SAFE TALK OR DIALOGIC LEARNING IN THE JUNIOR SECONDARY BILINGUAL SCIENCE CLASSROOM? A CASE STUDY

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This case study examines the implementation of English Medium Instruction (EMI) in a junior secondary Science classroom in Sri Lanka, aiming to enhance access and equity by improving students' English proficiency. Drawing on sociocultural theory and dialogism, the study explores how EMI policy is translated into practice, emphasizing opportunities for authentic language use and participatory learning. Data were collected through classroom observations, audio recordings and teacher interviews at an urban national school. Findings reveal that while initial classroom interactions were characterized by ritualized, teacher-centered IRF/IRE patterns and minimal student participation, over time, the teacher fostered a more interactive environment. The use of L1 (Sinhala) was prevalent for scaffolding, classroom management, and encouraging student participation, reflecting a mixed-code approach. The study highlights the need for teacher training on strategic L1 use and dialogic teaching techniques to enhance EMI effectiveness.

Keywords: Bilingual Education, English Medium Education

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INTRODUCTION

Interviews conducted by the researcher with key policy makers and principal architects of the 2001 'new initiatives in education', that deal with the (re)introduction of English medium instruction (now, 'bilingual education') in selected subjects starting at junior secondary level in Sri Lankan schools, revealed that two main (and related) aims underpinned the policy: access and equity. Since the aims of the EMI policy being studied were meant to increase access and equity by means of giving students a chance to improve their proficiency in English (by providing them with opportunities to use the language), it is apparent that some key assumptions underlie these aims. These assumptions were arrived at after in-depth semi-structured interviews with the policy makers from the 2001 Presidential Task Force on the New Reforms, who are well known and were very vocal about the policy aims and justifying them in the local media at the time of the initiative.

1) Students will be exposed to English for longer periods of time if they study selected subjects in the English medium, than if they only study English in the time set aside for learning it as a subject.
2) Students' language proficiency can be increased if they are motivated to use the language in authentic contexts, with an authentic need to communicate (Genesse, 2007) and for genuine 'tasks'.
3) Bilingual classes will afford students more opportunities to use (speak and write) the language than if they only attended their English (ESL) classes.

A "Supplementary Manual to teach Health and Physical Education in the English Medium – A Support to Improve English" (Ministry of Education, 2018) reiterates in its foreword:

> With the view to improving English language skills of students learning in the general education system of Sri Lanka, measures have been taken to provide with opportunity [sic] for the students to learn some selected subjects in English medium for the last two decades. (2018: iii)

Bilingual/English medium instruction (EMI) classrooms are supposed to correspond to the conditions under which young children learn their first language; so, it is envisaged that in these programmes, a communicative use of the target language (i.e., English) along with interactive classrooms will prevail. Therefore, the theoretical perspective adopted by this study underscores the policy assumptions by using as its theoretical lens, sociocultural theory, the participatory perspective of

language learning and dialogism, which emphasize opportunities for students to actively interact in the classroom. Alexander (2006) has defined dialogic interactions as those in which students not only ask questions, but also share their points of view, give their opinions, share their comments about information which emerges from the lessons. Miao (2006) argues that the students become keener to articulate their ideas when they recognize that their contributions are jointly constructed over turns and exchanges when their utterances are incorporated into the successive discussions by the teacher. Erdogan and Campbell (2008) investigated the frequency of teacher questions that occurred in classrooms grouped according to the differing levels of constructivist teaching practices, and found that a significantly larger number of questions were asked by teachers employing high levels of constructivist teaching practices (HLCTP) than by those employing low levels of constructivist teaching practices (LLCTP). Their study also found that the HLCTP teachers use more open-ended questions and fewer close-ended questions. They reiterate that "teacher questions are mechanisms for coaching students to articulate their understandings, constructing relevant relationships and providing a setting for more active student inquiry" (p.1894).

In this context, the Research Questions that drive this study are:

1) To what extent does the EMI Science classroom provide opportunities for students to practice [produce] the target language in an authentic context and how participatory is the process of teaching and learning as reflected in classroom discourse?
2) What role does the use of mother tongue play in Bilingual Science classrooms and what are its functions?

METHODOLOGY

This study aims to explore at the implementation level, how policy is translated into practice in the classroom in an effort to investigate the conditions that may facilitate the meeting of the two related aims: opportunities to learn the language and issues of equity. In many ways, the policy can be interpreted as an 'intervention' because its aim is to remedy a problematic situation. Therefore, a qualitative approach is used to obtain an in-depth understanding. Since language learning is assumed to be shaped by, and situated within, interactional contexts that are framed socio-historically and defined locally, this study too, involves primarily the use of ethnographic and discourse analytical methods, and entails careful observation of the context of language learning, relying on audio taped data collected from actual classroom contexts as well as field notes compiled during the tapings as the primary source of data, grounding it in the actual processes of interaction occurring between individuals and their particular learning environments. Research in a qualitative paradigm is

pragmatic and interpretive and is grounded in the lived experiences of the participants (Marshall and Rossman, 1999:2). Findings thus 'emerge' and are not anticipated, but rather, reveal themselves. As such, the research on which this study is based falls broadly within an *emic* perspective. The school chosen was an urban, 1AB National School in the Kurunegala Educational Zone and was selected due to the researcher's access to engage in data gathering; thus, it was a convenience sample. Further, it was assumed that being a privileged school in the district, the researcher could investigate the implementation of bilingual education in a school under optimal or near-optimal conditions. Data were collected in the Grade 6 Bilingual Science classroom over an entire school term. The Science classes were audio recorded and the researcher took notes while sitting at the back of the class. The first year of   Junior Secondary School (Grade 6), was selected because it is the point at which both Science is taught for the first time and EMI is used in a child's school career. The recordings were transcribed, coded and analysed using a combination of conversational analysis and classic discourse analysis. A semi-structured interview was also carried out with the Science teacher who taught the bilingual class.

