

Article

# An Evaluation of Modal Verbs Teacher-Trainees Used in Writing Long Essays and Assignments

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**Abstract:** Qualitatively, the study adopted a case research design. The population of this study comprised the last batch of Diploma in Basic Education (DBE) and the current first-year students of the new programme (Bachelor in Basic Education) of Mount Mary College of Education. Simple random and stratified sampling techniques were used to select 15 long essays from the final year, while 30 assignments were chosen from the first year. Nine (9) long essays from the English language, five (5) essays from Social Studies and one (1) essay from Mathematics. The main tools used for the study were students' assignment items and copies of long essays. Through an interpretative lens, the data were analysed into themes. The data and the analysis largely showed that students employed different kinds of modal verbs in their writing, including complete and periphrastic modal verbs. There was evidence that students have used these modal verbs in different ways that sometimes affected the intended meaning. These inappropriate choices are evident in both written texts and oral presentations. Findings showed that students employed modal verbs indiscriminately with little attention to contexts. It would be recommended that language teachers deal with the issue by giving written feedback on the use of modal verbs to students in their texts anytime they are given assignments.

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## 1. Introduction

The engagement of modals in our interactions is critical because they signal our flair in language use. The appropriate application of modals by students in writing could help these students communicate better. The difficulty faced when dealing with modal verbs by students as second language learners is how to keep up with their use to make a meaningful input in communication and that if employed properly, it will facilitate easy comprehension of academic texts [1]. Modal auxiliaries express knowledge and how the speaker perceives or intends to utter a speech, mostly in agreement with the core idea of modality that could denote an act [2]. In addition to that, modal verbs perform other functions such as obligation and volition. At least, any language user is concerned with the richness he/she desires to put in their language and equally convey the message to the receiver more clearly. Modal verbs, to a large extent, serve such a purpose in a multifaceted manner [3].

*To give a proposition a degree of probability, to express one's attitude, and to perform various social functions, such as expressing politeness or indirectness when making requests, giving advice, or granting*

*permission. [...] When English speakers use a modal, they interject their perspective and view a proposition more subjectively than when they simply use present or past tense.*

Modal verbs, also known as modal auxiliaries, are part of a large group of English verbs employed to express speakers' attitudes and opinions depending on the resources available to the speakers. It must be noted that modal verbs are only one of such linguistic elements used to express modality, though other linguistic units such as adjectives- *likely, possible*; adverbs- *perhaps*, and other verbs are used to express modality. Here, we can also mention private verbs such as *believe* and *think* and semi-modal such as *need, dare, used to, ought to, have to and supposed to* [4].

A writer explores semantic investigation into the employment of modal verbs in the report of a Ghanaian political party. Even though the research focuses on modal verb use, the perspective is outside academia. The writer sought to engage in discourse analysis of a political text [5]. Other writers also examined whether the modals of Black and White South African English converge, revealing that there are varieties between these two English speakers [6]. The mention of other Ghanaian authors will be useful to this study. For example, writers researched modality and evidentiality in Akan by focusing on the Corpus of the language, revealing that most of the studies carried out on both modal verbs and modality mainly focused on the perspectives of European, American, and Asian writers. African writers, most especially Ghanaian researchers, did a little work on students' use of modals [7, 8]. This vacuum, coupled with students' difficulty in identifying the modal verbs to use in different situations, necessitated the research.

Considering the previous studies on modal verbs, even though there has been an extensive study on their use, these studies have been skewed. As a result, the current study is focused on filling this gap by looking at the appropriateness of such verbs in students' academic writings in colleges of education in Ghana. At all levels of the various programmes offered at the college levels, students have been involved in different kinds of academic writing such as essays, quizzes, long essays and other assignments. In all these academic writings, students' choice of modal verbs to negotiate their persuasive skills may come into play, at least with a certain degree of difficulty. It is the choices students make and the effect the use of these modal words has on their writing that this study seeks to explore. The study will equally be interested in whether students use modal verbs to suit their appropriate environment or use them arbitrarily or, for lack of better words, use these verbs interchangeably in most of their writings, that is, the long essays and the essays. There is, therefore, the need to conduct a study into Modal Verbs Teacher-Trainees Used in Writing Long Essays and Assignments at Mt. Mary College of Education. The study addresses this research question - What kind of modal verbs are found in students' writings?

### **1.1. Modal meaning**

A writer postulated that "word meaning can be looked at from two different perspectives: the meaning derived from a non-contextual environment and that which is located within a defined context. Modal verbs as such, take a similar spectrum; as found in textbooks, the meaning of modal verbs is quite different from the practical use of modal in context. In areas such as legal usage, modals are still used especially" [9]. On the other hand, these two dimensions are indicative of root and epistemic modality, there is proof from diachronic studies that epistemic meaning appeared to have developed from root meaning [10]. The author asserted that when speakers engage in interaction, the knowledge of modal use is graded from weak position to a strong one. A single definition

for root meaning is, however, problematic; root modals are those “containing the element of will” while those “containing the no element of will” signal the epistemic modality [11].

A writer affirmed with other writers that it is natural in the old principle in most languages to maintain one form for meaning and another form for another meaning [12, 13-14]. In his work, for instance, in modality and English modals, a writer agreed that even though modals have their denotative meaning, it would be unrealistic to stick to that, looking at the nature of the language and its dynamic use for various purposes [15]. Palmer’s argument stems from the earlier study that the definition of modal is ‘imminent, biased and precarious’ [16]. From the above discussion so far, despite the core meaning associated with modal verbs, it is almost impossible to stick to any mono-semantic property of modals in any changing language.

### ***1.2. Underuse, overuse and misused of modal auxiliaries***

A writer sees modal use as “the most important channel for conveying claims dissemination of new knowledge” [17]. Writers conducted various studies in that same area, dwelling much on non-native (NN) writers in English. The task of these authors was to explore the level at which the second language users employ these modal verbs and the degree to which they follow the conventions expected of them within the academic circles [18, 19-20]. Other writers have found that “there is ample proof in most research papers which were published in NN writers’ work concerning underuse, overuse and sometimes misuse of modal verbs in an attempt to show hedging [21, 22-23]. In light of this challenge, a writer suggested to such authors to “gain a deeper understanding of the social contexts in the use of academic texts and the strategic linguistic choices that characterize these texts” [19]. A similar study also suggested that academic writers who are second language users “need to control linguistic and rhetorical features of English” [23].

