



RIPE

Research Journal

Journal de Recherches

- > International Education
Theory and Practice
- > Théorie et pratique
dans l'éducation internationale

Volume 10

Spring/Printemps 2024

LIFELONG LEARNING

SE FORMER TOUT AU LONG DE SA VIE PROFESSIONNELLE

Table of Contents / Contenu

Introduction	3
Karen L. Taylor, International School of Geneva, Associate Professor in Practice, Durham University School of Education	
Revisiting the Meaning of an International Education - An Examination of Student Perceptions of Internationalism at British Satellite Colleges in China	6
Simon Probert, Deputy Head, Harrow Shanghai AISL	
The role of translanguaging in an English Medium International school	21
Patrice Thompson and Paul Magnuson, Moreland University	
Are languages the key to problem solving?	38
Tim F Nash, Co-Founder of Wo Hui Mandarin (part of the Education in Motion group)	
La Lecture Interculturelle, Outil de Lutte Contre les Racismes	48
Mehdi Lazar, Directeur Académique du Lycée International de Boston	
Reconciling Competencies for Combating Disinformation with the IB MYP Science Curriculum: A Strategic Approach	56
Jake Burdis, Assistant Professor (Education) Durham University	
Living and Breathing, the school's strategic plan: a case study from theory to practice.	68
Maripaz Aguilera and Simon Downing (IB Coordinators and Heads of Student Support) at St. Dominic's International School, Portugal.	
Approaches to Curriculum Integration in English Primary Schools: through the eyes of an American teacher	83
Samantha Brant, Fulbright Distinguished Awards in Teaching Research Program and Dr Yuqian (Linda) Wang, School of Education, Durham University, UK	

Introduction

Karen L. Taylor, International School of Geneva, Associate Professor in Practice, Durham University School of Education

In this edition of the *Research Journal: International Education Theory and Practice* we continue to reflect explicitly and implicitly on the interconnectedness of educational theory, research and practice and to promote RIPE (Research Informed Practice in Education).

The purpose of the RIPE network is to bring researchers and classroom practitioners into a space of collaboration and exchange with the aim of promoting robust research-informed practice in international education and collectively to construct a deep understanding of dialogic teaching and learning in a plurilingual and pluricultural context. The fundamental aim of the RIPE network is to develop deeply engaged international “networked learning communities”¹ whose work will ultimately have a positive impact on student learning. The articles in this volume offer a wide range of provocative thinking about learning and teaching in a variety of contexts. Together they push us to reexamine our stance as educators, our principles and our values as expressed in our practice.

Simon Probert, “Revisiting the Meaning of an International Education - An Examination of Student Perceptions of Internationalism at British Satellite Colleges in China”

China represents a dynamic, complex market in international schooling. This complexity is seen in the scale of the market, and also the range of different schools in China, with international schools for foreign passport holders and private bilingual schools for Chinese nationals both being significant in number of schools and students. Equally, schools linked to British independent schools (dubbed ‘satellite colleges’) have come to fill a significant place in the market. This paper investigates student perceptions of internationalism across 4 schools in a group linked to a British independent school as a means of understanding ways in which this sector represents an evolution and extension of earlier models of international education.

¹ Jackson, D. and Temperley, J. (2007). From professional learning community to networked learning community. In Stoll, L. and Seashore Louis, K. (Eds), *Professional Learning Communities: Divergence, Depth and Dilemmas*. Berkshire, England: Open University Press.

Patrice Thompson and Paul Magnuson, “The role of translanguaging in an English Medium International school”

Translanguaging in education is the intentional use of a student’s home language to advance learning. The use of translanguaging is academically promising, because it draws on students’ prior knowledge, but translanguaging can also make important contributions to other common school goals, like providing an inclusive, respectful learning environment and addressing power imbalances. We recount the process of introducing translanguaging in a large international school in China. The article can thus be read as a case study, tracing the school’s effort to live up to its inclusive language policy by introducing translanguaging to teachers, parents, and students.

Tim Nash, “Are Languages the Key to Problem Solving”

If digital technologies allow us to communicate effectively in a wide range of languages instantly, is there a need to take up valuable curriculum time with language lessons anymore? A growing body of evidence shows that different languages impact how we perceive the world and how we think. Might the greatest value of learning other languages lie not in acquiring communicative competence but rather in developing thinking skills, helping students to be more creative, solve problems and build relationships? If so, we need to reconsider the nature and objectives of our language provision in schools in the digital era.

Mehdi Lazar, “La Lecture Interculturelle, Outil de Lutte Contre les Racismes”

Les efforts pour préparer nos élèves à s’épanouir dans le monde pluraliste dans lequel nous vivons restent essentiels afin de créer des communautés scolaires plus inclusives et de former des citoyens empathiques capables d’apprécier la diversité et le métissage, à l’image du monde contemporain. Les compétences interculturelles, définies comme la capacité d’interagir de manière efficace et appropriée dans des situations interculturelles reste pour cela essentielle. Ces dernières s’appuient sur des attitudes et des capacités spécifiques que la littérature, notamment par la lecture interculturelle, peuvent développer. Ou, dans un contexte de montée des extrêmes sur l’échiquier politique mais aussi de pluralisation croissante des sociétés (résultant de la globalisation et de la diversité ethnique, religieuse et culturelle), œuvrer pour développer les possibilités de dialogue entre individus est plus important que jamais. Ceci participe de la lutte contre toute forme de racisme.

Jake Burdis, “Reconciling Competencies for Combating Disinformation with the IB MYP Science Curriculum: A Strategic Approach”

To combat the rise of scientific misinformation, this study adapts Allchin's (2023) competencies for the International Baccalaureate (IB) Middle Years Programme (MYP) Science curriculum. It equips educators with strategies to incorporate these competencies into their teaching. Highlighting prevalent misinformation issues in areas like COVID-19, climate change, and genetic modification, the article offers a practical framework for teachers to clarify scientific realities in the classroom.

Maripaz Aguilera and Simon Downing, “Living and Breathing, the school’s strategic plan: a case study from theory to practice”

This article explores the articulation and implementation of school strategic planning drawing inspiration from our school’s international context. There is limited research directly pertinent to international schools and this article serves the purpose of synthesising such findings as there are and offering a case study as a sample of good practice. We seek to outline the processes which were undertaken to create a meaningful and cohesive plan through aligning the perspectives of different stakeholders, followed by an identification, articulation and implementation of the relevant goals that support school development.

Samantha Brant and Dr Yuqian (Linda) Wang, “Approaches to Curriculum Integration in English Primary Schools: through the eyes of an American teacher”

The implementation of curriculum integration in primary schools in England benefits from more freedom compared with in the United States. A case study from England is offered to show these curriculum integration approaches from the perspective of an American primary school teacher. This study, which employs grounded theory with reference to models from Fogarty, starts from two broad approaches: thematic and explicit links. After interviewing seven headteachers and deputy headteachers in primary schools, and three academics working on Initial Teacher Training programs in England, three layers of curriculum integration appear: knowledge and skills; broad and balanced curriculum; and student engagement. We suggest that two key lessons can be learnt from English primary schools: concerning school leadership’s vision and staff training.

If you would like to submit an article to the next edition of the *Research Journal: International Education Theory and Practice*, we invite you to submit your work to institute@ecolint.ch.

Revisiting the Meaning of an International Education - An Examination of Student Perceptions of Internationalism at British Satellite Colleges in China

Simon Probert, Deputy Head, Harrow Shanghai AISL

Abstract

China represents a dynamic, complex market in international schooling. This complexity is seen in the scale of the market, and also the range of different schools in China, with international schools for foreign passport holders and private bilingual schools for Chinese nationals both being significant in number of schools and students. Equally, schools linked to British independent schools (dubbed 'satellite colleges') have come to fill a significant place in the market. This paper investigates student perceptions of internationalism across 4 schools in a group linked to a British independent school as a means of understanding ways in which this sector represents an evolution and extension of earlier models of international education.

Keywords

Curriculum, Identity, Satellite College, Internationalism, Bilingualism

Introduction

Caffyn (2018, 514) has written on the 'importance of understanding how international schools work as complex cultural, political, and psychosocial places where diverse, competing groups and individuals work in confined places'. The complexity of the international schools market in China has only increased in recent years as the market has both expanded exponentially (see fig 1), and simultaneously it has moved from catering to expats, to catering predominantly to local national students. In turn, more traditional understandings and definitions of what comprises international education have become of questionable use.

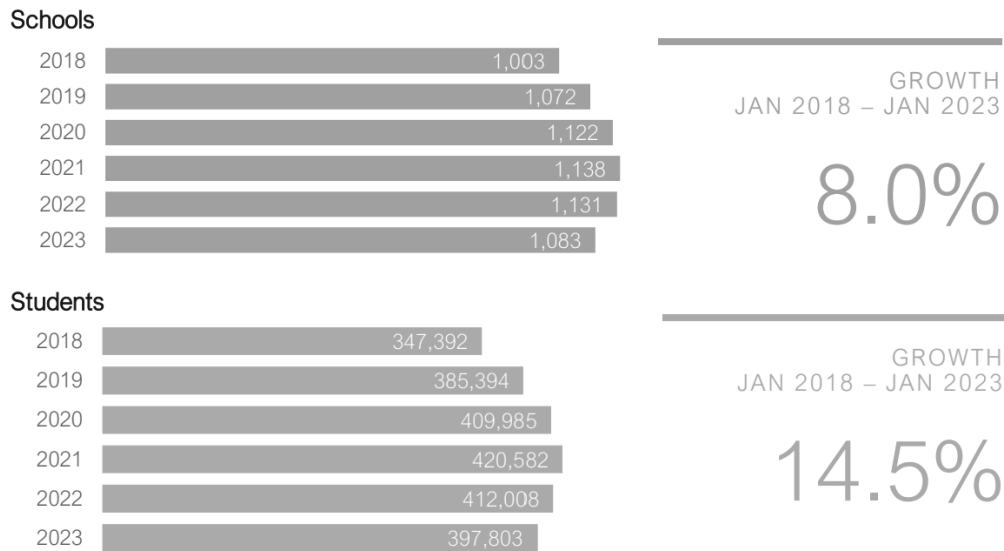


Fig 1 - The Growing Market in International Schools in China (ISC, 2023)

The growth of the sector in China is representative of the growth of the sector in Asia more broadly in recent years – Machin (2017) describing this as an educational ‘gold rush’. Equally, international schools are coming to represent a key part of the private school market in Asian countries. ‘Satellite Colleges’ (overseas branches of British private schools) are a significant part of this growth, there being 75 such schools in China in 2023 alone, representing 7% of the entire market (Bunnell, 2008; Venture, 2023; Probert, 2024). The link back to heritage brands such as Wellington, Dulwich and Harrow means that parents are buying into the social capital involved in attending such as school, with these schools potentially providing entry to the global middle class (Bunnell et al, 2020; Hollis, 2023; Probert, 2023).

As I have examined elsewhere (Probert, 2022), the sector in China is particularly complex given the mixture of schools for foreign passport holders, those for Chinese nationals, and also the heavy-handed role of government regulation in the sector. As mentioned above the sector has grown exponentially in recent years, before stabilising, the broader sector itself being in flux due to changing government regulation around the sector, as well as a smaller population of expats post-covid, traditionally the main demography of schools for foreign passport holders. In this sense, the sector is suffering growth pains, the number of students in international schools in China declined in 2023 for the first time (fig 1), issues around satellite colleges being seen in the fact Westminster school which had been due to open 6 campuses in China pulled out entirely, or the closure of Perse school Suzhou due to issues with regulations (Sina, 2023).

The research which underpins this paper will focus on student understandings and perceptions of internationalism in Chinese satellite colleges, this being an under-researched area, and as such my paper represents a significant addition to the field. Although there is a long-standing literature on student perceptions of international schools (dating from Hayden and Thompson's 1997 seminal paper on students in traditional international schools), there is no research on the fast-growing field in China. Equally, although in recent years China has become a focus of the literature around international education (as seen in recent papers by Adam Poole; Poole, 2020, Poole 2021), this is focussed on staff rather than student perceptions.

It will focus around the following key research question: *How do students perceive internationalism in Chinese International Schools?*

Literature Review

Chinese International Schools

The Chinese bilingual private schools market in particular has faced a range of challenges in China. Schools in this sector, which are mandated to teach the Chinese National Curriculum (CNC) and cater for Chinese National students, operate in 'a legal grey area' (Gao and Ren, 2019). This is due to the limits of what can be taught in English, and for that matter ongoing regulation which has only tightened the narrow confines within which these schools are able to operate. In particular, the 2021 Double Reduction Policy and 'Implementation Regulations of the Private Education Promotion Law of the People's Republic of China' have made it clear bilingual schools were expected to follow the same curriculum as all other schools in China, the latter as well as creating further regulations around enrolment, 'noting the 'ideological risk' for 'bilingual schools' or those linked to 'foreign brands' (MOE, 2021; Liu, 2022, 26).

There has been some debate about ways in which these new schools relate back to more traditional international schools, Hayden dividing earlier schools into 3 sectors – Type A and B schools both focussing on expat students, the latter being ideological in nature, opposed to Type C school aimed at local students, and often a part of a for-profit network (Hayden, 2006). Given Type C schools catering for Chinese nationals predominantly offer a bilingual curriculum based on the Chinese National Curriculum (CNC), Poole (2020) has argued they represent a subset of type C (for profit) international schools, defining them as Chinese Internationalised Schools, and in turn that they represent a coming together of international and national education ('dove-tailing', Poole and Bunnell, 2023).

This remains a complex and dynamic area – rather than representing a subset of Type C international schools, elsewhere (Probert, 2022) I have argued they represent potentially a new paradigm within the sector as seen on their focus on both local and international curricula. As such for the purposes of this paper, I will refer to them as Chinese International Schools, viewing them as having something significant to say about the future of international education, with their emphasis both on local and global curriculum contexts.

Student Identity

Given the focus in this paper on student perceptions and understandings of internationalism, ways in which Chinese international schools foster student identity is a key consideration. Although there has been a range of research about third culture kids who grow up in a culture other than their own (for example Pollock and Reken, 2009), there has been less focus on ways in which local students attending an international school may struggle with their own sense of identity. Given the westernising influence of international education, this is seen as a particularly pertinent area, Gardner-McTaggart (2021) using the metaphor ‘washing the world in whiteness’ and notion of ‘cultural Englishness’ to describe ways in which such schools often promote white narratives and identities at the expense of local ones.

The emphasis by satellite colleges on a value-based education is also critical to the sense of ways in which they are fostering student identity. Although Hollis (2023) has noted some satellite colleges discuss ways in which they are ‘locally and globally embedded’ in their marketing materials, the extent to which these schools root themselves in local cultures is debatable, there being very little school-based research around this area.

Curriculum Planning in CIS

As I have written about elsewhere (Probert, 2022), curriculum planning in Chinese International Schools is a complex process, the primary institutional task of an international school being the delivery of an international curriculum (Bunnell et al, 2016). Whilst for schools teaching foreign passport holders, they are in essence free to plan their curriculum as they see fit, for bilingual schools, there is a need to articulate their curriculum around the CNC. This means for example these schools have to balance out the curriculum hours required for the CNC with an English language curriculum, to allow students to access English language qualifications such as GCSEs and A-Levels. Equally, subjects such as History and Geography are highly ideological in China, focusing around Chinese nationality, identity and the values of the Communist Party (Probert 2022). This is even more the case in

Moral Education, which focusses around political and social values, the CNC ultimately aiming to prepare the next generation of your socialists (Xi, 2020).

Balance is therefore needed in terms of ways the values of the CNC are aligned with the broader values of schools and their curricula. Indeed, given the importance of curriculum to the ethos and culture of international schools, ways these schools ensure their curriculum is rooted in westernized concepts and values alongside the CNC, and ways these different approaches to curriculum are brought together, is a real priority.

Global Citizenship

Global Citizenship is an important concept for Chinese International Schools in terms of ways in which they espouse internationalism. Inclusive of values such as ethics, diversity, sustainability and global issues the interaction of these values with the CNC remains a challenging area. Nonetheless, it remains important for schools which aspire to be international to ensure these values are at the centre of their communities. As Poole (2018, 118) notes, 'schools can choose between a democratic school ethos that embraces plurality and difference or an authoritarian one that emphasises the needs of the country over the needs of the global'.

More generally, the notion of global citizenship, associated as it is with western humanism and values, may be seen as representing western ideas about universalism rather than having a basis in Asian civilisation, implicitly suggesting a belief in the superiority of European theoretical and cultural achievements (Walker, 2010). In this sense, there needs to be reflection on what both internationalism, and in turn global citizenship mean and represents in a given school. Guided by Chen's (2010, 244) notion of 'translation', which he contends, 'is not simply a linguistic exercise but a social linguistics, or an intersection of history, sociology, and politics', schools need to find ways to understand and translate complex local cultural norms into their own contexts. In turn they need to map out ways they are locally embedded, but simultaneously provide their students with a global outlook and understanding.

Models for International Education

There are a range of models and frameworks for understanding ways in which international schools frame the curriculum and culture of their schools which is relevant to this new wave of schools. In his cube model, Thompson (1998) discusses the importance of administrative styles, a balanced curriculum and cultural diversity when developing a model for more traditional Type A and B international schools. This is mirrored in suggestions

from the International School of Geneva when planning an international curriculum, McKenzie (1998) emphasizing the importance of focusing on international values, global issues, language development and promoting respect for the home country in his research on the school.

I further developed these models in my 2022 paper (Probert, 2022), in which I examined the challenges facing the Chinese International Schools market and ways of articulating a model around internationalism. Using Thompson's (1998) model, I emphasized administrative styles through Deardoff's (2008) model of Intercultural Communicative Competence, a Balanced Curriculum seen through links within and across subjects, and cultural diversity through embedding the culture of the school in both normative international values (such as those of COIS; COIS, 2024), and local values (such as Zhuangzi's 8 virtues).

Methodology

The Post-Colonial Lens

A Post-Colonial Lens will be used as a methodological framework to approach my study and reflect on ways to define and contextualise this new wave of schools in China.

Postcolonial approaches to education 'are concerned with the effects and operations of colonialism, and how they are negotiated and challenged in decolonizing interventions in educational sites of curriculum and pedagogy' (Dennis, 2018, 16). This approach leads to questions about how far western narratives about 'international' which originated in organisations such as the League of Nations and United Nations are representative of the identities of the colonial other, not least as most of the research on International Schools derives from the Global North (Probert, 2023).

Equally, as Yang (2022, 54) argued in a recent paper, 'conventional Eurocentric theories and approaches have fallen short of their promises', there being a need to develop new ways of understanding notions of 'international'. In this sense, schools need to think carefully about how they explicitly develop local values and languages in their curriculum and ethos to ensure localised identities and ways of thinking are not marginalised by structures within the schools (Santos, 2018).

Research Design

My research takes the ontological perspective that people take on their own understandings of the world around them, based on observation and experience. I opted to take a qualitative

approach towards my research given my emphasis on understanding student perceptions on the world around them, Denscombe (2017) noting qualitative approaches are more suited to collecting descriptive data round people's experiences and opinions. This is reflective of my research questions which assumes different research participants will have different perceptions of internationalism.

I opted to use focus groups for the student interviews as I hoped they would allow me 'to identify a range of different views around the research topic, and to gain an understanding of the issues from the perspective of the participants themselves', this potentially allowing me to collect more information in a shorter amount of time than would be the case from interviews. (Hennick, 2007, 4). Equally, I hoped they would allow the role of the researcher to be minimised, relative to the case in interviews, with the students taking more of a lead in discussions. The questions were based on those used by Hayden and Thompson (1997) in their research on student understandings of traditional international schools.

I conducted research in 4 schools in the same group which is linked to a British independent school – to anonymise the sample I have named them after Chinese rivers. Two of the schools had both foreign passport holders (IL students) and Chinese students (PL Students) on the same site (Liangma and Yulong), this making them relatively unique as research contexts. The other two schools had in one case exclusively Chinese national students (Pearl), and the fourth school foreign passport holders (Huangpu). In almost all the cases the foreign passport holders were of Chinese heritage. Focus groups focused on year 8-10 students which represent Middle School in Chinese Schools. At Liangma and Yulong I interviewed 8 students in years 8-10 on both the IL and PL, and then at Pearl and Huangpu 8 students in years 8-10 on the PL or IL license respectively. In all cases ethical processes were followed in alignment with the BERA (2018) guidelines on ethical research.

After the focus groups the data was transcribed and analysed in Nvivo. The data was analysed in three stages in line with Hennink (2007). First a descriptive analysis took place allowing me to focus on key terminology, and how many times different themes appeared over the focus groups. The second stage involved using the data to develop key theories around the research question, allowing a conceptual framework to emerge based around key themes – these were Language and Curriculum, Diversity, Global Citizenship and Identity. The final stage of the data analysis involved synthesizing findings to respond to my key research question.

Findings and Discussion

Language and Curriculum

Curriculum was the first key area students discussed in the focus groups. Language was a key part of this focus, students in all the schools in my research emphasising the importance of studying English to being at an international school, one year 10 PL student at Yulong stating, *'it is extremely important to develop communication in English to allow us to communicate across lots of different contexts. It provides us with a door to a range of opportunities, to working and studying in other countries. It's what I would expect studying at an international school'*. Equally, they commented on how it allowed them to take IGCSEs and A-Levels and allow them to study at foreign universities. In this sense English was seen as critical to any understanding of internationalism, and potentially superior to other languages, one student (year 9 IL Liangma), stating *'in Hong Kong people look down on you when you speak Cantonese compared to English'*. This links back to Gardner-McTaggart's (2021) arguments around 'cultural Englishness' with an emphasis on ways in which English fluency is associated with power and status.

Mandarin was also seen as an important part of this for PL students across all the schools. As one Year 8 at Liangma stated, *'it was more important to speak Chinese first'*, not least as they intended to *'come back and work in China after university'*, and another reflected on the importance of *'knowing how to speak and write in your first language fluently'*. This was less the case for IL students. One IL student at Liangma stating, *I don't think Mandarin is any more important than any other language'*, and another in Huangpu, that *'it wasn't important, and we only need to know the basics'*. Nonetheless, at Yulong and Pearl where the English language curriculum was more limited for some PL students they commented, *'we want to do more English like the IL students, Mandarin is important but won't help with our IGCSEs'*. In turn, this links back to Santos's (2018) arguments about ways being fluent in a native language is 'empowering' contributing to local understandings.

Humanities were also identified as an important area where students developed an understanding of internationalism. Nonetheless, although they generally commented on ways it allowed them to develop an understanding of different contexts globally (*'we're learning about stuff worldwide not just one country'*), there was also a concern that not enough was studied about China (*'I'm Chinese, I need to understand my own country as well as the world'*). This was particularly the case for IL students who studied the humanities in English. PL students at all the schools had to do humanities classes in Mandarin, meaning in some cases there conversely was a frustration not enough was being done in English. At

Yulong, the PL students stating *'we want more English lessons, like the foreign students have'*. Although Gardner-McTaggart (2021) has argued there is too much of a focus in international schools on teach English values and concepts, the stress also on the local is demonstrative of ways these schools provide a more sophisticated, localised form of curriculum.

Diversity

When asked about diversity, students identified having foreign teachers are particularly important, in terms of understanding perspectives on internationalism. As one IL student at Huangpu described, *'It's about foreign people, that's why we come to international schools'*, foreign teachers being a *'basic expectation'* in terms of having a diverse community. Equally, having local teachers was important, one PL student at Liangma stating, *'If a foreign teacher brings a window to another world, another culture, another type of lifestyle, I see the local teachers are what harbours us to a sense of feeling of being in our own country, at home. This is why it's important we have Chinese teachers as well as foreign teachers'*.

Conversely, foreign students were seen as less important, not least as even where there were expat students at Liangma and Huangpu, they tended to socialize almost exclusively with each other. This was particularly the case for PL students, one stating, *'to be honest I don't think foreign students are important – they don't talk to us so we don't really have any strong impression about them'* (Liangma, Y8 PL). Nonetheless, at Yulong where there was a small number of foreign students, students did suggest it would be desirable to have more stating, *'we need foreign students so we can learn about other countries, this is important for international schools'*.

Gardner-McTaggart's (2021) metaphor 'washing the world in whiteness' is of use in considering ways in which some international schools articulate diversity through westernised concepts and peoples. Nonetheless, the dual stress on local staff seen in my study again demonstrates the complexity of these space, and that they are doing more than merely promoting westernised tropes and epistemologies. The lack of foreign students does not necessarily suggest a lack of reflection or understanding of diversity relative to more traditional schools, Tanu's (2017) work stressing that in more diverse student bodies, students often form cliques based on language and national groupings, rather than leading to the creation of a more explicitly diverse community.

