

Chapter 2: Designing and delivering a curriculum that supports the development of the learner attributes

Overview

This chapter builds on some of the points made in Chapter 1 of this guide and Chapter 2 of the *Implementing the Curriculum with Cambridge* guide www.cambridgeinternational.org/curriculumguide.

Schools interested in developing the learner attributes need to develop a curriculum that is broad, balanced and coherent in a number of ways.

A broad and balanced curriculum

The *school curriculum* is sometimes narrowly defined to include only the subjects a student studies within a school year, and in sequential years, as they progress through the school. The concept of curriculum, however, can be considered more broadly to include the *co-curricular curriculum*, which recognises the valued educational activities that support learning beyond classes and subjects. We also need to recognise the hidden or informal curriculum. This is learning that takes place as a result of the culture and climate of the school and is often unacknowledged. Broad definitions of curriculum focus on the overall learning experience a student receives as a result of the educational programme and culture in the school.

It can be useful to distinguish the curriculum, which includes all valued learning, from qualifications and subjects. The curriculum in an excellent school is more than the sum of the qualifications, subjects and activities that are visible on the school schedule. This is because careful attention in curriculum design and implementation is given to learning within, across and between the subjects and activities. All subject teachers support the development of the learner attributes and other qualities identified in the school's vision. Breadth, balance and coherence need to be built in by design.

Here are a few questions to consider for your school. Does the curriculum:

- expose students to learning powerful knowledge and skills that will be useful for them in the future? Is there an appropriate balance of subjects, disciplines and activities?

- make connections in students' minds between what they are learning in different topics in a discipline and between different disciplines?
- teach subjects and disciplines in a way that helps students master basic skills and build on these to develop deep understanding of the material and the ability to apply their knowledge in unfamiliar contexts?
- encourage students' creative contributions?
- help students explore their interests and passions, exposing them to new possibilities?
- nurture learning habits in all subjects and activities that help students understand themselves as learners so that they can help themselves learn new material?
- support the development of emotional, physical and creative competences?
- support the development of collaborative and individual learning habits and skills?
- provide challenge in non-academic practical areas, for example service learning?
- support students' physical and mental wellbeing?

How should the curriculum be organised?

Most schools operate a timetable that divides the day into blocks of time in which subjects are taught. The main reason for including academic disciplines in the curriculum as discrete subjects is that they nurture powerful knowledge (Young, 2013), with applications that are not easily acquired from everyday experience, so that students learn to think critically and creatively as mathematicians, artists, scientists, historians etc. Each academic discipline has its own methodology. Critical thinking in science, for example, requires an understanding of the scientific method and the development of scientific knowledge and understanding which is embedded in practice and theory. As competence and understanding grow, learners can take on more advanced concepts and challenges because they have a solid disciplinary foundation.

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The idea of powerful knowledge is based on improving understanding and performance, not just learning facts.

One danger with organising learning in this way is that students, teachers and parents can start to view knowledge as compartmentalised into silos that do not relate to each other. Interdisciplinary understanding, the ability and confidence to traverse disciplines, make connections and develop a holistic appreciation of knowledge that provides new perspectives, is extremely important.

For this reason some schools, particularly at primary level, organise the curriculum around inter-disciplinary or trans-disciplinary topics. This can be effective provided careful attention is given to developing the foundational literacies and knowledge needed for progression. Disciplinary understanding needs to be the foundation on which a rigorous interdisciplinary approach is based, otherwise learning can lead to superficial coverage and confusion. One alternative is to use interdisciplinary courses to complement traditional subjects and timetable them separately. These can provide an opportunity for students to investigate interdisciplinary questions using knowledge and skills acquired across the curriculum. This is the approach adopted in Cambridge Global Perspectives (see Chapter 7).

Excellent schools support the development of interdisciplinary understanding by expecting teachers to plan collaboratively. Teachers need to understand what other teachers are teaching a particular year group in order to make connections with their own classes. This can be facilitated through using curriculum mapping exercises to coordinate the curriculum so that knowledge and skills taught in one class support learning in another.

What subjects and activities should the curriculum provide?

