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Providing effective delivery in English: Exploring challenges and strategies of academics from non-native English speaking backgrounds

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The Australian higher education context has seen an increasing number of international students and academics, including those from a non-native English speaking (NNES) background. Whilst the issue of the English language as a means of communication for NNES international students has been well researched, the communicative and pedagogical challenges facing educators, especially those from NNES backgrounds, in teaching and supervising students in English have been overlooked. This paper aims to explore the challenges in teaching using English as a medium of instruction (EMI) and associated strategies of academics from NNES backgrounds. Adopting a Vygotsky’s socio-cultural theoretical perspective, the study conceptualises EMI as a mediational tool academics appropriate in mediating their teaching delivery. This study adopted a mixed-method approach, using semi-structured individual interviews and survey questionnaire with academics from a range of disciplines, including STEM (Science, Technology, Engineering & Mathematics) and HASS (Humanities, Arts, and Social Sciences) disciplines, at an Australian university. Findings revealed multiple communicative and pedagogical challenges facing academics in providing effective delivery in English. The study also reveals strategies successful academics applied to adapt the tool – the English language- to effectively mediate their teaching delivery for student learning. The findings have implications for professional development programs and institutional support for NNES academics teaching in contexts with English as a native language. The findings could also contribute to supporting academics develop effective delivery in EMI and facilitate curriculum transformation in the ever changing context of higher education.

Keywords: English-medium of instruction, academic professional development, learning and teaching in higher education

Introduction

In contemporary higher education context, internationalisation is a prevalent multifaced process defined as ‘the policies and practices undertaken by academic systems and institutions, and even individuals to cope with the global academic environment’ (Altbach & Knight, 2007, pp. 290-291). In the Australian higher education context, this phenomenon is manifested partly by an increasing number of international students and academics, including those from a non-native English speaking (NNES) background. Whilst the issue of the English language as means of communication for NNES international students in the global academic environment has been well researched (see e.g., Arkoudis & Doughney, 2014;
Johnson, Veitch & Dewiyanti, 2015), the issue of language and communicative demands facing educators, especially those from NNES backgrounds, in teaching and supervising students in English-medium instruction (EMI) has been little researched. Notably, although EMI teaching in tertiary contexts where English is not a native language has received some recent attention (see e.g., Doiz, Lasagabaster & Sierra, 2013), EMI teaching in contexts with English as a native language, such as in Australia, has been overlooked. An insight into the communicative and pedagogical challenges NNES academics face in an Australian higher education context would help to inform professional development programs and institutional support for NNES academics teaching in these contexts, and would ultimately help to support student learning.

The research reported in this paper aims to explore the challenges in teaching using English as a medium of instruction (EMI) as perceived by academics from NNES backgrounds and the strategies exemplary academics have adopted successfully to overcome the challenges. It asks two questions: What are the challenges NNES academics face in teaching and supervising students using EMI in this context with English as a native language? What strategies do exemplary NNES academics adopt to overcome the challenges? The paper begins with a literature review and theoretical framework, followed by an account of the method and techniques utilised. A major part of the paper is dedicated to presenting and discussing key findings, encompassing the challenges and strategies adopted by NNES academics, drawing on data from both interviews and the survey. The paper concludes with a discussion of implications of the findings.

**Literature Review**

Research on EMI in non-Anglophone tertiary contexts has reported on various challenges and strategies for NNES academics, who teach using EMI in tertiary contexts where English is not a native language (see e.g, Doiz, Lasagabaster & Sierra, 2013; Helm & Guarda, 2015; Klaassen & De Graaff, 2001; Wilkinson, 2012). In terms of EMI challenges, whilst considerable insights have been obtained about NNES academics in these settings, little is known about the growing cohort of NNES educators working in Anglophone countries, where English is a native language. In fact, with regard to EMI-related issues in native English speaking contexts, EMI literature has been largely confined to a paucity of works on international teaching assistants (ITAs) at the U.S. universities (see e.g., Bailey et al., 1984; Turitz, 1984). Similarly, knowledge about EMI strategies is also largely dependent on studies conducted in non-native English speaking countries (Ball & Lindsay, 2012; Im & Kim, 2015; Wilkinson, 2005) and ITA research (Shaw & Garate, 1984; Williams et al, 1987). Except for Shaw and Garate (1984) who explicitly mention the role of ‘university pedagogy’ in improving EMI delivery by ITAs, current research mainly focuses on language and communication skills related strategies.