Global Citizenship

Students were also asked about global citizenship as part of the questions. Broadly, students linked the concept of global citizenship back to being able to travel and communicate freely wherever they chose to go rather than explicitly around service learning and empathizing with other peoples. Hence, for example one Liangma PL student in year 9 stated, *'being a global citizen is about travelling to different counties and talking to different people and feeling at home'*. This was very much focussed around working and studying abroad in future, one student in year 8 at Huangpu stating, *'we need these skills to go to a good university, and maybe work in a different country'*.

Broadly, students at Liangma, Yulong and Pearl had a good understanding of differences between being a local and a global citizen, one student commenting, *'being Chinese is about knowing my own country and understanding traditions, but being a global citizen is how I interact with foreign countries'* (Liangma Y9 PL). This was particularly clear to PL students who had a firmly rooted sense of local identity, and what it meant to be Chinese, as well as being outward looking as global citizens. Local and Global citizenship were interwoven, one PL student at Liangma stating, *'to become a truly global citizen, you should be a good citizen in your culture first'*.

Global citizenship then was articulated through links between a localized and a global culture. In this sense, it is of importance for Asia as well as the West to be used as a point of reference in any discussion of global citizenship, and schools reflect on how they embed local concepts within the curriculum. In this sense, in line with Chen's (2010) concept of 'translation', schools need to reflect on connections within their curricula to both localised and globalised contexts and settings, and the implications for the complexity of their own unique contexts for their schools.

Identity

The final key area which emerged through the focus groups with students was around identity, and ways in which the schools in the study explicitly foster a sense of local as well as westernized identity through the curriculum. Although the schools all were connected to a British independent school, which was part of their values, students did not feel this was a strong part of the ethos, one student questioning *'what is meant by British values – we don't really drink tea do we?'* (Liangma IL, Yr 10). Nonetheless, rituals such as assemblies and international celebrations were important. whilst students in Huangpu and Yulong equivocally felt the song was an important part of their identity as students at the school, at Liangma they had stopped singing it. Students commenting, *'we should keep our song it doesn't seem*

like a British school anymore'. PL students at all the schools also valued the importance of the weekly flag raising ceremony, viewing it as an important part of feeling Chinese and understanding China.

Broadly, local identity was less of a focus for IL students, particularly at Huangpu where one student at Huangpu stated, *'I've not really thought about identity before, maybe I'll start thinking about it now'*. In particular, for IL students at Huangpu, who were not studying alongside Chinese students, articulating a sense of local identity was more challenging, students mentioning Korea and Japan as cultural reference points rather than China, despite the fact they were native speakers of Mandarin, and from Chinese heritage families. This was less the case for IL students where they studied alongside PL students at Liangma and Yulong. At Liangma, IL students also attended the flag raising which they said allowed them to understand China which was important to them at the future, and similarly at Yulong students spoke positively about ways a sense of Chinese identity was affirmed through the curriculum.

Indeed, the curriculum also had an important role in promoting a sense of identity. At Liangma students were studying poems called 'Half-caste' and 'Speak my tongue', one student stated, *'when we did this in English it made me think about who I am, and where I come from. I hadn't really considered this before'*. Conversely, at Huangpu there was very little focus on local values through the curriculum. Equally, teachers had an important role in promoting a sense of identity, students reliance on expat teachers to provide a sense of diversity potentially being problematic in the sense the majority of their teachers were British, Gardner McTaggart (2021) commenting on ways expat teachers promote westernised ways in thinking. In this sense having local teachers was important to teach students about their own identities as Chinese students – arguably one reason IL students had less of a sense of the fact they only had local teachers in Mandarin.

Indeed, broadly PL students had a clear sense of who they were, and identified clearly with China as their home country. This was also the case for IL students, where they studied alongside PL students at Liangma and Yulong. However, where students were studying at a school exclusively for foreign passport holders it was more of an issue, students at Huangpu having little sense of China, narrowly or broadly defined, despite the fact the vast majority were from Chinese heritage families and backgrounds.

Conclusion

My paper has investigated student perceptions and understandings of internationalism in satellite colleges in China. Whilst students in these schools do demonstrate similar attitudes

to those in traditional international schools in areas such as an emphasis on English language, the importance of preparation for university abroad, and the importance of having foreigners in the community, they also demonstrate significantly different attitudes to those in more traditional schools. This is seen in the emphasis on studying local values and cultures alongside westernised ones, and an understanding that the notion of international must be more than merely the study of the culture of the western world.

Post-colonialism is a useful framework for considering these schools – students showing an awareness of ways in which westernised concepts and ideas were dominant in the curriculum and ethos of the schools, and the need to also incorporate local values and norms. Certainly, from a student perspective the notion that international is focussed predominantly on westernised values and ways of thinking needs to be challenged – the ‘glocal’ being a useful construct for considering this convergence of localised and westernised values. Ensuring there is a balance is of importance if these schools are to promote a sense of identity which is not overly westernised in nature, representing their own cultural background rather than that of the subaltern other.

Indeed, for students in Chinese International Schools, identity is a complex area, in terms of having a strong sense of local identity, as well as reflecting on ways this might interact with more westernized values and mindsets. In this sense, Bhabha’s (1994, 2011) ideas are of relevance, with the notion of the ‘Third Space’, as ‘a transition space where hybrid identifications are possible and where cultural transformations can happen’. More broadly then these schools are to be viewed as places where different national and localised cultures meet and intersect, a new culture developing in the process, which in turn feeds into ways in which the students understand their own identities.

In this sense, rather than merely being a subset of existing typologies as Poole (2020) suggested with his C1 typology they do have the potential for a reconsideration of what we mean by international education, particularly given the blend of global and local values and norms. The notion of ‘international’, needs to be one which is inclusive of all the communities and individuals who aspire to develop the ability to cross borders and communicate with other individuals globally.

My paper has considered ways in which students in Chinese international schools perceive the curriculum. Further research might do a longitudinal study of ways in which these perceptions change over time (specifically with an emphasis on if and how this might change as these students enter the working world), or compare these students’ perceptions from the new wave of international schools in China to those elsewhere in Asia.

References

- BERA (2018), Ethical Guidelines for Educational Research, London, BERA at https://www.bera.ac.uk/wp-content/uploads/2018/06/BERA-Ethical-Guidelines-for-Educational-Research_4thEdn_2018.pdf?noredirect=1 [Accessed on 3 August 2018]
- Bhabha, Homi (1994), *The Location of Culture*, London: Routledge
- Bunnell, T. (2008), 'The exporting and franchising of elite English private schools: the emerging 'second wave'', *Asia Pacific Journal of Education* (28:4), 383-393.
- Bunnell, Tristan, Fertig, Michael and James, Chris (2016) 'What is international about International Schools? An institutional legitimacy perspective', *Oxford Review of Education*, 42:4, 408-423. <https://doi.org/10.1080/03054985.2016.1195735>
- Bunnell, Tristan (2019), *International Schooling and Education in the 'New Era': Emerging Issues*, UK: Emerald
- Bunnell, Tristan; Courtois, Aline and Donnelly, Michael (2020), 'British Elite Private Schools and their Overseas Branches: Unexpected Actors in the Global Education Industry', *British Journal of Educational Studies* (68:6), 691-712. <https://doi.org/10.1080/00071005.2020.1728227>
- Caffyn, R. (2018), 'The shadows are many...' Vampirism in 'International School' leadership: Problems and potential in cultural, political, and psycho-social borderlands', *Peabody Journal of Education*, 93(5), 500-517. <https://doi.org/10.1080/0161956X.2018.1515817>
- Chen, K.H. (2010), *Asia as Method: Toward Deimperialization*, Durham, NC and London: Duke University Press
- Council of International Schools – CIS (2024), 'Global Citizenship', at <https://www.cois.org/about-cis/global-citizenship> [accessed on 24 June 2023]
- Dearhoff D K (2008) 'Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization', *Journal of Studies in International Education*. 10(3): 241-266. <https://doi.org/10.1177/1028315306287002>
- Denscombe, Martyn (2017), *The Good Research Guide for Small-Scale Research Projects (Fifth Edition)*, Maidenhead: Open University Press
- Dennis, Carol Azumah (2018), 'Decolonising Education: A Pedagogic Intervention', In: Bhabra, Gurminder K.; Nişancioğlu, Kerem and Gebrial, Dalia eds. *Decolonising the University*, London: Pluto Press, 190–207
- Gao, Xuesong and Ren, Wei (2019), 'Controversies of bilingual education in China', *International Journal of Bilingual Education and Bilingualism*, 22:3, 267-273. <https://doi.org/10.1080/13670050.2018.1550049>
- Gardner-McTaggart, Alexander Charles (2021), 'Washing the world in whiteness; international schools' policy', *Journal of Educational Administration and History*, 53:1, 1-20. <https://doi.org/10.1080/00220620.2020.1844162>
- Gross, I. (2023), 'Riding the global wave of elite English private schools', *Journal of Research in International Education*, 22(1), 70–86. <https://doi.org/10.1177/14752409231163841>

- Hayden, Mary (2006), *An Introduction to International Education* (London, Routledge)
- Hayden, Mary and Thompson, Jeff (1997) 'Student Perspectives on International Education: a European dimension', *Oxford Review of Education*, 23(4), 459-478
- Haywood, Terry (2022), '5 lenses for interpreting international education', in *Interpreting International Education, In Honour of Jeff Thompson*, edited by Mary Hayden, London: Routledge, 21-44
- Hennick, Monique M., (2007), *International Focus Group Research: A Handbook for the Health and Social Sciences*. Cambridge: CUP
- Hollis, Stefano (2023), 'Education as an international export: Marketing elite, English schools as franchises overseas', in *Current Issues in Comparative Education (CICE)*, Volume 25, Issue 1 (51-72). <https://doi.org/10.52214/cice.v25i1.10250>
- Liu, Lili (2022), 'Opportunities and Challenges for Private Education in China: A Review of the Latest Policy Revisions' in *ECNU Review of Education*, 6:1. <https://doi.org/10.1177/20965311221120829>
- Machin, D. (2017), 'The Great Asian International School Gold Rush: an economic analysis', *Journal of Research in International Education*, 16(2), 131-146. <https://doi.org/10.1177/1475240917722276>
- McKenzie M (1998), 'Going, Going, Gone . . . Global!' In Hayden M, Thompson J (eds) *International Education: From Principles to Practice*. London: Taylor & Francis, 242-252.
- Ministry of Education (2021), 'MOE press conference explains new requirements in compulsory education', at http://en.moe.gov.cn/news/press_releases/202109/t20210910_561827.html [accessed on 28 February 2022]
- Pearce, R. (1998), 'Developing Cultural Identity in an International School,' In *International Education: Principles and Practice*, edited by M. Hayden and J. Thompson, 44–62. London: Kogan Page
- Pollock, David C and Reken, Ruth E. Van (2009), *Third Culture Kids: Growing Up Between Worlds*, Boston: Nicholas Brealey
- Poole, A. (2018), 'We are a Chinese school': Constructing school identity from the lived experiences of expatriate and Chinese teaching faculty in a Type C international school in Shanghai, China', in *International Journal of Progressive Education*, (14.1), 105-121. <https://doi.org/10.1080/03057925.2018.1684639>
- Poole, A. (2020) 'Decoupling Chinese internationalised schools from normative constructions of the international school', *Compare: A Journal of Comparative and International Education*, 50:3, 447-454. <https://doi.org/10.1080/03057925.2019.1682839>
- Poole, A. (2021), *International Schools Teachers' Lived Experiences: Examining Internationalised Schooling in Shanghai*, London: Palgrave
- Probert, Simon (2022), 'China -The Under-Researched Nexus of Activity', in *Journal of Research in International Education*, 21:3, 228-241. <https://doi.org/10.1177/14752409221140627>

- Probert, Simon (2023), 'International Education in Asia: The Changing Market', in *Journal of Research in International Education*, 22:3, 280-295.
<https://doi.org/10.1177/14752409231212185>
- Probert, Simon (2024b) [Forthcoming], 'Satellite Colleges' - Overseas Branches of British Independent Schools as a Growing Field of Research', *The BERA Blog*,
<https://www.bera.ac.uk/blog> [accessed 22 February, 2024]
- Sina (2023), 'Suzhou Report – Bilingual School Closes Down' [In Chinese], in *Sina News* at
<https://edu.sina.cn/ischool/xw/2023-02-15/detail-imyfuraq9089664.d.html> [accessed 4 November 2023]
- Said, Edward W. (2003), *Orientalism*, London, Penguin.
- Santos, Boaventura de Sousa (2018), *The End of the Cognitive Empire: The Coming of Age of Epistemologies of the South*: New York, Duke University Press.
- Tanu, Danau (2017), *Growing up in Transit: The Politics of Belonging in an International School*: New York: Berghhan Books
- Thompson J (1998) *Towards a Model for International Education*. In Hayden M, Thompson J J (eds) *International Education: From Principles to Practice*. London: Taylor & Francis. [pp 276-290].
- Venture (2023), *British Independent Schools in China Report 2023*,
<https://www.ventureeducation.org/> [accessed 18 June 2023]
- Vincent, S., and O'Mahoney, J. (2018), 'Critical realism and qualitative research: an introductory overview'. In *The SAGE Handbook of Qualitative Business and Management Research Methods: History and Traditions*, CA: Sage, 201-216.
- Walker, George (2010), *East is East and West is West*, IB Position Paper at
<https://www.ibo.org/globalassets/new-structure/about-the-ib/pdfs/east-is-east-and-west-is-west-en.pdf> [accessed 5 March 2024]
- Xi Jinping (2022), *Transcript: President Xi Jinping's report to China's 2022 Party Congress* at
<https://asia.nikkei.com/Politics/China-s-party-congress/Transcript-President-Xi-Jinping-s-report-to-China-s-2022-party-congress> [accessed 23 April 2023]
- Yang, Rui (2022) 'Baby and bathwater or soup?: some epistemological considerations of how to observe China and Chinese education', *Globalisation, Societies and Education*, 20(1): 49-55. <https://doi.org/10.1080/14767724.2021.1937065>

The role of translanguaging in an English Medium International school

Patrice Thompson, Paul Magnuson, Moreland University

Author notes

Patrice Thompson has worked as a teacher in international schools for 8 years. She has an international MBA and an M.Ed. in the Globalization of Education, and speaks English, Spanish, German, and Mandarin. She began teaching at Rabat American School in Morocco in Fall 2023.

Paul Magnuson is an instructor with Moreland University and the research director at Leysin American School in Switzerland. His PhD is in Curriculum & Instruction for Second Languages and his primary interests include language education and teacher agency in professional development.

The process of introducing translanguaging at this international school in China was originally described in three separate blogs published by The International Educator.

Abstract

Translanguaging in education is the intentional use of a student's home language to advance learning. The use of translanguaging is academically promising, because it draws on students' prior knowledge, but translanguaging can also make important contributions to other common school goals, like providing an inclusive, respectful learning environment and addressing power imbalances. We recount the process of introducing translanguaging in a large international school in China. The article can thus be read as a case study, tracing the school's effort to live up to its inclusive language policy by introducing translanguaging to teachers, parents, and students.

Keywords

Translanguaging, multilingual learners, inclusion, DEIJ, international school

Introduction

In an analysis of linguistic diversity in international schools, Eowyn Crisfield (2023) highlights tensions in language policy by quoting Jim Cummins (2005): “... we are faced with the bizarre scenario of schools successfully transforming fluent speakers of foreign languages into monolingual English speakers, at the same time as they struggle, largely unsuccessfully, to transform monolingual English speakers into foreign language speakers.’ (Cummins, 2005, p. 586).” Crisfield also points out the trend that most international schools, although dominated by multilingual students, are usually run by “Anglo-centric, often monolingual school leaders” (Crisfield 2023, p. 14).

Considering the diverse makeup of the student population in international schools, there is room to rethink instructional practices. Primarily, it is important to consider the use of the students’ home language. Chaika (2023) conducted a case study analysis in diverse educational settings with multilingual students through interviews with students and teachers, classroom observations, and document analysis of student work. They found significant evidence that translanguaging enhances language learning as well as academic achievement. Perhaps our current policy and practices are driven by a simplistic understanding of language education that boils down to this: If the goal is English, do everything in English. But language learning is more complex than that - knowing one language influences how one gets to know a second language. Furthermore, teachers and administrators can use home languages to promote inclusion, well being, and international mindedness in a school culture.

We have set out here to thoroughly document one implementation of translanguaging in a school program, complete with sample informational flyers and infographics, so that others might have a process upon which to model their own introduction of translanguaging, learning from the successes and challenges of this particular effort.

We first set the stage with the definition and origin of translanguaging, the manner in which translanguaging may support students both socially and academically, and the factors present in a school that are likely to support the implementation of translanguaging (or to create barriers to it). Then, we describe one of the authors’ experiences with bringing translanguaging to her international school over the course of an academic year.

What is translanguaging?

Ofelia García is well known in the education community for her work with translanguaging in American schools for the purposes of helping multilingual students succeed in largely

monolingual settings. She argues that translanguaging differs from multilingualism and plurilingualism (Multilingualism & Diversity lectures, 2017). García explains that there are two perspectives of language for a bilingual person. The first is the external perspective of society from which named languages exist. These languages belong to the nation state, and schools teach and test them. The other perspective is the internal one of a speaker: a perspective in which language is a single internal system which makes meaning.

Translanguaging, García says, “does away with language hierarchies and returns the power to the speaker, not the nation state” (Multilingualism & Diversity Lectures, 2017).

Translanguaging theory effectively removes the boundaries between what we usually think of as separate languages. This definition is important because it helps us to see the bi- or multilingual speaker as a person with a whole (and vast) set of linguistic and cultural resources at their disposal, not just varying levels of English.

It is also important to be clear about the terms “translanguaging,” “code switching,” and “translation.” Translanguaging in pedagogy practice is an umbrella term which refers to purposefully helping students to draw on all the linguistic features of their repertoire in order to make meaning of the material being studied (Rajendram, 2019). Code switching is a change in language, signaling an interactional shift such as a change in tone, topic, or addressee (Mendoza, 2022). Translation is the reproduction of one language into another for purposes of communication (Creese et al., 2017). Although translation and code switching can be useful in the pedagogical practice of language inclusivity, they are both tools in the broader picture.

Furthermore, there is sometimes reference to weak and strong versions of translanguaging. The weak version, or serendipitous or unplanned translanguaging (Crisfield, 2020), is incidental use of the student’s native language, like when one student translates for another, while the strong version is the intentional use of the student’s native language in curriculum, instruction, assessment, and/or lesson planning. The weak version is likely to look more like code switching and translation, while the strong version should in general appear to be purposeful teaching and learning that draws fully on both the language of instruction and the student’s home language.

Translanguaging in historical context

Attitudes toward language use in education are dominated by colonial biases. In African education systems, only 176 (8%) of local languages are used as a means of instruction, and few of these languages are elevated to the status of those inherited from colonization (Akinpelu, 2020). With little connection to the material and often poor understanding due to English-only instruction, 40-60% of Nigerian students don’t complete their basic education.

In another place and time, the U.S. federal Indian Commissioner in the 1880s decreed that “all instruction must be in English ... and the conversation and communication between the pupils and with the teacher must be ... in English” and spoke of eradicating the “barbarous dialects” of Native American students (Crawford, 1992) - a policy which has left a lasting impact on many communities. In India, a country replete with hundreds of officially recognized home languages (and even more unofficial ones), the diversity in language of instruction has dwindled in the past 50 years from 81 to an estimated 23, despite the Indian government’s official policy of using native tongue as the primary one in early years. The majority of instruction is dominated by Hindi and English, with home languages used as auxiliary languages (Jolad & Doshi, 2021). In recent history, it was only until the late 20th century that bilingualism went from being viewed as causing “mental confusion” by many to an advantage (Lewis et al., 2012), and even since then, positive perceptions of bilingualism as additive rather than subtractive can be arguably reserved for those with privilege, but not for the lower classes of society.

Wales is another example of a country which is no stranger to the struggles of language and power. For hundreds of years of English colonization, the Welsh language was repressed. In the 20th century, however, as the language started to make a revitalization culturally and legally, the country saw a rise in bilingual education and the introduction of Welsh-medium schools (Redknap et al, 2006). In the midst of this language struggle, Cen Williams, a renowned Welsh educator and poet, wrote a thesis on teaching and learning in bilingual education in which he coined the term “trawsieithu” which was originally translated into “translinguifying” but later into “translanguaging.” Williams’ theory was linked to an idea of the purposeful use of two languages at the same time in a classroom of bilingual students. It is based on the idea that bi- and multilingual learners naturally use their full linguistic repertoire to maximize learning (Lewis et al., 2012). Rather than the traditional view of the switch between languages as a “contamination” of one or the other language, translanguaging is an emancipation from negative ideas about bilingualism: it’s additive rather than subtractive, a holistic rather than a fractional process. For Garcia, it is recognizing the complexity of the individual who operates with one language system composed of more than one recognized language. Human vocal and neural anatomy evolved to specialize in language acquisition and grammatical construction (Handwerk, 2019), thus we all have a linguistic repertoire. According to the theory of translanguaging, we simply choose from it the appropriate features and concepts for a given context.

No doubt this same general phenomenon has happened across the planet and across centuries when a dominant language has come into contact with the local language, or when a language minority has struggled to preserve its minority language. In Iceland, for example,

where Danish was the majority language, pedagogical materials were in Danish, contributing to the adoption of translanguaging when teachers, inspired to promote Icelandic, assigned Danish readings from Danish language textbooks but discussed them in Icelandic (Baldur Sigurdsson, personal communication). Wherever two or more languages are in contact, with a power differential, it is likely that the weak definition of translanguaging, at a minimum, will be at play, if not the strong version with its intentional use of the home language to support learning both of course content and the home language itself.

Benefits of Translanguaging

We see at least three immediate social and academic benefits of translanguaging: socially, for inclusion and wellbeing, academically for understanding course content, and as a positive foundation for a school's culture. "A report from UNESCO (2016) outlines the challenges for learners who are educated in a non-dominant language. Among the five recommendations, the first is most pertinent here: 1. Teach children in a language they understand, for at least six years" (Crisfield, 2023, p. 16). While seemingly obvious, plenty of students struggle to access content in an instructional language in which they are less than fluent, sometimes markedly so.

Inclusion and Well-Being

Rajendram (2019) compared two English language classrooms in which the same content was taught. They observed significant differences in social interactions between those who were allowed to use their home language (weak or strong translanguaging) in lessons versus those who were required to use only the target language. While the English-only group's interactions were more disputatious, translanguaging students had more positive social relationships as they were empowered to scaffold each other's learning, build rapport, resolve conflict, and assert their identity and culture. Li (2023) argues that translanguaging also promotes a sense of inclusion between the teacher and the student, as the teacher embraces the notion of co-learning. By recognizing students as rich resources, teachers see their classroom as a world of vast knowledge, insights, and values and "engage in real-world meaning making and identity exploration, which are crucial yet often neglected aspects of learning" (Li, 2023, p. 6). Chen & Pushor (2023) also posit that the integration of translanguaging into a teacher's pedagogy can help involve students' families more in their learning, which can encourage more school involvement. As a result, minority language students can see themselves reflected in their learning environment, have a higher investment in it, and feel more included without pressure to change their identity.

Academics

Chaika (2023) identified specific ways that translanguaging supported language learning and contributed to students' academic achievement. First, students were better able to comprehend material when they had access to their full linguistic repertoire. Second, their vocabulary in the language of instruction as well as their home language developed due to exposure in a wider variety of contexts. Students were also able to make more meaningful cultural connections, thus enhancing motivation and a sense of belonging. Finally, translanguaging "promoted critical thinking, problem-solving, and metalinguistic awareness, as students navigated different languages and made meaning across linguistic boundaries" (Chaika 2023, p. 132) Rajendram's (2019) research also suggests translanguaging to be beneficial for 21st century skills, specifically critical thinking, communication, and collaboration.

Classroom and School Culture

A teacher's language policy and use in the classroom plays an important role in shaping their students' attitudes toward language, as do ethnic tensions and parental views regarding language status (Rajendram, 2019). It is essential, therefore, for educators to understand that multilingual students are always using their home language to make sense of their world. A pervasive attitude of monolingual idealism in schools can foster a multilingual student's linguistic insecurity, "leaving them in limbo as they evaluate their practices according to isolated monolingual standards and practices" (Vogel & Garcia, 2017). Furthermore, monolingual policies and attitudes have been shown to negatively impact teachers' expectations for and perceptions of their multilingual students. In a Flemish school where Dutch is the dominant language, teachers with monolingual purism ideologies had less trust in their bilingual students, potentially setting them up for lower achievement in the long run (Sierens & Van Avermaet, 2014).

The use of translanguaging pedagogy can be used to dismantle socially constructed linguistic hierarchies and elevate international and intercultural mindedness. Many international schools today are still monolingual at their core. However, building translanguaging into the culture can help foster an inclusive attitude toward languages. Translanguaging pedagogy supports the "development of cross-linguistic awareness in both bilingual and monolingual students, as well as positive bilingual identities" (Crisfield Burr, 2018). Making space for multilingualism in a school environment is a form of social justice: it gives power to the students to grow their multicultural identities in a positive social-emotional environment. Crucially, international mindedness stands in stark contrast to the aforementioned historically colonial attitudes toward language use.