This has to be the choice of the school based on school values expressed in the school mission statement, student age, local culture and national requirements. Curriculum is a local construct owned by the school; no one curriculum prescription is suitable for all.

There are a number of views on how to choose what to include in the curriculum and what weighting to attach to each. Traditionally these have emphasised cultural transmission (Lawton, 1989), where the school's role is to empower students with the knowledge, skills and competencies valued in their culture. Today, we see schools

placing increasing emphasis on transformation of society, which is based on the argument that the skills needed to succeed in the modern world are different from in the past (see for example Cheng, 2002). Another perspective highlights the critical importance of helping students to identify and develop their passions. All these perspectives have value and they should be viewed as complementary approaches, not alternatives.

A good curriculum must respect local culture and traditions, recognise the changing nature of the world and encourage students to explore their interests. The terms broad and balanced are relative. There is no one right answer about the extent to which schools will want to engage with ideas presented in this guide. One curriculum prescription is not suitable for everyone and some schools will want to specialise in particular disciplines more than others.

Decisions about what to include in the curriculum have an opportunity cost. There are only so many hours in a school day, and days in a school year. Including more disciplines and/or giving more time to particular disciplines/subjects will have a cost expressed in terms of the best alternatives lost. There is, therefore, a potential trade-off between depth and breadth that schools must consider in designing their curriculum. If a school values the learner attributes it needs to evaluate what it offers to ensure an acceptable degree of breadth, balance and depth in curriculum planning.

One common and dangerous misunderstanding in curriculum design is that adding more subjects or content improves it. In fact the opposite is often true. Covering too much content can reduce the quality of that coverage. Howard Gardner made an important point when he said that 'the greatest enemy of understanding is coverage' (Brandt, 1993). What matters most is the quality of engagement in learning so that students learn to deeply understand the material and can apply that understanding in new contexts. This is considered in more detail in Chapter 3. This was one reason why the phrase 'teach less learn more' was introduced into the Singaporean national curriculum (see Ministry of Education, Singapore, 2015).

One way of optimising learning, given time constraints, is to look for areas of synergy across the curriculum. The statement 'an excellent curriculum is more than the sum of its parts' means that learning is more effective when key processes and competencies are reinforced in all disciplines and activities. The learner attributes are designed to help

schools facilitate this. Creativity and innovation, for example, are fundamental to all disciplines and need to be nurtured across the curriculum. They are not just confined to arts subjects (see Chapter 4).

There is also a danger in trying to create a discrete subject out of everything that is valued when the desired learning outcomes are better infused in the curriculum as a whole. Learning how to learn and personal development are concerned with habits and skills that are foundational to performance in all areas, and therefore the concern of every teacher and class. Students need to experience them as habits reinforced across the curriculum. Everything that has value does not need to result in a qualification.

Another important consideration to be aware of in designing the curriculum is the fundamental importance of language. Language is privileged in the curriculum as learners are dependent on their understanding of a language to access knowledge and skills in all subjects taught through the medium of that language. This has direct implications for the student's first or best language and the language of instruction of the school. Students attending international schools are often learning the curriculum through the medium of English, so developing a high level of English language competence will help them learn.

It is also very important that all students continue to develop their first or best language, this can be neglected if attention is just focused on English. All subjects students learn provide rich opportunities for language development and teachers need to be language aware. Students can only become more confident, responsible, reflective, innovative and engaged if their powers of expression and communication, mediated through language, are enriched. Language is also critical to developing student identity and international understanding. Cambridge has published a number of resources on language awareness and bilingual education recognizing the critical importance of language in the curriculum. Further information is available at: www.cambridgeinternational.org/programmes-and-qualifications/bilingual-education/

Curriculum coherence, assessment and teaching that support deep learning

We talk regularly to universities about our syllabus development. They often tell us how important it is for them that students understand key concepts and ideas deeply, and can take learning from one area and apply it elsewhere in novel ways. It is mainly for this reason that the high-stakes summative assessment we provide is linear, which means it takes place at the end of the course. This allows students more time to think, mature and practise before they are assessed. Teachers have more time to engage students' interests and support their development through assessment for learning rather than assessment of learning.

