

# *4 Is: A Conceptual Framework to Drive Curriculum Development in Transnational Foundation Years in Mainland China*

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*In this article, the authors aim to propose a conceptual framework based on four principles - integration, inspirational teaching, inclusiveness, and innovation - named the 4 Is. The framework, developed through reflective practice, addresses the current literature gap on curriculum development in foundation years and a number of challenges faced by foundation programmes in transnational universities in China. The framework is presented both in narrative and visual forms, the latter taking the shape of a dandelion flower to signify the non-hierarchical and flexible nature of the dimensions characterising each principle. The authors will discuss examples of curriculum changes inspired by the framework that they carried out in a foundation year in a transnational campus in Mainland China.*

## **Introduction**

Foundation years (or programmes, or sometimes called preliminary years) are not a phenomenon unique to the UK. It has been estimated that there are over 1000 foundation year programmes being offered worldwide and taught in English (Cambridge English and Study Portals, 2015). Outside the UK, they primarily serve the learning needs of prospective students entering higher education, reaching certain levels of academic English proficiency and learning skills necessary to succeed in a British-style degree programme. They are a characteristic feature of British branch campuses abroad.

There is no fixed curriculum for foundation years. They usually combine English language, academic skills, and introductory content classes. While the variety of settings where foundation years are situated may command different approaches, the current literature does not offer much guidance to educators who wish to drive the transformation of a foundation year curriculum. Despite their international reach and expansion, foundation years remain relatively under-researched. The few published studies on foundation years tend to focus on the effectiveness of these programmes in ensuring student success and academic identity development (Jones *et al.*, 2020; O'Sullivan *et al.*, 2019; Bartels-Hardege, 2018; Clifford, 2018; Hale, 2018; Sanders and Daly, 2012). Among the studies published by the UK Foundation Year Network, only one specifically addresses curriculum design showing the development of an arts-based module (Wheeler, 2018), but it does so without pinpointing any challenge that is unique to foundation years.

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The purpose of this paper is to initiate a discussion about the specific challenges and needs of curriculum development in foundation years, both at the programme and module level, with a specific focus on those outside the UK. The paper will illustrate a conceptual framework to drive curriculum development in foundation years in the context of transnational higher education in Mainland China. This framework is not meant to be a recipe or a prescription. It is a way to frame the authors' experiences of teaching and learning and to stimulate conversations around the curriculum development challenges faced by foundation years in transnational contexts.

The three authors work in a foundation year delivered by the Centre for English Language Education of a British university in Mainland China and the framework is based on their practice as it has evolved there since 2017. The framework was first conceptualised around the 4 Is and put forward in a staff presentation in 2021 and has continued to influence the authors' practice ever since. The way the framework was developed can be regarded as an example of experiential learning and reflective practice (Moon, 1999; Gibbs, 1998; Kolb, 1984). The authors continuously reflected on their daily experiences in the classroom or in the management of the foundation programme and gradually developed strategies to address challenges emerging in their interactions with students and the wider institutional context. The challenges were further abstracted to form a framework that could be shared with other educators and could serve as a guidance for curriculum development in transnational foundation years in Mainland China and, potentially, programmes elsewhere facing similar challenges.

### **The framework**

The framework is named the 4 Is because it is comprised of four principles each beginning with the letter I: integration, inspirational teaching, inclusiveness, and innovation. Each of these principles arose from specific challenges encountered by the authors in their context. The need for integration came about as the authors reflected on the overall need to connect the experience in the foundation year with subsequent levels of study and to find connection between its English and content components. Then, the search for inspirational teaching was seen as a response to the perceived lack of academic interest and curiosity manifested by foundation year students still in the process of building their academic identity and confidence. Next, inclusiveness emerged as an answer to the challenge to serve the learning needs of a more diverse student body, spanning students coming from both Mainland China public high schools and a range of international and private educational institutions. Further challenges that led the authors to reflect on the value of inclusiveness emerged during the Pandemic (2020-2022) when at times many of the students were unable to attend classes on campus, creating issues of fairness and equality in the experience of students on and off campus. Finally, the drive for innovation came about as an answer to prepare students for a range of instructional strategies popular in British-style education that they may have not experienced yet in their high schools.