A writer maintained, “In academic writings, second language learners face different challenges in the appropriate use of modal verbs compared to native speakers. Many reasons he assigned to the above challenges, spanning from handlers of the language, appropriate inadequate learning materials, and lack of good practices. In his estimation, the second language learner can learn these modal verbs’ surface meaning and function” [24].

### ***1.3. Modals in student writing guides and grammar instruction***

Studies on modal verbs in students’ texts are pushing for new dimensions as to how to tackle the challenges facing learners. A writer posits that research on testing students on modal verbs has gained a lot of momentum in linguistic inquiry; it is at the same time worrying that teaching academic writings in English is not getting much result as far as textual analysis of these works is concerned [2]. The writer further observed that “there is a huge gap and contrast in how to teach these verbs as markers and the writing pedagogy. One instance the author gave was that during instructions in such exercise, “the complex and culturally-bound functions of modal discourse are usually not discussed” [2]. Another writer said, “Students are typically instructed to employ modal verbs ‘appropriately’, ‘indicate doubt and certainty’ using can, could, may, might, make their statement ‘more polite’ and ‘less assertive’, use can, may, should, and avoid must”. He was of the view that the employment of modal verbs is generally difficult for L2 learners to use by following the conventions available, especially with the rigid academic format [25]. Another writer commented, “the instructions which accompanied each section for students to follow as a guide are usually not explicit and make students more confused than ever” [26, 27]. Even at the level of university students, the distinction between the meaning of possibility, necessity, and prediction modals can be blurred and for that matter, students’ use of modals ought to be precautionary [28, 29]. Pedagogical grammar for ESL students is usually more elaborate than the writing guide, and even in some

situations, the instruction for grammar for ESL modal meaning and function is encapsulated in the findings of recent studies [28, 29].

In recent times, the findings of corpus analysis done for students who study English at a higher level together with that of their instructors to shed more light on how the language is used for communicating with others, including the usage of modal verbs like 'reference grammar'. Students writing also put modals in three classes depending on their meanings: permission/ability, obligation/necessity, and volition/prediction, where "each modal can have two different types of meaning: personal or logical, also called intrinsic and extrinsic" [20]. Though such texts gave about three to four examples for illustrations of modal meanings, most of these meanings are more clear-cut for teachers than students. The writer equally clarified that in the employment of modal verbs in academic discourse, "could, may, and might are used almost exclusively to mark logical possibility, and can additionally express ability, although it is often ambiguous with a logical possibility meaning". In equal measure, necessity/obligation modal verbs "express personal obligation . . . even though writers of academic prose usually suppress their personal feelings in their writing, they also use these modals to express personal obligation rather than logical necessity" [20].

## 2. Materials and Methods

Qualitatively, the study adopted a case research design. The population size of this study constitutes the last batch of Diploma in Basic Education (DBE) and the current first-year students of the new programme (Bachelor in Basic Education) of Mount Mary College of Education. Simple random and stratified sampling techniques were used to select 15 long essays from the final year, while 30 assignments were selected from the first year. Nine (9) long essays from the English language, five (5) essays from Social Studies and one (1) essay from Mathematics. The choice of these numbers enabled the researchers to have enough time to analyse the texts. It was discovered that the outcome of a finding does not depend on the large size of the sample space. A writer who remarked that in a qualitative study, the focus is not on generalisation but on a case study to identify a problem and possibly find some interventions to mitigate such challenges [30] corroborated this. The researchers also chose simple random sampling in the selection of first-year assignments. The assignment was deliberately given for this research. The topic for the assignment was on making a request: **Write a letter to the principal of the college for a change of program of study. Justify your reason.** The demand of the assignment was such that, students could not have avoided the use of modal verbs in their write-ups. Since students were not aware of the intention of the assignments, they wrote them according to their ability. As said earlier, thirty texts were chosen with five each from a class of about 40 students. These were classes whose assignments were collected and used as data: A- 40, B – 39, E – 39, F- 39, K- 40 and L- 27. The six classes summed up to 224. Since the assignments were placed in envelopes, the researchers randomly picked five texts from each of the six envelopes to constitute the sample. Though there were French students among the students, all of them studied English language at least as a core subject in the first year. To have easy working materials, the selected long essays and students' assignments were coded. First of all, the long essays written in the English language were coded EL, Social Studies – SS and Mathematics – Ms. This codification will be used throughout the analysis to identify one text from another in terms of disciplines. The codification for students' assignments also followed this pattern – As1 – till the last assignment whereas stands for assignment. Through an interpretative lens, the data were analysed into themes.

## 3. Results and Discussions

### 3.1. Kinds of modal verbs found in students' writing

This section presents data analysis on the choices of modal verbs that students made in their long essays (LEs) and assignments (ASS). The researcher discovered different kinds of modal verbs and these are presented in tabular form for analysis. Table 1 presents data from the students' texts consisting of LEs and ASS and discusses modal verbs that were found to be dominant in both texts under the following themes: substitution, insertion and improper tense of modal verbs.

### 3.1.1. Substitution of one modal verb for another

The data shows that students substituted several modal verbs with other modal verbs in their texts. The substitutions that are found constitute unintended meaning. Substitutions between 'ought to' and 'should', 'must' and 'need to', 'can' and 'able to', 'would' and 'should' were found in the students' texts. Tables 1 and 2 present the frequency of substitution for different modal verbs in the texts. The total frequency represents the total kinds of modal verbs in all fifteen. For instance, 'can' has appeared 364 times in the 15 long essays and 'could' appeared 157 times in the 15 essays analyzed. The substitution is the number of times the modal appeared in each of the 15 LEs or ASS. For example, 'can' was substituted 12 times in the 15 long essays or 'could' be substituted 4 times in the 15 long essays.