School language policies and implementation of translanguaging

Supports

How can translanguaging pedagogy be successfully fostered in a school environment?

Rajendram (2019) outlines four conditions. First, the school should be supportive of translanguaging without a monolingual ideology. The administration, in this case, celebrates the ideals of co-learning and co-planning between students and teachers. Second, there needs to be a significant level of involvement from the family and community members, in order to build partnerships among the classroom, home, and community. Third, pedagogy at the school should be sensitive to the sociocultural contexts of language use, and encourage students to challenge the status quo's linguistic hierarchy. Finally and optimally, multilingualism should be normalized at the school, district, and provincial levels.

At the individual teacher level, Vogel & Garcia (2017) also propose three important core components of translanguaging pedagogy, which are (1) stance, (2) designing the learning plan, and (3) shifts (flexibility). A stance is the belief that students with diverse linguistic backgrounds and practices have valuable resources to offer, both in and out of the classroom. When designing the learning environment and expectations, teachers can make a strategic plan designed to integrate students' language practices in both inside and outside the school. This design involves engaging parents and helping them see the value in developing the student's home culture and language along with the target language. Finally, during instruction, the flexibility of a teacher based on formative assessments throughout the day should be open to language shifts if necessary. Shifts do not refer to a teacher's fluency in all the languages of the classroom, but rather to encouraging and empowering students to make their own judgments and decisions about language usage for the right learning context.

Hindrances

While the benefits of translanguaging have been well-documented, its implementation in international schools and optimal conditions has not. It would then seem that even less documented is "what not to do," but one can make some inferences.

Above all, it should go without saying that English-only policies are not only a hindrance to the implementation of translanguaging; they are in fact detrimental to student-teacher power balances and thus their relationships, and they create an atmosphere which encourages students to police each other based on languages. In our opinion, English-only policies are an outdated and colonial practice that should be removed from all, not just international,

schools. Of course, in a language class or in presentations, there are times in which students should be encouraged and even pushed to use a target language. However, setting restrictive language policies in classrooms and social areas shapes an environment in which non-native speakers of the school's language do not have access to all of their linguistic and cultural resources. This is unfair and inequitable.

A second, and more subtle, hindrance is the superficial acknowledgment of student culture through an "international week." While an international week at a school can be a wonderful initiative in which cultures are celebrated, it should not be the only time in which student backgrounds are acknowledged and valued. Multilingualism should be valued and recognized day to day. Many schools have found ways to collaborate consistently and intentionally in regard to language, such as one school in the Netherlands in which students of all ages in common language groups share with each other on a weekly basis for an allotted period of time (Eowyn Crisfield, personal communication, June 2022).

Finally, one must stress the importance of effective parent communication regarding home languages. It is common for even educated parents to have a view of good English as the most important part of their child's schooling. Especially in primary education, parent values are often mirrored in their children. However, as the research has made clear, target language acquisition is supported by a strongly developed first language. Therefore, poor communication about home languages between the school and parents can undermine a teacher's efforts to encourage students to use their home language.

Summary

Understanding how to use translanguaging in a pedagogical setting is a significant step in helping the cultural and linguistic development of bi- and multilingual speakers, both in and outside of academics. Translanguaging utilizes the tools in a learner's linguistic repertoire in order to help them learn content and grow in both their home language and the target language. It has also been shown to support the development of 21st century skills such as critical thinking, communication, and collaboration with a wide variety of peers in schools. Making the school a place of the acceptance and normalization of language inclusion is a vital step in helping students to feel more confident with their identity and culture, particularly for those who come from an alternative linguistic background compared with the majority of the pupils at that school. It may not only be important, but actually imperative that stakeholders in international schools promote translanguaging practices among their staff, as they are meant to be serving as experienced learners in the classroom with their students. An important starting point is to understand the perspectives and opinions of

translanguaging held by teachers who work in those schools, and the perception of students and parents about multilingualism.

Introducing translanguaging over the course of an academic year

In 2022, the lead author's master's thesis outlined (1) the background and benefits of translanguaging, (2) an in-depth look at teacher attitudes regarding translanguaging at an international school, and (3) a 4-step plan to bring the practice into the school pedagogy culture. After the findings and the plan were passed to the school leadership team, approval and support was given for implementation. The following is an account of the experience, along with some reflections and conclusions.

Teacher attitudes

According to a survey, teachers at this international school in southern China generally had positive attitudes toward language inclusivity. However, there was a general misunderstanding regarding translanguaging (often viewed as translation), and teachers also reported various hindrances to being able to implement it in the classroom. The main hindrances reported were a lack of time and resources, and a concern from parents and teachers about target language (English) acquisition.

The plan

Informed with data about teacher attitudes, the plan to bring translanguaging into the school pedagogy culture consisted of four parts: First, educate all teachers about the school's language policy, which explicitly encourages home language use. Although it is an English medium school, home language use is encouraged as it is proven to help with target language development. Secondly, the importance of home language use should also be communicated to the parents, as this was a hindrance to the attitude of students, as found by Aleksić & García (2022). Third, students also needed to be aware of the importance and value of their own abilities. At first glance, it may seem too obvious to mention to them. However, making it explicitly clear that students' home language and culture are valued, and that this knowledge will actually help them become better learners, is a new concept for many students and contradicts what they might have learned at home and elsewhere. Finally, teacher training and education on specific strategies for the implementation of translanguaging is vital. Good intentions and knowledge of language inclusion might not always lead to effective classroom pedagogy without proper training, as Aleksić & García (2022) observed: best intentions combined with a lack of understanding can even lead to the perpetuation of raciolinguistic ideologies.

Teacher workshops

Over the course of the school year, four teacher workshops about translanguaging took place during after-school professional development sessions. The workshops varied in length and depth of topic, but they generally boiled down to the following points:

1. Translanguaging is possible and a great option, even in a school in which student output is usually in English. Input and processing are two great opportunities to utilize home language as a resource.
2. There is scientific evidence that a strong home language is associated with stronger target language acquisition.
3. Translanguaging is promoted by our school language policy and is officially a part of the PYP, so we should be doing it as a PYP school.
4. Implementing translanguaging into the design of a unit or lesson plan does not necessarily require extra time or resources. It just requires some intentionality and a mindset shift.
5. Language inclusivity is important. If we model it, the students will follow suit. If we want to raise global citizens, this is one of the key aspects of that goal.

The following infographics were developed to help teachers in all subjects garner an understanding of what translanguaging might look like in the classroom, as well as theoretical implementations.

Figure 1. Infographic for teachers of all subjects

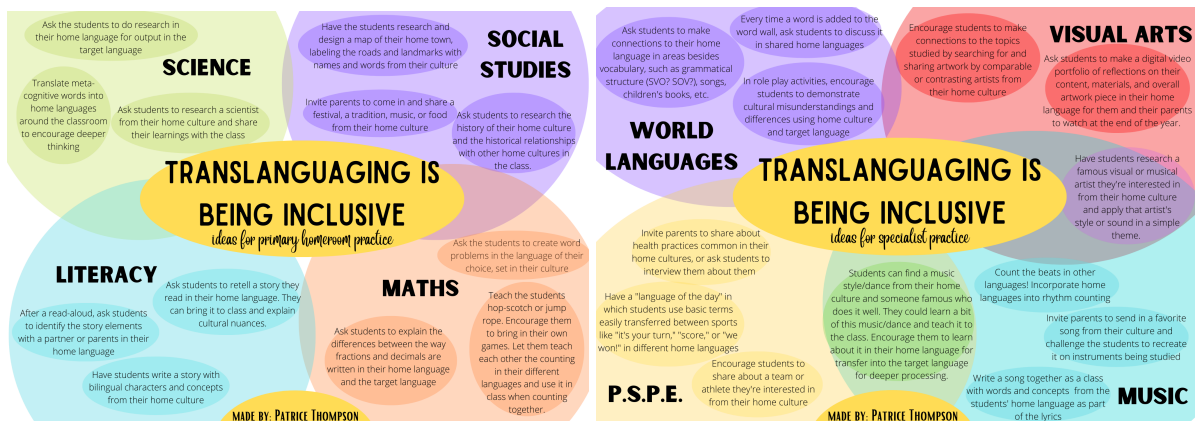
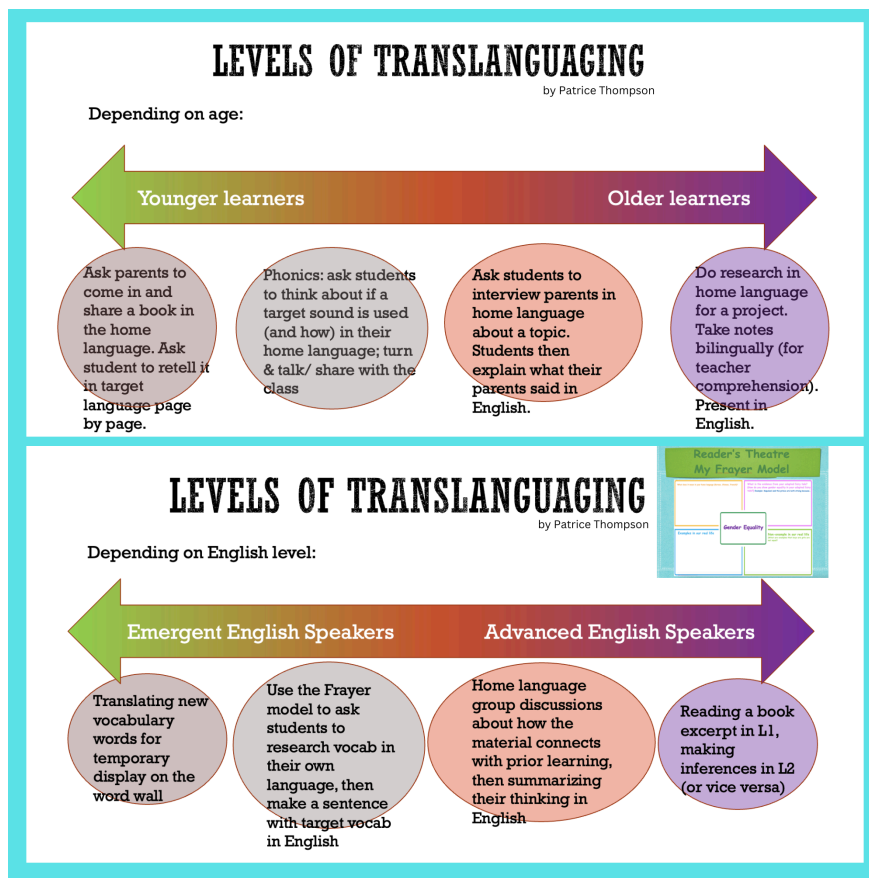


Figure 2. Infographic to further inform teachers

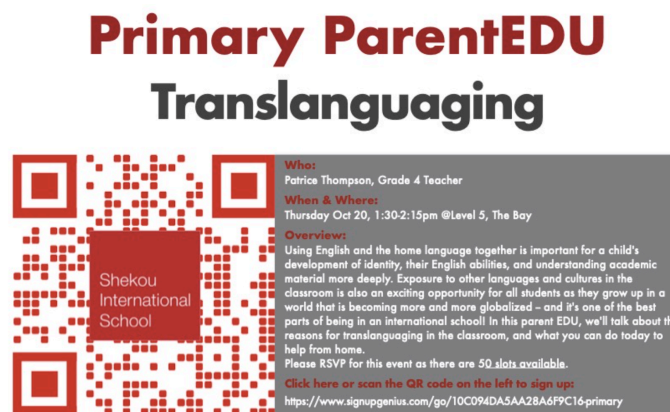


Consistent with the positive attitudes toward language inclusion reflected from the teacher survey results collected for the lead author’s thesis, teachers seemed enthusiastic about learning how they could use their students’ languages for tools in the classroom.

Parent workshop

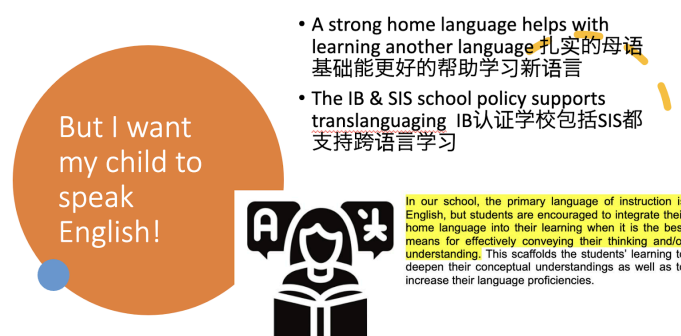
The school leadership provided an opportunity for, and promoted, a parent workshop, which had 50 parents in attendance. After a brief presentation in English with Mandarin translation, the participants were given an opportunity to try learning activities themselves in which they used translanguaging.

Figure 3. Parent flyer



The following slide was notable for the way it resonated with parents. A theme in the international school community is the struggle between maintaining the home language and developing the target language.

Figure 4. Sample slide from the parent presentation



The parents were asked to give feedback in a survey following the workshop. The results were positive, with an average rating of 4.7 out of 5. Some feedback:

- “It’s a very impressive presentation. I think I will be able to help my kid better at home. Knowing what is translanguaging, I do see the value in this.”
- “我覺得非常有用，而且跟老師溝通的過程中，了解更多幫孩子的方法，甚至是孩子在課堂的狀態，能更信任學校” – I think it is very useful, and in the process of communicating with teachers, I can learn more ways to help children, even the state of children in the classroom, and I can trust the school more.
- “这次的非常棒，是高质量的parentEDU，受益良多” – This time is extremely good, it is a high-quality parent EDU, and it is very beneficial.

Thoughtful questions from parents included:

- “Should I push my child to tell me about her experience at school in Italian, even though school is in English and she wants to tell me about it in English?”
- “At home, we mix French and Arabic and I have noticed that my daughter has started doing that with her brother. Should I ask her not to?”
- “We speak several languages at home. My child is not particularly excellent in any of them. Should we just speak one so that he learns it very well?”
- “If my kid doesn’t want to speak Chinese with me because it’s easier for her to speak English, what should I do?”

These questions highlight the need for educators and parents to partner together in order to support multilingual development. With the rise of international schools around the world, and an increasingly global economy, there are so many multilingual and multicultural children who will soon represent a significant portion of the working population. Thus, there is an obligation to be mindful of the need for language inclusion in the world of international education, in order to raise children with a model and sense of compassion and of mutual respect.

DEIJ sessions

Two DEIJ (Diversity, Equity, Inclusion, and Justice) sessions for school staff highlighted linguistic diversity as a matter of inclusion at the school, as well as the need to take advantage of that diversity in an academic setting. Something not often addressed is the concept of inequalities among foreign and local staff, as well. In an international school, expatriate teachers are often paid more than their local counterparts, reflecting education and experience, but also privilege. Going a step further, being able to operate professionally in the language with which one is most comfortable is also a privilege enjoyed by staff from the US, UK, Canada, South Africa, and Australia. It was important to draw attention to that privilege, and to serve as a reminder of the risk-taking that both students and local staff take every day by working in a second language (or in many cases, third, fourth, or fifth) for this context. As a takeaway from the session, monolingual teachers who usually find themselves in positions of privilege and authority encountered a reality that their local counterparts had an ability which they had not (yet) gained.

Observations

Successes. A supportive administrative team that backed supportive school policy was vital to help the school grow in this way. It is still not uncommon to find a school with an “English only” policy, but the school language policy had already been fitted with an inclusive clause, and the leadership values aligned with that policy. A staff predisposed with positive attitudes toward language inclusion also made it easy to get them interested in translanguaging and ready to take further steps. Finally, parent support and buy-in was essential. That made it easier to get parents to trust the practice, especially once they understood the lead author’s goals of helping their children succeed academically by showing how valued their home language and culture were.

Challenges. One of the biggest challenges is that translanguaging is a topic usually reserved for the benefit of language acquisition. Most professional development in which multilingualism in education is the focus are attended by and geared toward EAL teachers. Of course, the use of a home language in acquiring an additional one is useful. However, if almost all of our students have a different home language from that of their school, utilizing the home language as a tool to help students make meaning of their topic should be a focus for all teachers, regardless of what subject they teach. Although translanguaging is helpful in language acquisition, it also goes beyond academics as a means of creating an environment of global mindedness, mutual respect, and trust in the classroom. A teacher who consistently reinforces the value that a child’s background brings to their classroom is contributing to a responsive classroom environment in which everyone has an important role to play. These conditions are essential to every classroom, not just those designed for language acquisition.

Another challenge trying to stand out among the multitude of priorities of excellence in the school. Overwhelmed teachers who already have too much content and not enough time are never quite sure what they should prioritize. We argue that language inclusion and translanguaging should be prioritized for the following three reasons. First, translanguaging is the gateway through which students can see their home language and culture represented in academia, not just social situations. It encourages the decolonization of curricula and helps to develop a child’s sense of identity as a complex human whose background is something to be proud of and brings value to the classroom. Additionally, an internalized linguistic hierarchy is evident in international schools with English at the top. Viewing English as a “shared language,” while still placing value on others, helps to combat this hierarchy, along with the associated racism and classism that inevitably comes with viewing one group (in this case, English speakers) as superior to another. Therefore, translanguaging is a tool

that can be used to reach for a more equitable world. Finally, learning a language is a personal process, acquired through unique experiences and growth. Failure to integrate a home language into learning is a failure to take complete advantage of the activation of prior learning, an essential component of learning any new concept. Translanguaging gives students the tools for a richer and deeper experience of critical thinking, empathy, and becoming more knowledgeable about a topic.

Recommendations

For teachers who are hoping to bring translanguaging into their school pedagogy culture, we recommend keeping the following recommendations in mind.

1. Find allies who would be willing to help, ideally from all backgrounds in the school. Language departments are usually rife with enthusiastic multilinguals, but it will make a bigger impact to get others on board from leadership positions, learning support, teaching assistants, homeroom and specialist teachers, and those from across student age groups.
2. It is important to have a concise pitch and to be able to deliver it clearly to different audiences: from staff to parents and students. The pitch should include what translanguaging is, why it should be implemented, and an easily-understood example of using it in school.
3. With more people, the effort should and will become more collaborative. While being flexible is always necessary in a collaborative environment, we have seen that it is common for well-meaning teachers to misunderstand and then misapply translanguaging. Over time, we learned to be able to teach the concept to teachers, most of whom are professionals open to growth and improving their practice.
4. As with everything in teaching and learning, follow-up on an administrative level is imperative to ensure any school-wide initiatives are seen through. This follow-up could be implemented through coaching or observations with suggestions on how to keep in mind language diversity in the classroom.

International schools, and any schools working with multilingual students, stand to benefit from a working knowledge of translanguaging. A translanguaging stance will not only foster academic achievement, but can also contribute to a culture that openly respects and values students' cultural and linguistic differences. A thoughtful process, rich in opportunities to discuss the value of translanguaging, will help move all stakeholders - administrators,

teachers, parents, and students - in the direction of greater inclusion, understanding, and harmony.

References

- Akinpelu, M. (2020). Translanguaging as an Effective Tool for Promoting the Use and Contribution of African Languages to Formal Education: the Nigerian Case. *Journal of Education & Social Policy*, 7(4). <https://doi.org/10.30845/jesp.v7n4p5>
- Aleksić, G., & García, O. (2022). Language beyond flags: teachers misunderstanding of translanguaging in preschools. *International Journal of Bilingual Education and Bilingualism*, 25(10), 3835–3848. <https://doi.org/10.1080/13670050.2022.2085029>
- Chaika, Oksana. (2023). Translanguaging in Multilingual Classrooms: A Case Study Analysis. *Philological Review*, 21. <https://doi.org/10.31499/2415-8828.1.2023.281366>
- Chen, E. X., & Pushor, D. (2023). Parents in the Classroom: Translanguaging and Informal English Vocabulary Learning Among Newcomer Prekindergarten Students. In *Vocabulary Learning in the Wild* (pp. 87–104). https://doi.org/10.1007/978-981-99-1490-6_3
- Crawford, J. (1992). Language Loyalties: Introduction to Part 1. Language Policy. <http://www.languagepolicy.net/archives/LLPT1.htm>
- Creese, A., Blackledge, A., & Hu, R. (2017). Translanguaging and translation: the construction of social difference across city spaces. *International Journal of Bilingual Education and Bilingualism*, 21(7), 841–852. <https://doi.org/10.1080/13670050.2017.1323445>
- Crisfield, E. (2023) “Linguistic Diversity in International Schools.” *Ecolint Institute Research Journal*, vol. 9, pp. 11–23.
- Crisfield Burr, E. (2018). Changing the Monolingual Habitus of International School Classrooms. *International Schools Journal*, 37(2), 77–84.
- E. Crisfield. (2020, March 9). Translanguaging - Why to how [Video]. YouTube. <https://www.youtube.com/watch?v=9-08jDnN9cc>
- Handwerk, B. (2019, December 11). Human Ancestors May Have Evolved the Physical Ability to Speak More Than 25 Million Years Ago. *Smithsonian*.
- Jolad, S., & Doshi, I. (2021). Colonial Legacy of Language Politics and Medium of Instruction Policy in India. OSF. <https://doi.org/10.31235/osf.io/w9j7x>
- Lewis, G., Jones, B., & Baker, C. (2012). Translanguaging: origins and development from school to street and beyond. *Educational Research and Evaluation*, 18(7), 641–654. <https://doi.org/10.1080/13803611.2012.718488>
- Li, W. (2023). Transformative pedagogy for inclusion and social justice through translanguaging, co-learning, and transpositioning. *Language Teaching*, 1–12. <https://doi.org/10.1017/s0261444823000186>
- Mendoza, A. (2022, May 22). Once again, what are “translanguaging” and “code-switching” (within and beyond the classroom)? *Annamend*. <https://annamend.com/2022/03/23/once-again-what-are-translanguaging-and-code-switching-within-and-beyond-the-classroom/>

- Multilingualism & Diversity Lectures [MuDiLe 2017]. (2017, October 11). Ofelia García - Translanguaging [Video]. YouTube.
https://www.youtube.com/watch?v=5l1CcrRrck0&ab_channel=MuDile2017
- Rajendram, S. (2019). Translanguaging as an Agentive, Collaborative and Socioculturally Responsive Pedagogy for Multilingual Learners. [Doctoral thesis, University of Toronto]. Tspace Repository.
https://tspace.library.utoronto.ca/bitstream/1807/97590/1/Rajendram_Shakina_201911_P hD_thesis.pdf
- Redknap, C., Lewis, W. G., William, S. R., & Laugharne, J. (2006). Welsh-Medium and Bilingual Education. University of Wales School of Education.
- Sierens, S., & Van Avermaet, P. (2014). 12. Language Diversity in Education: Evolving from Multilingual Education to Functional Multilingual Learning. In *Multilingual Matters eBooks* (pp. 204–222). <https://doi.org/10.21832/9781783090815-014>
- Vogel, S., & García, O. (2017). Translanguaging. *Oxford Research Encyclopedia of Education*.

Are languages the key to problem solving?

Tim F Nash, Co-Founder of Wo Hui Mandarin (part of the Education in Motion group)

Abstract

If digital technologies allow us to communicate effectively in a wide range of languages instantly, is there a need to take up valuable curriculum time with language lessons anymore? A growing body of evidence shows that different languages impact how we perceive the world and how we think. Might the greatest value of learning other languages lie not in acquiring communicative competence but rather in developing thinking skills, helping students to be more creative, solve problems and build relationships? If so, we need to reconsider the nature and objectives of our language provision in schools in the digital era.

Keywords

Language; digital education; pedagogy; communication; thinking; problem-solving; perspective

Second or foreign language education is usually based on the assumption that language is about communication. “Communicative competence can be considered to be the target of second language acquisition, a main goal of second or foreign language teaching and learning, or the object language testers seek to measure via performance tests.” (Whyte, 2019, p.1) Put more succinctly, “the goal is to enable students to communicate.” (Forsberg, Mohr & Jansen, 2018, p.31)

It follows that unless a learner is able to reach a relatively high degree of communicative competence, then learning a second language is of no value to them. If, with very limited contact with a language that is foreign to their environment, that seems impossible then it is little wonder that the majority of students – at least in English-medium schools - do not choose a foreign language for public examination.

In the United Kingdom, for example, only 20% of Year 7 pupils say they plan to take a second language GCSE (Standley, 2023) and fewer than 10% of A-Level candidates take a language other than English (Association for Language Learning, 2022); in the United

States, only 20% of students across the entire K-12 spectrum were enrolled in a foreign language class (Devlin, K., 2018); and in Australia, the number of Year 12 students taking a foreign language dropped from just over 11% in 2010 to 8.6% in 2021 (Australian Curriculum, Assessment and Reporting, 2023).

