‘Not Knowing is Hence, Not Loving’
The Significance of Raising Language Awareness Amongst Teachers of Content Area Learning

Norashikin Yusof
BRUNEI
School of Education, College of Arts & Social Sciences
University of Aberdeen, United Kingdom

Affiliates:
Sultan Hassanal Bolkiah Institute of Education
Universiti Brunei Darussalam

Abstract - Listening to or speaking another language that we do not know or rarely use can be a daunting or even a frustrating experience in communication. Similarly, for language not to be addressed in content area, teaching and learning may hence do a disservice to students especially ones that find learning in another language challenging. Thus ‘Not knowing is hence not loving’, a literal translation from a well-known Malay saying “Tak kenal maka tak cinta” is deliberately chosen as a title for this paper to encapsulate that simple connection between knowing and loving i.e. to know is to love in relation to this issue. This paper believes in the importance of consistently taking initiatives of wanting to know and finding out about language issues that surrounds teaching and learning as comprehensively as possible for teaching to be more inclusive of addressing one of many possible majorities of learning problems i.e. language barriers. It draws on discussions of the phenomenon of a second or foreign language as a medium of instruction especially in relation to English language.

II. TO “KNOW” AND TO “LOVE” IN TEACHING AND LEARNING

If we imagine a classroom with its key people - a teacher and a group of students - how much do they ‘know’ each other to be able to ‘love’? To answer this, it may be useful to first conceptualize how ‘to know’ and ‘to love’ are defined in this paper. ‘To know’ is defined in this paper as ‘to be aware of’ and includes the need to understand what affects knowing. ‘To love’ on the other hand, is loosely defined in this paper as ‘to be aware of’ and includes the need to understand what affects knowing. This act of knowing is assumed to influence the love for something. ‘To love’ on the other hand, is loosely defined in this paper as relating to any outcomes that are positive as a result of knowing. Such positive outcomes can be in the form of achievement or even motivation. Therefore, relating this to our question regarding how much a teacher and his or her respective students ‘know’ each other to be able to ‘love’ refers to the gap between how much the teachers know about their students and the actual description of their students for teaching and learning to be effective. This brings in the notion of situatedness and how teaching and learning needs to be considered in relation to the ‘make-up’ of the classroom. For instance, asking questions such as ‘who are the students’, ‘what are their abilities’ and ‘what are their learning styles and preferences’ are some questions that when answers are sought for them, the teaching and learning gap is hopefully drawn inwards and hence become narrower. Nonetheless, the thoroughness of our process of finding information about our classroom context of teaching and learning should frequently be readily opened to this question: ‘Have we all grounds covered?’

There is one thing that ties teaching and learning, teachers and students together. It is not merely about the ‘what’ that needs to be taught and learnt but about another crucial thing that this
‘what’ will not exist without i.e. language. For instance, the ‘what’ of any subject area has its own subject-specific language. In Science for example, there is a bank of words and phrases that are specific to Science only. Furthermore, the ‘what’ in the teaching and learning of a subject or content area needs to be communicated whether verbally or non-verbally and hence requires the use of language. Hence, language is the focal point of this paper’s discussion.

III. THE LANGUAGE AS MEDIUM-OF-INSTRUCTION (MoI) PHENOMENON

Language as a medium of instruction (MoI) is a subject of continuous debate and receiving proliferating attention across the globe. Such can be seen by simply reading an edited book by James W. Tollefson and Amy B.M. Tsui titled ‘Medium of Instruction Policies: Which agenda? Whose Agenda?’ [1]. The compilation of texts in this book discusses issues around Medium-of-Instruction policies that are not limited to only about the choice of language to be used as instruction but also about its relation to the sociopolitical issues such as globalization and migration and how this have impacted on the society particularly in education. In Brunei, English is the language of instruction for most of the curriculum across all levels of schooling. This is significant as English is a second language or even third language for a majority of the population. This paper therefore further discusses possible issues around teaching and learning in a second language. It particularly focuses on content area teaching and learning in which language discussions may not be a norm.

According to [2], there appears to be a close relationship between language and education at the practical level but at a theoretical level, language and learning remain in separate fields fuelled by academic compartmentalization that ‘makes it difficult to focus on the dynamic and central role that language plays’. This compartmentalization is also typified in practices involving in-service and initial teacher education in particular for secondary level teaching, which are usually led by subject matter specialists who have extensive experience in the subject matter but often less awareness of the role of language as the medium of learning and teaching and its impact on the learning process itself [3]. Due to these covert boundaries between disciplines particularly between language and other content areas, teachers of content may not see language playing a central role in teaching. This resonates in a clause written 30 years ago taken from the Bullock Report [4]:

12.4 A curriculum subject is a distinctive mode of analysis. While many teachers recognize that their aim is to initiate a student in a particular mode of analysis, they rarely recognize the linguistic implications of doing so. They do not recognize, in short that the mental processes they seek to foster are the outcome of a development that originates in speech.