**Table 1. Substitution of modal verbs in students' long essays (LEs)**

Kinds of modal verbs	Total freq.	No of substitution
Can	364	12
Could	157	4
Will	228	6
Would	104	8
May	98	7
Might	15	1
Should	189	90
Must	72	36
To be able/ to	56	2
Need/to	46	2
Used to	15	1
Want to	16	0
Have to	1	1
Shall	1	1
Total	1362	171

**Table 2. Substitution of modal verbs in students' assignments (ASS)**

Kinds of modal verbs	Total Freq.	Substitution
Can	71	4
Could	34	1
Will	169	7
Would	148	1
May	16	3
Should	15	5
Shall	3	2
To be able/to	39	1

Have to	9	1
Total	504	25

### 3.1.2. 'Should' substituted for 'ought to'

The substitution of modal verbs emanated from the fact that students usually replaced one modal with another which under normal circumstances was not supposed to be the case. One modal which was found to have been substituted for most in the data was **ought to** with **should**. In both tables above, "**should**" was significantly employed in students' writings. The modal verb occurred 189 times in LEs with 90 substitutions. In ASS, the number of occurrences was 15, with 5 replacements. Example (1) is taken from LEs 4 (page 14).

#### *Example 1:*

*"Whetly and Restak state that, the pupils could start by each making a list of the spelling they find trickiest, using a dictionary to help them compile the list if necessary; then they **should** try to learn by heart and finally they swap the list to test each other" [31].*

The modal, which was used as a substitution in Example 1 above, was '**should**'. The ideal modal was supposed to be '**ought to**'. In an epistemic sense a writer postulates that "the modal '**ought to**' could alternate with '**should**' and could also operate as the conditional counterpart of the modal '**must**' this is seen in tentative or hypothetical utterances" [18]. A writer explained that "the modals '**should**' and '**ought to**' are used interchangeably but what needs to be considered in their usage is the notion of objectivity or subjectivity. While '**ought to**' is tilted more towards a subjective cause, '**should**' is more objective. The researcher agrees with the stance of Collins that the two modals '**ought to**' and '**should**' cannot conclusively be used interchangeably" [32]. This implies that since the obligation to act in a certain manner comes from within the person acting not from an external force, it is therefore appropriate that the modal verb **ought to** is used to indicate the burden of self rather than an outsider. The implication for this modal verb pointed the frequent use of the verb in most students' writing. To some extent, this modal needs to be studied further to look its functions.

### 3.1.3. 'Must' substituted for 'need/to'

In Example (2), the substitution of modal verb '**must**' is taken from LEs3, (pages 13-14). Though "must" did not occur at all in ASS, it was counted 72 times in LEs all but substituted 36 times as the highest. The text was extracted with all omissions and other inappropriateness as found in the LEs. Considering the use of '**must**' in Example 2, it showed that the modal was substituted for another which from a critical analysis is supposed to be a quasi-modal verb '**need to**'. According to a writer the difference between the modal verbs '**must**' and '**need to**' is that of external obligation against self-obligation. The author opined that while external obligation is imposed by established rules and conventions self-obligation comes from a sense of internal demands that place an individual to perform a duty because of what one needs. Smith observes, that '**need to**' "can acquire the force of an imposed obligation, but – something which does not apply to the other markers – the writer or speaker can claim that the required action is merely being recommended for the doer's own sake" [33].

#### *Example 2:*

*"Sprague explained that children '**must**' be shown samples of all these forms of writing and select what meets their interest".*

A writer noted that "both '**must**' and '**need to**' are used to express the epistemic concept of necessity and obligation" [34]. However, in most conversations, written and oral forms, the modal '**need to**' has received less attention just as indicated in Table 1 above.

In all 15 LEs, '**need to**' appeared only 46 times as compared to 72 times of the use of '**must**', an indication that it is used less often. Looking at example 2 above, it is argued therefore that the modal verb '**need to**' is semantically weaker, and is appropriate as compared to the pragmatically stronger **must** just as its counterpart **can** [35]. The authors' explanation of weak semantic modal verbs as against strong pragmatic modal verbs was that a modal verb is weak when the obligation to perform a certain function comes within an individual instead of an external force. In contrast, when there is an external force from a person or authority, then the stronger modal is preferred [35]. The use of the modal '**need to**' in the above structure as a weaker verb is referred to as a subjective modal verb [33]. In support of the above, another writer cautioned that the modals of obligation and necessity are not encouraged in most academic writing [20].

If the modal **must** is maintained as a choice, it will indicate a kind of compulsion effect instead of the need to provide some sample of writing form to pupils. The instructor owned it a duty to meet the needs of his/her pupils as part of strategies adopted in the classroom not because s/he is forced to do so. Notably, the meaning of '**must**' in the sentence is different from when '**need to**' is applied.

#### *'Can/not' substituted for 'to able to'*

The modal verb "**can**" had the highest frequency in the LEs table (364) and the third highest in ASS with 71 occurrences. Example (3) is taken from LEs 7, (page 22). The analysis looked at the verb in both the positive use and that of negation.

#### *Example 3:*

*"Firstly, it is obvious that anyone who cannot spell and pronounce a word from the memory cannot read a simple sentence correctly".*

The usage of '**cannot**' in both situations depicted an epistemic sense of the modal. What is important here is that the above modal verb has been substituted in place of a quasi-modal '**to be able to**'. This is because writers showed the difference between '**can**' and '**to be able to**' by arguing that the latter is used when its implication is that of actuality. What is more, is that the epistemic '**cannot**' is too strong in the instances with varying effects. Is it that the pupils are incapacitated in pronouncing words, resulting in the incapacitation of reading or the techniques used put pupils at a disadvantage position? If the latter holds, then the employment of the semi-modal '**to be able to**' could be suitable to mitigate the strong obligational power of '**must**' [36, 37].

#### *'Would' substituted for 'will'*

Example 4 is taken from LEs 10, (page 41). The modal verb under discussion is '**would**'. Its use did occur much as far as this theme is concerned. The few times it appeared however, it was used in place of another modal verb as in Example 4 below. From the LEs table, "would" occurred 104 times and was replace other modal verbs 8 times. The verb however had the highest frequency in ASS.

#### *Example 4:*

*"The 5 would be placed in the hundred column representing 500 (5\*100), the 2 would be place in the tens column representing 20 (2\*10) and the ones would be place [...]."*

The modal '**would**' is normally used as past tense of '**will**'. It is also used to indicate formality. One other use of '**would**' is to combine with other verbs to express conditionality. Instead of the student using '**will**', s/he chose to substitute '**would**' for '**will**' which was not appropriate. It is realized that the students repeatedly chose '**would**' in the instances. This exposes the inability of the students to use this particular verb correctly. In using '**would**' instead of the modal '**will**', it shows that the student was not referring to the activity s/he was carrying at that particular time. One finds it difficult to associate the idea the student put across since s/he was only explaining a certain process to teach the topic 'place value' to pupils, and therefore the choice of '**would**' was misplaced here.