The development of AI-enabled technologies which provide translation between a vast number of languages on-demand – now even presenting the translation in the voice of the original speaker (see, for example, this showreel from HeyGen <https://v.qq.com/x/page/t3513i01q1u.html>) – means that a high degree of communicative competence in a multiplicity of other languages is immediately available to us without us needing to learn any of them. Language learning would appear to have found its rightful place on the margins of the curriculum in most schools and, as the technology continues to improve, we might reasonably expect the popularity of language-learning to shrink further until it is unsustainable to include it in the curriculum at all.

Unless, of course, language is about more than communication. The Information Age that has given rise to that AI-enabled translation is underpinned by Boolean logic. One hundred and fifty years ago, the person behind that logic declared: “That language is an instrument of human reason, and not merely a medium for the expression of thought, is a truth generally admitted.” (Boole, 1854, p.17). We do not just use language to communicate; we also use it to think.

To put it another way, language is how our brains process what we perceive. But perception itself is not simply a matter of us receiving data (through our sound and light and other sense receptors); it is a product of our brain’s processing of that data. “Complex mechanisms in the brain filter the incoming sensory information and shape the representation of the world in our minds ... Perception is highly selective; the brain constantly decides what information is important enough to reach our consciousness.” (Dwarakanath & Panagiotaropoulos, 2023) Which begs the question: does the language we use make any difference to how we think and even what we perceive?

Noam Chomsky (often dubbed the “father of modern linguistics”) would say “no,” arguing that language is a part of human nature and that all humans essentially speak dialects of the same language. For decades, alternative views were inextricably linked to the so-called Sapir-Whorf hypothesis of linguistic relativity: that what a person is able to perceive and to understand is determined by the language they speak, with the result that - in the words of Ludwig Wittgenstein - “the limits of my language mean the limits of my world.” (Wittgenstein,

1922, p.74) Since this is demonstrably nonsense (just because my language does not have a word for something, does not mean I cannot see it), the very idea that language might have an impact on our perception and our thinking was largely abandoned by linguists. Thankfully, with the rise in popularity of neuroscience and the work of linguists like Lera Boroditsky and Guy Deutscher, the baby has been retrieved from the drain and fresh exploration of a topic that is at least as old as Plato has begun again.

In her 2017 TED talk “How language shapes the way we think,” (Boroditsky, 2017) Boroditsky reported that when Spanish speakers were shown a picture of a bridge (which in Spanish is a masculine noun), they were more likely to use descriptors like “strong” or “long” while German speakers (for whom bridge is a feminine noun) would more frequently describe it as “beautiful” or “elegant.” Of course, it is not that Spanish speakers never described the bridge as “beautiful” or “elegant,” much less that they were incapable of seeing it in that way. Nor indeed that “strong” or “long” cannot be used to describe the feminine. But the grammatical gender of the word “bridge” in the speaker’s language did seem to make it more likely that they would see the object in one way rather than another.

Quoting Roman Jakobson’s encapsulation of Franz Boas’s insight that: “Languages differ essentially in what they must convey and not in what they may convey,” Deutscher agrees that whilst the language we use does not prescribe how we think, it will inevitably have affect our thinking. “If different languages influence their speakers’ minds in varying ways, this is not because of what each language allows people to think but rather because of the kinds of information each language habitually obliges people to think about.” (Deutscher, 2011, p.152) He illustrates this with a Papua New Guinean language in which cardinal directions are used even in greetings. If people cannot say “hello” without knowing which way north is, they necessarily pay continual attention to it whereas speakers of other languages usually do not.

There is much more research to be done and the debates will continue to rage in academia for some time yet about how exactly language, perception and thought are connected. In the meantime, the pertinent question for educators is not so much how other languages may or may not make “them” think but rather whether or not those languages might help “us” to get out of the ruts in our own thinking.

Ed Yong has written a fascinating exploration of perception in an enormous variety of animals. The title he chose was “An Immense World: How Animal Senses Reveal the Hidden Realms Around Us.” His aim was not so much to inform us about the peculiar

Umwelten of other creatures as it was to open our eyes to vast aspects of our own environment to which most of us are blind. We are not to become spiders but rather to have our boundaries expanded because of what the spider perceives, for “to perceive the world through other senses is to find splendour in familiarity, and the sacred in the mundane.” (Yong, 2022, p.353) Yong quotes Marcel Proust’s remark that: “The only true voyage ... would be not to visit strange lands but to possess other eyes ... to see the hundred universes that each of them sees.” Languages can give us those eyes, which is why Boroditsky is calling her upcoming book: “7000 Universes,” corresponding to the estimated number of different languages that we humans speak.

On a flight out of Kuala Lumpur, I had nothing to read but the safety instructions in front of me, which were written in English and Malay. I got to wondering which of the words meant “seat” and, with the help of an online translator, discovered that my life jacket was under “the place where I sat down.” I was used to thinking about a seat as an object (which might be large or small, clean or dirty, plain or luxurious etc), but Malay shifted my focus to what I was doing.

In Singapore, I noticed that many streets were called “Jalan” something. “Jalan” predictably turned out to be Bahasa for “street,” but a local friend helped me see that it is also the word for “to go,” “means” and “behaviour” – highlighting the inseparability of what I do, where I do it, how I do it, and how it affects others. The lack of any semantic connection between “go”, “street”, “means” and “behaviour” in English makes it easy for me to forget this but Bahasa alerts me to that reality again.

Online, another friend unpacked for me the Hebrew for a verse from the Bible that is often quoted or alluded to in parental and educational literature: “Train up a child in the way they should go and when they are old they will not depart from it.” (Proverbs 22:6). I discovered that the qualifier of “the way” – translated here as “they should go” – is a word that means “mouth” (of a person, animal, well or sack). From that fundamental meaning, the word came to refer also to the “edge” or “limit” of something (presumably thinking about the lips around the mouth); to “eating” or “tasting” or “speaking” (what you do with your mouth); and to “commands”, “instructions” or “wishes” (what you convey by speaking). In the Hebrew I was made conscious of the juxtapositions between openings and boundaries, between the tangible and the aspirational, and between behaviours and instructions in a way that I was not in an English translation.

“A rose by any other name – be it “trëndafili” (Albanian), “kacay” (Somali) or “gül” (Turkish) - would smell as sweet.” But the names we assign to things carry a range of meanings and associations in one language which they may not carry in another. The poppy reminds Brits of lives sacrificed for freedom since 1914, but it reminds Chinese of 19th century British imperial oppression which began with the first Opium War (1839-1842). Search online for images of “chien” and you will not get the same results as if you search for “dog.” The equivalent words in different languages show us different aspects of the same common concept and alternative ways in which ideas can be grouped together. They evoke different emotions, helping us to see how something we think of as negative could equally be a force for good – and vice versa.

Language does not just give us labels for things; it also gives us specific ways to arrange them. In English if you tell me that you opened your door to a “dark, sweaty, drooling, snarling ...” I will all the while be wondering what this terrifying threat is that you faced and yet mercifully seem to have survived, which is great for suspense if that is what you are going for. In French the same anecdote would begin with you opening your door to a “kitten,” which – poor thing – had somehow been left “dark, sweaty, drooling, snarling ...” The same labels but two very different ways of arranging them, resulting in opposite emotional responses. Each arrangement is useful in different contexts and for different purposes.

To use a computing analogy, languages are human thought algorithms and different algorithms yield different results. The value of us learning Chinese or Portuguese or Amharic is thus not only – or even primarily – so that we can communicate with “them”: it is so that we can see things in front of “us” that we had hitherto ignored or undervalued; it is so that we can see things that are familiar to us from fresh perspectives; it is so that we can think more broadly and creatively about the situation we are in. These are the skills we need for problem-solving, and we can begin to acquire them through other languages long before we reach any kind of communicative fluency (if we ever do).

The goal of a pedagogical approach based on this view of language would not be to inhabit another’s world but rather to make better sense of our own. I do not foresee living or working amongst Malays or Indonesians and I could not live and work amongst ancient Hebrews even if I wanted to. If the sole purpose of learning Bahasa were to communicate better with Malays or Indonesians, I would have no interest in doing so. Yet it appears that Bahasa-speakers may see things in my environment that I do not - or at least that I tend not

to take notice of. “The languages you know influence how you see the world quite literally.” (Marian, 2023, p.32) And that is both relevant and interesting to me.

This sounds self-centred, and it is – because we are. British cartographers put the UK in the centre of their world maps and declared that everything to the right was “East” and everything to the left was “West” and the time was ahead of or behind the time in Greenwich. China’s leaders called their country the “Middle Kingdom” because they perceived themselves as being at the centre of the world. American astronauts took a picture of the world from space, which for years was the home screen for all iPhones. It showed only one country on our little blue and green ball: North America was not only the centre of the world, it was the world. And, shown a group photo, most of us look first for ourselves in it. Is not one of the points of learning a foreign language to draw us out of ourselves and develop empathy? Indeed it is, but we have to start where we actually are. If another’s language helps us in our own situation, it will engender a degree of respect for its speakers. If we continue to find their insights beneficial, we will be interested in getting to know them. And the more we engage with them with respect and interest, the more empathy we are likely to develop for them. This sequence follows our personal development through infancy to maturity: from being aware only of our own needs, to realising that satisfying our needs involves other people, to recognising that those other people also have their own needs and desires. Which means that the goals of communicative fluency and empathy are not lost by this reframing of language education but rather recovered.

A famous poem (題西林壁, reproduced with notes in English at <https://cn.hujiang.com/new/p477723/>) by Su Shi (1037-1101) describes hiking up Mount Lu and noticing how the shape of the mountain continually changed depending on where he was on the path. The kicker in the final line says that the only time he could not really see what the mountain looked like was when he was on top of it. If I asked you to draw a mountain – like Fuji or the Matterhorn – you would almost certainly draw a triangular shape. That is what is most obvious about those mountains to the rest of the world, but that is the one shape that those on the mountains cannot see. We need the eyes of others – of the “outsider” – to see ourselves clearly. There is a marvellous and instructive irony in this, since language is intimately bound up with identity and therefore is all-too-frequently weaponised by those battling to preserve tribal exclusivity.

This insight into perspective also means that the native speaker will often not see in their own language what the foreigner sees. If the focus of language education is on communication, then the native’s view of the language is all that matters. But for our current

purposes, the outsider's view is equally valuable. Native French speakers are unlikely ever to wonder why their numbers stop at sixty (seventy is sixty-ten, eighty is four-twenties and ninety is four-twenties-ten). They just do. That is normal. By contrast, I am not sure I have ever met a non-native learner who, on hearing this for the first time, did not immediately react: "What?!" Usually followed – silently or audibly - by: "That's stupid!" Numbers go to a hundred. That is normal. Being repeatedly faced with such a reaction when I was teaching French led me to reflect on "why" this might be. We have ten fingers and ten toes, and ten rows of ten make a neat grid of one hundred. So having separate names for each multiple of ten up to one hundred makes sense – at least if you are working in squares. On the other hand, if you are working in circles – such as with seconds or minutes on a clock – then sixty (or a factor of sixty) is a much more useful maximum number for each cycle. Which is "right" and which is "wrong"? Of course both are right, neither is wrong, and both are useful in different contexts. If the light shines on a cylinder that is as long as it is round from the side, it will cast a square shadow. If the light shines on it from above, it will cast a round shadow. If we ever feel like we are trying to fit a square peg in a round hole, it may be that we have the peg sideways.

Seeing the value in another's perspective is a crucial skill for relationship building and developing empathy. "The ability to change your perspective in communication and in relationships is a key element of emotional intelligence, or your ability to empathize and connect with others. This type of intelligence doesn't just help you create fulfilling relationships – it's also essential to advancing in your career, influencing others and more." (Robbins, n.d.) Language offers us a unique and ubiquitous tool with which to develop that skill, and yet we typically leave it to chance. Dr Robert Sharples points out that in education "we talk about the value of language learning without looking at the specific features or pedagogies that are needed to make that happen." (Sharples, 2023) The benefits are not necessarily inherent in the language itself; they need to be drawn out by the way we approach the language.

There certainly seems to be growing evidence that polyglots enjoy improved cognitive abilities. Dr Dina Mehmedbegovic-Smith asserts: "Research evidence shows that multilingualism ... is associated with better cognitive performance and higher academic achievement in children and with slower cognitive ageing, delayed onset of dementia and better recovery from stroke in later life. These benefits can already be observed during language learning, long before learners become proficient, and have been reported in language learners of all ages." (Bak & Mehmedbegovic, 2017) It is not clear what it is about multilingualism that positively impacts our brains, but there is no reason to believe it has

anything to do with communicative competence. That should cause us to reconsider the fundamental way we are used to framing language education.

We cannot turn to the Académie or the equivalent authority for native speakers because they lack the outsider's perspective; nor can we simply pluck the language out of its social context because it lives in its speakers. Instead, we must actively identify the points of difference between "our" language and "theirs" and wrestle with the tension. This is an act of metacognition, which is another skill associated with developing problem solving. With the sixty/hundred example above, the insight came first from acknowledging the discomfort instead of trying to ignore it; secondly from reaffirming our common humanity, which meant there must be a human logic behind "sixty" just as there evidently is behind "hundred;" and then, on that basis, wondering in what circumstances "sixty" would make sense to me. Digging around that question quickly takes you back to ancient Babylon – which has nothing directly to do with either French or English but in this case helps to broker peace between the two.

It is common to think of languages as barriers that separate people. The points of greatest distance between those on each side are typically what leads the language learner to give up ("I never understood why table is feminine and the floor is masculine" or "it made no sense to me that there are sixteen different words for 'the'" and so on). The double tragedy is that it is the very parts of another language that seem most non-sensical and contrary to us which offer the greatest potential for enabling us to see our problems from a different perspective. The wall is thickest where the gateways are.

In English-medium educational environments, we have long had two basic categories when it comes to other languages: Modern Foreign Languages (MFL) programmes aim to help "us" navigate "their" environment; and English as an Additional Language (EAL) programmes aim to help "them" navigate "our" environment. We seem to think that other languages have little if any real relevance to the majority of "us" in "our" environment. Festivals, events and performances can add moments of wonder and delight, but they rarely have anything much to do with "their" language and essentially leave "us" unchanged in our normal everyday lives.

In a welcome departure from this norm, the island of Jersey (where English is the medium of instruction in schools) in 2022 adopted a whole sector inclusive language policy based on the recommendations of Eowyn Crisfield. Recognising that "Multilingualism offers cognitive and cultural benefits to students which enables them to work effectively and collaboratively

within the community,” (Languages Policy working party of the Department for Children, Young People, Education and Skills of the Government of Jersey, 2022, p.4) in this policy “learners are designated as 'MLL' (Multilingual Learners) if they speak a language beyond English, and EAL is now a temporary provision that some MLL receive.” (Crisfield, 2023) It is not only “they” (the EAL students and the trans-languagers) who need support for the sake of Diversity, Equity and Inclusion; it is “we” too, whose first - and perhaps only - language is the language of instruction. As one professor attests from interviewing students at Michigan State University: “almost every student has a story about the personal transformation they experienced ... thanks to learning a second language.” (Stark, 2019) Whilst researchers continue to investigate the ways in which and extent to which language affects our thinking, as educators we already have enough evidence to know that it does. It is imperative that we reconsider our approach to language education, not embarrassed by our own lack of fluency, before we not only lose languages from the curriculum but fail to give our students a compelling reason to save one of humanity’s greatest assets: a diversity of languages.

References

- Association for Language Learning. (2022). Statement on 2022 A level and AS results. Association for Language Learning. Retrieved from <https://www.all-languages.org.uk/news/all-statement-on-2022-a-level-and-as-results/>
- Australian Curriculum, Assessment and Reporting Authority [ACARA]. (2023). Australian students seem to be losing interest in languages. Should we all be worried? SBS News. Retrieved from <https://sbs.com.au/news/article/australian-students-seem-to-be-losing-interest-in-languages-should-we-all-be-worried/>
- Bak, T. & Mehmedbegovic, D. (2017). Healthy linguistic diet: The value of linguistic diversity and language learning across the lifespan. MEITS. Retrieved from <https://www.meits.org/policy-papers/paper/healthy-linguistic-diet>
- Boole, G. (1854). An Investigation of the Laws of Thought on Which are Founded the Mathematical Theories of Logic and Probabilities. Project Gutenberg. <http://www.gutenberg.org/ebooks/15114>
- Boroditsky, L. (2017, November). How language shapes the way we think [Video]. TED Conferences. https://www.ted.com/talks/lera_boroditsky_how_language_shapes_the_way_we_think
- Crisfield, E. (2023). Whole Sector Inclusive Language Policy. Crisfield Educational Consulting Blog. Retrieved from <https://www.crisfieldeducationalconsulting.com/single-post/whole-sector-inclusive-language-policy>

- Deutscher, G. (2011). *Through the Language Glass: Why the World Looks Different in Other Languages*. Arrow Books. [Kindle version]. Retrieved from <https://amzn.eu/d/cAtVJmY>
- Devlin, K. (2018, August 6). Most European students are learning a foreign language in school while Americans lag. Pew Research Center. Retrieved from <https://www.pewresearch.org/short-reads/2018/08/06/most-european-students-are-learning-a-foreign-language-in-school-while-americans-lag/>
- Dwarakanath, A. & Panagiotaropoulos, T. (2023, April 23). How the brain decides what we perceive. Max-Planck Gesellschaft. Retrieved from <https://www.mpg.de/20170692/how-the-brain-decides-what-we-perceive>
- Forsberg, J., Mohr, S. & Jansen, S. (2018). "The goal is to enable students to communicate": Communicative competence and target varieties in TEFL practices in Sweden and Germany. *European Journal of Applied Linguistics*, 7(1), 31–60. <https://doi.org/10.1515/eujal-2018-0006>
- Languages Policy working party of the Department for Children, Young People, Education and Skills of the Government of Jersey. (2022). *Language Policy for Jersey Education*. Retrieved from <https://www.gov.je/SiteCollectionDocuments/Education/P%20Language%20Policy%2020211108.pdf>
- Marian, V. (2023). *The Power of Language: Multilingualism, Self and Society*. Pelican. [Kindle version]. Retrieved from <https://amzn.eu/d/930CGly>
- Robbins, T. (n.d.). Gain perspective in a relationship: 4 tips for seeing another point of view in your relationship. Retrieved from <https://www.tonyrobbins.com/love-relationships/seeing-your-partners-perspective/>
- Sharples, R. (2023, October 6). [Personal communication].
- Standley, N. (2023, December 5). Pupils say languages not key to careers - report. BBC News. Retrieved from <https://www.bbc.com/news/articles/c889nyxmkpmp>
- Stark, K. (2019). Reevaluating the Importance of Foreign Languages: How language learning fosters empathy in students. Center for Language Teaching Advancement, Michigan State University. Retrieved from <https://celta.msu.edu/reevaluating-importance-foreign-languages/>
- Whyte, S. (2019). Revisiting communicative competence in the teaching and assessment of language for specific purposes. *Language Education & Assessment*, 2(1), 1–19. <http://dx.doi.org/10.29140/lea.v2n1.33>
- Wittgenstein, L. (1922). *Tractatus Logico-Philosophicus*. Project Gutenberg. <https://www.gutenberg.org/ebooks/5740>
- Yong, Ed (2022). *An Immense World: How Animal Senses Reveal the Hidden Realms Around Us*. Random House. [Kindle version]. Retrieved from <https://amzn.eu/d/04yTRuV>

Racisme(s)

La Lecture Interculturelle, Outil de Lutte Contre les Racismes

**Mehdi Lazar, Directeur Académique du Lycée International de
Boston**

Les compétences interculturelles sont souvent définies comme la capacité à *“rencontrer l'autre au-delà des visions figées de « sa » et de « ma » culturalité, [...] le rencontrer dans ses diversités et non sa diversité de façade (artefacts, stéréotypes...), [...] accepter que nous sommes autant différents que similaires de l'autre”*². Selon l'UNESCO, ce sont des connaissances pertinentes sur des cultures particulières, mais aussi des connaissances générales sur les types de questions qui se posent lorsque des membres de différentes cultures interagissent. Elles englobent des attitudes réceptives qui encouragent l'établissement et le contact avec d'autres personnes, ainsi que les compétences nécessaires pour tirer parti de ces connaissances et de ces attitudes lors de l'interaction avec d'autres personnes de cultures différentes³.

Les compétences interculturelles sont de plus en plus importantes dans notre monde contemporain, en raison d'un triple contexte. Tout d'abord celui d'une diversité démographique croissante des grands Etats développés. Ensuite, celui d'une globalisation croissante des économies et des cultures et, enfin, d'une reconnaissance de plus en plus fréquente de la race en tant que construction sociale et politique, et non définie biologiquement⁴. Dans ce cadre, développer les compétences interculturelles est essentiel afin de lutter contre toute forme de racisme. Pour cela, il s'agit notamment de travailler sur des compétences clés telles que le respect (valoriser les autres), la conscience de soi et de sa propre identité (comprendre le prisme à travers duquel nous voyons le monde), comprendre d'autres perspectives et conceptions du monde (notamment comment ces perspectives sont similaires et différentes des siennes), écouter (s'engager dans un dialogue interculturel authentique) ou encore faire preuve “d'humilité culturelle” (être capable de combiner respect des autres et estime de soi)⁵.

Pour développer certaines de ces compétences, un travail autour des textes littéraires peut s'avérer extrêmement pertinent. Dans ce court article, nous tenterons donc de présenter des pistes pour l'enseignement des compétences interculturelles par la littérature, que nous

nommerons lecture interculturelle, afin de promouvoir non seulement une aptitude au vivre ensemble mais également une lutte contre toute forme de racisme.

Les compétences interculturelles: compétences du 21e siècle

Un consensus fort existe désormais sur le fait qu'une éducation de qualité nécessite plus que de pures compétences académiques. Comme le dit le professeur de l'université Harvard, Fernando Reimers, les élèves contemporains doivent devenir "*globally aware, globally minded, and globally proficient*"⁶(« conscients du monde, avec un esprit mondial et compétents à l'échelle mondiale »).

Pour cela, il est essentiel de viser, entre autres, de développer chez les élèves des compétences interculturelles leur permettant de comprendre et respecter autrui au-delà de toutes les barrières culturelles. Cette dimension est particulièrement importante afin de pouvoir respecter, apprécier et vivre en toute sérénité avec des individus d'autres cultures (où que ce soit). Cette approche permet de lutter contre le racisme - ce dernier étant défini comme une discrimination ou hostilité violente envers un groupe humain, quel qu'il soit, reposant sur des stéréotypes - puisqu'elle donne aux élèves des clés de dépassement des stéréotypes et des préjugés, tout en livrant des éléments d'appréciation de la diversité. *In fine*, il s'agit d'un objectif d'éducation au vivre ensemble qui est de plus en plus définie comme une compétence du 21e siècle⁷. En effet, puisque la race, dans son acception social et politique, est un fait éminemment culturel, lutter contre le racisme nécessite des compétences interculturelles⁸.

Le rôle central de la littérature dans la lutte contre le racisme

Dans le cadre d'une éducation à l'interculturel, la littérature joue un rôle central. Il s'agit d'un média puissant pour explorer le monde, car comme le dit la philologue Jacqueline de Romilly « la littérature offre tout ». Les livres peuvent ainsi être un outil extrêmement puissant pour voir le monde différemment et offrir des opportunités de réflexion sur notre humanité commune, nos propres biais et sur l'appréciation d'autres expériences de vie. Emily Style a conceptualisé cette approche à travers la métaphore des miroirs et des fenêtres (*mirrors and windows*)⁹ qui vise à ajouter une dimension interculturelle aux programmes scolaires. Il s'agit pour les élèves d'être exposés à des histoires qui reflètent leurs propres expériences et leur identités (le miroir) mais également qui offrent un aperçu des expériences des autres (la fenêtre).

L'opportunité de se voir ainsi représentés dans les lectures de classe permet ainsi aux

élèves d'être valorisés, de développer leur estime de soi, leur confiance, un sentiment d'appartenance à la communauté scolaire, qui reconnaît ainsi leur place au sein de groupe, ce qui en retour augmente leur engagement et leur réussite scolaire¹⁰. Ainsi, que ce soit à travers la lecture de textes retraçant les récits de jeunes gens d'un quartier similaire aux leurs, ou d'origine similaire à la leur, ou bien à travers des récits relatant les différentes expériences quotidiennes d'une jeune fille somalienne ou d'un garçon afghan, la littérature de jeunesse devient plus humaine. Cette plurivocalité¹¹ aide les élèves à devenir de meilleurs lecteurs, plus autonomes, mais renforce également leurs compétences interculturelles.