Although findings from research in many educational settings that use another language other than the home language as a medium of instruction confirm that the language of learning and teaching frequently creates a barrier to learning (see examples [5]&[6]), contradictory to these findings is the fact that language is not seen by content or subject teachers as a potential problem in students’ learning. For example, in [5], teachers are quick to blame students’ negative attitudes and a lack of learning is perceived as being a result of learners’ lack of care for school work. Crucially, the language demands of content instruction are ‘invisible’ to content teachers as most teachers do not consider themselves to be teachers of language [7].

Extending shared knowledge and understanding that teachers bring to the profession which is typified by subject expertise, into an understanding of how the subject might be taught and learned is what [8] termed Pedagogic Content Knowledge (PCK). PCK transcend the boundaries of divisions and instead, according to [9], constitutes

‘A special form of professional understanding that is unique to teachers and combines knowledge of the content to be taught with knowledge of what students know or think they know about this content and knowledge of how this content and knowledge of how this content can be represented to the students through examples, analogies etc. in ways that are most likely to be effective in helping them to attain the intended outcomes of instruction’.

The phrase ‘knowledge of the content to be taught and what students know or think they know about this content’ includes an understanding of what topics are easier or more difficult to learn, knowing how students develop understanding or even misunderstandings, knowing how to anticipate and diagnose, how to deal with these misunderstandings and also acknowledging that students of different ages and background bring to class conceptions and preconceptions [8] [10]. Reference [8] further notes that it is with all these understandings of both content and student learning that teachers develop ‘ways of representing and formulating the subject to make it comprehensible to others’ through examples and analogies known as comprehensible input. Comprehensible input may be verbal or non-verbal. It is a way for teachers to make what they say and do to be understood by learners. In the context of teaching bilingual learners, especially in dealing with students who have low proficiency in the target language, teachers tend to use L1 in order to support student understanding [6] [11], a form of comprehensible input. However as has already been alluded to, this language change from one language to another presupposes that the teachers involved are aware of how to make their input comprehensible in either language – this is not a given. Furthermore, teachers may sometimes use non-verbal effective instruction for example in the form of visuals or graphic organizers [7]. These approaches are entirely appropriate for deconstructing the content and for making the teaching more comprehensible for the learners. However, caution also needs to be exercised in monitoring learner progression over time otherwise approaches used for assessing learning without awareness (i.e. appropriate PCK) may reinforce deficiency in students’ language use for two reasons.
The first is that dependence on L1 increases and thinking in L2 becomes even more difficult. If learner thinking in L2 is absent or limited, output - whether speaking or writing - is affected [12]. Secondly, although the use of non-verbal means can be effective in helping to mediate the language demands of content learning and increase the level of comprehensibility, comprehension at a broad level will not ‘automatically lead to an ability to use English to carry out academic tasks effectively’ [13].

Any learning situation demands learners to demonstrate in different forms their understanding through applying their knowledge and skills. For learners to use language appropriately to demonstrate their understanding requires language input that models the sort of language needed to produce the appropriate output. The input-intake-output model, promoted by Swain in bilingual settings, requires teachers to have an understanding of the way language is used as the medium for learning which according to [14] may have been lacking in the Brunei context. It is therefore important for teachers to know how understanding is constructed and applied so as to foster understanding - one of ultimate goals in teaching [15]. Whist it can be argued that fostering understanding is part of every teachers’ daily work, exactly how that can be accomplished in terms of language use remains less known and is not easily identifiable in lesson plans, tasks and activities in the classroom [16]. Tasks and activities may appear to be developing understanding but in actual fact are merely transferring knowledge and developing routine skills [15]. In order to nurture this deep understanding it calls for thinking that can be guided through modeling and scaffolding appropriate language [17]. Fig.1 visualizes the urgent need in bilingual education, as well as monolingual settings, for teachers to be aware of the relationship between the content they are teaching, the language they are using and the ways in which their learners will learn through that language.

Across the globe, apart from in training institutions, teachers are working in contexts where the documentation of language education policy to guide practice is non-existent [18]. Similar to Brunei, reference [5] highlights that although there is a major concern about language and learning, there is no written language education policy to guide practice whilst schools continue to use English as a medium of instruction. This poses another challenge and further contributes to the invisibility of the language learning medium to content teachers and may effect in an incomplete picture for effective teaching and learning. This invisibility therefore reinforces the title clearly: Not knowing is hence not loving.