#### *'May' substituted for 'will'*

The tables showed that "may" was employed in both writings. In LEs, the verb appeared 89 times with 7 substitutions. In ASS however, the frequency was less. The example has to do with the substitution of modal verb '**may**'. The sentence below exemplified how modal verb '**may**' was used to replace '**will**'.

#### *Example 5:*

*"You may suspect that this is the cause of poor handwriting if the quality of handwriting varies, being good when words can be spelled easily [...]"*

Even though the sentence itself is not jelling well for one to understand, the use of modal '**may**' is also problematic with its attending effect. At least, the modal '**will**' is what is needed in the above structure or better still, '**will**' may not be needed there. The next thing is that, the use of '**may**' together with '**suspect**' gives an impression to readers that, what the writer was talking about was an imagination. Since the analysis is done side by side, that is, LEs and ASS, the theme of substitution in students' ASS is next.

The next discussion now focused on students' assignments. The kind of modal verbs identified in the various assignments will form the basis of the analysis, not necessarily the same themes as found in LEs. The task for students was for them to write a request to the principal of the college about a change of programme and the justification for the change.

As seen in the table above, the modal verb which was mostly used to substitute for other verbs was **will**. Each ASS has a maximum of four pages. For that matter, the page numbers were not necessary since it was easy to locate any modal in the work time. The discussion will begin with modal verb **will**.

#### *'Will' substituted for 'could'*

Example six (6) below indicates how students substituted modal verb "**will**" in their essays. This is the second highest modal verbs in LEs with 6 times substitution.

#### *Example 6:*

*"In our country here, we know that the foreigners are many and they also take part in the day in day activities in the country therefore a lot of companies will need someone who will communicate cordially and make them feel at home".*

The sentence above is the exact way that was found in the student's ASS. The modal **will** appear at two different positions in the text, but the second one is our target. The researcher argued that the modal **would** have been used as a substitution for another. Good communication is relative in terms of the smooth flow of the language and proper grammatical structure. It depends on how one communicates to convince others; it will be termed good communication. The language of the writer is a tentative one. For this reason and appropriately, the modal **could** be more robust. If used, it could raise the level

of the conversation between the reader and the writer to show the writer was only assuming companies have their standard of what good communication is about.

**'Should' substituted for 'need /to'**

In the example below, the modal verb "**should**" is substituted for "**need/to**."

**Example 7:**

*" Also, there should be a better understanding of the course to help me in my academic performance that has to do with the needed..."*

This modal verb was discussed in LEs earlier. The writer in the above sentence was not demanding any requirement but rather assuming that if a specific condition has been created, it would improve their performance in class. As the sentence's tone suggested, that condition could have been seen as a need and not an obligation. Since the writer was communicating with readers but would not be there to defend his real intention, the easy way to reduce the confusion in the mind of readers was to use the semi-modal **need to**.

**'Would' substituted for 'will'**

Another modal verb that was used to substitute was "**would**" for "**will**".

**Example 8:**

*"After the semester results, I performed well in all my courses but failed in French. I explained to him that I did not intend to pursue French education but would love to offer primary education instead of the French programme".*

The writer is still in school and can change the programme according to his/her interest if the college has room for a change. The student here expressed hope for the future, and that hope is still pending. If the student chose the modal to express that futuristic wish, which is still possible at the time of writing the assignment, then the modal **would** be appropriate. Where the student chose **would**, it was as if it was a wish expressed in the past. The use of **would** create some level of difficulty in the mind of readers vis-à-vis what the real intention of the writer was communicating. Therefore, the researcher believes that replacing the will with the modal **would** have some meaningful effect on the sentence.

**'Shall' is substituted for 'will'**

It is one of the two modal verbs that occurred least in students' LEs. It appeared only once.

The modal verb "**shall**" was used in place of "**will**"

**Example 9:**

*"With this, all zeal shall be put in place or actions in learning that particular program".*

The above sentence continues the writer's request to change a new program. The modal the writer chose was **shall**, the present form of **should**. The modal shall is hardly seen in most academic writing because its use is usually confined to legal matters. Writers remarked that "in real utterance, shall is used to make a demand that the speaker makes herself/himself" [38]. However, other writers have said that whether an illocutionary force of conversation comes from oneself or another, both situations have commitments with varying degrees of action.

Regarding the writer's use, no force from any angle caused the individual to act in a particular manner. The observation is that the writer saw the need to take some steps if

the request were granted and prove their strength in studying a specific program. If that was the case, then the suitable modal was supposed to be **will**, which future expectation is more anticipated instead of the binding **shall**, which seems to be coming from an external force [35].

### 3.2. Insertion of various modal verbs

Tables 3 and 4 present the data on the insertion of various modal verbs in LEs and ASS. The insertion of these modal verbs, to a large extent, constitutes their abuse. The abuse, therefore, stems from the fact that students, in the first place, were not supposed to use these modal verbs where they were used. A close look at the kind of modal verbs that were mostly inserted in students' texts showed that '**can**', '**will**', '**may**', '**should**' '**could**' and '**to be able to**' were the dominant ones as shown in the tables and the examples below. While the total frequency is the overall occurrences of the modal verbs in the long essays, the insertion signifies the number of times a particular modal verb was inserted. Considering, for example, the occurrences of **can** and **could**. The implication of such insertions is misconstrued meaning, and the understanding of the reader needs to be clarified. A writer described this as a "forceful introduction of modal verbs". The authors say that in such situations, the meaning becomes blurry [39].

**Table 3. Insertion of modal verbs in students' long essays**

Kind of modal verbs	Freq.	No of Insertion
Can	364	84
Could	157	29
Will	228	37
Would	104	14
May	198	26
Might	15	3
Should	189	8
Must	72	6
To be able to	56	4
Need/to	46	2
Used to	15	1
Total	1362	214

**Table 4. Insertion of modal verbs in students' assignments**

Kinds of modal verbs	Total Freq.	Insertion
Can	71	5
Could	34	1
Will	169	24
May	16	1
Should	15	1
Must	2	1
To be able/to	39	9
Want to	46	1
Have to	1	0
Total	504	43

#### *Insertion of 'can'*

Students have inserted modal verbs such as "can," "will," "may," "should," and "could." These insertions are actually not needed since they alter the meaning of the utterances. The first to be discussed is "can." The modal verb, being the highest in

frequency, is also the highest in terms of insertion. Out of the total of 364, it was inserted 84 times.