Coherence is important to support deep learning. This is different from the concepts of breadth and balance considered earlier. A coherent curriculum organises learning in a carefully planned and aligned 'spiral' instructional system. Oates (2010, p. 13), citing the work of Schmidt and Prawat (2006) relating to effective practice in national education systems, points out: 'A system is regarded as coherent when the curriculum content, textbooks, teaching content, pedagogy assessment and drivers and incentives all are aligned and reinforce one another.' The same principle holds true for effective schools. Curriculum, assessment and pedagogical practice are well aligned and mutually supportive. Learning experiences are thoughtfully sequenced, respecting students' developmental stages.

Our syllabuses, teacher support material, teacher professional development and assessments are designed by subject experts to ensure a smooth progression from primary to upper secondary. We plan the progression carefully so it respects the progression of knowledge and understanding needed to advance to the next stage in each discipline. Subject curricula are based on key concepts, principles, fundamental operations, key knowledge and the learner attributes.

We use ideas about important concepts in a number of ways. Threshold concepts are the ones that students need to understand before they can engage with more difficult material as they progress through a discipline. These are fundamental to curriculum and assessment planning and are used to decide what goes into syllabuses, and to define the level of demand expected, from primary to upper secondary. The order is critical and students need to be exposed to more complex ideas earlier on before they can be

expected to master them. Learning progressions need to be based on a learning spiral where students return to knowledge, concepts and skills repeatedly.

The term 'key concept' is specifically used by Cambridge International to describe essential ideas that help learners to develop a deep understanding of their subject and make links between different aspects. Key concepts may open up new ways of thinking about, understanding or interpreting the important things to be learned. These include a range of significant ideas and organising concepts that help learners to develop a deeper understanding, making sense of their subject and making links between different aspects of it. They can be transformative in nature and can be compared to a door or portal (Meyer & Land, 2003), opening up new and previously inaccessible ways of thinking about the important things to be learned. They support improved ways of understanding, interpreting or viewing, which helps the learner progress. As Cambridge International redevelops its syllabuses, key concepts are being emphasised more clearly (see, for example, Table 2) with the intention of helping students gain:

- a greater depth as well as breadth of subject knowledge
- confidence, especially in applying knowledge and skills in new situations
- the vocabulary to discuss their subject conceptually and show how different aspects link together
- a level of mastery of their subject to help them enter higher education.

Table 2: Example of key concepts from Cambridge International A Level Geography

The key concepts on which this [Cambridge International A Level Geography] syllabus is built are set out below. These key concepts can help teachers think about how to approach each syllabus topic in order to encourage learners to make links between topics and develop a deep overall understanding of the subject. The teaching support package gives teachers guidance on integrating the key concepts into their teaching. See page 7 for more information on our teacher support.

1. Space: the implications of spatial distributions and patterns of a range of physical and human geographical phenomena.
2. Scale: the significance of spatial scale in interpreting environments, features and places from local to global, and time scale in interpreting change from the geological past to future scenarios.
3. Place: the importance of physical and human characteristics which create distinctive places with different opportunities and challenges.
4. Environment: how the interactions between people and their environment create the need for environmental management and sustainability.
5. Interdependence: how the complex nature of interacting physical systems, human systems and processes create links and interdependencies.
6. Diversity: the significance of the similarities and differences between places, environments and people.
7. Change: the importance of change and the dynamic nature of places, environments and systems.

Teachers are expected to embed the key concepts through the study of the topics, both in general and specifically through examples and case studies.

Embedding the learner and teacher attributes in teaching practice

It is the teacher's responsibility to take Cambridge syllabuses and teacher support material, and develop appropriate schemes of work and lesson plans that provide engaging and locally relevant classroom activities for students. Cambridge syllabuses and support material also emphasise the learner attributes in subject-specific ways that complement their more general use across the curriculum (see the example in Table 3).