RESULTS AND DISCUSSION

The question of how students are afforded opportunities to participate in the teaching-learning process cannot really be separated from the issue of how the L1 or mother tongue is used in the classroom because L1 is too pervasively used to exclude it from means of participation. At the beginning of the observation period, there was a ritualised participation which occurred, with the teacher sticking to the traditional IRF/IRE format for a large part of the teaching learning process and relying on safetalk to some extent. Safetalk, is a form of interaction that maintains minimal participation without causing embarrassment. The classroom was teacher centred and students rarely got the opportunity to produce utterances in English that were longer than a word or clause. The fact that the teacher almost never paused enough for the students or a single student to answer or complete their responses added to the mechanical nature of the classroom interaction. However, over time, the students participated more in class discussions and there were occasions when the teacher and students engaged in a joint co-construction of knowledge both during group work and whole class-fronted discussions. This reveals that the teacher improved the participatory nature of the classroom interaction over time and in relation to increasing familiarity, experience and time spent as a classroom participant. While teacher initiations rarely supported a classroom, which gave students adequate opportunities to produce significant output in the target language, she often used her follow up or evaluation turn to elicit meaningful student responses and participation.

In addition to the use of L2, the teacher often used L1 to scaffold students' content learning, mostly within the IRF structure. She did this by means of prompting both monolingually and (mainly)

bilingually. Dialoguing also occurred bilingually. The teacher switched to L1 to encourage, motivate and draw in students to participate in the verbal interaction. L1 was also used in asides, for classroom management and to summarise main points and provide recapitulations of lessons. The teacher sometimes switched to L1 due to her awareness of her own lack of proficiency in English. L1 was rarely used on its own but instead it was blended with the target language in a mixed code that is reflective of the verbal language behaviour of many (urban) bilinguals in Sri Lanka. Although a lot of talk in the classroom among students as well as between students and teacher takes place in mother tongue, all greetings, when the teacher enters the class as well as leaves are in English. Important notices and sign boards around the school are in English. This signifies both the symbolic value and prestige played by English in the ethos of the school as well as in wider society, and the fact that the two languages are used in conjunction with each other. Due to the rapid and seamless switching between English, L1 and mixed code, no *one* language was privileged as the language of Science, although there was a focus on the learning of key words and Science vocabulary in the target language. Colloquial Sinhalese was used for classroom management issues and asides, but formal academic Sinhalese was also used to summarise the main points of the lesson. Key definitions were repeated in English by the teacher and there was an emphasis on rote learning in the L2 for definitions and specially in the explanation phase of the lesson. However, there was no dichotomous division of labour between the L1 and L2, where the L1 is used for classroom management, asides and to create solidarity and L2 is used for academic learning. Instead, the data shows that English too, was used for asides and classroom management (though to a lesser extent than the L1) and Sinhalese was used for academic content teaching. The teacher, a 23-year-old novice teacher with six months of experience, thus used L1 and L2 in fairly equal proportions. This was borne out by what was observed in the classroom as well as stated in her response during the teacher interview. She was defensive/apologetic about using L1 but saw it as an important way of getting the students to be active learners and share knowledge. Her strategic use of L1 was mostly instinctive and 'unconscious'.

Despite her limited English proficiency, the teacher is dedicated, confident and eager to improve her teaching skills. Observation of classroom participation highlighted varied student engagement, with significant use of choral responses and individual interactions, despite following a typical IRE/IRF pattern. The teacher had an ambivalent attitude towards the issue of EMI and was of the opinion that she had not received adequate training to teach in the EMI. Among the challenges of teaching in an L2, she found that her own as well as the students' limited proficiency in English was paramount. Many instances of the lack of fluency and/or accuracy in the target language on the part of the teacher were observed. She used various strategies to confront the challenges of teaching in the English medium Science classroom, the chief one and the one that was acknowledged, being the use of Sinhala, the L1 of the students as well as the teacher. Further, the expert-novice roles assumed in

socio-cultural theory (which supports a participatory model of the classroom) were somewhat challenged in that the teacher may have been the expert in the content knowledge but not only was she not an expert in the language of instruction (English), she also acknowledged that she saw herself as a novice/learner. In many instances, this helped her to empathise with the students, breaking down traditional asymmetry of the classroom (van Lier, 2001) and creating a more dialogic and participatory learning environment

CONCLUSIONS/RECOMMENDATIONS

Although it is a well-known practice, and has been cited as an alternative to monolingual Sinhala in wider society (Senaratne, 2009), the teacher did not admit or acknowledge that she used Mixed Code (CM, or blended language) because it is the norm in Sri Lankan speech communities. Instead, she took the position of CM/use of L1 and codeswitching being simply a strategy to cope with deficiency. This may be due to the fact that she was unaware of CM as a legitimate linguistic phenomenon, or the fact that she subscribes to essentialist positions about language purity in relation to classroom language, as implied by her responses in the interview. It is recommended that bilingual teachers be made aware of the legitimacy of using the L1 strategically and legitimately in the bilingual medium/English medium classroom. It is also recommended that teachers are given training about the different responses they can give during questioning phases of classrooms, and they be taught how to use prompting and dialoguing (Forman, 2008) in the Evaluation /feedback move of the IRF pattern.

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