IV. THE WAY FORWARD

This section proposes initial steps for Brunei with the objective of raising awareness by using language as a platform for discussion in relation to teaching and learning. First and foremost is to consider the most important stakeholders for learning i.e. the learners. Through the lens of language, learners need to be defined by their ability to understand and use the language of instruction in order to help teachers tailor their teaching closer to not merely their students’ general needs but also language needs.

Teaching in bilingual contexts assumes that teachers are likely to teach bilinguals with different levels of language proficiency. In the case of Brunei, teachers are dealing with bilinguals with very different levels of proficiency in English. These bilinguals are specifically English language learners as they are still continuing to learn and develop the target language. Furthermore, content teachers need to understand that L2 competence has a major impact on how one performs academically [19]. Hence, since second language proficiency is one of the most crucial determinants of achievement in content area learning, it may be useful to understand their students as English language learners who might not only have different learning needs but also different language needs i.e. bringing together an understanding of linguistic as well as cognitive needs to make more informed classroom decisions. For this purpose, Valdes’ et.al taxonomy of different types of bilinguals is fundamental in supporting teachers’ understanding of what different levels of proficiency ‘look’ like. This taxonomy however should not be used as the sole reference for understanding different language proficiency levels. It is merely showcased in this paper to give a gist and general understanding of them. As shown in table 1, they differentiate between 3 types of bilinguals namely incipient bilinguals, ascendant bilinguals and fully functional bilinguals.

<table>
<thead>
<tr>
<th>TABLE I. DESCRIPTION OF DIFFERENT TYPES OF BILINGUALS [4]</th>
</tr>
</thead>
<tbody>
<tr>
<td>In which students have no problems in comprehending oral English.</td>
</tr>
<tr>
<td>May have trouble comprehending written English in textbooks as</td>
</tr>
<tr>
<td>In which students have little oral English.</td>
</tr>
</tbody>
</table>

Figure 1. Relationship between knowledge of pedagogy, content and language.
Reference [4] gives examples of how this information exposing what English language learners can or cannot do with language, can be utilized. They suggest that for students who are ascendant bilinguals, for example, teachers may need to carry out informal assessments of their English language learners to identify the linguistic functions which students are capable of handling or need more help with. Teachers can observe if students can follow a class explanation, understand the instructions on a worksheet, read assignments in the time allotted and so forth. Information such as this is critical to understanding bilingual learners yet it is not obtainable from traditional language or content test scores. According to Valdes et al. when teachers reflect on students’ strengths and weaknesses and ‘design ways to give greater access to the lesson to English language learners without compromising access to academic content and language,’ the pathway towards effective bilingual learning is manageable.

Recent reforms in the education system in Brunei have given English a more dominant role to play. It is now to be used as a medium of instruction as early as in the lower primary level. Bruneians would then be expected to be fairly fluent in English as a result of prolonged exposure to the English language. There may be arguments stating that exposure to language used for both teaching content and taught as a separate subject on its own provides opportunities for language learning to take place. This assumption reflects Scrivener’s illustration of the language learning process, where according to him, one of the steps that people go through in learning language is exposure to the target language [20]. However, exposure is not enough to sustain the continuity of language learning and development [7]. Content teachers, especially those teaching at secondary level, continue to assume that their students who have been exposed to English for several years at primary level and have learned English as a school subject in its own right, are proficient enough to deal with the demands posed by content instruction and learning. These content teachers are under a serious misapprehension with resulting negative consequences.

Reference [21] suggests that students would benefit more academically and linguistically if they established a solid foundation in their first language, especially when English is not used for everyday purposes. Hence, reference [5] notes that ‘many educators believe in the logic of suggesting that if children are failing to learn through English, the obvious alternative is the mother tongue’. Even if the mother tongue is used, learning will still be challenging as school language is different from home language. Regardless of social status or ethnicity, everyday experiences of students are often different and remote from the language registers of academic and speech events of school-based work [3]. Fluency in mother tongue may therefore not necessarily translate into academic literacies. Teachers therefore need to ‘gain greater awareness of the challenges that students face in particular with the types of language demands [3] and processes involved [4] in the course of content teaching and learning. To exemplify the importance of this phenomenon, Fang’s study of struggling readers and English language learners identified about a dozen salient features of the language of school science known specifically as expository language e.g. vocabulary, abstraction and grammatical forms identified in science texts [22]. Fang compared each of these features with the students’ everyday language and noted that such features were neither known nor used by the students. It was predicted that because of these differences, English language learners, who do not have sufficient exposure to academic language may find it challenging and difficult to comprehend subject matter. It is noted that if teachers were exposed to studies such as these during their own professional learning, they might serve to raise their awareness of language for learning. The teachers would then be more open to being supported in providing the conditions and creating an environment in which ‘students will have access to the essential content instruction and opportunities to develop the language used in school to talk and write about the content’ [3]. The following extract from the Bullock Report sums this up:

12.7 Subject teachers need to be ... able to provide the variety of reading material that is appropriate and willing to see it as their responsibility to help their pupils meet the reading demands of their subject. The variety of written forms a [pupil] encounters in reading will be an influence upon the development of his writing abilities. To restrict the first can result in limiting the second [4].

V. PROPOSED FRAMEWORK: INTEGRATING LANGUAGE IN CONTENT TEACHING

As has already been alluded to, language is at the very core of learning. First, many aspects of teaching and learning revolve around language. Teaching, for example, requires language for teachers to communicate content to students. Learning, on the other hand, requires language to process what is being taught or what is being read. Furthermore, to show
understanding, students need to use language to write or say what they have learnt. It is the vehicle for learning. Second, the relationship between language competence (in both L1 and L2) and academic achievement has been the subject of debate and research across centuries. More recently, as bilingual education expands across the globe situating a second language as the medium of instruction for content area learning, language competence has a major impact on how one performs academically. Even in those areas which appear to be less related to language such as Mathematics for example – a subject that is often perceived as needing less language due to its numerical focus [23] – it was found that there is a positive correlation between Mathematics achievement and second language proficiency [24]. Low L2 competence thus may be very detrimental to learning for understanding and classroom participation, and may not do any justice to learning particularly in contexts that are test and exam-oriented [25]. It is now appropriate to turn to an approach to learning which has been rapidly gaining momentum since the mid 90s, to investigate the principles of integrating content learning and language learning in different contexts into a pedagogical approach.

A. The significance of the CLIL model

CLIL (content and language integrated learning) grew out of European contexts where it was evident that young people needed to be able to use more than national language/s especially when these were not English [26]. Learning parts of a national curriculum through the medium of English (or in Anglophone countries or some of the European borderlands, German, French and so on) became established as the ‘norm’. In this sense language learning was integrated into parts of the curriculum so that learners use the language to learn as well as learn to use the language. This shift has demanded a re-think not only in terms of conceptualizing language (grammar and vocabulary) but also in terms of the language demands of content area subjects to identify the language needed to function effectively. Bringing together second language acquisition theories with learning theories spawned an alternative approach to bilingual education. The consequent discussion will look at integrating language and content learning inspired by a model that recognizes comprehensively the importance of language in content teaching i.e. the Content and Language Integrated Learning model. Particular attention will be drawn to Coyle’s 4Cs framework and language triptych which contribute to an in-depth understanding of language as both the object and medium of learning [26] [27] [28].

B. The 4Cs Framework and the Language Triptych

The 4Cs framework constitutes a conceptualization of learning and teaching through an integrative model. It emphasizes the importance of conceptualizing how four elements of learning might interact with each other namely content (the subject matter), cognition (learning and thinking), communication (language learning and language using) and cultural elements (identities and orientations) [26]. The 4Cs Framework brings to the fore the importance of pedagogic approaches which take account of different dimensions of bilingual learning situated in specific contexts. When a teacher teaches, there is content that needs to be communicated to students. It also involves thinking on the part of the teachers on how best to communicate the content to students and also how students come to understand the content which very much draws on the role of cognition. The 4Cs Framework purports that content matter (knowledge, skills and understanding), communication (language) and cognition (learning and thinking) must not be understood as separate from one another but rather inter-related. It also takes account of the cultural dimension which influences learning and is at the very core of learner identity – thus fusing the affective, the cognitive and the social elements of learning. The model is now being applied in very different contexts across the world.

The role of language in learning has been emphasized throughout this paper. The tension arises when the language is not as developed as the cognitive skills of the learners. Coyle’s Language Triptych [26] provides an alternative to language learning which is not built on grammatical chronology. Instead it emphasizes acquiring skills for language using. Whilst traditional models for language learning based on a grammatical approach still adhere in classical language learning, an alternative approach which focuses on language using runs in parallel. It is not possible to maintain systematic grammatical progression when learning through another language - e.g. the past tense is likely to be needed immediately and language functions and notions impact on input being transformed into comprehensible intake and output. The Language Triptych therefore provides an approach to learning through a language which identifies language needs in terms of language of, for and through learning. This approach brings into question the classical learning of any language in formal settings which are not immersive in context and which rely upon grammatical progression into an approach which provides the means of learning language for the proposes of learning through the language at the same time as acquiring the language itself. Clearly such an approach has wide pedagogic implications in terms of skilling teachers to use language in their classrooms in alternative ways.