**Example 10:**

*"Good spelling reinforces strong reading skills, and reading, in turn, can reinforce the ability to standard spelling".*

In the above example, the student explained the role of spelling from different literature backgrounds. The insertion of '**can**' imposes an idea of possibility that is incongruent with the meaning of the reviewed literature, which is what spelling does and not what spelling has the power to do. The insertion in the above sentence may constitute abuse. Even in the situation where the writer intended to use a modal, s/he could employ a hedging modal to escape any criticism.

**Insertion of 'will'**

The modal verb "**will**" was found to have been inserted more in students' work. The modal occurred 228 times and was inserted 37 times. In both occurrences and insertion, it is the second highest in the LEs.

**Example 11:**

*"Another factor that causes poor reading comprehension is oral language deficit. Children with limited vocabulary and oral reading fluency will have difficulties understanding written text".*

The first sentence is not our focus, but the researcher used it to aid in understanding the subsequent sentence. The above text is written to provide factors that cause reading comprehension. The literature the student was referring to had already made its findings on what factors affected pupils' reading. The factors that were found to impede pupils did not make any futuristic statements or assumptions. The factors were clear, so the modal's presence may constitute an abuse in the form of insertion. It is also to be noted that students' LES were action research type. Students were to find challenges faced by pupils and measures that could be used to mitigate them. In this sense, the student's insertion of **will** implies that "the factors will be used to identify the difficulties pupils will face. Meanwhile, the literature has already stated the factors". A writer explained, "with Asian students, to escape the difficulty of certain modal verbs, students avoided the use of modal verbs by adopting other lexical verbs that could be understood" [32].

**Insertion of 'may'**

In the table above, "may" was also used by students for insertion. With 98 occurrences, it was inserted 26 times.

**Example 12:**

*"Socio-economic status may be linked to family structure".*

A writer explained that '**may**' can assume all three significant forms of modality: epistemic, deontic, and dynamic. As used in the above text, the modal may exhibit the feature of an epistemic modality [32]. A writer reported that "this modal may assume the position of subjectivity or objectivity with the latter scarcely featuring in most academic writings. In such situations, the writer clearly needs to know whether the claim being proffered is true or false. Social and economic issues are always part of every human group, whether as a family or larger society. To say socio-economic status may be linked to family structure means the writer is unaware of this and is now making some

assumptions. But this statement is a statement of fact which does not need a conjecture. The insertion of the modal may give a different meaning, which the researcher thinks was not the student's intention. The insertion has shifted the meaning so one may think socio-economic matters are optional" [32].

#### *Insertion of 'should'*

As mentioned earlier, the above modal appeared 189 times in LEs and was inserted 8 times. The substitution was lower than the insertion.

#### *Example 13:*

*"The second test was about how they would spend their break time. They should narrate how their break time was going to be spent. After the result, only a few learners could speak English".*

All grammatical errors are from the student's text. The use of **should** to writers has many uses, including particular cases. The modal as a preterite form of '**shall**' does not usually occur independently. It can function as epistemic or deontic. '**Should**' as found in the students' writing appeared to have been used as a deontic modal. The instructor did not instruct pupils where they were strictly bound to obey. It was an activity to help pupils to perform a task. It meant that the onus rested with the pupils and not the instructor [35]. Based on the above argument, the researcher believes that the insertion of the verb **should** be an intrusion, and its meaning was largely uttered.

#### *Insertion of 'could'*

The modal "could" was one of the highest-occurring verbs. Its frequency was 157, but it was inserted 29 times.

#### *Example 14:*

*LEs 9, (page 20). "It is obvious from the above point that reading difficulty could be due to dyslexia, poor ability in first language reading, premature introduction in formal reading, poor and low-income level of family background [...]. The modal under discussion is **could**. About the secondary modal, there are some permutations available in terms of different persuasions and the attitude of the speaker [40]. "*

The authors believed that it is also the most used modal to command and express politeness and formality than *can*. Besides its preterite form and use, it is a strong hedging device which allows writers to escape harsh criticism from their readers.

Now the modal as used in the student's text appears to have changed the pragmatic behaviour of the conversation with readers. The text itself was a summary of some findings that the researcher picked from the LEs. The student also employed the word 'obvious' at the beginning of the sentence to indicate the state of the difficulty pupils encountered in reading. The writer was supposed to be aware that her/his interaction with reader at this point was not based on uncertainty or epistemic knowledge, rather, s/he was only informing or laying bare the finding in the summary note. When the student then inserted '**could**' as hedging device to show the difficulty of pupils with reading, it was like the writer was making some assumptions instead of going straight to the facts which were already stated.

At the end of the interaction, readers' meanings were truncated, and one may be wondering if the engagement with readers was interactive enough for comprehensibility. Even in the situation where the modal verb was to be used as a preterite of '**can**', the insertion would have been unnecessary because it will affect the meaning of the sentence.

The above argument is supported by Halliday's third pillar of metafunction - textual organization. Halliday said that textual organization is not just a mere linguistic

representation but how certain language elements are used to promote cohesion [18]. The sentence could be appropriate if reconstructed as: *It is obvious from the above point that reading difficulty was as a result of dyslexia, poor ability in first language reading, premature introduction in formal reading, and poor and low-income level of family background.*

#### ***Insertion of 'will'***

The modal to be discussed is “**will**” in terms of its insertion as found in LEs.

#### ***Example 15:***

*“To begin with, I have already fantasized about becoming a French teacher and have made conscious effort to learn very hard to achieve this dream. Due to this, I will humbly request that the program allocated to me thus Music, be changed”.*

The task given to students fell within formal writing. It is expected therefore to observe the convention of. The insertion of the modal ‘**will**’ as found in the second sentence was needless. The writer could have made his/her point without bringing the modal. If the writer still had wanted to introduce any modal verbs at all, then ‘**would**’ could have been used to signal formality. The use of ‘**will**’ in that instance signaled inefficient use of the verb and its presence in the sentence was an abuse in the application of the verb. The modal verb ‘**will**’ has therefore reduced the level of formality the writing deserved.

#### ***Insertion of 'to be able/to'***

This is one of the least occurring modal verbs. Its frequency was 56 but was inserted 4 times.