Table 3: The learner attributes in Cambridge Mathematics

Confident	In using and sharing information, ideas and mathematical techniques to solve problems. These skills support work in other subject areas as well as in mathematics.
Responsible	By learning and applying skills which prepare them for future academic studies, and also help them to become numerate members of society.
Reflective	Through the development of insight into the connections between different branches of mathematics and the steady build-up of mathematical and modelling skills.
Innovative	Through solving both familiar and unfamiliar problems in different ways, selecting from a range of mathematical and problem-solving techniques.
Engaged	By the beauty and structure of mathematics, its patterns and its many applications to real-life situations.

While developing a culture of learning in a school that emphasises effective learning habits will create a supportive environment, nothing is more important than teachers being good role models, exemplifying the Cambridge learner attributes by being confident, responsible, reflective, innovative and engaged themselves.

“ How can we expect inspired students without inspired teachers? ”

Pak Tee Ng at Cambridge Schools Conference, 2016

Collaboration

One potential limitation with curriculum in schools is that learning tends to be focused on the individual. Most summative assessment practices, notably examinations, assess the student's own knowledge and problem-solving abilities. Students need to learn to function effectively as team members and leaders as this an important ability needed to get on in life and the workplace. They also need to learn to solve problems collaboratively. The Organisation for Economic Co-operation and Development (OECD, 2013, p. 6) defines collaboration as follows:

'Collaborative problem-solving competency is the capacity of an individual to effectively engage in a process whereby two or more agents attempt to solve a problem by sharing the understanding and effort required to come to a solution and pooling their knowledge, skills and efforts to reach that solution.'

Collaborative problem-solving requires teamwork where individuals actively, responsibly and productively work towards a shared goal. This requires high levels of emotional competence and inter- and intra-personal awareness. Collaboration is more sophisticated than cooperation. A cooperative task may involve dividing up the work equally and everyone getting on with their share. Collaboration requires collective intelligence and agility. Individual responsibilities may change as progress or obstacles are met. Many schools tend to support cooperative learning rather than collaborative learning.

Being an effective collaborator requires additional habits and skills to being a good individual learner. Students need to be able to define the problem and ensure they have a joint understanding of what is being asked, think critically as a group, communicate

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and reflect on how well the group is progressing towards solving the problem. Effective collaboration is linked to the concept of student leadership considered in Chapter 6. Leadership requires monitoring that the group is doing the right things towards achieving the set task and adjusting practices and work as required. Leadership should be viewed as a process rather than a position of responsibility, and is often distributed with different individuals contributing as leaders in different ways and at different times.

Schools that focus on the learner attributes have a responsibility to provide opportunities for collaborative learning through well-planned learning activities. Many academic disciplines can provide such learning opportunities through collaboration, including social science fieldwork and science practicals, or project work in courses like Global Perspectives and Enterprise (see Chapter 7). The co-curricular programme provides opportunities for group work and collaboration, as many of the case studies in this guide illustrate. Chapter 6 considers how 'challenge education', service and leadership can support the development of collaborative skills.

The assessment of collaboration requires careful consideration of an individual's contribution to the success of a group. This means teachers need to analyse the processes that led to group performance, and reflect on individual and group performance. The process of collaboration, as well as the product of the group, needs to be assessed at least formatively in terms of reflection and feedback.

Information literacy and research skills

Students today are bombarded with information. It has never been more important to learn how to argue critically, evaluate evidence and handle information wisely. Information literacy is closely related to learning how to learn (considered in Chapter 3) and needs to be the concern of all disciplines. Many disciplines focus on critical thinking skills and the evaluation of evidence. These are usually context specific but students can learn to apply them more broadly through supportive teaching and appropriate reflection.

Learning how to research is vital for success in higher education and the world of work. This means being able to define then investigate a significant question, evaluate evidence and prepare and communicate an argument in extended writing and through

spoken communication. It is also an engaging process that will develop confidence, innovation and responsibility.

A well-balanced curriculum provides students with the opportunity to research as a part of their learning experience. It is important that teachers help students to understand research methodology and to improve their research skills. As with any learning activity it is important that students are made to think hard and reflect on the process of research. Cambridge Global Perspectives, highlighted in case study 4 and considered in detail in Chapter 7, is a programme specifically aimed at developing critical thinking and research skills. There are also many possibilities for the co-curricular programme to support the development of practical critical thinking and research. Case study 3 provides one example of this.