The framework is also encapsulated through a visual representation inspired by a dandelion flower. A dandelion can be regarded as a collection of small flowers. Each component of the dandelion, called a floret, is a small ecosystem comprised of hundreds of filaments. Similarly, the framework is comprised of four main pillars, with each pillar branching into multiple dimensions representing teaching and learning strategies (Fig. 1). With this visual representation, the framework is not meant to provide step-by-step guidelines. Rather, the strategies branching from each pillar can be activated depending on the context and situation, leading to unique solutions.



In the rest of the section, the four principles will be presented with reference to the wider academic literature, which, for the authors, has represented a way to live vicariously other educators' experiences and has offered a way to better extend and contextualise their conclusions. Examples of applications coming from the foundation year where the authors work will be offered throughout.

### **Integration**

Integration can be regarded both as a need and a challenge for foundation years. Since a foundation year, by definition, is meant to support students' transition to higher education, it cannot be regarded as an end in itself. The need for integration among the parts of a curriculum and between its subsequent stages is a well-established imperative (Wiles and Bondi, 2007). These two interconnected dimensions assume a specific role in the development of foundation year curricula and have been named in the model, lacking specific terminology in the literature, as horizontal and vertical integration.

Horizontal integration means creating connections between the modules of the foundation year curriculum. One of the main challenges to achieve this goal is to link academic English and content subject classes. One reason behind the challenge is that they are usually taught by professionals coming from different educational backgrounds and, consequently, cooperation is not always easy to achieve. However, enhancing connections can foster students' ability to transfer their learning across contexts, and this is considered a vital learning skill (Broad and Newstrom, 1992). Moreover, vertical integration refers to the connections with the next stage of the curriculum that, for a foundation year, typically means the first year of a bachelor's degree. Vertical integration is not limited to concerns of cohesion in the content taught, but it may mean alignment in terms of type of learning and assessment experiences, so that learners will begin their bachelor's studies equipped with the proper skills and expectations. Learners may feel frustration and disappointment when the practices in the foundation year and in the ensuing stages of studies are not aligned, as this has been shown by Jones *et al.* (2020) in their analysis of an international foundation year.

The existing literature on integrative pedagogical strategies focuses on four elements of the knowledge forming the base of the learning process: theoretical, practical, self-regulative, and sociocultural knowledge (Tynjala *et al.*, 2016). Theoretical integration refers to the classic concern for cohesion in the sequence of themes taught, but it also increasingly calls for integration between disciplines (Gidley, 2021). Secondly, the concept of integration applied to practical knowledge suggests the need to help learners to see how their studies can be applied in new contexts and they can support their professional and personal aspirations. Next, the focus on self-regulation suggests the need to help learners to use their cognitive skills to synthesise in original ways the bits and pieces of knowledge that they may acquire through their engagement with different parts of the curriculum. Finally, sociocultural knowledge refers to cognitive structures acquired by the learners through their upbringing and needs to be considered to facilitate learners in the process of building durable new skills and knowledge. Table 1 shows in more detail the literature that was instrumental in developing the principle of integration and its facets.

Keywords	Themes	References
• Theoretical integration	It can refer to the trend to transcend disciplinary specialisation (i.e. inter-, multi- or trans-disciplinary). “Inter and transdisciplinary become the key notions for a systems approach to education and innovation”.	Gidley, 2012. Jantsch, 1972, p.107.
• Vertical and horizontal integration	Vertical integration and horizontal integration have the potential to enhance student learning experience and problem-solving skills.	Snyman and Kroon, 2005. Dalton-Puffer, 2011
• Language and content integration	The content language integrated learning approach has shown that the two can be taught together.	
• Local communities	Developing connections with local communities and civil society is a helpful way to preparing students to better adapt to a world in constant change.	Brydon-Miller, 2017; Sachs and Clark, 2017.
• Practical integration	Practical activities accelerate learner’s knowledge absorption and integration process.	Lyons and Bandura, 2020.
• Sociocultural knowledge	Without the reference to learners’ social and cultural context where they are/were embedded, educators can hardly understand their growth paths.	Vaughan, 2014.
• Cooperative learning	Cooperative learning can help different learners to get together as group members need to negotiate understanding.	Wenger, 2000.
• Self-regulation	Through the practice of self-regulation, learners start to internalise what is learned, how to learn and try new strategies to achieve their goals.	Cleary <i>et al.</i> , 2015.

Table 1: Summary of key elements of integrative pedagogical strategies.

