 2: Assessment Inventory of Values Domain

No.	Codes	<i>Extremely Explicit</i>	<i>Very Explicit</i>	<i>Explicit</i>	<i>Somewhat Explicit</i>	<i>Not at All Explicit</i>
<i>Values Domain's Characterization (VDC)</i>						
1.	VDC1	15(5.6)	28(10.4)	61(22.8)	63(23.5)	101(37.7)
2.	VDC2	20(7.5)	41(15.3)	118(44.0)	34(12.7)	55(20.5)
3.	VDC3	11(4.1)	19(7.1)	42(15.7)	63(23.5)	133(49.6)
4.	VDC4	12(4.5)	21(7.8)	46(17.2)	60(22.4)	129(48.1)
5.	VDC5	12(4.5)	20(7.5)	46(17.2)	61(22.8)	129(48.1)
6.	VDC6	16(6.0)	22(8.2)	41(15.3)	54(20.1)	135(50.4)
7.	VDC7	17(6.3)	27(10.1)	55(20.5)	59(22.0)	110(41.0)
8.	VDC8	23(8.6)	33(12.3)	70(26.1)	55(20.5)	87(32.5)
9.	VDC9	20(7.5)	29(10.8)	51(19.0)	57(21.3)	111(41.4)
<i>Values Domain's Organization (VDO)</i>						
10.	VDO10	22(8.2)	23(8.6)	24(9.0)	34(12.7)	165(61.6)
11.	VDO11	18(6.7)	28(10.4)	40(14.9)	39(14.6)	105(53.4)
12.	VDO12	18(6.7)	33(12.3)	27(10.1)	33(12.3)	157(58.6)
13.	VDO13	12(4.5)	29(10.8)	37(13.8)	43(16.0)	147(54.9)
14.	VDO14	15(5.6)	32(11.9)	33(12.3)	43(16.0)	145(54.1)
15.	VDO15	15(5.6)	22(8.2)	44(16.4)	46(17.2)	141(52.6)
16.	VDO16	18(6.7)	28(10.4)	38(14.2)	46(17.2)	138(51.5)
17.	VDO17	22(8.2)	26(9.7)	27(10.1)	44(16.4)	149(55.6)
18.	VDO18	22(8.2)	19(7.1)	30(11.2)	52(19.4)	145(54.1)
19.	VDO19	15(5.6)	35(13.1)	54(20.1)	67(25.0)	97(36.2)
20.	VDO20	15(5.6)	31(11.6)	60(22.4)	64(23.9)	98(36.6)
21.	VDO21	12(4.5)	34(12.7)	54(20.1)	72(26.9)	96(35.8)
<i>Values Domain's Valuing (VDV)</i>						
22.	VDV22	14(5.2)	28(10.4)	29(10.8)	31(11.6)	166(61.9)
23.	VDV23	14(5.2)	31(11.6)	25(9.3)	37(13.8)	161(60.1)
24.	VDV24	17(6.3)	30(11.2)	38(14.2)	43(16.0)	140(52.2)
25.	VDV25	21(7.8)	25(9.3)	42(15.7)	46(17.2)	134(50.0)
26.	VDV26	29(10.8)	31(11.6)	57(21.3)	50(18.7)	101(37.7)

<i>Values Domain's Responding (VDRES)</i>						
27.	VDRES27	24(9.0)	28(10.4)	50(18.7)	34(12.7)	132(49.3)
28.	VDRES28	21(7.8)	33(12.3)	45(16.8)	42(15.7)	127(47.4)
29.	VDRES29	18(6.7)	26(9.7)	48(17.9)	55(20.5)	121(45.1)
30.	VDRES30	16(6.0)	36(13.4)	71(26.5)	52(19.4)	93(34.7)
31.	VDRES31	19(7.1)	39(14.6)	74(27.6)	55(20.5)	81(30.2)
<i>Values Domain's Receiving (VDREC)</i>						
32.	VDREC32	20(7.5)	31(11.6)	68(25.4)	67(25.0)	82(30.6)
33.	VDREC33	17(6.3)	34(12.7)	68(25.4)	66(24.6)	83(31.0)
34.	VDREC34	15(5.6)	22(8.2)	32(11.9)	60(22.4)	139(51.9)
35.	VDREC35	23(8.6)	37(13.8)	65(24.3)	58(21.6)	85(31.7)
36.	VDREC36	20(7.5)	37(13.8)	64(23.9)	66(24.6)	81(30.2)
37.	VDREC37	15(5.6)	21(7.8)	22(8.2)	44(16.4)	166(61.9)
38.	VDREC38	15(5.6)	39(14.6)	63(23.5)	65(24.3)	86(32.1)

The results revealed that below three-quarters of the lecturers (70.1%) did somewhat to not at all assess VDO14 (relating to values). This suggested that below three-quarters of the lecturers did not at all assess the organization of values at a higher-order level where the learners are required to bring different values together, resolve conflicts, and build an internally consistent value system.