Students at Frensham School, Australia (*case study 4*)



Case study 3:

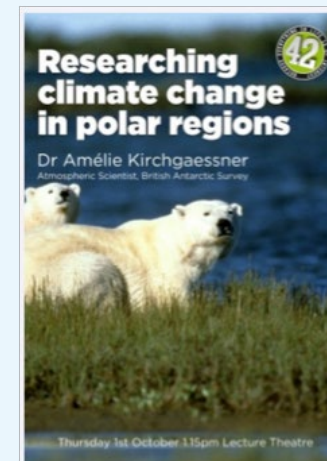
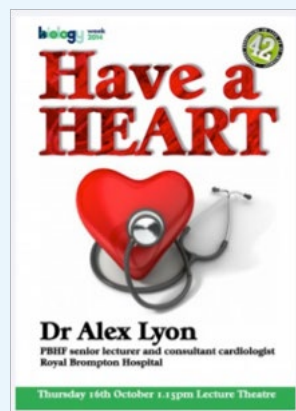
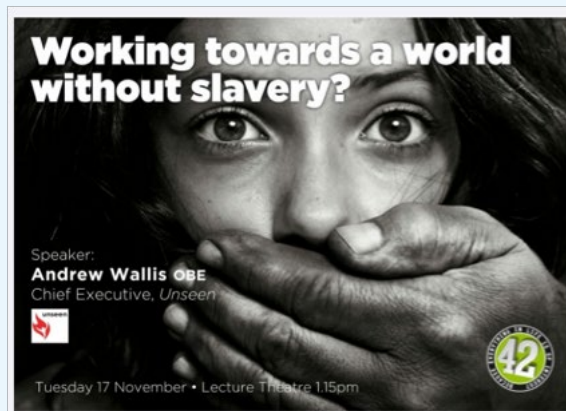
Supporting the development of research skills at The Perse School, Cambridge, UK

Organising a structure: Independent learning and research

Research and scholarship are at the heart of The Perse School's learning culture. The school supports the development of pupils as effective independent learners by a programme of embedded research skills built into the curriculum. There is a strong emphasis on helping students make progress in their capabilities as researchers. Every year group is offered activities ranging from reading groups to lunchtime lectures with experts and external partnerships, trips and visits. Extension tasks and booklets for every subject are issued at the start of the year with a range of challenging material to dip into. The emphasis is on supporting pupils to become independent learners by making good choices about how to direct their time and extend their learning.

Pupils are offered a pipeline of research opportunities as they move through the school, with an increased level of depth and challenge at each stage. These begin with internally designed and assessed independent investigation programmes with teacher mentor support in Years 7 and 8, with the option of undertaking an externally validated research qualification in Year 10 and Year 12 respectively.

Pupils have the opportunity to develop great depth of subject knowledge at the same time as learning valuable skills in project management, the critical evaluation of source material and metacognition and reflection. This emphasis on research-driven learning as a creative approach to the curriculum reflects the school's location and values, situated as they are in Cambridge, a global centre of scholarship.



The school's lecture series 'The 42' draws on volunteer speakers to provide a weekly lunchtime focus lecture with Q&A opportunities. It draws a wide student audience from all year groups

The co-curricular programme

Co-curricular refers to learning experiences, usually organised into activities and programmes, which complement what students are learning in the classroom. Another term often used with a similar meaning is extra-curricular activities, 'extra' referring to the fact that these fall outside the scope of the 'normal' curriculum. Co-curricular is a better term as it suggests a central idea in this guide that this valued learning is not extra to the curriculum but fundamental to it.

The learning experiences provided by the co-curricular programme complement and support what the students are learning in the academic programme. They play a particularly important role in developing foundational competencies including self-understanding, communication, leadership, a sense of responsibility, health and wellbeing, confidence and intra- and inter-personal skills.