VI. THE BIG PICTURE: THE IMPORTANCE OF PROBLEMATIZING LANGUAGE

This paper has underlined the importance of pedagogic approaches which take account not only of the challenges of learning itself but of learning through other languages which are neither the mother tongue or those spoken daily in the community. Where English is the medium of instruction of an educational context and it is not used for everyday purposes English language learners, especially those with limited English proficiency, will undoubtedly be challenged and potentially face insurmountable problems unless the learning context is sympathetic to the complex demands of bilingual
learning. There is therefore an urgent need for issues around language in content area teaching and learning to be addressed. For this to be possible, content area teachers need to understand language problems that may arise in their lessons and to find out how best to avoid them or solve them. This stance does not however suggest that teachers should be trained as language teachers nor does it disregard any content teaching that does take account and plan for with language problems. On the contrary, because content area teachers are trained differently from language teachers, the chances of being aware of complex language issues is likely to be less than that of language teachers.

Reference [19] argues that teachers need to critically examine the role that language plays in teaching and learning and further suggests that rather than providing comprehensible input to English language learners that helps them “go around” language, teachers should scaffold understanding and learning to use academic language. Teachers may not be able to support learners in appropriate ways such as to talk and write about what they are learning, if they do not understand themselves the unique language demands of the disciplines they are teaching [3]. Such understanding requires understanding the discourse associated with ways of speaking and writing in their disciplines in addition to specialized vocabulary which makes particular demands on students. The Bullock Report which has been used as one of the fundamental sources for this paper emphasizes that for language (L1, L2 or L3) to play its full role as a medium for learning, the teacher must create a classroom environment which encompasses a pedagogic approach appropriate for learning through two or more languages. Teachers need to constantly problematize language, to examine the kinds of oral and written proficiencies that are required for their students: to access textbooks and other written material, to comprehend teacher explanations, to participate effectively in group discussions, to demonstrate what students have learned in class, on classroom evaluations, and on formal assessments [3]. Reference [3] further suggests that teachers must be nurtured to become aware of subject and academic discourse as well as being skilled in making learning possible according to the language and cognitive levels of their students. This provides strong evidence for the need for teacher professional development to take account of bilingual learning as a matter of urgency if language policies are to be successfully implemented.

VII. CONCLUSION

Through a programme inspired by the existing and evolving European CLIL (Content and Language Integrated Learning) model, which sets out to empower teachers to improve their current practice and to be aware that by incorporating language learning and language using into their deliberations of teaching and learning, the CLIL philosophy is one which will lead to ‘a value-added approach, as opposed to a subtractive [one], that seeks to enrich the learning environment’ [29]. The whole essence of this discussion therefore is for content teachers to have heightened awareness of language. In the attempt to cater for learners’ needs, teachers who are dealing with English language learners, and in particular with those with limited English proficiency, not only have to address general needs but also to understand what these learners can or cannot do with language. Furthermore, when looking at language, content teachers must see that language is not only about the language of their content area (e.g. technical vocabulary) but they also need to understand that their content teaching is mediated by language, that teachers need language for learning and that the language that students need can emerge through learning.

To raise this awareness effectively requires a strategy of professional development that does not target only transmitting information about the role of language but rather a more experiential environment for those teachers to come to a shared understanding of the crucial role of language (L1, L2, L3) in the learning process. It also requires transforming the “invisible” into the “visible” by guiding them throughout the process. To conclude, it is therefore deemed appropriate that professional development programmes should aim at teacher learning and experiencing what is arguably the most fundamental element of bilingual education. It is hoped that when language awareness on the part of the teachers is amplified, ‘to know is to love’ as defined earlier becomes an eventuality.

ACKNOWLEDGMENT

A special thanks to both my supervisors Professor Do Coyle and Dr. Archie Graham for their continuous guidance and support throughout my current doctoral studies.

REFERENCES


1 The use of word ‘heightened’ acknowledges that there could already be language awareness at some level.


Norashikin Yusof is a lecturer in the Sultan Hassanal Bolkiah Institute of Education, Universiti Brunei Darussalam. She is currently a PhD candidate under the University of Aberdeen, United Kingdom. Her current interests are mainly in English Language Education, Applied Linguistics, Content and Language Integrated Learning (CLIL) and Teacher Professional Learning.