Thinking along the lines of integration has enabled the authors to improve a foundation year curriculum in many ways. These are a few examples:

- In an introductory management module, the teaching team reformulated the case discussion method used in seminars adopting a Harvard-style approach to cases so that it would be aligned with the methods used in the Business School where students would continue their studies.
- Through conversations with the Schools where the foundation year students were to continue their studies, the assessments in many modules were re-designed in order to present students with assessment practices similar to what they would encounter in the following years of study. For example, an introductory management module introduced an oral case analysis with questions requiring students to use management theories to analyse the cases, as required in assessments embedded in modules taught in subsequent years. Similarly, final exam questions were redesigned to achieve the same goal.
- The department encouraged some cross-teaching and peer-observations, allowing English professionals to teach in some content modules, where appropriate, or observe classes. This in turn helped English teachers to create more connections with the content modules in terms of vocabulary and themes taught in their classes.
- An introductory management module pioneered building connections with the local community by developing original case studies of local companies and institutions for class discussion and assessment.

### ***Inspirational teaching***

The principle of inspirational teaching took form as an answer to a number of challenges. First, learners were observed struggling to engage in large lectures (attended sometimes by hundreds of students) which is a common feature shared by many higher education institutions worldwide. Second, given the system of university admission in Mainland China that is heavily based on the students' score in the Gaokao examination at the end of high school and the province of origin, some students tend to start their studies with little motivation toward their subject, sometimes feeling that what they are studying is more the consequence of their circumstances (Gaokao scores), rather than a deliberate choice. Given these challenges, the authors began developing strategies to spur students' motivation and engagement that ultimately led to a reflection around the theme of inspirational teaching.

It is no easy task to find a definition of inspirational teaching in the literature. Cohen and Jurkovic (1997) connect inspirational teaching with "surprise, fun and drama" (p. 68), and McGonigal (2004) clarifies that it is a collaborative venture which is not simply the solo performance of the teacher. Additionally, according to Nordstrom and Korpelainen (2011), inspirational teaching should be captivating, exciting, memorable, energetic, entertaining, enthusing, provocative, and original. Evidence also shows that the increased engagement will eventually enhance students' understanding of the disciplinary context over traditional approaches (Leidner and Jarvenpaa, 1995). Table 2 shows more themes that emerged through engagement with the literature.

<b>Keywords</b>	<b>Themes</b>	<b>References</b>
• Motivating	One key goal of teaching is to foster personal change and development, and ideal lectures should be visionary, practical and inspirational and arouse motivation.	James, 2001.
• Encouraging	Inspirational teaching is encouraging learners to go above and beyond.	Harden and Crosby, 2000; McGonigal, 2004.
• Passionate	Inspirational teaching flows from teachers who are passionate about the subject.	Harden and Crosby, 2000; Nordstrom and Korpelainen, 2011.
• Timeliness	Teaching materials based on up-to-date information, make students more engaged and inspired.	Havelka, 2015.
• Resonating	Resonance is not an emotion or a feeling, but a relation, a heightened sense, an ambivalent experience of aliveness, excitement, and connectivity.	Rosa, 2019; Felski, 2020.
• Relevance	Examples used in teaching are relevant to existing knowledge and experience which are more likely to inspire.	Anderson and Krathwohl, 2000.
• Fun	Inspiration comes from fun, creativity and critical thinking.	Noy <i>et al.</i> , 2017; Sipos, Battisti and Grimm, 2008

Table 2: Summary of key elements of inspirational teaching strategies.

The authors have tried to embed inspirational teaching in the following ways:

- Led by the first author, teaching teams were encouraged to add active learning elements to large lectures, for example using interactive polls and 'two-minute learning activities' that could keep the audience engaged. Overall, this led to up 50% increased attendance throughout the 2019 fall semester and these gains remained after the parenthesis of an online semester in 2020.

- The first and third author introduced the use of co-delivered lectures with the two teachers engaging in drama, interviews, and debate with excellent reception by students in terms of engagement: data collected through a survey after a co-delivered lecture showed that students felt more engaged every time the two presenters interacted during the lecture.
- In an introductory management module led by the second author, students were presented with ideas of the management jobs that they could apply for thanks to their studies, helping them visualise their future careers.
- The authors worked on introducing more engaging examples to illustrate management theories in their lectures and seminars creating connections between the examples and students' lives. This led to a balance between local and international cases used in lectures and seminars. Anecdotally, some students found internships as a result of their experience with some of the companies discussed in class.