Bien sûr, cela implique d'éviter une approche essentialiste et stéréotypique des cultures, notamment car les migrations, les situations postcoloniales et l'intégration croissante des sociétés créent des cas de plus en plus fréquents d'hybridation, avec des cultures fluides et dynamiques¹². Enfin, le développement de compétences interculturelles aide les élèves à naviguer positivement entre des groupes différents, à réduire les préjugés et aide des individus d'origines différentes à interagir et à collaborer ensemble de manière efficace. Dans ce cadre, cette démarche aide les élèves à s'opposer au racisme et à promouvoir l'équité dans leur société¹³. La lecture interculturelle n'est cependant qu'une des solutions possibles de lutte contre le racisme et gagnerait à être mise en œuvre en conjonction avec d'autres mesures.

Méthodologie de lecture interculturelle

Inspiré par la possibilité de lire "le mot et le monde" (le "word and the world") de Paulo Freire¹⁴, Henry Giroux a préconisé une approche de la lecture permettant aux élèves de se questionner sur eux-mêmes, sur leur communauté et sur le monde, tout en développant des compétences de lecteur expert et des compétences métacognitives. Giroux¹⁵ préconise ainsi de lire un texte à trois niveaux. Premièrement, un élève va lire "derrière le texte". Ce niveau de lecture, centré sur le lecteur, est complété par une lecture "dans le texte", centrée sur le texte, puis par une lecture "derrière le texte", centrée sur l'auteur. Pour chaque type de lecture, Morell et Morell¹⁶ ont développé des questions qui ont été adaptées par l'auteur de cet article afin de guider la réflexion des élèves.

Lire "derrière le texte" remplace ce dernier dans une profondeur socio-historique. Ancrés dans un territoire, une culture, une histoire, les auteurs écrivent cependant selon un point de vue particulier. Il s'agit donc pour les élèves de mieux comprendre les expériences de l'auteur, ainsi que les facteurs sociaux, culturels ou politiques ayant influencé l'écriture du texte. De plus, les élèves peuvent réfléchir aux objectifs de l'auteur: il s'agit ici de dégager

l'élément dominant du texte, selon son genre, et donc de pouvoir saisir l'objectif, voire les partis-pris idéologiques de l'auteur dans un contexte donné. Finalement, une réflexion autour de la façon dont le texte a été reçu à l'époque de sa publication est mise en exergue (le livre a-t-il reçu des prix, été interdit, a-t-il créé la polémique?). Les questions suivantes peuvent aider les élèves à lire "derrière le texte":

- Qui est l'auteur?
- Quand a-t-il/elle écrit le texte?
- Quel événement contemporain/historique ou quel mouvement social, culturel ou politique a influencé l'écriture du texte?
- Qui était le public du texte? Quelle était la culture des lecteurs, comment voyaient-ils le monde?
- Quel était le but du texte?
- Comment le texte a-t-il été reçu?

Deuxièmement, lorsque les élèves lisent "dans le texte", ce dernier est l'élément central de l'attention des élèves. Les différents éléments du texte sont passés en revue. Les élèves peuvent commencer par identifier le genre littéraire, puis les éléments constitutifs du texte tels que le narrateur, les personnages, l'intrigue, le cadre, le style ou le thème. Ils peuvent identifier des faits du texte qui renvoient à un contexte particulier, afin de comprendre les normes et les cultures de l'époque ou du lieu auxquels le texte est rattaché. C'est pour les élèves l'occasion de comprendre que les références culturelles ou les normes sociales peuvent être plus ou moins différentes des leurs. Les différents personnages peuvent être étudiés dans leur contexte social et culturel, afin de voir si certains ont des positions plus dominantes que d'autres, tandis que les discours et les styles langagiers des personnages peuvent également être étudiés. Des connexions avec d'autres textes de même genre, thème, ou style peuvent être établis. Des comparaisons entre des personnages de textes différents ayant des points communs ou des différences notables peuvent aussi être passés en revue. Afin de "lire le texte", les questions suivantes pourront être posées:

- Quel est le genre du texte (poésie...)?
- Que se passe-t-il dans le texte (résumé et intrigue)?
- Qui sont les personnages principaux?
- Quels registres de langage sont utilisés dans le texte? Par qui?
- Quel est le style du texte?
- Quelles sont les caractéristiques du texte (aide visuelle, cartes, dessins, photos...)
- Quels liens avec d'autres textes?

- Quels éléments de la vie culturelle, politique, sociale trouve-t-on dans le texte?

La troisième approche place le lecteur au centre. Les élèves, en tant que lecteurs, vont questionner les biais éventuels du texte. Ils vont s'interroger sur les débats potentiels qui peuvent en être tirés. Ils réfléchissent à des lectures ou à des interprétations alternatives du texte. Par exemple, la publication des Aventures d'Huckleberry Finn en 1885 a conduit à deux lectures du texte de Mark Twain¹⁷. Certains y ont vu un livre raciste tandis que d'autres ont vu chez Twain une lecture satiriste de la société esclavagiste états-unienne de la fin du 19e siècle (ce qui était son objectif). Finalement, il est important pour les élèves de comparer la vie des personnages avec la leur. Afin de réfléchir à la fois à l'altérité mais aussi à notre humanité commune, les élèves peuvent tenter d'identifier des éléments de diversité mais également de parallélisme entre les personnages et eux-mêmes. Cela peut être autour d'un événement (comme la perte d'un être cher ou un déménagement), d'un sentiment fort (de honte, de joie), ou bien encore d'un intérêt commun (pour les animaux par exemple). Il est essentiel que les élèves soient capables de faire un aller-retour entre des éléments distinctifs de leur vie et de celles des personnages et les éléments communs à tous; cette "forme d'équivalence" permise par ce travail littéraire d'identification est aussi la connaissance commune de l'expérience humaine qui affaiblit les stéréotypes, donne le goût de la diversité, ou permet de mieux se rendre compte des nombreuses inégalités qui existent dans le monde. Afin de lire devant le texte, les questions suivantes peuvent être posées:

- Ai-je aimé ce texte et pourquoi ?
- Quelles connexions puis-je établir entre le texte et ma propre vie ?
- Quels biais, selon moi, existent dans ce texte?
- Quelles interprétations puis-je tirer du texte?
- Ce texte provoque-t-il chez moi une nouvelle façon de voir les choses, ou une envie de faire des choses nouvelles?
- Quels éléments chez les personnages sont différents de ma vie, quels éléments sont similaires?

Ces questions peuvent faire l'objet d'un travail individuel, du CM1 au Lycée, et servir à rédiger des fiches de lecture, des analyses de chapitres ou d'ouvrage, ou bien servir de base à des discussions en petites groupes, de type "cercles de littérature", ou encore à des plus grands débats de classe.

La lecture interculturelle, outil de lutte contre le racisme

Cette technique de lecture interculturelle aide donc à la création de communautés inclusives

en développant une meilleure compréhension de l'identité propre de l'élève tout en développant chez lui une appréciation de la diversité humaine en général. A travers études, dialogues, discussions, les élèves sont exposés à des histoires qui reflètent leurs propres expériences, tout en leur fournissant également des perspectives sur les expériences des autres. Intégrer plusieurs points de vue à travers la littérature favorise par conséquent le sentiment d'appartenance des élèves, leur compréhension du monde, leur empathie ainsi que leur appréciation des différences. Cette approche rappelle d'ailleurs la démarche "lecteurs, écrivains et textes" du Baccalauréat International qui vise à initier les élèves à l'examen des textes littéraires, tout en développant leur conscience métacognitive, notamment à travers une capacité à se reconnaître dans des textes, et la découverte du monde dans toute sa diversité.

Réviser périodiquement les œuvres étudiées en classe et présentes dans les CDI permet d'offrir aux élèves « des miroirs et des fenêtres » tandis que les livres deviennent aussi des "baies vitrées" permettant de se reconnaître, de découvrir le monde vécu par d'autres, et d'explorer au gré de l'imaginaire. Engager les élèves dans ce dialogue littéraire permet de mieux imaginer les expériences des autres et d'accéder ainsi à une meilleure compréhension de soi, de l'autre et du monde. Avec de l'entraînement, un élève peut lire n'importe quel texte de manière interculturelle en se focalisant sur le texte, l'auteur et le lecteur. Ce faisant, les élèves développent une empathie accrue pour l'expérience humaine dans toute sa richesse, une appréciation de la diversité culturelle tout en réduisant la tendance, somme toute assez humaine, aux préjugés et aux stéréotypes. Toutes ces composantes permettent, *in fine*, de développer des capacités et des attitudes permettant de lutter contre le racisme.

En conclusion, les efforts pour préparer nos élèves à s'épanouir dans le monde pluraliste dans lequel nous vivons restent essentiels afin de créer des communautés scolaires plus inclusives et de former des citoyens empathiques capables d'apprécier la diversité et le métissage, à l'image du monde contemporain. Les compétences interculturelles, définies comme la capacité d'interagir de manière efficace et appropriée dans des situations interculturelles reste pour cela essentielle. Ces dernières s'appuient sur des attitudes et des capacités spécifiques que la littérature, notamment par la lecture interculturelle, peuvent développer. Or, dans un contexte de montée des extrêmes sur l'échiquier politique mais aussi de pluralisation croissante des sociétés (résultant de la globalisation et de la diversité ethnique, religieuse et culturelle), œuvrer pour développer les possibilités de dialogue entre individus est plus important que jamais. Ceci participe de la lutte contre toute forme de racisme.

References

- ¹ Mehdi Lazar est le directeur académique du Lycée International de Boston. Il est l'auteur de nombreuses publications portant sur la géographie du monde arabe, l'éducation internationale et le leadership éducatif.
- ² Dervin, F., 2010, « Pistes pour renouveler l'interculturel en éducation », *Education et formation interculturelles : regards critiques*, n° 9, p. 32-42. Citation p. 35.
- ³ Leeds-Hurwitz, W. (2013). *Intercultural competences: conceptual and operational framework*. UNESCO.
- ⁴ Ray, V. (2022). *On Critical Race Theory: What it is & Why it Matters*. Penguin Random House.
- ⁵ Leeds-Hurwitz, W. (2013). *op. cit.*
- ⁶ Reimers, F. M. (2020). *Educating students to improve the world*. Springer Nature.
- ⁷ Voir par exemple: Klafehn, J. 'Cross-Cultural Competence as a 21st Century Skill', *Building Better Students: Preparation for the Workforce* (New York, 2017; online edn, Oxford Academic, 22 June 2017).
- ⁸ Voir par exemple: Baires NA, Catrone R, May BK. (2021). On the Importance of Listening and Intercultural Communication for Actions against Racism. *Behav Anal Pract.* 15(4). 1042-1049.
- ⁹ Style, E. (1988). *Curriculum As Window and Mirror. Listening for All Voices*. Oak Knoll School monograph, Summit, NJ.
- ¹⁰ De nombreuses études soulignent ce point. Aux Etats-Unis, on peut citer par exemple: Abacioglu, C.S., Epskamp, S., Fischer, A.H. et al. (2023). Effects of multicultural education on student engagement in low- and high-concentration classrooms: the mediating role of student relationships. *Learning Environ Res*, 26, 951–975.
- ¹¹ Morrell, E., & Morrell, J. (2023). *Freire and Children's Literature: Joy, Voice, Agency, Responsiveness, & Love*. Bloomsbury Press.
- ¹² Torres, C.A. & Tarozzi, M. (2020). Multiculturalism in the world system: towards a social justice model of inter/multicultural education, *Globalisation, Societies and Education*, 18:1, 7-18.
- ¹³ Wiersma-Mosley, J. D. & Banton, C. & Klein, T. & Hart, S., (2023) "Intercultural Competence and Anti-Racism among College Students", *Currents: Journal of Diversity Scholarship for Social Change* 3(1).
- ¹⁴ Freire, P., & Macedo, D. (1987). *Literacy: Reading the Word and the World*. South Hadley, MA: Bergin & Garvey.
- ¹⁵ Giroux, H. A. (1990). Reading texts, literacy, and textual authority. *the journal of education*, 172(1), 84–103.

¹⁶ Morrell, E., & Morrell, J. (2023). *Freire and Children's Literature: Joy, Voice, Agency, Responsiveness, & Love*. Bloomsbury Press.

¹⁷ Morrell, E., & Morrell, J. (2023). *op. cit.*

Reconciling Competencies for Combating Disinformation with the IB MYP Science Curriculum: A Strategic Approach

Jake Burdis, Assistant Professor (Education) Durham University

Abstract

To combat the rise of scientific misinformation, this study adapts Allchin's (2023) competencies for the International Baccalaureate (IB) Middle Years Programme (MYP) Science curriculum. It equips educators with strategies to incorporate these competencies into their teaching. Highlighting prevalent misinformation issues in areas like COVID-19, climate change, and genetic modification, the article offers a practical framework for teachers to clarify scientific realities in the classroom.

Key words

Scientific Misinformation, Educational Strategies, International Baccalaureate, Middle Years Programme, Curriculum Development.

1. Introduction

Misinformation is a growing concern in an era marked by the widespread availability of information and the increasing influence of social media, and the proliferation of scientific misinformation (Dahlstrom, 2021; West & Bergstrom, 2021). In this work I apply competencies (identified by Allchin (2023) to the International Baccalaureate (IB) Middle Years Programme (MYP) Science curriculum (IBO, 2014) with the intention of helping educators more easily integrate these competencies into their teaching.

In the context of scientific misinformation, several examples come to mind that illustrate the challenges that educators and their students face. There is rampant misinformation surrounding the COVID-19 pandemic, which has led to the spread of false claims, conspiracy theories, and misleading information about the virus, its origins, prevention, and treatment (Roozenbeek et al., 2020). Similarly, there is misinformation related to zero/low carbon energy (Farrell et al., 2019), climate change (Treen et al., 2020), genetically modified organisms (GMO's) (Lynas et al., 2022), and evolution (Finazzo et al., 2017). These have permeated public discourse, often distorting scientific consensus, and creating confusion among students.

So, what can we do about it? This research bridges the gap by aligning competencies with an existing curriculum, offering hands-on strategies for educators. By doing so, we hope to arm teachers with tools to boost scientific literacy and shield students from the pitfalls of misinformation.

2. The Threat of Misinformation in Science Education

The internet has democratised content sharing, enabling anyone to disseminate information without necessarily verifying its accuracy or bias. This has resulted in the accelerated spread of misinformation (Burkhardt, 2017). As a result, younger people, who predominantly source their news from digital platforms like TikTok, X, and Instagram, face heightened vulnerability to scientific misinformation (Vogels & Gelles-Watnick, 2023). A concerted effort is needed to help young people develop the skills they need to deal with misinformation in their social media feeds.

Current science curricula are not particularly aimed at inoculating students with the skills they need to resist misinformation. The breadth and complexity of modern-day science has made it impossible to imbue most students with anything but a foundation for understanding scientific ideas. Feinstein (2011) refers to these young people as "marginal insiders," possessing a basic understanding of science, yet neglectful of the nuances and complexities of authentic scientific work. This, combined with their news consumption habits makes them fertile ground for the seeds of misinformation to take root. This underscores the pressing need for targeted interventions to address the pervasive issue of scientific misinformation in the digital age.

3. The Aims of the IB Curriculum and the Challenge of Critical Thinking

The International Baccalaureate's Middle Years Programme (MYP) Sciences curriculum, introduced in 2014, emphasises an inquiry-based approach, guiding students to explore scientific concepts through research, observation, and experimentation. Central to the MYP sciences framework is the exploration of the interplay between science and everyday life, highlighting its connections with morality, ethics, culture, and socio-economic factors. The curriculum offers significant flexibility in its implementation, allowing for the development of discrete, modular, or integrated science courses tailored to local and national educational requirements (IBO, 2014). This adaptability ensures that the MYP sciences curriculum remains relevant, engaging, and aligned with the evolving needs of students globally. This flexibility makes it one of the most promising curricula for seamlessly integrating instruction on discerning and countering misinformation.

The root of this challenge lies in the constraints imposed by the nature of expertise. To critically evaluate an expert's proposition calls for a level of proficiency comparable to that of the expert themselves. Non-experts, despite being educated in identifying broad patterns of reasoning and understanding their inherent flaws, are inherently limited in their ability to replicate scientific experiment outcomes, identify subtle technical anomalies, or verify the completeness of the evidence. This limitation, dubbed the "expertise horizon" (Allchin, 2023), denotes the boundary beyond which non-experts are unable to venture.

This predicament is further complicated by the reality that absolute intellectual independence is a theoretical ideal rather than a practical possibility. Experts often rely on the collective expertise of their peers to construct significant conclusions, reflecting the essential role of collaboration in modern scientific practices (Stokols et al., 2008). This makes it necessary to reassess the instructional strategies employed to prepare students to engage with scientific information.

While the commitment to nurturing critical learners remains a praiseworthy and essential goal, it is equally imperative to equip students with metacognitive strategies that enable them to understand the boundaries of their own knowledge and capabilities. This could involve integrating into the curriculum instructions on how to evaluate the credibility of information sources, as well as the expertise of the individuals making scientific claims, rather than an exclusive emphasis on independent argument analysis (Muijs & Bokhove, 2020). By adopting such an approach, the objectives of the IB MYP can be more effectively realised, thereby preparing students not only to think critically, but also to adeptly navigate the complexities of scientific discourse in contemporary society.

The next section sets out criteria to help educators identify those portions of the curriculum that are most promising for helping teach these competencies.

4. Criteria for Matching Competencies and Topics

1. **Effectiveness in teaching the competency:** The selected topics must offer a strong foundation for teaching the specific competency in question. The chosen topics should provide students with the context and background necessary to understand and apply the competency in a meaningful way. This criterion is grounded in the constructivist learning theory, which posits that learners construct knowledge and meaning from their experiences. By selecting topics that provide meaningful

experiences, rather than shoe-horning a competency in at every opportunity, students are far better able to assimilate (or accommodate) the competencies (Vygotsky & Cole, 1978).

2. **Engaging and interesting activities:** The topics must contain engaging and interesting activities that can be used to teach the competency. These activities should capture the students' attention and facilitate their learning while reinforcing the key concepts of the competency. This criterion is supported by research demonstrating that student engagement and interest are key factors in effective learning. Engaging activities can enhance motivation, deepen understanding, and promote retention of knowledge (Fredricks et al., 2004).
3. **Sensitivity to time and resource constraints:** The selected topics must take into consideration the time and resource constraints faced by teachers. This means that the activities and lessons within the topics should be feasible to implement with limited resources and within the time constraints of a typical school timetable. This criterion acknowledges the practical realities of teaching and aligns with the principle of feasibility in curriculum development, which emphasises that educational programs should be realistic and implementable given the available resources and time (Tyler, 1949).
4. **Alignment with curriculum objectives:** It is crucial that the chosen topics align with the existing curriculum objectives to ensure effective integration. This will help teachers address the competencies without compromising the overall learning aims for their students. This criterion is rooted in the principle of alignment in curriculum design, which emphasises the importance of coherence between learning objectives, instructional methods, and assessment (Black & William, 2018).
5. **Interdisciplinary connections:** Topics that can demonstrate connections between different subject areas (e.g., biology, chemistry, and physics) can help students better understand the complexity of scientific knowledge and its application in various contexts (Tonnetti & Lentillon-Kaestner, 2023). This approach fosters critical thinking and the ability to apply competencies across different fields. This criterion is supported by the concept of interdisciplinary learning, which encourages the integration of knowledge and skills across different subject areas to promote a more holistic understanding (Jacobs, 1989).
6. **Real-world relevance:** Topics that have a strong connection to real-world issues and current events can help students understand the practical importance of the competencies. This can enhance their engagement and motivation to learn, as they see the direct impact of the knowledge and skills they are acquiring on their lives and society. This criterion aligns with the principle of situated learning, which posits that

learning is most effective when it is relevant to the learner's life and experiences (Lave & Wenger, 1991). Indeed, Sjöström & Eilks (2018) recommend that controversial, relevant, and socio-scientific issues should be the underpinning of an effective curriculum.

7. **Progression and scaffolding:** The selected topics should be organised in a way that supports a logical progression of learning and allows for the gradual development of the competencies. This means that the complexity of the topics and the activities within them should be scaffolded to match the students' increasing levels of understanding and proficiency. This criterion is informed by the concepts of differentiation and scaffolding, which involve providing support to learners as they develop new skills and gradually removing this support as their proficiency increases, whilst also adapting instruction and guidance as required to best facilitate effective learning (Smale-Jacobse et al., 2019).
8. **Inclusiveness and Diversity:** Ensuring that chosen topics are inclusive and represent a diverse range of perspectives and experiences is paramount. This not only promotes a deeper understanding of the complexity of scientific knowledge but also helps to give science a broad and universal appeal. By showcasing diverse voices and experiences, we can challenge the notion that science is the domain of a specific 'other' group, unrelatable to the learner. This approach not only helps students appreciate the importance of considering multiple viewpoints in the context of misinformation but also prevents misconceptions stemming from viewing scientists as a distinct and unfamiliar group. Rooted in the principles of multicultural education and inclusive learning, this criterion emphasises the need to incorporate diverse perspectives in the curriculum, fostering a richer understanding and appreciation of knowledge (UNESCO, 2005).

5. The Importance of Integrating the Competencies into the Curriculum

Efficiently combating misinformation needs a strategic integration of competencies. The IB MYP curriculum is designed to provide adaptability in diverse educational contexts, permitting a mapping of competencies onto diverse subjects (IBO, 2014). For instance, the 'Gatekeepers' competency can be imparted through an exploration of medicine in one school or via physics content in another. This decentralised approach capitalises on the unique strengths of individual educators and schools and tailors the learning experience to the demographic specifics of the student intake. Therefore, to ensure an effective response to misinformation, curricula should embrace a strategic and tailored approach to the integration of critical competencies, taking into consideration the distinctive attributes of the educational institution, its educators, and its learners.

6. Examples for the integration of Competencies into the MYP curriculum

In this next section, specific suggestions are given for aligning each of the competencies with select MYP curriculum areas. The following alignments are not prescriptive directives demanding absolute adherence. Rather, they serve as foundational references and illustrative examples, so that educators can discern and optimise areas within their curriculum conducive to suit these competencies.

Gatekeepers

Teaching the competency of 'Gatekeepers' in the MYP Science curriculum can be done as a direct response to COVID-19 misinformation (Roozenbeek et al., 2020), thus ensuring relevance to the learner. This competency revolves around students understanding how scientific information is disseminated and who the 'key players' are. Teaching the competency in this way also aligns with the MYP's 'Systems' key concept (IBO, 2014), shedding light on the role 'Gatekeepers' play within the systems of information dissemination. A case study of COVID-19 misinformation could engage students in investigating these 'Gatekeepers', such as the World Health Organisation or news outlets. Students should be motivated to reflect on their role in addressing misinformation within their local communities. Notably, a dedication to community service is a fundamental value the MYP seeks to instil in its students. Furthermore, this emphasis on "action" aligns with the principles of constructivist learning theory, which enhances student learning (IBO, 2014; McMahon, 1997).

Epistemic Dependence

Epistemic dependence can be woven into the teaching of the MYP concept of 'Systems' through the real-world example of drug discovery. Educators can design a unit that introduces students to the complexities of organic chemistry and the process of drug creation, from discovery to approval. Students could research a newly approved drug, uncovering its chemical structure and journey to societal use, thereby recognising the value of expert knowledge. Additionally, the implications of misinformation, particularly relating to medicine, can be highlighted, demonstrating how understanding expert processes can help debunk false claims. This learning experience, integrating aspects of health education, critical thinking, and information literacy, would be facilitated by teachers, guiding students' independent exploration, and understanding of epistemic dependence.

Expertise

The competency of expertise, understanding the vital role and identification of scientific experts, can be seamlessly embedded within the MYP Science curriculum via the topic of atomic structure. In teaching atomic structure, educators are positioned to delve into the historical development of atomic models, highlighting the evolution of scientific knowledge through expert contributions from figures like Dalton, Thomson, Rutherford, and Bohr. This journey equips students with the critical thinking skills necessary to appraise the scientific validity of each model and recognise the difference between genuine expertise and mere authority. In conjunction with the MYP Individuals and Societies subject group, students can reflect on societal shifts in acceptance of these models over time, tracing the impact of misinformation. This integrated approach bolsters appreciation for scientific expertise and arms students with the skills to discern reliable scientific authorities, enhancing their resilience against misinformation.

Deceptive Tactics and Consensus

Within the MYP Science curriculum's structure, the urgent global issue of climate change can be explored to instil the competencies tackling both Deceptive Tactics and Consensus in students. An opportunity presents itself here to deliver this whilst also addressing key MYP concepts such as Change and Systems. This can all be done through the global context of 'Globalisation and Sustainability', educators can plan an inquiry-based unit that focuses on global warming (IBO, 2014).

For instance, students could scrutinise a variety of resources on global warming, some of which may employ deceptive tactics like cherry-picking data or misrepresenting consensus. This approach is discussed in detail by Osborne & Pimentel (2023). Here, with guidance from their teacher, they would learn to recognise and challenge such tactics. Simultaneously, this topic offers an opportunity to emphasise the principle of consensus in the scientific community, particularly the overwhelming agreement among scientists that global warming is largely human induced.