For this reason, schools that value the learner attributes consider the co-curriculum carefully. The culture of the school is permeated with a sense of valuing worthwhile student activities and these are considered on a par with academic achievement.

It is possible to broaden the concept of the co-curriculum to include activities that the school encourages which are actually provided in the community beyond the school. The extent to which a school is able to provide a rich choice of activities will be constrained by its context and resources. One way to broaden these opportunities is for the school to discover, support and develop opportunities for students to use clubs and resources available in the local community, recognising student participation beyond the school.

As with the academic curriculum there is no one formula for what to include in the co-curricular programme. Typically schools support activities and programmes in: physical recreation, performance arts, community service, student government, recreational hobbies, health and social education, outdoor pursuits and work experience. Many of the best programmes and activities, a number of examples of which are illustrated in case studies in this guide, are student led and managed. Activities and opportunities should reflect the local culture and community, and provide one opportunity for placing the school as a contributing force to community cohesion and development.

How should student participation in co-curricular areas be organised?

Again, this is a decision for each school. Some schools require students to do certain activities and reward credit towards school diplomas and graduating requirements. Other schools are more flexible and voluntary in their expectations.

Structure provides clarity. Well-designed compulsory co-curricular programmes will give students a wide range of experiences. On the other hand, too much compulsion can have unintended consequences. For the learner attributes to become life-long habits it is essential that learners pursue co-curricular activities because they want to, not because they are another requirement to be ticked off. Ultimately we want students to behave in certain ways because this leads to personal fulfilment and enjoyment.

This does not mean that assessment and evaluation of student participation in co-curricular activities should be ignored. Assessment needs to be fit for purpose and we need to assess what we value, not just value what we assess.

How should student performance in the learner attributes be assessed?

Assessment needs to develop self-awareness and responsibility in learners. It also needs to give them the belief, desire and knowledge to improve. With this in mind valid assessment approaches could include:

1. **Self-evaluation instruments and reporting.** This could be done in a number of different ways, respecting the students' age and school culture. Quality is more important than quantity in order to preserve enthusiasm and commitment. Options include:
 - Students complete a self-evaluation as part of the end-of-term report sent home to parents.
 - Students complete self-evaluations of their performance in particular tasks or activities, including individual and group work.

2. **Students running parent–student meetings.** They lead the conversation with their own reflections on how they are doing and what they need to do to improve (as demonstrated in Case study 10 in Chapter 3).
3. **Process journals, e-portfolios or blogs** where students can write about their learning journey and reflect on it.
4. **Involving students, where appropriate, in designing assessment rubrics** that include learner attribute criteria. Students can then evaluate their own performance individually or collectively.
5. **Displays of student work and school activities** that exemplify the learner attributes.

The following four case studies illustrate different approaches schools have developed in order to support the development of the learner attributes and other valued learning highlighted in their missions. Each approach has been designed by the school to reflect its own context and culture.

The Jamieson Programme at Frensham provides structured challenge in a number of areas beyond traditional academics. The school includes Cambridge Global Perspectives as a requirement that supports the development of global citizens, together with The Duke of Edinburgh's international youth award and other activities.

The Global Citizenship Award at ShenZhen College of International Education is an integrated programme. It ensures that the educational objectives of the College are being addressed through the academic and the co-curricular programmes. This started with a sophisticated mapping exercise of skills and habits the school identified as important to the curriculum. They then added a co-curricular dimension, along with ways of encouraging and recording student involvement.

Bromsgrove School created their own bespoke Learner Profile supported by the Bromsgrove Award and Badge system.

Confucius International School, Qingdao introduced the Six Arts curriculum in order to develop a unique programme blending the best of Confucian and Western traditions.

Case study 4:

Jamieson Programme at Frensham, Australia: Grit, gratitude and good humour.



Watch the video at
<https://vimeo.com/228213301>

Unique to Frensham, the Jamieson Programme is built on the belief that teenagers are risk takers growing up in a complex and rapidly changing world. In order to thrive they must develop empathy, self-control, integrity and grit – as core personal attributes. Based on the precept of experiential education, the programme offers real-world challenge through engagement in new physical, intellectual and emotional experiences in a secure, stimulating environment that is inherently exciting and immensely rewarding.