The third sub-construct, VDV (values domain valuing) contained five items. Table 4.15 revealed that below three-quarters of the lecturers (73.5%), did somewhat to not at all assess VDV22 (internalization of a set of specified values). The results in Table 2 showed that one in three of the lecturers (68.2%) did somewhat to not at all assess VDV24 (make the value consistent and identifiable). The results also showed that one in three of the lecturers (67.2%) did somewhat to not at all assess VDV25 (make the value consistent, stable, and identifiable). This means that one in three of the lecturers did not at all assess the valuing of values middle-order level that required learners to identify sets of specified values in specific disciplines showing some definite involvement or commitment.

The fourth sub-construct, VDRES (values domain responding) consisted of five items. The results exhibited that 65.6 percent did somewhat to not at all assess VDRES29 (how the learner reacts to it in some way). Table 2 also revealed that 63.1 percent did somewhat to not at all assess VDRES28 (how the learner attends to a particular phenomenon). The results also showed that 62.0 percent did somewhat to not at all assess VDRES27 (active participation on the part of the learner). This suggested that one in three of the lecturers did not at all assess the responding values' lower-order level, where the learner is expected to participate actively in the development of values.

The fifth sub-construct, VDREC (values domain receiving) contains seven items. The results in Table 2 revealed that below three-quarters of the lecturers (78.3%) did somewhat to not at all assess VDREC37 (willingness to attend to music). It was also found that more than half of the lectures did not assess the remaining items at all. This was revealed by 56.4 percent

of the lecturers in VDREC38 (simple awareness that a thing exists to selective attention). This was followed by (55.6%). This indicated that more than half of the lecturers also did not at all assess the receiving values of lower-order levels where the learners were required to attend to something relating to values.

Proposed Framework

A framework for discipline-specific acquisition, teaching, and assessment of values is based on Bloom's taxonomy (Sideeg 2016). This framework aimed to support the stakeholders in developing assessment tasks that systematically, explicitly, and adequately assess values. When assessing values, stakeholders need to ensure that there is no artificial divide between learning, teaching, and assessment practice. In addition, the framework emphasizes that when developing assessment tasks, the levels of thinking relating to lower, middle, and higher-order levels should be considered and included. This framework suggests that stakeholders should only retain verbs that are pertinent to their discipline-specific values at each level and eliminate those that are not. Furthermore, the framework is not restricted to the verbs used in this study; instead, other discipline-specific verbs may be included as judged suitable by experts in the field.

For the first level, "receiving," it is required that the stakeholders should develop the learning outcomes that require the learners to notice, name, reply, choose, hold, tolerate, follow, locate, describe, give, identify, point to, select, initiate, and use. This should be accomplished so that when assessing learning, stakeholders should construct assessment instruments that would determine whether the learner could perform all the doing words or action verbs mentioned above and be provided with the opportunity to be aware of, conscious, cognizant, responsive, mindful, and familiar with and recognize the existence of discipline-specific values. This implies that the lecturer should make the learner aware, conscious, cognizant, responsive, and mindful of the existence of (work-specific) values and how to recognize and be familiar as a result.

Concerning the second level, "responding," the stakeholders need to develop learning outcomes that require the learners to answer, assist, comply, cooperate, conform, discuss, follow, greet, help, justify, join, label, practice, present, read, recite, report, support, select, share, tell, volunteer, and write, so that when assessing learning, assessment instruments should be constructed in a way that would determine whether the learner would demonstrate the action verbs mentioned earlier. This practice would allow learners to participate, react, and comply with discipline-specific values, and the lecturer to provide opportunities for them to do the same and comply with (work-specific) values.

Regarding the third level, "valuing," the stakeholders need to develop learning outcomes that require the learners to defend, initiate, select, explain, share, follow, justify, support, join, cooperate, propose, differentiate, complete, describe, form, read, report, and work, so that when assessing learning, stakeholders should construct assessment instruments that would determine

whether or not the learner would indicate the potential to demonstrate all the aforementioned action verbs. This exercise would enable learners to present the identifiable values relating to behavior, attitudes, and appreciation, implying that the lecturer would have taught them to identify values and present them about work-specific behavior, attitudes, and appreciation.