Connecting this to the MYP's interdisciplinary approach, a collaboration with the Individuals and Societies subject group could further enrich students' understanding of how misinformation around climate change can influence socio-political outcomes.

The desired outcome is to cultivate scientifically literate global citizens who, guided by the MYP's focus on inquiry, reflection, and critical thinking, understand the importance of consensus in science and can discern deceptive tactics.

Analytical Posturing

Exploring the electromagnetic spectrum and communications technology through a 5G technology case study can address this competency. A classroom activity analysing prevalent '5G' misconceptions (Elzanaty et al., 2021), such as its alleged links to cancer, immune system weakening, or COVID-19, allows students to apply their knowledge of the EM spectrum and assess these claims. They would also learn to dissect assertions, scrutinise their sources, and cross-reference these with scientific knowledge of the EM spectrum, notably the nature of non-ionising radiation. This approach helps students to not only deepen their understanding of EM spectrum, an essential component of the MYP Science curriculum, but also to develop the skill of Analytical Posturing by critically examining information.

Internet and Social Media

Competencies in combating misinformation from the Internet and Social Media can be taught using a study on renewable energy, a subject frequently distorted online and in the media (Farrell et al., 2019). Students will critically assess online information and how data presentation on social media platforms influences public opinion on renewable energy. They would explore the effects of data visualisation, headlines, and the algorithmic echo chambers of social media on our understanding of scientific data. The activity would also incorporate analysis of social aspects such as comment sections and shares that can emotionally charge objective scientific information. This activity's core learning objective would involve questioning the credibility and intentions behind these sources. Students could also explore the economic, political, and linguistic influences on online information, fostering a comprehensive understanding of how the Internet, social media, and misinformation interplay within the realm of science.

Epistemological Beliefs

Developing the competency of Epistemological Beliefs can be achieved through studying the historical 'Phlogiston Theory'. Students would delve into the theory's origins, acceptance, and eventual displacement by modern chemical understanding. Through inquiry-based learning, this activity could enhance students' understanding of the fluid nature of scientific

knowledge, promoting the critical questioning of 'how we know what we know in science'. This method provides not only deep content knowledge, but also the skills to critically evaluate scientific claims, offering protection against misinformation. The integration of history, philosophy, and theory of knowledge also encourages interdisciplinary learning, showcasing the adaptability of the MYP framework. Teaching the now-debunked phlogiston theory also offers a unique chance for students to objectively study 18th-century scientific debates, be they genuine historical accounts or fictional educator-designed scenarios. Unlikely to be influenced by the scientific content of the discussions, this would ideally equip them with a lens to examine modern-day issues.

Confirmation Bias

Within the MYP Science curriculum, the competency of confirmation bias can be deftly tackled through the polarising issue of Genetically Modified Organisms (Lynas et al., 2022). Utilising the curriculum's emphasis on creating critical learners, a lesson can engage students with varied resources on GMOs—scientific reports, opinion articles, and social media posts—prompting them to scrutinise the credibility, reliability, and potential biases of these sources. Simultaneously, students are encouraged to identify and reflect on their own biases, fostering an understanding of how personal beliefs can shape information interpretation. The teacher, acting as a facilitator, steers students through this self-reflection and critical evaluation, adhering to MYP's pedagogical approach. Interdisciplinary links can be woven in, such as examining the economic and political aspects of GMOs in MYP Individuals and Societies. The exercise cultivates students' ability to question their own beliefs and adapt in light of new evidence, which is crucial in combating misinformation.

Cognitive Heuristics and Bias

Cognitive heuristics and bias can be integrated with the topic of conservation, focusing on 'charismatic megafauna bias' (Heathcote, 2021). For instance, a lesson could involve students examining why certain species gain more conservation attention than others, and recognising how biases shape these decisions. This aligns with the MYP's key concept of "interactions", exploring how human cognitive biases influence conservation efforts.

An engaging classroom activity could be students creating a conservation strategy for an uncharismatic species, challenging their biases, and developing compelling arguments for their chosen species. This also allows for a deeper exploration around the ethics of conservation. Teachers can steer these discussions, aligning feedback with MYP's assessment criteria and identifying interdisciplinary learning opportunities. This educational

approach enhances students' ability to recognise and challenge their own cognitive biases, a vital skill in combating misinformation.

7. Conclusion

The pervasive challenge of misinformation remains a pressing concern in our digital age, and current educational systems appear inadequately prepared to arm students with the skills to counteract it autonomously. Given the intricate and multifaceted nature of science, it's unrealistic to expect anyone, especially young people, to possess an expert-level understanding of every scientific discipline to combat misinformation effectively. Instead, the focus should shift towards equipping students with broader competencies that transcend mere subject knowledge. Allchin's work presents a viable foundation, offering adaptability across various curricular topics. Similarly, the MYP science curriculum stands out as a promising framework for integrating these competencies. Utilising the guidelines discussed in this study, educators can identify and embed these competencies within their existing curriculum structures, negating the need for a comprehensive revamp. Future research should explore the adaptability of other curricula for such integration and delve into practical methodologies for embedding these competencies more effectively.

References

- Allchin, D. (2023). Ten competencies for the science misinformation crisis. *Science Education*, 107(2), 261-274.
- Black, P., & Wiliam, D. (2018). Classroom assessment and pedagogy. *Assessment in education: Principles, policy & practice*, 25(6), 551-575.
- Burkhardt, J. M. (2017). *Combating fake news in the digital age* (Vol. 53). American Library Association Chicago, IL, USA.
- Dahlstrom, M. F. (2021). The narrative truth about scientific misinformation. *Proceedings of the National Academy of Sciences*, 118(15), e1914085117.
- Elzanaty, A., Chiaraviglio, L., & Alouini, M.-S. (2021). 5G and EMF exposure: Misinformation, open questions, and potential solutions. *Frontiers in Communications and Networks*, 2, 635716.
- Farrell, J., McConnell, K., & Brulle, R. (2019). Evidence-based strategies to combat scientific misinformation. *Nature climate change*, 9(3), 191-195.
- Feinstein, N. (2011). Salvaging science literacy. *Science Education*, 95(1), 168-185. <https://doi.org/10.1002/sce.20414>
- Finazzo, S., Melton, B., Cowles, E., Christenson, S. D., Annee, S., Carroll, M., . . . Reeves-Pepin, J. (2017). *NABT: Teaching Biology in the Age of "Alternative Facts"*. In (Vol. 79, pp. 433-433): University of California Press USA.

- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of educational research*, 74(1), 59-109.
- Heathcote, G. (2021). Animals of Instagram: taxonomic bias in science communication online. *Journal of Science Communication*, 20.
- IBO. (2014). MYP: From principles into practice. In: International Baccalaureate Organization (UK) Ltd.
- Jacobs, H. H. (1989). *Interdisciplinary curriculum: Design and implementation*. ERIC.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge university press.
- Lynas, M., Adams, J., & Conrow, J. (2022). Misinformation in the media: global coverage of GMOs 2019-2021. *GM Crops & Food*, 1-10.
- McMahon, M. (1997). Social constructivism and the World Wide Web-A paradigm for learning. ASCILITE conference. Perth, Australia,
- Muijs, D., & Bokhove, C. (2020). *Metacognition and Self-Regulation: Evidence Review*. Education Endowment Foundation.
- Osborne, J., & Pimentel, D. (2023). Science education in an age of misinformation. *Science Education*, 107(3), 553-571.
- Roozenbeek, J., Schneider, C. R., Dryhurst, S., Kerr, J., Freeman, A. L., Recchia, G., . . . Van Der Linden, S. (2020). Susceptibility to misinformation about COVID-19 around the world. *Royal Society open science*, 7(10), 201199.
- Sjöström, J., & Eilks, I. (2018). Reconsidering different visions of scientific literacy and science education based on the concept of Bildung. *Cognition, metacognition, and culture in STEM education: Learning, teaching and assessment*, 65-88.
- Smale-Jacobsee, A. E., Meijer, A., Helms-Lorenz, M., & Maulana, R. (2019). Differentiated instruction in secondary education: A systematic review of research evidence. *Frontiers in psychology*, 10, 2366.
- Stokols, D., Misra, S., Moser, R. P., Hall, K. L., & Taylor, B. K. (2008). The ecology of team science: understanding contextual influences on transdisciplinary collaboration. *American journal of preventive medicine*, 35(2), S96-S115.
- Tonnetti, B., & Lentillon-Kaestner, V. (2023). Teaching interdisciplinarity in secondary school: A systematic review. *Cogent Education*, 10(1), 2216038.
- Treen, K. M. d. I., Williams, H. T., & O'Neill, S. J. (2020). Online misinformation about climate change. *Wiley Interdisciplinary Reviews: Climate Change*, 11(5), e665.
- Tyler, R. W. (1949). *Basic principles of curriculum and instruction*. University of Chicago press.
- UNESCO. (2005). *Guidelines for inclusion: Ensuring access to education for all*. Unesco.
- Vogels, E. A., & Gelles-Watnick, R. (2023). Teens and social media: Key findings from Pew Research Center surveys. Pew Research Center. Retrieved 3rd July from <https://www.pewresearch.org/short-reads/2023/04/24/teens-and-social-media-key-findings-from-pew-research-center-surveys/#:~:text=Much%20smaller%20shares%20of%20teens,15%20to%2032%25%20in%202022>.

Vygotsky, L. S., & Cole, M. (1978). *Mind in society: Development of higher psychological processes*. Harvard university press.

West, J. D., & Bergstrom, C. T. (2021). Misinformation in and about science. *Proceedings of the National Academy of Sciences*, 118(15), e1912444117.

Living and Breathing, the school's strategic plan: a case study from theory to practice.

Maripaz Aguilera and Simon Downing (IB Coordinators and Heads of Student Support) at St. Dominic's International School, Portugal.

Abstract

This article explores the articulation and implementation of school strategic planning drawing inspiration from our school's international context. There is limited research directly pertinent to international schools and this article serves the purpose of synthesising such findings as there are and offering a case study as a sample of good practice. We seek to outline the processes which were undertaken to create a meaningful and cohesive plan through aligning the perspectives of different stakeholders, followed by an identification, articulation and implementation of the relevant goals that support school development.

Key words

Strategic Plan, Educational Leadership, Secondary School leadership, Development plan.

Introduction

There are three fundamental elements of strategic planning: clarity of vision and direction, attainable actions, and stakeholder involvement. Schools are complex organisations with people at the heart of everything they do; the various stakeholders of a school each come with their own perspective, uniquely informed by their culture. It is this diversity that should be celebrated in a school, yet uniting this diversity is inherently challenging. Quality education results from a combination of factors that are intentionally planned (Agi, 2017). To this end, a cohesive vision that philosophically brings people together allows schools to effectively achieve their objectives.

A school is only as good as the sum of its constituent parts. Strategic direction allows these constituent parts to function in unison towards a common goal. As Keller said, "Alone we can do so little, together we can do so much". As such, strategic direction allows schools to build on foundational standards, to drive progress and change but with shared values that determine the direction of the school.

As Seneca said, "If one does not know to which port one is sailing, no wind is favourable", and this holds true in schools. Lack of direction and lack of a destination can lead to stagnation at best and regression at worst. Therefore, effective articulation of a school's vision acts as a beacon with the strategic plan allowing effective navigation towards that point. Who determines that vision and how it is delineated can present a challenge. Articulation of an effective vision requires input from a multitude of perspectives. The voice and representation of the school community pave the way for consensus or at the very least acknowledgment that voices have been heard. From administrators to parents, from students to teachers, all should feel that they are agents in determining the direction of a school. Inclusivity facilitates engagement in both the journey and the destination. As pointed out by Meyer *et al* (2020), a collaborative problem-solving approach actively contributes to a more coherent and team-based effort that is more likely to lead to improvement; it is when we consciously and explicitly tessellate these pieces of the puzzle that our direction and vision become aligned.

As Carvalho *et al* (2021) highlight, strategic planning in education has been largely overlooked by the academic community. However, research has consistently shown that a clear and unified vision can have a positive impact on student outcomes and the overall school community. A study by Leithwood and Riehl (2005) found that schools with a shared vision outperformed schools without one in terms of student achievement, school culture, and teacher satisfaction. Additionally, a survey conducted by the National Association of Secondary School Principals (NASSP, 2019) found that schools with a well-defined and communicated vision had higher levels of student engagement, teacher retention, and parental satisfaction.

In this article, we present our initial ideas about the articulation and implementation of the strategic plan, followed by a description of our journey as a case study in which we sought to meaningfully articulate and implement the secondary school's vision. We will explore the impact of our shared vision on the school community, academic and pastoral outcomes and school culture based on our experiences. We intend our findings to serve as an example for schools looking to develop and implement a strategic plan that is central to the evolution of the school.

Identifying goals to reach our “destination”

School cultures are unique, framed as they are by the geopolitical, religious and economic contexts in which they are constructed. School culture can be inherently difficult to define and therefore shape; it is an organism encompassing elements of both conscious and the subconscious. Whilst aspects of school culture might come as integral parts of the school's

DNA, there is always capacity for an organisation to determine for itself elements of that culture, and therefore schools are best placed to identify areas needing improvement (Agi, 2017).

A meaningful goal for improvement should always have an impact on school culture. Assuming that there is an existing school culture which needs to be changed, generally the goal(s) which give direction to the vision are related to an evolution of school culture rather than to a reinvention of it.

Often, school goals for improvement are prompted by accreditation bodies, be they private, governmental or international. These recommendations are normally conducted as part of a cyclical review process. This external impetus is invaluable in encouraging reflection on where the school has come from, where it is now and where it sees itself going in the future. External reviews are a stepping stone by which we can benchmark our progress and generate the foundational standards by which a school might develop as well as setting the parameters by which a school might measure its growth. This contributes to the clarity of the focus, which is reflected in Bryk's (2015) research explaining that schools' development tends to fail when teachers don't understand the direction or the steps to reach the goal. It is not through lack of openness that schools don't progress, rather it is a lack of know-how or capacity to enact change. If we accept this then we can use feedback from external reviews to legitimise change and help guide schools in the process.

Whilst external verification can and should form one of the stepping stones for growth, we should strive to integrate internal data points into the growth process. For example, we might make use of periodic staff reflections on change made during previous years as a way of determining the effectiveness of previous actions taken; or we might obtain information from a review of an internal professional development system. A school's internal review process will likely generate quantitative and qualitative data that can be used to inform future direction. Commonly there are underlying patterns in teachers' practices and "professional behaviour" that reflect the teaching and learning culture of the school, and even the robustness of the collaborative culture among the staff; furthermore, we might seek to evaluate the impact of school events such as exams, sports fixtures and experiential learning trips in determining to what extent there is a unified direction or whether these things happen just 'because' that's how it has always been done; we might also seek input from the wider community in order to engage them in the process. Participating in this underlying process of school development will aid cohesive progression towards that end point.

The breadth and depth of data that can be included is both a blessing and a curse for administrators seeking to make meaningful sense of a community voice. Seeking commonalities and trends between voices helps identify themes that transcend stakeholder perspectives. Identification of a theme can be guided by predetermined parameters chosen to narrow the breadth of data. An overarching theme could represent one of the school values or perhaps an abstract word that is in your school mission and vision and that requires further clarification, progression or deeper understanding from the community. Once you have chosen an overarching theme it is important to break it down into its constituent parts in order to determine the most appropriate pathway towards addressing the identified theme. This may be done by deriving several measurable goals and identifying a possible timeline for the completion of each goal.

Determining an appropriate timeline for change can be difficult and will depend on a school's approach to strategic planning. If the school strategic plan is for one year, there is the need to be conscious of the parameters of this timeframe when writing the goal. Many schools have a strategic plan of two years or more, and therefore the goal can be broader. If seeking greater immediacy in goal-setting, an alternative to a one-year strategic plan is to have sub-goals, completed over a number of years that contribute towards a bigger goal. For example, a two-year goal may be to create a system of more effective feedback.

To contextualise our approach to strategic planning as a case study, St Dominic's International School in Portugal has English as the language of instruction. The school community is composed of a student body from across the academic spectrum with a large number of nationalities. There are 700 students at the school with ages ranging from three to eighteen. The school is fully accredited by both the IB and NEASC. Our observations are based on the implementation of reflections on the strategic development plan in the senior school.

In the past, strategic plans were arguably based on short-term needs and did not involve or lead to a cultural shift but rather simply comprised solutions to short-term problems. In addition, school strategic plans are frequently produced by the Senior Leadership Team without representation from across the school community. The outcome of this approach may well be that the strategic plan seems more like an abstract requirement of the re-accreditation process than a truly whole school drive to improve the school. This kind of 'top-down' approach inevitably excluded certain voices from the process and some felt ostracised as a result.

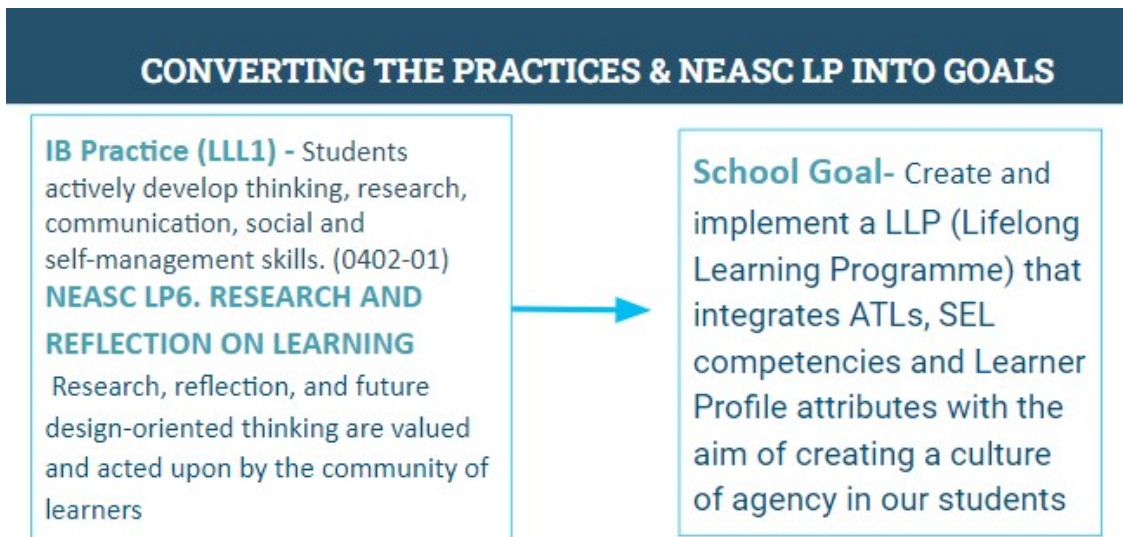
As a school community, we wanted to change this approach taking into account Agi’s long-term perspective for success at the same time as having a meaningful impact on student learning as expressed by Leithwood et al (2004).

Having reviewed our data from external verification visits (both from the IB and NEASC) conducted over the last two years as well as internally generated data, we identified the theme of ‘self-agency’. From this, we formulated a whole school goal that is driving strategic direction over a five-year period; *students and teachers have greater agency in their own learning which leads to personal growth within the classroom and beyond.*

Subsequently, we chose IB Practices and NEASC Learning Principles that we felt would support us in creating a culture of agency within the school community. The table below details how we sought to align feedback from the two organisations;

A G E N C Y	<p>IB Practice (ATT1) - Teachers use inquiry, action and reflection to develop natural curiosity in students.</p>	<p>NEASC LP4. LEARNING PERSPECTIVE Meaningful learning is extended when learners explore the unfamiliar, consider a range of perspectives, and take informed risks. Mistakes are seen as opportunities for learning.</p>
	<p>IB Practice (ATT5) - Teachers remove barriers to learning to enable every student to develop, pursue and achieve challenging personal learning goals.</p>	
	<p>IB Practice (ATA1) - Students and teachers use feedback to improve teaching, learning and assessments.</p>	<p>NEASC LP3. ASSESSMENT FOR, OF AND AS LEARNING Assessment measures the effect of learning on the learner. Assessment for, of, and as learning includes qualitative as well as quantitative criteria.</p>
	<p>IB Practice (LLL1) - Students actively develop thinking, research, communication, social and self-management skills. (0402-01)</p>	<p>NEASC LP6. RESEARCH AND REFLECTION ON LEARNING Research, reflection, and future design-oriented thinking are valued and acted upon by the community of learners.</p>
	<p>IB Practice (SS 1) - The school provides relevant human, natural, built and virtual resources to implements its IB programmes.</p>	<p>NEASC LP9. LEARNING SPACE AND TIME The design of learning spaces and the structuring of learning time are driven and shaped by the learning community’s intended learning Impacts.</p>

Once we had aligned the feedback from the IB and NEASC reports we then sought to combine the data in order to support goals. Below is one example which combines IB practices and NEASC principles whilst still governed by our overarching theme of agency;



From a school perspective this process was not entirely smooth sailing. For instance, we did not complete a joint visit between our two accrediting bodies. The outcome of this is that we got the NEASC report nearly a year later than the IB report. Having initially based our development plan on the outcome of the IB report, we then had additional data from NEASC to complement our development plan. We compared the NEASC Learning Principles with the IB practices and identified a degree of alignment. This allowed us to broaden our supporting goals to include the NEASC perspective.

Articulation

Vision amounts to nothing if it is not seen or heard. Effective articulation of the strategic direction acts like a rallying cry, encouraging action toward the vision. "Vision without action is just a dream, action without vision just passes the time, and vision with action can change the world" (Barker, 1992). As alluded to by Barker, it is in the articulation phase of the process that we move from ideas to action and as a result, might seek meaningful impact on educational organisations. In that same vein, school progress towards a vision is inherently more effective when consideration is given to staff input. Meyer et al (2020) commented that "The level of staff commitment to the goals appears to be affected by the justification used by leaders". Logically, if the staff voice is heard, the staff are more likely to relate to the justification for strategic development. Staff being involved in the process will encourage the commitment which will help ensure an element of cohesion in the journey.

With a vision being shaped by the themes that underpin it, we then need to consider how to appropriately channel the action to that end. As a way of transitioning from the often ethereal and abstract to the familiar, it is important to determine who will do what and when. Adopting a thematic approach to creating a framework in order to drive the action is one way of doing

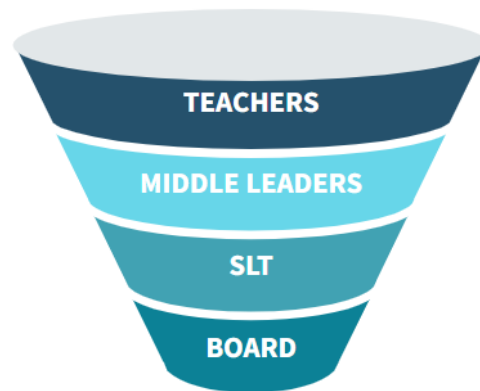
this. For example, one might group goals into sections: teacher support, student support, teaching and learning, curriculum, assessment, environment, leadership etc. This kind of thematic approach to action initially taken can help schools look at whole school themes from a broader perspective before zooming in on the minutiae. It is a way of striking the balance between different elements of the school such as departments, sections, or grade levels which are a somewhat contrived mechanism for organising school structures. If not kept in check, organisational structures of a school can restrict holistic collaboration and be detrimental to progression towards a whole school vision.

As previously acknowledged, any goals that imply a change of school culture, should have a whole school focus. Of course, there are times when it is more appropriate to create goals which are 'section' specific. When dealing with multiple sections within one school, it is inevitable that priorities may differ or have a different timeframe and although the vision is whole school, the pathway to reach the vision will be different between the different sections. This approach can give greater autonomy for section heads to evaluate progress and act accordingly.

Once goals are appropriately grouped, it is important to break them down into steps. As with vision, goals can be abstract and unmanageable if not governed by concrete actions. The goals unpack the vision, but the actions define the fundamentals that lead to effective progression. It is at this stage that we must identify the most appropriate person, people or community who will be responsible for the actionable steps. The most appropriate person to undertake the action will depend on the magnitude of the goal and its associated steps. At times, initial steps towards the completion of a goal are created at teacher level before being concluded by a Department Head or Programme Coordinator for example, whilst sometimes an alternative pathway may be more appropriate. This element of accountability aids monitoring progress and will ultimately help the reflective component of the process when seeking to establish the impact of a desired goal. Chickering and Gamson (1987) famously commented that "Learning is not a spectator sport". This comment emphasises the importance of students being active participants for learning to be effective. Systemic school development is no different. For a school to meaningfully implement actions as a result of strategic planning it requires involvement from all staff. If staff are acting as spectators, then regardless of how strong the vision, the impact of defined actions will be found wanting. Shared responsibility in articulating goals and the constituent steps spurs action by the collective and by proxy, removes the capacity to simply spectate in the process.