### **Inclusiveness**

Inclusiveness and EDI (equity, diversity, inclusion) have become a major force shaping higher education. In their reflection about inclusiveness, the authors developed two main guiding ideas: parity in learning experience and parity in assessment. These can be regarded as a starting point in an effort to create an inclusive environment for all students and staff. The problem of parity emerged during the pandemic years (2020-22) where online and hybrid teaching were often required to cope with epidemic control restrictions. During this time, it was not unusual to see a mixture of face-to-face and online classes. This meant rethinking many assessments and learning activities in order to provide parity in the treatment of online and on campus students.

<b>Keywords</b>	<b>Themes</b>	<b>References</b>
<ul style="list-style-type: none"> <li>• Parity in learning</li> <li>• Parity in assessment</li> <li>• Non-discriminatory</li> </ul>	<p>No discrimination can be acceptable in access to higher education on the grounds of race, gender, language, religion or economic, cultural, or social characteristics, or physical disabilities.</p> <p>The growing scope and depth of human rights commitments have served to highlight the importance of differences in learners' prior experience, national and ethnic status, gender and religion.</p>	<p>Lee, 2016; Jacob and Xiong, 2016.</p>
<ul style="list-style-type: none"> <li>• Multicultural</li> <li>• Global citizenship</li> <li>• Ethical orientation</li> </ul>	<p>Multicultural competence becomes a key skill to build through the curriculum.</p> <p>The curriculum should offer a global view on themes discussed.</p> <p>The ethical dimension of education has a role in all parts of the curriculum. The way the faculty leads students' engagement can provide models on how to learn from diversity.</p>	<p>Castellanos and Cole, 2015. Schutte <i>et al.</i>, 2017. Monteiro <i>et al.</i>, 2019; Sanger, 2016.</p>

Table 3: Summary of key elements of inclusive pedagogical strategies.

The reflection around EDI takes unique features in a transnational campus in Mainland China. In this context it is not always simple to identify the key variables that affect students' perception of inclusiveness. This is because the majority of the students are Chinese nationals, which a casual observer may regard as a homogenous group. However, province of origin, type of high school attended, spending power, or belonging to an ethnic minority group may all influence their experience, and it can be challenging for educators to identify these underlying

tensions. In face of this situation, embedding EDI themes in the curriculum has become a strategy to bridge differences. Students can be exposed to EDI with a focus on multicultural understanding, ethical issues and global citizenship. Table 3 synthesises some of the literature that helped define the dimensions of inclusiveness in the framework.

Examples of curriculum developments inspired by the principle of inclusiveness in the authors' foundation year include:

- The authors opposed the initial approach of dividing students in groups along some administrative variables that resulted in separate seminar groups for international and Chinese students who attended international high schools. The authors promoted diverse groups and interaction through groupwork inside and outside the classroom.
- When using pedagogical approaches grounded in other cultures, such as brainstorming, the authors offered students elements to understand their origin and social implications (Miani, 2023).
- In some modules, students finding themselves in quarantine outside campus were offered online or hybrid classes, so maintaining a connection with their classes.
- Whenever possible, some extra-curricular activities such as language exchange were designed to allow online participation for students not physically present on campus.
- Throughout the curriculum, several EDI-related topics were embedded into lectures and seminars, such as female leadership, cross-cultural management issues, gender and language, media portrayals of ethnic groups. The department created a logo to emphasize the EDI-relevance of topics being presented to students.
- In some modules, the teacher, on a rotation basis, aggregated students on campus to online groups initially only comprised of students unable to travel to campus for extended periods of time because of the 2020-22 pandemic controls. This led to positive comments of online students feeling more included in the learning community (W. Shipton, personal communication, 8<sup>th</sup> October 2022).

### ***Innovation***

Within the 4 Is framework, innovation plays a twofold role. First, innovation is one of the underlying motives of the framework as it should inspire educators to effect change in their curricula. Second, the use of innovative pedagogies emerged as a need for curriculum development in order to expose students to learning activities that they had not experienced in high school, but were commonplace in their future bachelor's studies. From this point of view, innovation is a relative term. In the authors' context, even teamwork can be regarded as an innovative approach since most students have not had much experience in groupwork, especially in assessment, during their high school years. Table 4 offers a view of the main innovative pedagogical strategies considered by the authors in forming this principle.