Building on Dang, Nguyen and Le’s (2013) work on EMI in a non-native-English-speaking tertiary context, the present study adopts a Vygotsky’s socio-cultural theoretical perspective in conceptualising English as a mediational tool academics appropriate to mediate their teaching delivery in higher education. This conceptualisation is consonant with Baldauf’s (2012) argument on EMI that individual agency, including those of teachers and learners, is significant in implementing EMI policies.

According to Vygotsky (1978), we, human beings, use labour and tools to change the environment, including the conditions under which we live. Through this process we also
change ourselves. Language is considered a psychological tool (Vygotsky, 1981). In education, following Dang et al. (2013), in the present study the English language is one of the mediating pedagogical tools used by NNES academics (Grossman, Smagorinsky & Valencia, 1999) in teaching and supervising students in higher education for student learning. Arguably, for NNES academics teaching in EMI contexts with English as a native language, English is also a significant, if not only, means for communicating with students, who may not speak other languages than English.

To help elaborating the use of English as a pedagogical and communicative tool, the study draws on a modified conceptual framework of EMI competence encompassing both communicative and pedagogic aspects (see Figure 1). This framework shares a common perspective with Shaw and Garate (1984) who included university pedagogy in addition to linguistic and communicative components in a course designed for ITA training in the U.S. university contexts.

In terms of communicative aspect, we specifically draw on the communicative competence framework developed by Hymes (1972) and pedagogically adapted by Canale (1983), Canale and Swain (1992) and Savignon (1983) (see Hoekje & Williams, 1992). The framework combines four main areas of communicative competence: grammatical competence, discourse competence, sociolinguistic competence and strategic competence. Grammatical competence is also referred to as linguistic proficiency (Williams et al., 1987). This competence includes academics’ pronunciation, enunciation and general comprehensibility (Ball & Lindsay, 2012, p.5).

Discourse competence is referred to as strategies which support academics’ delivery in English, including: making explicit what they are trying to get across to their students, repetition, and summarising (Williams et al., 1987). Discourse competence also refers to strategies in structuring one’s lecturing delivery, such as providing background information, summaries, conclusions, and the ability to deviate from the structures to adapt to students’ needs (Klaassen, 2001).

Sociolinguistic competence is related to the social and cultural aspect of the English discourse, such as the appropriateness of language use according to the context of communication (Hoekje & Williams, 1992). According to Nguyen (2007), sociolinguistic competence also encompasses the ability to build rapport with students through language of instruction and the use of inclusive language (Nguyen & Nguyen, 2007).

Strategic competence includes non-linguistic strategies to significantly enhance the clarity of class delivery and verbal compensatory strategies (Williams et al, 1987). Non-linguistic strategies include the use of: visual aids, writing information on the board in conjunction with speech (and relatedly board presentation), and graphs (Williams et al, 1992); black/white board organisation (Shaw & Garate, 1984); and slides and videos (Klaassen, 2001).

The communicative competence framework tends to focus on linguistic and non-linguistic strategies in communicating to students in a didactic sense. When it comes to teaching delivery, ‘teaching’ is often reduced to ‘lecturing’. For this study on effective delivery, the scholarship on pedagogic/teaching delivery competence, with ‘teaching’ in a broader sense than ‘lecturing’, is also needed. Pedagogic competence is explored through Shulman’s (1986, 1987) conception of teacher professional knowledge. Shulman (1987) argues for the need of teachers to develop various types of professional knowledge: subject content knowledge (or
knowledge about the subject), general pedagogical knowledge, knowledge of learners and their characteristics, and pedagogical content knowledge (pedagogical knowledge to teach specific disciplines).

Figure 1: An adapted communicative and pedagogic competence framework for exploring effective delivery in EMI contexts with English-as-a-native-language

Methodology

This study formed part of a larger study including both native-English-speaking (NES) and NNES academics. It adopted a mixed-method approach, using semi-structured individual interviews and survey questionnaire with NNES academics from various disciplines, at an Australian university.

The major data source includes semi-structured individual interviews, each lasting approximately one hour, with eight exemplary NNES academics. The interviews were conducted at a time and physical location suiting the academics, mainly their offices. These academics were selected and invited to participate in this research as they have been recognised as ‘exemplary’ educators at their university. Specifically, they all have won learning and teaching awards or research student supervision awards at the institutional or national levels. Interview data provided insights into their EMI teaching experience, covering challenges initially encountered and strategies successfully adopted to overcome the challenges.