That said, schools are traditionally hierarchical organisations. As such, the final synthesis of data from different organisational stakeholders is likely done by the schools Senior

Leadership Team. It is here that the school's leaders ensure that the overarching goals are both cohesive and manageable in line with the defined time frames.



Involvement of the different elements of a school's hierarchy ensures inclusivity in the process and helps align the thinking. The image above represents the idea that it is at teacher level that we require the greatest input for driving change, yet it is from the Board that we find the structural foundations that facilitate the change.

As a school, once we aligned our IB practices and NEASC Learning Principles and created appropriate goals, we reflected on the suitability of different stakeholders to meaningfully work towards addressing the specific goals. It is inevitable that some goals might be more appropriately addressed by academic teams whilst others may be more pertinent to student support teams. We identified 5 school goals created in order to drive the change over an academic year. In order to approach the tasks in an equitable manner and to aid our progress towards the theme of agency, the Senior Leadership Team (SLT) identified the most appropriate people to drive the goals (Head of Senior School, IB Coordinators, Head of Student Wellbeing, Curriculum Leaders, Grade Level Leaders, Teachers, Tutors etc). Some of our goals were inevitably for a member of SLT such as creating the structure for professional learning sessions and creating professional learning communities. On the other hand, some goals are best directed at departmental level, within a grade level or perhaps at a teacher level. Clarity in the distribution of the roles helps maintain the sense of a shared effort. Whilst guided by the whole school goal, this division of labour helps to ensure involvement by all. To illustrate the point, the following table indicates how we divided responsibility for the goals;

SENIOR SCHOOL GOALS		RESPONSIBILITIES
A G E N C Y	GOAL- Teaching and learning is based on inquiry, action and reflection to develop natural curiosity in students.	SLT School Principal Heads of Senior
	GOAL- Teachers use effective teaching strategies which enable student to overcome barriers to learning. (Based on ATT5 and LP4)	Head of Senior School Curriculum Leaders Teachers
	GOAL-Create a consistent feedback system to improve teaching, learning and assessments (Based on ATA1 and LP3)	Head of Senior School and IB Coordinators Curriculum Leaders Teachers
	GOAL Create and implement an ATL and SEL (Social, Emotional and Learning) programme to develop lifelong learning skills with the aim of create a culture of agency in our students (based on LLL1 and PL 6)	Head of Student support and wellbeing GLLs Tutors
	GOAL- Review the effectiveness of the use of the human, natural, built and virtual resources to implements its IB programmes (based on SS 1 and LP9)	SLT Head of operations School staff

Creating a culture of agency within our school context is a significant challenge. It requires breaking down barriers between traditional organisational elements of the school. We intentionally want to keep a holistic perspective in our school with regard to academic and pastoral elements, and eliminate the division between the two sections. For this reason, making different school sections responsible for goals and trying to keep this holistic view was tricky, the danger being that it has the potential to trigger a bigger reflection on holistic education that could drive us away from our original goal. We are seeking transformational change rather than tweaking a system at the edges yet it remains important to focus on the overarching goal in hand.

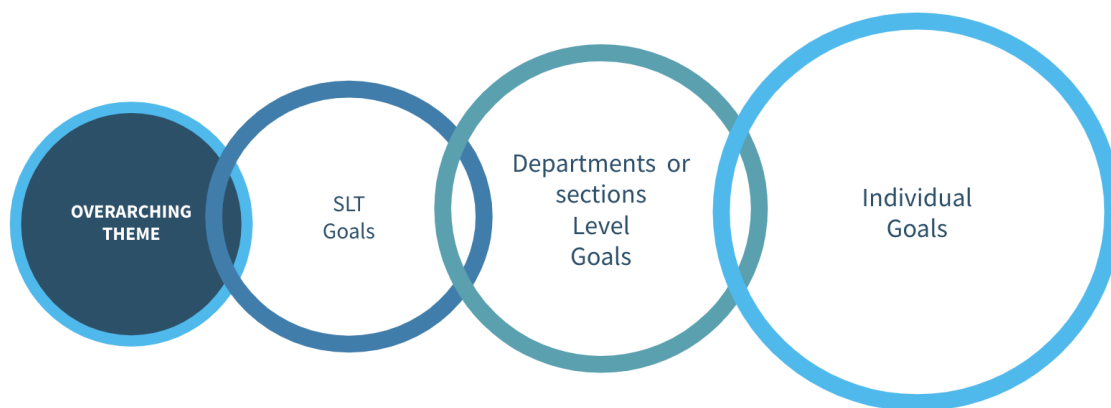
Implementation

It is in the implementation phase that we move from theory to practice. Realising the goals is a team sport. Active participation in the goals ensures progress across different groups and sections. In Eacott's (2006) words "what is important, is the meaningful involvement of key stakeholders". Regardless of position, every person needs to play a role in order to make meaningful progression as a school community.

Full comprehension of section-wide goals is essential. School goals will need to be explained at group level, be it by department or grade/year level. From this point the different departments and grade/year sections will take the strategic plan to their departments. As a community and with the whole school goals in mind, they will then reflect on the department/section performance during the previous year subsequently seeking to identify their own goals for the coming year. Shaping departmental and grade level goals in line with the whole school goals aids cohesion but ensures continued alignment with the

whole school vision. There are a variety of data points that departments and grade levels might use, for example, examination results, self-assessments as a team or feedback from internal performance management and development systems. Together with the departmental needs and the strategic plan, departments should select three or four goals that they would like to develop in the time framework. This keeps things manageable but aligned with the school's strategic development. These goals will be monitored as a departmental responsibility, guided by the curriculum or grade leader but not their sole responsibility. The aim of this approach is to foster collaboration and ultimately bring teams together united by progress towards the vision.

Although collaboration on departmental goals inevitably leads to greater involvement, it is possible that some members don't fully engage in the process. One approach to address this is by encouraging a system of personalised goals or assigned responsibilities as visualised in the following diagram.



If each individual teacher chooses a personal goal that will support the accomplishment of the departmental/sectional goal it further aligns the thinking as well as the implementation of development. Personal involvement in the strategic plan has a better impact on goal achievement. Furthermore, teachers' evaluation process could assess and recognise the level of contribution or commitment of the individual teacher to the strategic plan. Whole school organised and structural involvement is a key aspect to the success of the strategic plan. In this sense, we might seek to integrate strategic planning into the common vernacular of the school where everyone is looking to the vision, its underpinning theme and its associated goals. This helps move the school community away from a top-down dictatorial approach to strategic planning and more towards a cooperative approach in a common direction. In this vein, everyone is involved and responsible for school development and it fosters a culture of collaboration, sharing, and even a sense of pride when goals are accomplished.

In order to verify the extent to which a plan is being fully implemented, it is essential to monitor it. Good practice for meaningful monitoring (Meyer et al) requires an element of structure to ensure that the implemented plans are progressing as intended. This requires that all teachers report to a specific leader. The dialogue that surrounds this process is arguably as important as the documentation that accompanies it. Monitoring meetings could be a time when leadership provides guidance, encourages a growth mindset in colleagues and offers specific support for issues that arise when realising the goals. Having Curriculum Leaders or other middle leaders playing a monitoring role is positive as they raise their profile as pedagogical leaders and not only as managers. Sometimes there is a need for a degree of flexibility about the most appropriate pathway to achieve the goal. A particular school goal could be understood by a department in a certain manner than was not expected by the Senior Leadership Team. Assuming the interpretation still allows the realisation of the identified goal then a deviation from the expected path should be embraced.

Monitoring and support from pedagogical leaders help ensure that when progression is faltering, there is appropriate intervention to continue the momentum towards the identified goals. It also ensures a degree of dynamic cyclical reflection and action, so that the growth process is continuous and not purely linear with the goal at the beginning of the year and the reflection at the end of the year. With the guidance of a leader, teachers should be making use of data to review the impact of their identified goal(s). This places them on solid ground from which they can benchmark their progress. Ongoing reflection allows individuals to assess whether they need to extend their timeline for the goal or whether it is embedded within their practice and therefore meaningfully contributing to the school culture, procedures and vision.

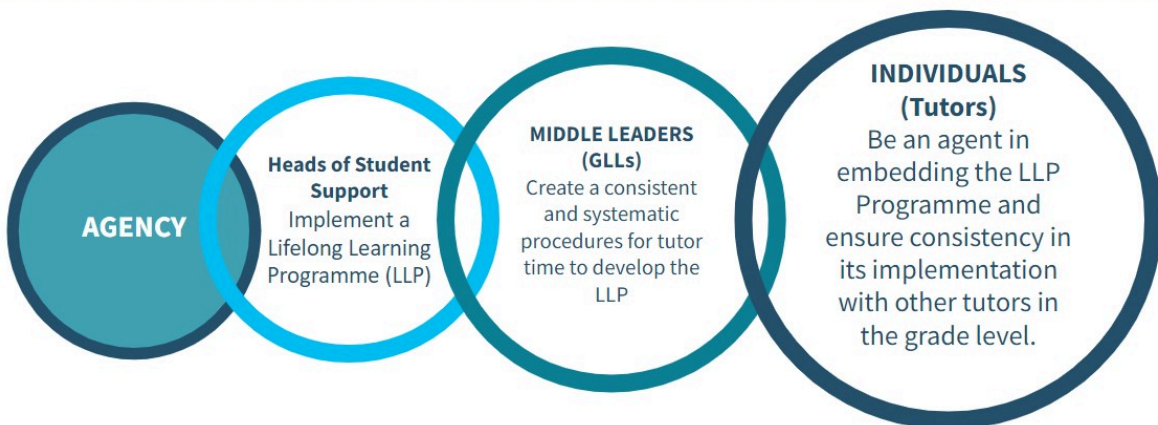
Recognition and celebration of success is an important part of the implementation process. A way to do this may be by creating visible accountability for accomplishing the goals. In a move away from traditional observations, Learning Walks allow teachers to share good practice at a time of their choosing, with an explicit focus on their identified goal. The leadership team would visit several lessons within a department (a minimum of three) to establish the extent to which a goal is visible in teaching practice. Learning Walks have the advantage that they are not attached to an individual and don't directly impact a teachers' evaluation process unless the teacher would like to use it as evidence of competency. If teachers have been working on their goal on an individual level (personal goal) as well as at a departmental level, they may appreciate recognition of their active and conscious contributions to the development plan. Another advantage is that departments will only invite the leadership team to visit as a way of showcasing their success. Therefore, there is a much more positive approach to the goals. Lastly, Learning Walks enhance collaboration

between the members of the same department resulting in stronger alignment, not only within the department but also with the school goals. As part of the reflective process this allowed us to gauge the effectiveness of implementation. As DuFour and Mattos (2013) commented, the most powerful strategy to improve schools is to create a collaborative culture with collective responsibility.

In the context of our Senior School, the development plan was articulated with the associated practices and principles, we shared the plan with the middle leaders asking them to create their own department /team plans with goals that needed to be completed at departmental/team level, giving due consideration for their own team needs in the process. As a result, middle level plans were in alignment with the Senior School plan in a manner that the goals from the Senior School were integrated into the plan rather than being simply added to their departmental plans. The final and arguably most important step of the process was asking teachers to create individual goals based on one of the departmental goals. We requested just one goal to ensure that progress was manageable, could be monitored and could be effectively evaluated in an ongoing process. Identifying more than one goal at the individual level has the danger of diluting the potential impact.

The following serves as a visual representation of our process leading with the whole school goal. In order to contextualise the process in practice, the diagram below shows the overlap between the overarching theme (agency) and the hierarchical structure of a school with growing circles that indicate the progression from articulation through the various stages of implementation.

IMPLEMENTATION CHART



It can be challenging to assign a goal to different sections without overloading people with development plan responsibilities. For example, on occasions those such as a tutor might wear “two hats”. They are also teachers, and therefore need to collaborate with their academic department leaders as well as the grade level leaders. We found having too many goals was detrimental to successful implementation and as a result this year we have reduced the requirement on sections from three to four goals down to two to three this year. We have also attempted to create more of a culture of agency by allowing colleagues to choose whether they align their goals with an academic department or a grade level team.

Conclusions

Having an overarching theme helps align action with vision. Having a theme that is clear and concise offers clarity to the end point based on a defined time period. It helps ensure that all the goals serve the same purpose and brings cohesion to the plan. As a result, all staff members understand where we need to go and have a voice in how we get there.

There will always be varying degrees of accomplishment when reviewing progress towards a goal. In the final reflection stages of an academic year, it is pertinent to determine that we can find a degree of closure on the goal, or whether it is more appropriate to go to the next step in that goal, a sort of part 2, which allows for evolution and development at a deeper level. For leaders, it is important to strike the balance between driving strategic development forwards and hitting ‘pause’ to allow for consolidation.

Carefully aligned strategic development helps alleviate the sense of box-ticking that might be associated with a more top-down approach. Personal goals is the contribution of an individual to the strategic plan. There is an organic overlap between the senior school development plan, the departmental development plans and the Personal goals. An added benefit of this approach is that it helps build reciprocal trust. Every member of the community has a responsibility in the accomplishment of the goals, and when this is done in a transparent manner, each individual can confirm that they all worked together in a cohesive manner for the greater good of school progression. It creates a sense of community and direction in addition to fostering a better knowledge of all aspects of school life and drives us all closer towards a realisation of the school vision and mission.

The approach to strategic planning needs to be both linear and cyclical in nature. The overarching theme gives linear direction but to keep the theme alive, schools should adopt a somewhat cyclical approach to reflection and to setting new goals. Schools will likely come closer to fully realising the overarching goal if over a number of years, they continue to set evolving goals based on the previous years development plan or by choosing different

practices upon which to base the subsequent strategic plan. This progressive approach to planning will help promote the continued development of the overarching theme.

In our school context we had a number of key takeaways based on trying to meaningfully articulate and implement our own school strategic plan. We recognised the importance of trying to maintain the rationale of the strategic plan and not deviating from the overarching theme. There are many “things” happening simultaneously in schools. Persevering with the overarching theme and thinking long-term helps maintain coherence and continuity. On reflection, having five substantial goals in the Senior School development plan was too ambitious and perhaps unrealistic in the time frame. This reflection has led us to reduce the number of goals in the following year to ensure a better degree of completion.

The school's strategic plan is a well-articulated system with involvement at all levels of the hierarchy. This construct is inherently complex owing to the number of layers involved. We opted to assign responsibility to everyone in the teaching community to avoid the potential gaps in implementation. Inevitably, there are some overlaps in the school sections, and although sometimes the Head of Senior School was responsible, the IB coordinators needed to support in order to follow up on accountability. In hindsight, we recognised this as a positive because even though our initial plan was to compartmentalise and allocate specific responsibilities to specific teams, it can be beneficial to explore a goal from different perspectives.

The Learning Walks were a positive experience whereby colleagues were empowered to invite us into the classroom to celebrate good practice. It was however logistically challenging in terms of availability to ensure that coordinators were available to observe the range of lessons across the school. There are eight different departments and with three lessons per department the number of visits quickly mounted up. Although it was hard to conduct, the experience was valuable as with a minimum of three different lessons per department we had enough data and evidence to evaluate the accomplishment of the goal.

We devoted significant time to ensuring accountability and the completion of the plan. This was important to produce this cultural shift, moving away from a traditional box-ticking exercise to a much more holistic approach. We believe the alignment of different sections of the school complemented with personal goals, meaning that school development is now more ingrained in our school culture.

Our long-term approach includes a five-year strategic plan with one overarching theme that will lead to a profound and meaningful cultural change in our learning community. After that time, we envisage looking to establish a new focus based on a different overarching theme.

References

- Agi, U. (2017). School Development Planning: A Strategic Tool for Secondary School Improvement in Rivers State, Nigeria. *J. Int. Soc. Teach. Educ.* 21 (1), 88–99
- Barker, J (1992). *Future Edge: Discovering the New Paradigms of Success*. Morrow.
- Bryk, A., Gomez, L., Grunow, A., & LeMahieu, P. (2015). *Learning to improve: How American schools can get better at getting better*. Harvard Education Press.
- Marisa Carvalho, Ilídia Cabral , José Lopes Verdasca, and José Matias Alves (2021). *Strategy and Strategic Leadership in Education: A Scoping Review*. *Fronteirs in Education*.
- Chickering, A. W., & Gamson, Z. F. (1987). *Seven principles for good practice in undergraduate education*. American Association for Higher Education.
- DuFour, R., & Mattos, M. (2013). How do principals really improve schools? *Educational Leadership*, 70(7), 34-40.
- Eacott, S. (2006). *Strategy: An Educational Leadership Imperative, Perspective*. *Educ. Leadership.*, 16(6), 1–12.
- Keller, H. (1903). Chapter XXII: Optimism. *The Story of My Life*. Garden City, New York: Doubleday, Page & Company.
- Leithwood, K., Seashore Louis, K., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning*. The Wallace Foundation.
- Leithwood, K., Riehl, C. (2005), "What we know about successful school leadership", *A New Agenda: Directions for Research on Educational Leadership*, Teachers College Press, New York, NY, pp.22-47.
- Meyer, F., Bendikson, L., & Le Fevre, D. (2020). *Leading effective goal-setting to improve school outcomes*. Teaching and Learning Research Initiative (New Zealand).

Approaches to Curriculum Integration in English Primary Schools: through the eyes of an American teacher

Samantha Brant, Fulbright Distinguished Awards in Teaching Research Program and Dr Yuqian (Linda) Wang, School of Education, Durham University, UK

Abstract

The implementation of curriculum integration in primary schools in England benefits from more freedom compared with in the United States. A case study from England is offered to show these curriculum integration approaches from the perspective of an American primary school teacher. This study, which employs grounded theory with reference to models from Fogarty, starts from two broad approaches: thematic and explicit links. After interviewing seven headteachers and deputy headteachers in primary schools, and three academics working on Initial Teacher Training programs in England, three layers of curriculum integration appear: knowledge and skills; broad and balanced curriculum; and student engagement. We suggest that two key lessons can be learnt from English primary schools: concerning school leadership's vision and staff training.

Key words

Curriculum integration, Integrated curriculum, elementary settings

Introduction

Why should schools concern themselves with how different subject curricula are integrated with each other? Simply put, it expands children's understanding of the world (Beane, 1995; Drake & Burns, 2004) and is compatible with the way brains learn (Caine & Caine, 1991; Sousa, 2022; Willingham, 2021). The effective integration of different subject curricula provides children with varying perspectives through which to examine issues and questions that are relevant to them. It helps them understand and retain knowledge, and it has been proven to produce overall positive effects in multiple disciplines (Alghamdi, 2017; Nurlaela et al., 2018; Mard, 2021; McCarthy, 2005; Swanson et al., 2020; Vars & Beane, 2000).

Recently, the Disciplinary Core Ideas (DCI) arrangement of the *Next Generation Science Standards* (NGSS, 2017) has been launched in the United States, and this has been viewed

as a major shift in K-12 curriculum policy for integrating STEM subjects (Roehrig et al., 2021).

Academics have been theorizing the challenges involved in developing curricula that are well integrated with each other – from the perspective of resources (Gehrke, 1998) and in subject-specific contexts, such as that of engineering education (Mitchell, et al., 2019). Fogarty (2009) has drawn attention to four forces involved: theorists, practitioners, parents, and students. Theorists bring “data on teaching, learning, and the human brain”; practitioners come with “frustration with an overcrowded standards-based and test-driven curriculum”; parents want their children to be prepared for the real-world, and students currently “see learning as fractured and not very relevant” (p.3). These perspectives are familiar to the first author, Samantha, from her experience over the past decade. She has sensed that some public-funded schools in the United States are hesitant to make the shift from a segmented schedule of subjects to full curriculum integration. Across various visits, she has found that many of England’s primary schools, on the other hand, have actively taken on the challenge of providing an integrated curriculum. And she has convinced the Fulbright Scholar Program to fund a further research project on curriculum integration, one supported by Durham University School of Education.

The study aims to understand how, within a strict timetable and hierarchy of subjects (core versus foundation), primary school teachers can expand their pupils’ understanding beyond the isolated lesson. We explore approaches to curriculum integration in English primary schools, raising discussions on commonalities and complementary approaches.

Contextual information

England and the United States are similar in many aspects of their education systems. Beginning in the 1980s, each country made a shift toward school and teacher accountability through standards-based reform and standardized assessments (Berlak, 2008; Greer, 2018; Isaacs, 2010; Powell et al., 2018; Scoppio 2002; Silvernail, 1996). A notable difference between the countries, however, is the freedom most English primary schools are given to choose how the National Curriculum is implemented in their school. Although private and charter schools have this freedom in the United States, American public-school districts large and small make decisions about curriculum implementation for all the schools in their district, and many districts around the country use similar curriculum approaches and initiatives. As a result, English primary schools vary in their curricular approaches, whereas there are substantial similarities in curriculum approaches among American public-funded

elementary schools. Many primary schools in England have chosen to use forms of integration to deliver knowledge and skills instruction while many American public elementary schools use a separate-subject approach to curriculum.

The typical American public-funded elementary school student spends the majority of instructional time learning reading and math in preparation for yearly standardized testing (OECD, 2021). Classroom schedules separate subjects into individual time blocks, and learning standards are sequenced within each subject to ensure the teacher covers all the learning standards before the end of the school year. Over three quarters of the instructional minutes are spent teaching reading, writing, and math with less than one quarter left for science, social studies, social-emotional learning, foreign languages, etc. (Banilower et al., 2018; Tyner & Kaborek, 2020).

There is no question that the intention of American education systems is to teach a vast amount of learning standards at each grade level, presumably to prepare students for college and various career fields. Yet, spending only 18% of the school day, on average, teaching science and social studies – subjects that support many of our currently crucial careers – is simply not enough for every student to meet all of the expected outcomes. Research has shown that adding time to subjects can increase student performance, although only incrementally (Curran & Kitchin, 2019; Tyner & Kaborek, 2020). The quality of instruction (Wedel, 2021), methods of student engagement (Gunuc, 2014; Lei et al., 2018), and real-world connections (Kingston, 2018; Lago & Cruz, 2021; Lazic et al. 2021) matter even more than the amount of instructional time devoted to a subject.

The lack of wide-spread implementation of curriculum integration strategies could be due to the link that education legislation has created between the assumed quality of schools and students' performance on standardized assessments (Kysilka, 1998). Educators are grappling with questions at the implementation level (Tallman, 2016; Wexler, 2020), and some schools are taking on the challenge by using curriculum integration as a way to balance numerous learning standards, frequent standardized testing, and relevant, meaningful learning experiences. Therefore, summarizing the varying degrees of curriculum integration in a small sample of English primary schools might have a patterning effect on American schools. We start the journey from the literature, first conceptualizing "curriculum integration" for the purposes of this study.

Curriculum integration

Curriculum integration has been moving in and out of education research and discussion since the progressive education movement in the early decades of the twentieth century. Always found alongside Standards Based Reform (SBR), it has been seen as a curriculum approach that engages children in meaningful learning experiences relevant to their lives and the world but not one that is always focused on the standards. As Drake and Burns (2004) say, “in its simplest conception, integration is about making connections.” Lederman and Neiss (1997) explain that “in curriculum/instructional integration, the different subject matters form a seamless whole.” Beane (1995) writes, “Curriculum integration centers the curriculum on life itself rather than on the mastery of fragmented information within the boundaries of subject areas.” In essence, curriculum integration brings knowledge from all disciplines together to infuse learning with meaning. Drake and Burns (2004) establish three categories of integrated curriculum: (1) multi-disciplinary, using themes in common to connect disciplines; (2) inter-disciplinary, emphasising skills in common; and (3) trans-disciplinary, with the curriculum based upon broader questions. However, in the realities of teaching, *integrated* and other comparable terms such as *thematic* and *multidisciplinary* have been confused with *themed*. A unit that is *themed* may integrate curricula, but it may also just include activities, worksheets, and classroom decor focused on a theme (such as, for instance, apples). While a *themed* unit can be very engaging for students and provide relevant learning experiences, it is not necessarily grounded in age-appropriate learning standards. In this study, curriculum integration is defined as any purposeful connection made across or within subjects while teaching grade-level learning standards. This allows for a broad range of school curricula to be observed.

Alongside the multi-, inter- and trans-disciplinary approaches, ten models of curriculum integration have been proposed by Robin Fogarty (2009), and they are worth laying out in full:

- Model 1: Cellular: Disciplines such as language arts, science, and math, are taught in isolation with a deep focus on learning standards in each distinct discipline and no explicit connection made between or within disciplines.
- Model 2: Connected: As with the Cellular model, disciplines are taught in isolation. However, explicit connections are made within each discipline by connecting relevant skills and concepts day to day, topic to topic, or term to term.
- Model 3: Nested: Disciplines are taught in isolation. Relevant life skills or process standards, such as agreeing and disagreeing or comparing and contrasting, are nested within each lesson.