Keywords	Themes	References
<ul style="list-style-type: none"> <li>Active learning</li> <li>Versatile and development-oriented assessment</li> <li>Student-centred method</li> </ul>	Active learning and student-centred methods coupled with formative assessments can foster the development of an innovation competence in students.	Keinänen and Kairisto-Mertanen, 2019; Kairisto-Mertanen <i>et al.</i> , 2011.
<ul style="list-style-type: none"> <li>Blended learning</li> </ul>	Blended learning has been promoted to foster social interaction, reflection, higher order thinking, problem solving, collaborative learning, and more authentic assessment in higher education. Blending new teaching techniques with existing teaching environments also help increase student access, inclusivity and engagement.	Vaughan, 2014. Baker and Spencely, 2020.
<ul style="list-style-type: none"> <li>Student autonomy</li> </ul>	Teachers move away from being the centre of the interaction and become guides or coaches.	Baran <i>et al.</i> , 2011.
<ul style="list-style-type: none"> <li>Multiliteracies and discussion</li> <li>Gamification</li> </ul>	Six clusters of innovative pedagogies have been highlighted as “new science of learning”: gamification, experiential learning, computational thinking, embodied learning, multiliteracies and discussion and blended learning.	OECD, 2018.
<ul style="list-style-type: none"> <li>Computational thinking</li> </ul>	In order to prepare students in all disciplines for today’s workplace challenges, curriculum design should foster not just computational skills, but also computational thinking.	Ali, 2017.
<ul style="list-style-type: none"> <li>Experiential learning</li> </ul>	Experience coupled with reflection and abstraction can lead to learning that can be applied in new contexts.	Kolb, 1984
<ul style="list-style-type: none"> <li>Teamwork</li> </ul>	Teamwork and assessment are widely used in higher education as part of transferable skills required for employment. The team-based assessments mimic cross-functional and cross-company work teams and can offer a meaningful learning experience.	Volkov and Volkov, 2015. Sweeney <i>et al.</i> , 2008.

Table 4: Summary of key elements of innovative pedagogical strategies.

Examples of innovative learning approaches that became part of the author’s foundation year include:

- In a management module, the authors exposed students to experiential learning (Kolb, 1984) using a teamwork activity called The Marshmallow Challenge. The activity was aligned to the learning goals of the module, as students could start experiencing teamwork dynamics as part of the same team later tasked to complete one of the module’s assessments. The activity would get students familiar with a type of assessment widely used during their future bachelor’s studies.
- The curriculum of many modules began incorporating blended elements in the form of online learning activities supplementing or completing in class interaction. These activities included video-seminars with Q&As, quizzes with real-time feedback, supplementary cases and exercises, and so on depending on the subject.

- One author introduced multimedia case studies (Miani, 2020) in a management module moving away from traditional text-based cases. The multimedia cases integrated text, videos, images, and interactive tasks in an online environment. Interestingly, some students still preferred paper and text-based business cases, showing that even 'digital native' learners may be resistant to technological innovation.

## Conclusions

The article has proposed a comprehensive conceptual framework, namely the 4 Is, based on the four principles of integration, inspirational teaching, inclusiveness, and innovation, to address the current gap in the literature overlooking the unique curriculum development challenges of foundation years. The framework emerged from the practice of the authors in a Sino-British university in China. The article links the 4 Is to existing literature and demonstrates how this framework has informed aspects of the curriculum development of a foundation year. Evidence of impact shown throughout the paper and positive results on a number of institutional measures (such as Student Evaluations of Modules and the lecture quality index in the University's annual student experience survey) seem to indicate that the 4 Is can be effective in driving curriculum transformation within the context of a transnational foundation year in Mainland China.

As shown, far from being prescriptive, the framework is meant to offer educators working in similar programmes four directions to inform curriculum development, with each direction characterised by multiple dimensions, like the florets of a dandelion. Educators can find inspiration in the dimensions and develop their own unique approach within this broad framework. Given the conceptualisation of broad principles one may argue that the framework has potential to support curriculum development of foundation years in other British-style higher education institutions and programmes in China and beyond. However, more research and reflection are needed in order to prove the transferability of the framework outside its original context. More generally, more research on curriculum development in foundations year is needed and this contribution from a practice-based point of view aims to highlight this need.

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