Data from the survey questionnaire, sent in an email to all academics from the university via Associate Deans (Education), helped to triangulate data from the interviews. The survey investigated academics’ challenges and professional learning needs in providing effective delivery in English. Responses from NNES surveyed participants were then extracted for the purpose of this paper. The first round of survey yielded 59 responses, including nine responses from NNES academics.
For data analysis, interviews formed the primary data source while survey data helped to triangulate findings from the interviews. The interview data was content-analysed using Nvivo software to identify challenges and strategies of each exemplary academic. Emerging themes were then compared and contrasted across eight focused academics. All participants’ names presented in this paper are pseudonym to protect anonymity. Analysis of the survey data, especially from the open-ended questions, helped to triangulate findings from the interviews.

Findings and Discussion

Findings reveal multiple EMI challenges NNES academics participants faced in all the five EMI competence areas, and various strategies NNES exemplary academics have successfully adopted and suggested to overcome the challenges. The findings lend support to existing literature on difficulties facing academics in EMI contexts and their strategies to overcome these obstacles. Being one of the first empirical studies on EMI where English is a native language rather than a foreign language, this study also identified aspects related to EMI challenges and strategies, only specific to this EMI context.

Challenges

- **Challenges in grammatical competence**

Findings suggest a common concern among interviewed academics and survey participants of pronunciation due to accent issues, which according to Ball and Lindsay (2012, p.51) is ‘inevitable’ to NNES speakers. Supporting previous observations of this typical challenge facing NNES academics in a non-Anglophone setting (e.g., Ball & Lindsay, 2012; Klaassen & de Graaff, 2001; Wilkinson, 2005, 2012), this study also elaborates on two facets of the accent related challenge: intelligibility and comprehension. For example, an Associate Professor from a French-speaking background felt that his French accent may make his spoken English less intelligible to students who were already struggling to understand English:

My own spoken English is accented in ways that may add a level of difficulty to those who have difficulty understanding English. (Survey response)

In Monique’s, another French academic, account the accent obstacle is rooted in her apprehension of the native speaker’s accent, in this case, her local student’s Newzealander’s accent:

When they say ‘behind,’ I say ‘behind’ because I’m French yeah. And they say ‘be-horn,’ completely different word. So before I could understand that be-horn ...[pronouncing be-horn with a New Zealander accent]... as ‘behind’... [I was] trying to remember how they pronounced it, compare it to my pronunciation, and switch my pronunciation to their pronunciation so that I could understand the next time he says ‘behind’, I could understand what he was saying. (Monique, Pharmacy)

Extending current literature which mainly associates the accent challenge with intelligibility, this research finding suggests a dual challenge NNES academis faced in this EMI context with English as a native language: understanding international and local speakers’ accented English whilst also making themselves understood.
• **Challenges in sociolinguistic competence**

Sociolinguistic competence is concerned with the social-cultural aspect of language use. The findings reaffirm three common sociolinguistic challenges mentioned in the EMI literature, including the appropriateness in language use according to the norms of students’ interaction and interpretation, balance of informality and authority in interaction with students (Hoekje & Williams, 1992) and humour (Klaassen and de Graaff, 2001). In addition, this study identifies a challenge related to the comprehension aspect of sociolinguistic competence. This aspect is largely neglected in the existing EMI literature. Findings reveal NNES academics in this Australian higher education context encountered difficulty in deciphering local students’ colloquial language use. This may inhibit mutual understanding, meaningful interactions and rapport between NNES educators and students. For example, Monique explained in her interview:

> But it’s really difficult when you arrive in another country because then they suddenly don’t speak [English] the way you have learnt. And I was speaking with people in industry. Adults. Scientists. And then I changed completely the audience again... they [students] are not adults yet because they are not working. And they are still in this student life where they speak a language that is slightly different from the adult one. So ‘What are you saying? What is this word?’ (Monique, Pharmacy)

Monique’s challenge alluded to the discrepancy between the formal English language that NNES academics were taught and the ‘real-life’ English, which is more demanding in tandem with slangs exclusive to a younger generation of native speakers like her students.

• **Challenges in discourse competence**

Discourse competence is fundamentally related to the organisation of utterances. Supporting the extant literature, this study revealed that early in their EMI teaching career, NNES academics experienced difficulty in providing coherent and cohesive delivery in English due to “extraneous information, trying to do too many things at once” (Williams et al, 1987, pp.10-11). In the following excerpt, Vihaan, from an Indian background, shared the issue with overpacking the lesson:

> Sometimes ... we have to cover 70 lecture slides in one or two hours of session. It's like roughly speaking two minutes per slide. Sometimes, some concepts have to be explained, which takes more than two minutes, maybe three minutes, four minutes, sometimes five minutes. What I did then [when I started teaching] is I tried to tend to speed up the process of going through a lot of concepts, a lot of material on the slide, which the students found very hard to follow. (Vihaan, Information Technology)

In line with Williams et al. (1987), the disorganisation described above is also associated with problems in pacing and failure to direct students’ attention to key points and their connection, impeding intelligibility of their English. This challenge, as will be revisited in last section, could also be deeply rooted in educators’ challenge in pedagogic competence.