- Model 4: Sequenced: Units of isolated disciplines are sequenced to coincide, so lessons and activities from one discipline can enhance another.
- Model 5: Shared: The Shared approach takes Sequenced units a step further by identifying shared concepts and skills between the units. Lessons in each unit are taught under an umbrella of the overlapping concept or skill.
- Model 6: Webbed: A Webbed approach can also be called a thematic approach; one overarching concept, topic, or problem connects learning standards from various disciplines.
- Model 7: Threaded: Thinking and learning skills are threaded through the content of each discipline, forming a metacurriculum that goes beyond the learning standards for each discipline.
- Model 8: Integrated: The Integrated approach builds on the Shared approach. Shared overarching skills, concepts, and attitudes are taught through the four main disciplines: language arts, science, social studies, and math.
- Model 9: Immersed: This real-world approach is led by the learner who soaks up knowledge from various disciplines, all related to a topic of interest.
- Model 10: Networked: Another learner-driven approach, learners select outside experts to be part of a network that provides information to aid in the understanding of a topic of interest.

Models 1 to 3 take a single-discipline form, while Models 4 to 8 cut across disciplines, and Models 9 and 10 take shape within and across learners. These three form categories have been used to gauge levels of integration between STEAM subjects (Jun-On & Kaya, 2021), primary school English language teaching (Aksoy, 2020), and others. Therefore, in this study, we use the ten models to guide our data analysis of interviews, as we seek to understand how curriculum integration takes shape in English primary schools.

A Case Study on Curriculum Integration

Sample

When selecting participants, a key consideration is combining their insights into school practice with academic experience on the topic of curriculum, through their work in Initial Teacher Training (ITT) programs. For the former, we sought participants in strategic roles enabling them to influence curriculum changes at the school level, meaning that their vision is critical for teaching across the school. For the latter, those working on the academic side of ITT programs have influence over pre-service teachers' views of curriculum integration,

presenting links between theory and practice. In this study, we do not distinguish the views from teacher educators and school leaders (see the second part of the results), but treat them as a whole.

Seven headteachers and deputy headteachers from primary schools in northeast and southwest England, as well as three teacher educators working in Initial Teacher Training programs, participated in semi-structured interviews. Participants were asked permission for the interview to be recorded. The recordings were transcribed and coded to identify themes within participant responses. Ethics approval was gained from the School of Education Durham University in June 2022.

Data collection and Analysis

To carry out the interviews, the first author visited schools for a day consisting of a school tour and a classroom observation, followed by a one-hour interview with the headteacher or deputy headteacher. All interviews were conducted by the first author at the interviewee's workplace. The interviews began with open-ended questions such as, "How do you structure your curriculum?" These questions prompted interviewees to explain the school's approach to curriculum, why it was chosen, how it was designed, and how it continues to be implemented by the teachers.

Data analysis followed a grounded theory approach (Cohen et al., 2013) to code the themes, and then these themes were compared with Fogarty's ten models. Two interview transcripts were chosen by the second author to check the transcription quality and repeat the process of generating the themes. Finally, these agreed themes were used to code the remaining transcripts.

Results

Summary of findings from schools

In each participating primary school, some form of curriculum integration was witnessed. Most of the schools fell into one of the two larger categories, those showing Thematic or Explicit links.

The Thematic Group

After initial analysis of participant interviews, it was determined that the situation in some of the participating schools reflected Fogarty's webbed and integrated models of integration, and thus, the schools were placed in a Thematic group. The webbed and integrated models are similar in that both see the harnessing of multiple disciplines for deeper understanding of a topic. Fogarty describes the webbed approach as deductive and the integrated approach as inductive (2009). Each school in the Thematic group described their curriculum as topic-based or thematic. Headteachers and deputy headteachers in these schools worked with their subject leads and classroom teachers to intentionally research and design units focusing on a particular theme or a shared idea for each year group over each term. Interviewees described unit topics coming from, for instance, a novel the class was reading or from an overarching character-education concept such as perseverance. In these schools, math, phonics, small group reading, and grammar are taught discretely, usually in a morning session. Then, all other learning standards from the other disciplines are taught through the topic in the afternoon.

The Group with Explicit Links

A second cluster of schools was identified as a group with Explicit Links. This group of participating schools reflected a combination of Fogarty's connected, nested, and sequenced forms of integration. Again, headteachers, deputy headteachers, subject leads and classroom teachers worked together to develop the curriculum. In each of these schools, the curriculum was sequenced to link as many subjects as possible without blurring the boundaries of the individual subjects. Where relevant and logical, knowledge and skills were linked between subjects, across terms, and even across age groups. Subjects are taught discretely but concepts are organized to line up in lessons, projects, or trips when knowledge from several subjects is required. School days here always include English and math lessons. Other subjects are spaced out through the week according to the time needed for coverage of the standards and the links being made. Some weeks might lean heavily on science while others on history or computing.

Views of curriculum integration

Following on from the identification of these two groups of schools, each interview was analyzed and coded to identify themes in the participants' answers. Three key themes emerged: Knowledge & Skills (Figure 1), Broad & Balanced curriculum (Figure 2), and

Student Engagement (Figure 3). These figures show the differences and similarities between the curriculum approaches across the groups, as related to these three key areas.

Knowledge and Skills

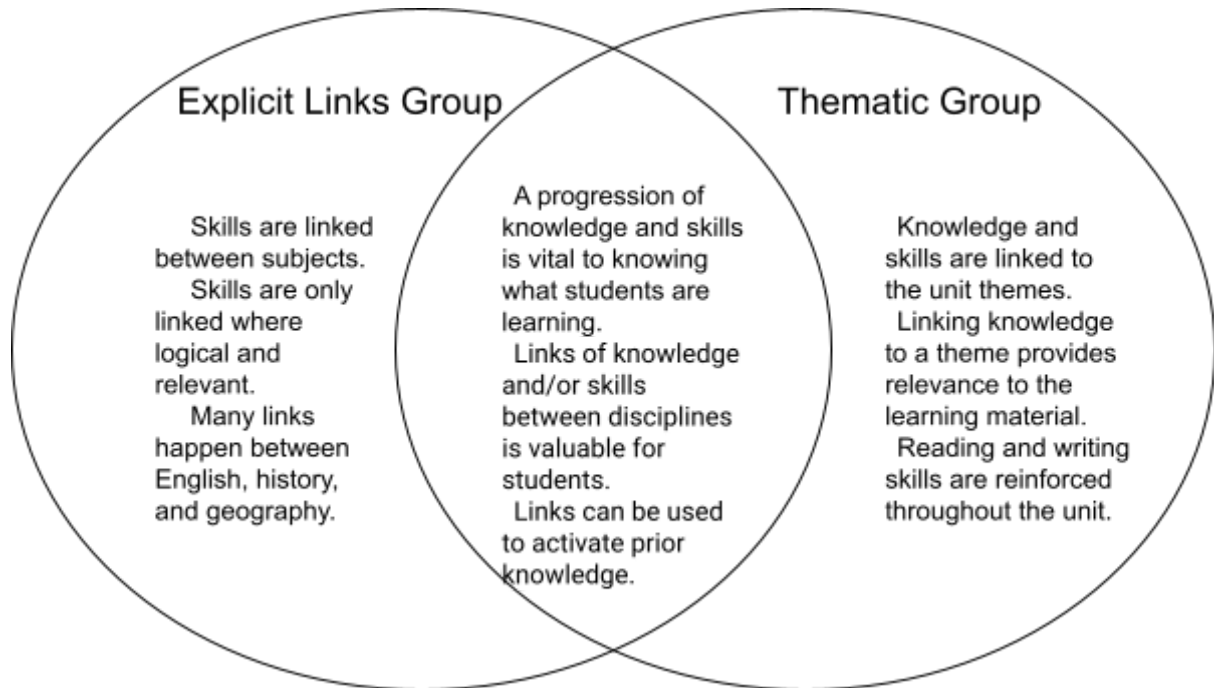


Figure 1 Knowledge & Skills

The main priority of the curriculum for each school was to deliver the knowledge and skills set forth by the National Curriculum. All participants talked about their school's process for developing a "progression of skills and knowledge" to ensure all students receive the necessary knowledge and skills at the right time in their primary education. Participants in the group with Explicit Links focused first on delivering the knowledge and skills and then on linking (mainly) skills from one subject to another. Conversely, participants in the Thematic group considered the required knowledge and skills while simultaneously looking for strong links with the unit topic. The Thematic group tried to link both skills and knowledge between and among subjects when strong, relevant links could be made. Both groups expressed the belief that strong, relevant links help students retain information because they allow students to rehearse the information in different contexts.

Broad & Balanced curriculum

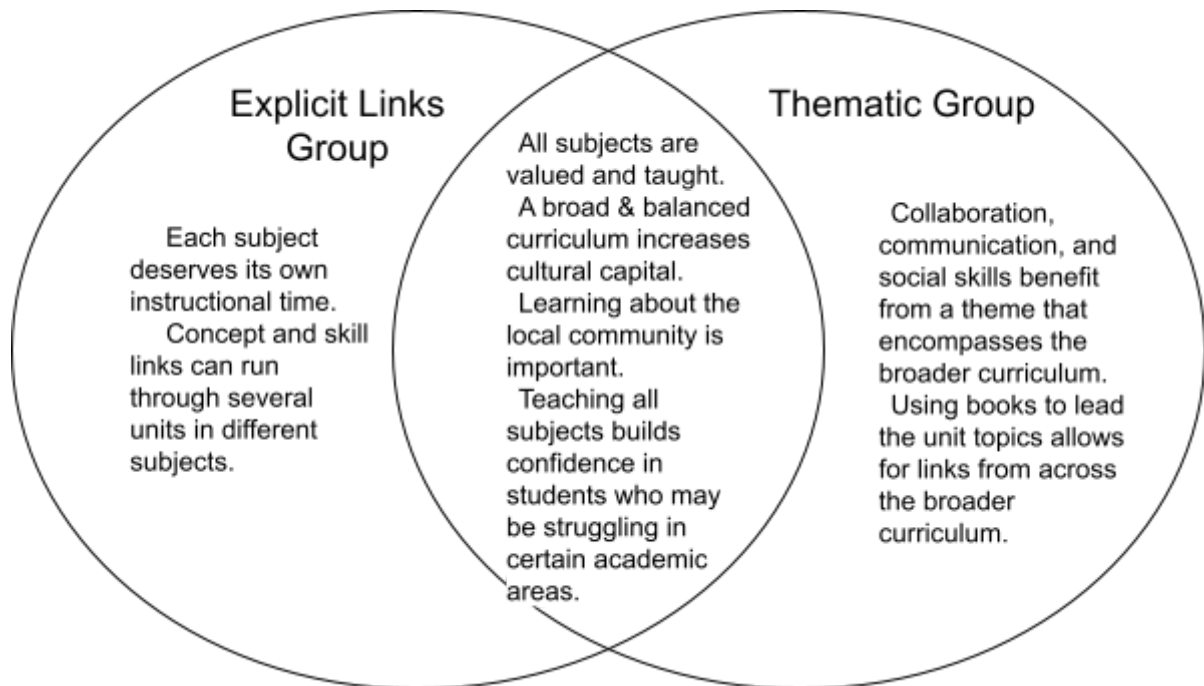


Figure 2 Broad & Balanced

Teaching a broad and balanced curriculum was also a major priority for all participating schools, and there were many similarities in participants' discussion of this. Both groups believed that a broad and balanced curriculum provided cultural capital for students and allowed access to life beyond school for all children. Each participant talked about the importance of exposing students to all subjects for the sake of their confidence and motivation to learn. A student struggling in math or reading can be discouraged if the curriculum is narrow and focuses mainly on these skills. However, that student may find they succeed in science or history, and this might positively impact their attitude toward other subjects. Participants in the Thematic group saw high-quality literature as a source for linking all subjects. Participants in the group with Explicit Links, on the other hand, turned to character traits such as kindness as a source for links across all subjects.

Student Engagement

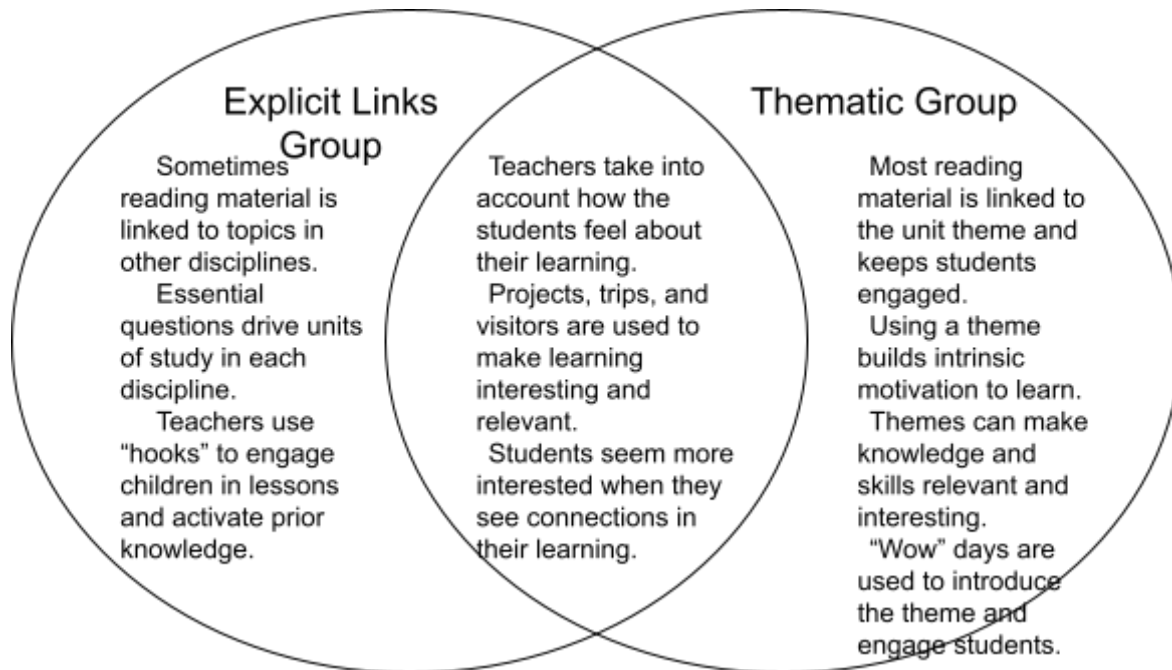


Figure 3 Student Engagement

Finally, many remaining remarks of the participants centered on engaging students with the curriculum. Both groups expressed a belief that students engaged with knowledge and skills more readily and easily if they saw how the learning connected to what they were learning in other subjects, to their lives, or to the world. When explaining the use of an overarching question that connected the unit to the world, one participant said, "[Students] seem to engage much better, and the interest levels are much better, and the discussion levels are better." Student engagement was of high importance to each of the participating schools, and each school takes student engagement into consideration when planning lessons and units. Deep learning of the knowledge and skills could not take place in the classroom if the students were not first engaged in the unit.

Reflection

This study shows that several English primary schools purposefully plan and implement an integrated curriculum approach – something that is not the norm in American public elementary schools. Over a decade ago, Fogarty said it was time for America to take curriculum integration seriously. Now is the time! Teachers are overwhelmed by individual learning standards for each subject. Students want learning to be fun. Parents want relevant learning experiences that prepare their students for the world, and theorists continue to say

that curriculum integration is a worthwhile instructional practice correlating with how the brain learns.

Some may see curriculum integration as a massive shift from the current reality, and in some places, it might be. But even in this time of standards, testing, and accountability, it can be done. As shown in primary schools in England, it takes leadership at the top and commitment on the part of all the teachers to map out the learning standards in all subjects, not just tested ones, and look for links. Using a webbed or integrated approach may be too intense for schools pursuing curriculum integration for the first time, but connecting, nesting, and sequencing knowledge and skills is a good place to start. Many textbook series offer these forms of integration and can provide the foundation for further integration. Books by authors mentioned in this article provide templates and exercises to help the novice integrator begin the process.

Through staff training, flexibility, and collaboration, the curriculum can be integrated to help solve issues educators encounter daily – lack of time to teach each standard, lack of coherence throughout the school day, and disconnected lessons with little real-world meaning. It's time for American public schools to reconsider how they approach their curriculum. With the use of curriculum integration, America may finally be able to stop using the phrase “teaching to the test” and start providing the meaningful learning experiences all students deserve.

References

- Aksoy, E. (2020). A Suggested Curriculum Integration Model with Activities to Fit the 2023 Education Vision of Turkey. *i-Manager's Journal on English Language Teaching*, 10(3), 22.
- Alghamdi, A. K. (2017). The effects of an integrated curriculum on student achievement in Saudi Arabia. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(9), 6079-6100.
- Banilower, E.R., Smith, P.S., Malzahn, K.A., Plumley, C.L., Gordon, E.M., Hayes, M.L. (2018). Report of the 2018 NSSME+. The National Survey of Science and Mathematics Education. <http://horizon-research.com/NSSME/2018-nssme/research-products/reports/technical-report>
- Beane, J. A. (1995). Curriculum Integration and the Disciplines of Knowledge. *The Phi Delta Kappan*, 76(8), 616–622. <http://www.jstor.org/stable/20405413>
- Berlak, H. (2008). From local control to government and corporate takeover of school curriculum: The No Child Left Behind Act and the Reading First program. In H. S. Shapiro & D. E. Purpel (Eds.), *Critical social issues in American education*:

- Democracy and meaning in a globalizing world (3rd ed., pp. 263–282). Taylor & Francis e-Library.
- Caine, R. N., & Caine, G. (1991). *Making Connections: Teaching and the Human Brain*. <http://files.eric.ed.gov/fulltext/ED335141.pdf>
- Curran, F. C., & Kitchin, J. (2019). Early elementary science instruction: Does more time on science or science topics/skills predict science achievement in the early grades?. *Aera Open*, 5(3), <https://doi.org/DOI: 10.1177/2332858419861081>
- Drake, S. M., & Burns, R. C. (2004). *Meeting standards through integrated curriculum*. ASCD.
- Fogarty, R. J., & Pete, B. M. (2009). *How to Integrate the Curricula* (3rd ed.).
- Fogarty, R. (2009). *How to integrate the curricula*. Corwin Press.
- Gehrke, N. (1998). A look at curriculum integration from the bridge. *The Curriculum Journal*, 9(2), 247-260. A look at curriculum integration from the bridge - Gehrke - 1998 - The Curriculum Journal - Wiley Online Library
- Greer, W. (2018). The 50 Year History of the Common Core. *Educational Foundations*, 31, 100–117. <https://files.eric.ed.gov/fulltext/EJ1212104.pdf>
- Gunuc, S. (2014). The relationships between student engagement and their academic achievement. *International Journal on New Trends in Education and their implications*, 5(4), 216-231.
- Isaacs, T. (2010). Educational assessment in England. *Assessment in Education: Principles, Policy & Practice*, 17(3), 315–334. <https://doi.org/10.1080/0969594x.2010.491787>
- Jun-On, N., & Kaya, J. (2021, July). Pre-service teachers' integrated curriculum approaches to STEM education in classrooms. In *Journal of Physics: Conference Series* (Vol. 1957, No. 1, p. 012022). IOP Publishing. Pre-service teachers' integrated curriculum approaches to STEM education in classrooms - IOPscience
- Kingston, S. (2018). Project Based Learning & Student Achievement: What Does the Research Tell Us? *PBL Evidence Matters*. 1(1), 1-11. <http://bie.org/x9JN>
- Kysilka, M. L. (1998). Understanding integrated curriculum. *Curriculum Journal*, 9(2), 197–209. <https://doi.org/10.1080/0958517970090206>
- Lago, J. M. L., & Ortega-Dela Cruz, R. (2021). Linking to the real world: contextual teaching and learning of statistical hypothesis testing. *LUMAT: International Journal on Math, Science and Technology Education*, 9(1), 597–621. <https://doi.org/10.31129/LUMAT.9.1.1571>
- Lazic, B., Knežević, J., & Maričić, S. (2021). The influence of project-based learning on student achievement in elementary mathematics education. *South African Journal of Education*, 41(3).
- Lederman, N. G., & Niess, M. L. (1996). Integrated, interdisciplinary, or thematic instruction? Is this a question or is it questionable semantics? - ProQuest. *School Science and Mathematics*, 97(2), 57–58. <https://www.proquest.com/openview/1a223fde82b7ed2571e4dcca6f8721cf/1?pq-origsite=gscholar&cbl=41443>
- Lei, H., Cui, Y., & Zhou, W. (2018). Relationships between student engagement and

- academic achievement: A meta-analysis. *Social Behavior and Personality*, 46(3), 517–528. <https://doi.org/10.2224/sbp.7054>
- Mård, N. (2021). History in multidisciplinary education: a case study in a Finnish primary school. *Education 3-13*, 49(5), 513–528. <https://doi.org/10.1080/03004279.2020.1737172>
- McCarthy, C. (2005). Effects of thematic-based, hands-on science teaching versus a textbook approach for students with disabilities. *Journal of Research in Science Teaching*, 42(3), 245–263. <https://doi.org/10.1002/tea.20057>
- Mitchell, J., Nyamapfene, A., Roach, K., & Tilley E. (2019). Faculty wide curriculum reform: the integrated engineering programme. *European journal of Engineering Education*, 46(1). <https://doi.org/10.1080/03043797.2019.1593324>
- NGSS. (2017). DCI agreements of the Next Generation Science Standards. DCI Arrangements of the Next Generation Science Standards (nextgenscience.org)
- Nurlaela, L., Samani, M., Asto, I. G. P., & Wibawa, S. C. (2018). The effect of thematic learning model, learning style, and reading ability on the students' learning outcomes. *IOP Conference Series: Materials Science and Engineering*. <https://doi.org/10.1088/1757-899x/296/1/012039>
- OECD. (2021). *Education at a Glance 2021: OECD Indicators*. <https://doi.org/10.1787/b35a14e5-en>
- Powell, D. E., Higgins, H., Aram, R. J., & Freed, A. (2018). Impact of No Child Left Behind on Curriculum and Instruction in Rural Schools. *The Rural Educator*, 31(1). <https://doi.org/10.35608/ruraled.v31i1.439>
- Roehrig, G., Dare, E., Ring-Whalen, E., & Wieselmann, J. (2021). Understanding coherence and integration in integrated STEM curriculum. *IJ STEM Ed* 8, 2. <https://doi.org/10.1186/s40594-020-00259-8>
- Scoppio, G. (2002). Common Trends of Standardisation, Accountability, Devolution and Choice in the Educational Policies of England, U.K., California, U.S.A., and Ontario, Canada. *Current Issues in Comparative Education*, 2(2), 130–141. https://www.tc.columbia.edu/cice/pdf/25668_2_2_Scoppio.pdf
- Silvernail, D. L. (1996). The Impact of England's National Curriculum and Assessment System on Classroom Practice: Potential Lessons for American Reformers. *Education Policy*, 10(1), 46–62. <https://doi.org/10.1177/0895904896010001>
- Sousa, D. A. (2022). *How the Brain Learns* (6th edition). Corwin Press.
- Swanson, J. D., Brock, L. L., Van Sickle, M., Gutshall, C. A., Russell, L. B., & Anderson, L. B. (2020). A Basis for Talent Development: The Integrated Curriculum Model and Evidence-based Strategies. *Roeper Review*, 42(3), 165–178. <https://doi.org/10.1080/02783193.2020.1765920>
- Tallman, A. (2016). *Making Time for Science and Social Studies* | EDU. <https://edublog.scholastic.com/post/making-time-science-and-social-studies>
- Tyner, A., Kabourek, A., (2020) *Social Studies Instruction and Reading Comprehension: Evidence from the Early Childhood Longitudinal Study*. Thomas B. Fordham Institute. <https://fordhaminstitute.org/national/resources/social-studies-instruction-andreading-comprehension>

- Vars, G. F., & Beane, J. A. (2000). Integrative Curriculum in a Standards-Based World. ERIC Digest. ERIC Digests. <https://files.eric.ed.gov/fulltext/ED441618.pdf>
- Wedel, K. (2021). Instruction time and student achievement: The moderating role of teacher qualifications. *Economics of Education Review*, 85, 102183. <https://doi.org/10.1016/j.econedurev.2021.102183>
- Wexler, N. (2020, January 13). Teachers Think Kids Need Science And Social Studies—But Still Focus On Reading And Math. *Forbes*. <https://www.forbes.com/sites/nataliewexler/2020/01/13/teachers-think-kids-need-science-and-social-studies-but-still-focus-on-reading-and-math/?sh=675350f318f0>
- Willingham, D. T. (2021). *Why Don't Students Like School?: A Cognitive Scientist Answers Questions About How the Mind Works and What It Means for the Classroom* (2nd ed.).

ECOLINT INSTITUTE OF LEARNING AND TEACHING
INSTITUT D'APPRENTISSAGE ET D'ENSEIGNEMENT DE L'ECOLINT

Fondation de l'Ecole Internationale de Genève | Campus des Nations

11, route des Morillons | CH - 1218 Grand-Saconnex | Tél. +41 (0)22 770 47 67 | www.ecolint.ch