In the fourth level, “organization,” it is crucial for the stakeholders to develop learning outcomes that require learners to synthesize, challenge, explain, arrange, generalize, integrate, dispute, combine, appraise, criticize, alter, compare, complete, defend, identify, modify, order, organize, prepare, and relate so that when assessing learning, stakeholders should construct assessment instruments that would determine whether or not the learner would perform all the doing words mentioned above. This assessment would provide the learner with the opportunity to bring together different values, resolve conflicts between values, and build a consistent value system. This would enable the learner to recognize the responsibility of individuals for improving human relations and develop a vocational plan that would satisfy the needs for economic security and social service and develop a life philosophy. Furthermore, the lecturer would support learners in learning to build consistent value systems that would allow them to recognize the responsibility for improving human relations and to develop vocational plans that would satisfy economic security, social service, and philosophy of life.

For the fifth level, “characterization,” it is imperative that stakeholders develop learning outcomes that require the learners to act, discriminate, display, influence, listen, modify, practice, propose, qualify, question, revise, solve, use, and verify. This is realized so that when assessing learning, stakeholders should construct assessment instruments that would determine that the learner would act, discriminate, display, influence, listen, modify, practice, propose, qualify, question, revise, solve, use, and verify. In doing so, learners would develop personal, social, and emotional adjustment of values to any given situation, implying that the lecturer should teach learners about the development of personal social, and emotional adjustment of values to any given situation.

Discussion and Conclusion

This study sought to answer the following question: How can Bloom’s taxonomy’s values domain be used to build/ develop a framework for assessing the values at the study university? The theory suggests that the values/affective domain relates to feelings and attitudes (Hoque et al. 2021). The authors further stated that values are important and lasting beliefs or ideas shared by the members of a culture about what is good or bad and desirable or undesirable. According to these authors, values significantly impact an individual’s behavior and attitude. They act as general principles that can guide their actions in various situations (Hoque et al. 2021).

Five major categories are listed from the simplest value to the most complex: receiving, responding, valuing, organization, and characterization (Allen and Friedman 2010). If the teaching purpose were to change values rather than to transmit information, then the

instruction would be structured to progress through the levels of the values domain (Micklich 2012). The researchers contend that when lecturers assess learners, they must use the action verbs associated with the values domain to guide them.

The framework can help stakeholders improve learning outcomes design, acquisition, teaching, and assessment of values in higher education. A framework for assessing values was developed to ensure that stakeholders systematically, explicitly, and adequately assess values. In this regard, the researchers assert that the involvement of stakeholders in developing assessment instruments relevant to assessing values could have the potential to increase learners' likelihood of acquiring the industry values requirements. Ghosh (2008) asserts that values assist employees in identifying with the organization and building a commitment to its aims. Patterson, Crooks, and Lunyk-Child (2002) and Charokar and Dulloo (2022) provided the values requirements of the industry. Furthermore, Quesenberry et al. (2012) West (2017), Luhova (2023), and Frisque, Lin, and Kolb (2004) shed light on the importance of values and how they can be implemented in the accounting discipline. The proposed framework encourages stakeholders of which industry should be part, to collaborate in the development of assessment instruments related to values. This could be beneficial to the learner, the labor force, the community, and the economy.

It is recommended that stakeholders adopt the values framework for assessing the values given in this study to provide remedies to the problem of unsystematic, implicit, and inadequacy of value assessment. Furthermore, stakeholders should use the framework to identify assessment tasks relating to values. The values that the industry demands are captured and addressed in this framework. Therefore, learners must be able to assess both their own and other people's learning resources; think back on what they have learned; manage information; collaborate in groups; develop social and personal values; modify emotional values; resolve disputes; create a consistent set of values; and understand that each person has a responsibility to improve human relations. (Patterson, Crooks, and Lunyk-Child 2002; Charokar and Dulloo 2022). The stakeholders must use the framework to gain the ability to create value-related outcomes. This would enable graduates to recognize, develop, and present values.

AI Acknowledgment

Generative AI or AI-assisted technologies were not used in any way to prepare, write, or complete essential authoring tasks in this manuscript.

Informed Consent

The study university granted ethics approval to conduct the study by the stipulation and institutional ethics protocol, and the participants signed an informed consent form.

Conflict of Interest

None of the authors have any conflict of interest to declare.

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