• **Challenges in strategic competence**

Strategic competence indicates the mastery of verbal and non-verbal strategies adopted to compensate for perceived shortcomings in other areas of competences or to communicate
more effectively (Hockje & Williams, 1992). Regarding strategic competence, findings identified three areas NNES academics found challenging: strategies to ascertain students’ understanding and engagement, the use of visual aids, and eye contact.

The biggest challenge is gauging students’ level of comprehension and engagement. In the following excerpts, Rachel and Peter, for example, elaborate on different degrees of difficulty in this respect:

One of the difficulty for that is trying to talk to a large class, not knowing whether they understand or not. We only know that when they do the assignment or when they do the test. Then we see how they perform in the test… Also, it's quite daunting as well. Especially because English is not your first language. You're not sure whether the student understand what you're talking about or whether they like you or whether they like your lectures and so on. (Rachel, Chemical Engineering)

My own spoken English is accented in ways that may add a level of difficulty to those who have difficulty understanding English. I repeat myself in several different ways, and explain to my interlocutors what that is that I am doing. I try to get my interlocutor to repeat my instructions back - so we can agree. Sometimes I'm not sure it's entirely effective. (Peter, Engineering)

While Rachel and Peter seemed to share a common challenge, their compensation strategies differed. Rachel’s approach appears to be passive as she waited until the end of the course to verify her uncertainty and was not seeking to gauge students’ level of comprehension during instruction. Meanwhile, Peter demonstrated his active role in adopting the discourse strategy of rephrasing and repeating to check and enhance the effectiveness of his instruction. These examples suggest the need to raise academics’ awareness of strategic competence and build capacity to draw on a repertoire of strategies to provide effective delivery using EMI.

**Challenges in pedagogic competence**

The interview data revealed NNES academics’ challenges with three dimension of teacher professional knowledge: knowledge of subject content, knowledge of learners, and pedagogical knowledge to teach specific discipline (Shulman, 1987). The following interview excerpt provides examples of the challenges they faced in the first years of teaching in this respect:

It’s like how much do you teach? how much do you tell the students? how much do they find out for themselves? what is too much? Yeah so the first few years I was really trying to get the syllabus correct. I find the content was more the problem, not the language. (Mary, Biomedical Science)

Mary’s comment recaps a core content-related challenge in providing effective delivery in English. As discussed earlier, issues connected to discourse competence such as overpacking information in a lecture could be attributed to educators’ struggle in figuring out ‘how much to teach, how much to tell the students, how much they should find out for themselves, what is too much’, which fundamentally reflects their knowledge of learners, of the subject content and teaching competence.
Strategies

Interestingly, whilst NNES academics elaborated prominently on communicative aspects in their account of challenges and only few explicitly mentioned pedagogic competence, the strategies adopted successfully by exemplary educators to deal with these challenges are mainly pedagogy-related. Notably, the range of strategies adopted by exemplary academics is fluid in the sense that one strategy may respond to several challenges. Key strategies will be presented as follows.

- **Strategies for educators to understand students**

One common approach explicitly discussed by most exemplary educators is a student-centered approach. They recommend that educators think like the students, getting to know students’ needs before and during the program, acknowledge the diversity of students’ characteristics and pitch the lesson to accommodate this diversity. One of the most important messages from these successful academics is:

> “Imagine you were a student, you were there, sitting there as a student, wanting to learn. How would you want to learn, how would you get engaged?” (Mary, Biomedical science)

This view resonates with Wilkinson’s (2005, 2008, cited in Wilkinson, 2012, p.15) observation that a student-centred approach is helpful to both academic staff and students in EMI. It reduces students’ ‘reliance on staff’s language ability’ when students are more prepared and facilitated to be in charge of their own learning as active and collaborative learners. Similarly, research on the implementation of blended learning in EMI in non-native English speaking higher education contexts (see, e.g., Im & Kim, 2015) also points out the mitigating effects of this pedagogy on the unfavourable impacts of teachers’ language proficiency and enhancing learner-centred learning.