#### ***Example 16:***

*“To draw the curtain down, I have passion for inculcating into learners and teaching them the domains.....TVET and related design therefore I want to learn more to have requisite skills and knowledge on those domains to be able to inculcate into others...”*

This is a quasi-modal which is rarely featured in students’ text. Existing literature showed that this semi-modal verb is not very common in students’ writing and when they did, there is a sense of forceful use of the verb [32]. A verb is used to paraphrase the verb **can** in a dynamic sense [41]. Another writer also said that, of the three semantic roles of possibility, ability, and permission of ‘**can**’, ‘**to be able /to**’ seems to be used for that of ability [42]. On the contrary view on the only ability role assigned to the modal. He said the modal can give more meanings associated with **can** but **to be able to** “cannot be used for subjective deontic possibility, dynamic existential possibility, present actualised ability with ‘private’ verbs of perception and cognition, or epistemic possibility, and thus could not readily be substituted for can” in all cases [43].

Suppose all the arguments put up by the above scholars in relation to the semi-modal and its replacement of **can** in the possibility, ability and permission sense. In that case, the modal does not even have a place or a role to play in the writer's text. A close look at the modal shows that it does not even collocate well with the verb ‘inculcate’. The effect on the sentence is that of ambiguity as it is difficult to ascertain whether the writer is talking about his/her ability to inculcate or his intention to inculcate. The modal could be taken out to make the meaning simple.

### ***3.3. Improper forms of modal verbs in LEs and ASS***

Tables 5 and 6 looked at the improper form of modals use in students' texts. The students' writing showed a number of misuses of the modal form. Sometimes, students

used the present in the place of the past form, and the vice versa. Students were not aware of the multiplicity of the modal forms to suit a particular situation.

Considering the figures on the tables for example, it could be seen that “can”, “would” and “will” were the most used inappropriately in terms of tense. The modal “can” was abused 67 times, “would” 51 and “will” 40 in LEs. The ASS indicated “would” as dominant in the abuse. It appeared 148 times and was used inappropriately 74 times.

**Table 5. Improper of modal form verbs in students’ long essays**

Kinds of modal verbs	Total freq.	Improper tense
Can	364	67
Will	228	40
Would	104	51
May	98	3
Might	15	1
To be able/to	56	3
Need/to	46	2
Total	811	167

**Table 6. Improper tense of modal verbs in students’ assignments**

Kinds of modal verbs	Total freq.	Improper form
Can	71	2
Could	34	1
Will	169	3
Would	148	73
Want to	46	1
Need/to	26	1
Total	494	81

Both forms (present and past) have been used interchangeably sometimes in students’ writing. Some students failed to use the forms appropriately to suit various circumstances. A writer explained tenses are key in the organization of texts. Their inappropriate use could throw out of gear the meaning of text and interactants become speculative. Some examples of the misused forms in the texts of students are discussed in the following sections [18].

### 3.3.1. ‘Can’ used in place of ‘could’

The modal “can” was found in two different positions with different sentential effects. The task in the LEs was action research to find challenges of pupils in schools of practice and find solutions that could be used to mitigate such difficulties. Thus, it was expected of the students to report most of their findings in the past tense with occasionally few verbs in the present form. In both table 5 and 6 one could see frequent improper modal form use of “can”. This evidence is an extract taken from Example 17 of LEs 1, page 25.

#### *Example 17:*

*“From the responses received, it is clear from table 6 that the problem can be avoided by providing materials to the pupils and school so that pupils can practice reading on their own”.*

When the notion of appropriate use of forms is violated, it affected the writing in terms of time and space. This inappropriateness results in misconstruing meaning and understanding of readers.

In the extract above, the epistemic modal **can** was used to show that someone has the ability to act swiftly but did not. But since the action happened in the past, then the modal that was appropriate was the secondary modal **could** to indicate an action in the past. Similarly, the second use of **can** in the same sentence was also violated.

*'Will' used in place for 'would'*

Both "will" and "would" as mentioned earlier have large frequencies. It was however realized one was used to supplant the other in some cases as discussed below.

*Example 18:*

*The modal under discussion is **will**. "The researcher administered series of comprehensive passages to the junior high learners of Mampong Presby Junior High School. The passage was attached with comprehensive questions of which he will let them answer".*

Though the first sentence from the extract has no modal that we are dealing with, its presence is to aid the subsequent sentence for the discussion.

In the extract, one could observe that the text was clearly demonstrating past events and activities the writer engaged in with her/his pupils. In that regard, readers will be expecting to see most clause constructions in the past to reflect a proper use of the language. Even the sentence in which the modal **will** is found started with a past tense of the verb to be (was). To show internal consistency with other verb elements of the sentence, the preterite of the modal **will** must be present to have the necessary understanding on the sentence. Unfortunately, the student was not able to link the construction with the past future of **will**. If the sentence is maintained as it is, its meaning will be blur and confounded.

*'Would' used in place for 'will'*

"Would" was also used in place of "will".

*Example 19:*

*The extract is taken from chapter one under the sub-heading - significance of the study.*

*"The study would help pupils to adopt the right and appropriate strategies during their writing lessons".*

*"The study would encourage teachers to adopt appropriate strategies during teaching". "The study would serve as a guide for Ghana Education Service".*

*"The material would serve as a reference material for further studies".*

A writer said "**would**" is used to represent epistemic modality to express the future past time which is usually underscored in narrative genre events. In expressing formality in future anticipatory gratitude, "**would**" is used in present and future times when writing to officialdom. In its hypothetical use, "**would**" represents unreal circumstances or conditional constructions of wish. The use of "**would**" as found in the student's text is identified as a clear deviation and violation of some of the uses of the modal. When the writer states the future significance of the study, it is expected of him/her to stick to the primary modal "**will**" since it was a normal report between the writer and readers. Even

though the setting is situated in the formal platform – (academic writing), the use of “**would**” was inappropriate because it was not a reported speech but future benefits of an activity. The student having been consistent with improper use of “**would**” is an indication that, the writer lacks the proper grammatical use of the verb in most instances. The application of “**would**” in those contexts, therefore, did not conform with the rule governing the modal verbs [32].

*'May' is used in place of 'might'*

"May" and "might" were also used interchangeably in student writings.

