







questions as a means of assessment nor did they direct questions at the creating level of the taxonomy. They seemed to have adopted the deductive-based mode of presentation, determined by the instructional objective which is to introduce students to a specific concept or generalization [29], e.g. the rule of ‘amplitude’ in mathematics and the definition of ‘allegory’ in English literature. Besides, they reflected some features of appropriate questioning behaviours, e.g. using proper wait time, attending to students’ questions, and providing instant feedback.

Upon taking a closer look, the differences in the implemented questioning strategies will come in the limelight; the English literature teachers opted mainly for the evaluative strategy, based on the divergent strategy, “to help students develop a logical basis for establishing evaluative criteria”; whereas the mathematics teachers used mostly the convergent strategy that encourages students to “focus on a central theme” [29]. Having said that, a data analysis indicated in [34] study showed that the type of questions most frequently asked in both the English language and the mathematics lessons were lower-order thinking (LOT) questions that proposed the lowest three levels of Bloom’s taxonomy. As per observation and unlike the previous research body findings, the most prevalent type of questions in the English literature classes was evaluative, which is considered among the higher-order thinking (HOT) question types. On the other hand, mathematics classroom observations confirmed the formerly mentioned results about the ubiquity of factual and application level questions which are, according to Thompson [35], among the lower-order thinking types that are “often characterized by the recall of information or the application of concepts or knowledge to familiar situations and contexts” [35p. 97]. In the same way, Weiss, Heck and Shimkus [36] made an overt statement when they said that questioning is one of the weakest aspects in mathematics instruction.

## VI. CONCLUSION

As stated by Tay et al. [37], the nature of the two subjects under examination is different –learning English revolves around expressing one’s ideas and thoughts, while learning mathematics aims to acquiring problem-solving skills and concepts. Consequently, due to content differences between the two subjects, the pedagogical approach of each might also differ. The nature of a subject is said to make limitations to the pedagogical strategy including the use of questioning as a part of the classroom discourse.

Personally speaking, as an English language teacher, English literature is a discipline that promotes discussion and reflection; thus, a divergent questioning strategy is the most applicable approach to prompt students’ feelings and thoughts. On the other hand, mathematics as a discipline is bound by rules and concepts as well as a limited range of problem-solving procedures that focus mainly on the achievement - the answers; it’s believed to be based on deductive and logical reasoning, as noted by Ayalon and Even [38], deductive reasoning is a mathematical thinking synonym, with no room for creation. Therefore, a convergent questioning strategy seems appropriate to a limited extent; it might also be reasonable to remark that the nature of mathematical tasks

demands mastery of both convergent and divergent thinking.

The goal of this research paper is to seek answers for two basic questions about whether there is a relationship between the nature of English literature and mathematics as subjects and the questioning strategies employed by the teachers which is revealed affirmative; and what the most prevalent types of questions in use in both subjects are. Both raised queries were relatively tackled and attempted at through the four observations paid to the mentioned classes.

## VII. STUDY LIMITATIONS AND RECOMMENDATIONS

Idiosyncrasies, e.g. teachers’ beliefs as claimed by Pham & Hamid [39], and time constraints, e.g. schedules and annual plans, are among the interfering factors that sometimes dictate specific instructional methods and have a say in the effective use of classroom discourse. The limited number of observations and the invariability of tools might have restrained the objectivity of the research results.

According to Morge [1], teacher questioning within an inquiry environment encourages students to elaborate and reflect on their own answers rather than assessing their preciseness which bounces the ball back to them for self-evaluation and knowledge construction. Thus, promoting classroom inquiry environment using a diversity of questions is a universal demand that needs to be well implemented and sustained in the UAE. Moreover, The Common Core State Standards (CCSS), now applied in many local schools in UAE, highlight some necessary reforms related to classroom questioning; they call for an interdisciplinary approach in utilizing common questioning language for instruction [40]. Finally, more bodies of research need to be conducted on wider scales, e.g. using various observational tools and increasing the number of observations as suggested by Shih [41], in order to verify these research findings and fill out the gaps in the previous ones.

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