- **Strategies for structuring the lesson**

While addressing challenges in discourse competence, strategies for structuring lessons are essentially pedagogically grounded. According to the NNES exemplary academics, it is critical that educators adopt a scaffolding approach, i.e., structuring the content from the basics to more complex to suit students’ differing levels. This requires fundamental pedagogical content knowledge for each discipline:

> I make sure the slides are very simple enough that depending on the student, if they just want level one information, it’s there. If the student want level two information then they listen to the lectures or interact more or do more online quizzes. There are different levels that will suit different students, yeah… I give them level one then they can climb if they want to climb. (Richard, Engineering)

- **Strategies for explaining technical or abstract concepts and nuances**

Findings revealed a range of communicative and pedagogic strategies to enhance the intelligibility of NNES academics’ explanation of technical or abstract concepts in English to improve students’ learning. The exemplary NNES academics suggested that educators think of different ways of explaining the same thing, utilise analogies and examples from everyday life, media news, professional experience in the industry, personal experience, and speak with effective teaching aids such as visual aids, white board, and handouts. For example,
I pause for a minute and then I explain to them... in a simple layman's language, and then I relate to some real life situations. That gets a photographic memory into their minds. (Christian, Engineering)

I have to actually use lot of visual aids to teach the students, to make them understand. (Vihaan, Information Technology)

- **Strategies for checking students’ understanding**

The exemplary NNES academics strongly suggested checking students’ understanding to enhance their learning and academics’ teaching delivery. According to them, it is essential that educators pause frequently to ask students questions to check their understanding, wait and look for their responses, looking for cues, and if students have difficulty in understanding, go over what has been taught by rephrasing the explanation and slowing down. This set of strategies can be illustrated in the following interview excerpt:

when you teach the students, you also get the vibe back from the students. … if you’re losing them, you can actually see that. … When you teach, you want to see that they are either nodding or asking questions or … It has to be interactive and that’s how I adjust it actually. When I see that everybody is going like, “What’s happening here?” And you know, and then that’s when I start to adjust it again or explain it again in a different way. (Mary, Biomedical science)

- **Strategies to use voice effectively**

Voice strategies, as one type of strategic competence, are recommended by most exemplary NNES academics. Specifically, they emphasised the importance of speaking at a moderate speed and slowing down when possible, clear enunciation, frequent pause to hold attention and to give time for the students to think, watching for overusing verbal pause fillers, e.g., “you know” “well”. In line with Klaassen’s (2001, pp.85-86) summary of lecturers’ beliefs of effective lecturing behaviour in terms of ‘clear language’, the following interview excerpts demonstrate NNES exemplary academics’ utilisation of these strategies: “I try to speak very clearly and enunciate and try to stop at some stage, look at their [students’] eyes.” (Monique, Pharmacy)

**Conclusion**

This study reveals key EMI challenges perceived by NNES academics in an Australian tertiary context, where English is a native language. Findings show that NNES academics encountered challenges in all the five areas of EMI competence in providing effective delivery in English. These include challenges in grammatical competence, sociolinguistic competence, discourse competence and strategic competence. In contributing to the body of scholarship in pedagogic and communicative competence (e.g., Ball & Lindsay, 2012; Williams et al., 1987), this research identifies challenges pertinent to the fifth area of pedagogical competence, i.e., pedagogic knowledge of the students, the subject content knowledge and pedagogical content knowledge. To overcome these challenges, exemplary NNES academics shared a range of EMI strategies successfully adopted. Findings indicate the fluid dynamics between communicative and pedagogic competences.
Being one of the first studies exploring EMI on a context with English-as-a-native-language, the study provides insights into the communicative and pedagogic demands facing NNES educators teaching in an Australian context. Common institutional support mechanisms for this cohort usually tend to limit to providing English language or communicative competence professional learning. Findings suggest that whilst this approach could be helpful in supporting academics to improve their English language communication, it may not be sufficient in supporting academics to teach effectively in English for student learning. Findings reveal exemplary NNES educators also drew on numerous pedagogical strategies. These include gaining an understanding of their diverse student cohorts and their learning needs, or in Shulman’s (1987) terms, knowledge of learners and their characteristics; knowing how to explain technical and abstract concepts, which involves subject content knowledge (Shulman, 1987). The insights gained from this study suggest professional learning, which addresses pedagogical, linguistic and communicative concerns, with an emphasis on pedagogical aspects.

From a Vygotskian perspective, English language is a mediational tool academics appropriate to mediate their teaching delivery in higher education (Dang et al., 2013) with an emphasis on individual educator’s agency (Baldauf, 2012). In this study, the exemplary NNES educators’ strong agency is significant in appropriating English to not only effectively communicate their message across to students, demonstrating their communicative competence, but ultimately to scaffold students’ learning. The practices actively driven by these academics confirm what Altbach and Knight (2007) highlight as important when individuals cope with the global academic environment in the context of internationalisation of higher education. The study findings thus could also contribute to supporting NNES academics develop effective delivery in EMI and facilitate curriculum transformation in the ever changing context of higher education.

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