*Example 20:*

*“Several researchers have investigated the significant role of student attitudes toward learning about their academic achievement. Students’ attitudes such as absenteeism, truancy, indiscipline, etc. [...] can affect their performance. Students’ attitude may not only directly academic achievement, but may also indirectly influence the effect of other factors”.*

The primary modal “**may**” and its secondary modal “**might**” primarily operate on the basis of epistemic modality. Halliday remarked that “**might**” is the deontic equivalence of “**may**”, whose usage is somehow challenging, especially for ESL. The speaker's attitude with regards to the use of any of these modals (may, might) may be deliberate and not fortuitous, except the speaker needs to be made aware of the appropriate usage. The only time where the level of degree may be relegated to the ground is when “**might**” has been used in a reported speech. In the sense of judgment, “**might**” is not measured but reflects the idea in the original speech. The modal **may** have appeared twice in the same sentence, with the student having committed the same grammatical error.

Though the modal itself was used in an epistemic sense, the event in which the interaction was captured was in the past. So, for the student to maintain the sentence in its current form, it has some effect on what idea was expressed. In reality, the writer was not reporting a general situation of students' attitudes but an attitude which was part of the findings of a particular group of people. Again, the writer did not refer to a level of degree so that s/he could shuffle between **may/might**. The writer was obliged to use **might** as an appropriate modal so as not to change the core meaning of the sentence.

Even though **may** is the focus of the discussion, the other modal – can – was also left in the present form. This exemplifies the researcher's claim that the writer's knowledge of proper use of modal tense is somehow limited and challenging.

*'Would' used in place for 'will'*

*Example 21:*

*The modal under discussion is “would”.*

*“Another fact I would want you to know is that the program change will affect the kind of class I would like to have people work hard for things they love and desire to have”.*

Though the above sentence has a structural challenge in terms of wording, the focus of the element under discussion cannot be lost. What was necessary in this task demanded that the writer observed formality; it did not also mean the writer mixed up the forms for that matter. The effect the improper choice of tense could have on the sentence in the area of meaning could make the interaction between the writer and readers difficult. The writer for instance used the modal **would** in two separate situations within the same text. In the

first instance, the modal was used in an amalgamated way with another modal “**want to**” to express a personal wish. Since the writer was expressing a personal wish in a non-anticipatory manner, the use of “**would**” was not appropriate since it gives a different meaning to the statement, that is, a past wish. A writer explained that if “**would**” is used hypothetically as in the example, then the idea behind the usage is non-affirmative [20].

The second use of **would** could be viewed from the same angle of personal wish. The conditional future which **would** be employed gave the impression that the writer was expressing a wish that was in the past but could have been achieved. It is not the case here because the writer was writing in anticipation of a positive response from the authorities. If the authorities allowed the change of program, the dream of making a certain academic class was possible. The improper use of tense in both cases affected the meaning of the sentence which could have been avoided. The researcher’s observation at this point is that, the writer lacks competence in the use of the modal with regard to tense.

#### *‘Will’ used in place for ‘would’*

##### *Example 22:*

*The modal under discussion is **will**. “However, I write this letter to request for change in the program administered to me and I hope with the reason stated below, my request will be granted”.*

As part of the discussion, a lot has been said in previous analysis about the modal **will** and its preterite form. The writer in the above statement was making an anticipatory request to an authority and for that is expected of the writer to recognize the setting and which modal was appropriate. In earlier discussions for example, it was explained that the past tense of will is used to express past event. The past form is also combined with other verbs to indicate conditional time. In its formal use, whether in the present or past, the use of “**would**” is preferred to indicate a certain distance from the writer to the reader and also as a mark of politeness to authority. Practically, if this grammatical rule is not adhered to, it shows the lack of language maturity of the writer. The writer’s choice of improper use of a modal could affect the content and consequently see the rejection of the letter or the request being ignored. At this point, the researcher could conclude that, the writer’s inability to translate his/her linguistic understanding to pragmatic use in the circumstance is part of what Chomsky referred to linguistic incompetence.

#### *‘Can’ used in place for ‘could’*

##### *Example 23:*

*The modal under discussion is **can**. “First of all, am really struggling with my current course which is social studies and history. I find it very difficult to understand what the Lecturer teaches in class, I try my best I can do to understand it, but still am always confused about what we learn in class, even after the lectures I find time to go over what we learnt but still I can see any improvement”.*

Critically looking at the omissions, the grammatical inappropriate and the overall sentence structure gives the impression that the writer did not consider the distance (formality) between him/herself and the readers. Even with all the above sentential challenges, the analysis of improper use of tense is still relevant. The writer appeared to be narrating some of his/her past experiences about the difficulty faced in reading Social Studies. In that case, it was expected of him/her to give that account in the past so as to affect the meaning of the content positively. The observation was that the writer chose to use most of the verbs in the present tense but kept the verb ‘to learn’ in the past tense, an indication of inconsistency. Even if the writer was recounting his daily experiences in the

past, it is expected of him/her to respect the grammatical rule. What could have been appropriate was to use the dynamic **can** in the past tense since in both cases, the writer referred to his/her inability to cope with the program in question. The use of **can** therefore affect the meaning of the sentence to a large extent.

#### 4. Conclusions and Recommendations

The data and the analysis largely showed that students have employed different kinds of modal verbs in their writing that involved full and periphrastic modals verbs. There was evidence that students have used these modal verbs in different ways that sometimes affected the intended meaning. These inappropriate choices are evident in both written texts and oral presentations. Findings showed that students employed modal verbs indiscriminately without paying much attention to contexts. It would be recommended that, language teachers could deal with the issue by giving written feedback on the use of modal verbs to students in their texts anytime students are given assignments to do.

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#### References

- [1] Thompson, M. (2002). Modals in English language teaching. Retrieved April 28, 2013, from <http://www.telusplanet.net/linguisticsissues/modalsinteaching.html>
- [2] Hoge, L. (1997). *Adverbs and modality in English*. London: Longman.
- [3] Celce-Murcia, M., & Larsen-Freeman, D. (1999). *The grammar book: An ESL/EFL teacher's course (2nd ed.)*. Boston: Heinle & Heinle.
- [4] Lyons, J. (1977). *Semantics*. Vols. 1 & 2. Cambridge: Cambridge University Press.
- [5] Nartey, M., & Yankson, E.F. (2014). A semantic investigation into the use of modal auxiliary verbs in the manifesto of a Ghanaian political party. *International Journal of Humanities and Social Science*, 4, 3.
- [6] Wasserman, R. & Van Rooy, B. (2014). The development of modals of obligation and necessity in White South African English through contact with Afrikaans. *Journal of English Linguistics*, 42(1), 31-50
- [7] Sakyi, J. P. (2019). *Modality and evidentiality in Akan: A corpus-based study*. Unpublished PhD thesis, University of Antwerp.
- [8] Owusu, A. (2015). *Linguistic strategies in the expression of modality in Akan*. <https://www.researchgate.net/publication>.
- [9] Perkins, M.R. (1983). *Modal expressions in English*. London: Frances Pinter.
- [10] Sweetser, E., (1990). *From etymology to pragmatics: Metaphorical and cultural aspects of semantic structure*. Cambridge University Press, New York.
- [11] Palmer, F. (2001). *Mood and modality (2nd ed.)*. Cambridge: Cambridge University Press.
- [12] Wertheimer, R. (1972). *The significance of sense: meaning, modality and morality*. Ithaca: Cornell University Press.
- [13] van Dooren, A. M. F. (2014). *Synchronic and Diachronic Perspectives on Modal Verbs and their Complements* (Master's thesis).

- [14] Biber, D., Johansson, S., Leech, G., Conrad, S., & Finegan, E. (1999). *Longman grammar of spoken and written English*. Harlow: Pearson Education.
- [15] Palmer, F. (1990). *Modality and the English modals (2nd ed.)*. London: Longman.
- [16] Bouma, L. (1975). On contrasting the semantics of the modal auxiliaries of German and English. *Lingua*, 37, 313-339.
- [17] Hewings, A. (2004). Developing discipline-specific writing: An analysis of undergraduate geography essays. In: Ravelli, L., & Robert Ellis (eds.) *Analyzing academic writing: Contextualised frameworks* (pp. 131–152). London: Continuum.
- [18] Hyland, K. (2007). English for professional academic purposes: writing for scholarly publication. In D. Belcher (Eds.), *Teaching language purposefully: English for specific purposes in theory and practice*, (pp. 1–27). New York: Cambridge University Press.
- [19] Martínez, I. A. (2005). Native and non-native writers' use of first person pronouns in the different sections of biology research articles in English'. *Journal of Second Language Writing*, 14, 174–190.
- [20] Biber, D. (2006). Stance in spoken and written university registers. *Journal of English for Academic Purposes*, 5, 97-116.
- [21] Flowerdew, John (1999) 'Problems in writing for scholarly publication in English: the case of Hong Kong'. *Journal of Second Language Writing*, 8(3), 243–264.
- [22] Martínez-Lucas, G., Sarasua, J. I., Fernández-Guillamón, A., & Molina-García, Á. (2021). Combined hydro-wind frequency control scheme: Modal analysis and isolated power system case example. *Renewable Energy*, 180, 1056-1072.
- [23] Leki, I., Cumming, A., & Silva, T. (2008) *A Synthesis of research on second language writing in English*. New York: Routledge.
- [24] Gibbs, D. (1990). Second Language Acquisition of the English Modal Auxiliaries can, could, may and might. *Applied Linguistics*, 11(3), 297-313.
- [25] Lunsford, A., (2005). *The Everyday Writer, (3rd ed.)*. St Martin's Press, New York.
- [26] Swales, J., Feak, C., (2004). *Academic writing for graduate students, (2nd ed.)*. The University of Michigan Press, Ann Arbor.
- [27] Axelrod, R., & Cooper, C. (2007). *The St. Martin's guide to writing, (7th ed.)* New York.
- [28] Raimes, A. (2004). *Universal keys for writers*. Houghton-Mifflin, Boston.
- [29] Smoke, T. (2005). *A Writer's workbook, (4th ed.)*. Cambridge University Press, New York.
- [30] Israel, G. D. (1992). *Determining sample size. Sampling the evidence of extension program impact*. Program evaluation and organizational development, IFAS, University of Florida. PEOD-5. October.
- [31] Languis, M., Buffer, J., Martin, D., & Naour, P. (2012). *Cognitive science: Contributions to educational practice*. Routledge.
- [32] Collins, P. (2014). Quasi-modals and modals in Australian English fiction 1800-1999, with comparisons across British and American English. *Journal of English Linguistics*, 42(1), 7-30.
- [33] Randall, R. B., Antoni, J., & Smith, W. A. (2019). A survey of the application of the cepstrum to structural modal analysis. *Mechanical Systems and Signal Processing*, 118, 716-741.
- [34] Nokkonen, S. (2006), 'The semantic variation of NEED TO in four recent British English corpora', *International Journal of Corpus Linguistics*, 11, 29-71.
- [35] Huddleston, R., & Pullum, G. K. (2002). *The Cambridge grammar of the English language*. Cambridge: Cambridge University Press.
- [36] Facchinetti, R. (2002). Can and could in contemporary British English: a study of the ICE-GB corpus. In: P. Peters, P. Collins and A. Smith (Eds.), *New frontiers of corpus research*. Amsterdam: Rodopi. 229-246.
- [37] Aijmer, K. (2004). The semantic path from modality to aspect: Be able to in a cross-linguistic perspective. In: H. Lindquist & C. Mair (eds), *Corpus approaches to grammaticalization in English* (pp. 57-78). Amsterdam: John Benjamins.
- [38] Boyd, J. & Thome, J. P. (1969). The deep grammar of modal verbs. *JL* 5, 57-74.
- [39] Lee, Y. W., Breland, H., & Muraki, E. (2004). Comparability of TOEFL CBT prompts for different native language groups. ETS, Princeton, NJ.
- [40] Carter, R., & McCarthy, M. (2006). *Cambridge Grammar of English: A comprehensive guide: Spoken and Written English: Grammar and Usage*. Cambridge: Cambridge University Press.
- [41] Hermerén, L. (1978). *On modality in English: A study of the semantics of the modals*. Lund: CWK Gleerup.
- [42] Zachiu, C., de Senneville, B. D., Moonen, C. T., Raaymakers, B. W., & Ries, M. (2018). Anatomically plausible models and quality assurance criteria for online mono-and multi-modal medical image registration. *Physics in Medicine & Biology*, 63(15), 155016.
- [43] Coates, J. (1995). The expression of root and epistemic possibility in English. In: Aarts, B., & Meyer, C. (Eds.), *The verb in contemporary English: Theory and description* (pp. 145–156). Cambridge University Press, Cambridge.