The Cambridge IGCSE® course Global Perspectives, which the school added to the Jamieson Programme in 2012, is a perfect fit in terms of preparing students to be global citizens of the 21st century. Developing global competence is a core focus of the Jamieson Programme, whose goals are closely aligned with the Cambridge learner attributes.

Responsibility in action, or 'character in action', is a fundamental principle that guides students in a diverse range of activities and leadership experiences. Frensham girls are encouraged to embrace challenges and undertake service activities with 'grit, gratitude and good humour', qualities that awaken a belief in themselves that will stay with them throughout their lives.

Frensham's Jamieson Programme

From its origin in 1986, the Jamieson Programme has become an integral component of Frensham's curriculum. The Programme continues to develop, as each element is tested and reviewed and each activity refined.

Case study 4: continued

The Jamieson Programme has four goals, which provide a focus for students aged 12–16 in Years 7 to 10:

1. Global citizenship: to develop an understanding of your responsibilities as a global citizen; to develop an intelligent perspective about other cultures.
2. Health/fitness and physical challenge: to develop and sustain a healthy lifestyle; to understand and develop your physical capabilities.
3. Critical, ethical and flexible thinking: to develop a love of learning; to become a skilled and critical user of technology; to become a disciplined learner; to develop creativity coupled with a strong work ethic; to develop a deep understanding of mathematics, literature, science, history and the arts.
4. Responsibility, service, leadership: to be the best you can be; to understand and act on your environmental responsibilities; to develop an awareness of, and to act on, your responsibilities to help those less fortunate.

The students meet these goals through regular programmed activities tailored to the needs of each year group. Activities include:

- community service
- outdoor education
- leadership (through, for example, the School Forum and peer support programmes)
- specialised courses in subjects such as presentation skills, personal development and financial literacy
- Jamieson Weekends (when all students remain at school to participate in planned activities)
- Jamieson Week (the final week of the school year full of activities dedicated to the goals of the Jamieson Programme).

The Jamieson Programme – Year 9 experience

The Jamieson Programme for Year 9 targets specifically their personal needs at what is a crucial time in adolescent development. In addition to ongoing involvement with their Year 12 mentors and acceptance of increased responsibility with Junior Houses, each fortnight Year 9 students engage in a mandatory extended-day curriculum from 13.30 to 20.30. During this time they undertake the Cambridge IGCSE Global Perspectives course, exploring key global issues from a personal, local, national and global perspective. The extended day also gives the Year 9 students the opportunity to work together as a whole cohort in a range of activities spread across each term including: community service, environmental projects, personal fitness, health and well-being workshops and challenges, religious studies and study skills.

Integral also is participation in a three-day residential Global Forum, where Year 9 students have the opportunity to engage with global thinking in a range of collaborative workshops with guest speakers from local, business, sporting, social justice and artistic communities. The Global Forum is directly linked to the Cambridge IGCSE Global Perspectives course and the three-day immersion in ideas adds significantly to the outcomes achieved by all students. A cornerstone of the Global Forum experience is working, learning and playing alongside students and teachers from an Intensive English Learning Centre (a school for students who have recently arrived in Australia).

Year 9 also engages in a mandatory programme associated with The Duke of Edinburgh's Award scheme. This includes an outdoor education camp, a caving expedition, overnight expeditions and service activities. Students can also undertake additional service activities that contribute to The Duke of Edinburgh's Award, such as visiting nursing homes, environmental management and the Addis Ababa Fistula Hospital Project. At the end of the school year, Year 9 joins with the rest of the school in Jamieson Week, a whole-school focus on Jamieson Programme activities.

Student reflections

“ We are emerging as global thinkers who do not just picture our own lives but consider the perspectives of others. ”

Holly, Year 8

“ You don't have to do something extraordinary in your life to make a change in the world; little steps can have a big impact. ”

Sophie, Year 9



Case study 5:

The Global Citizenship Award at ShenZhen College of International Education (SCIE), China

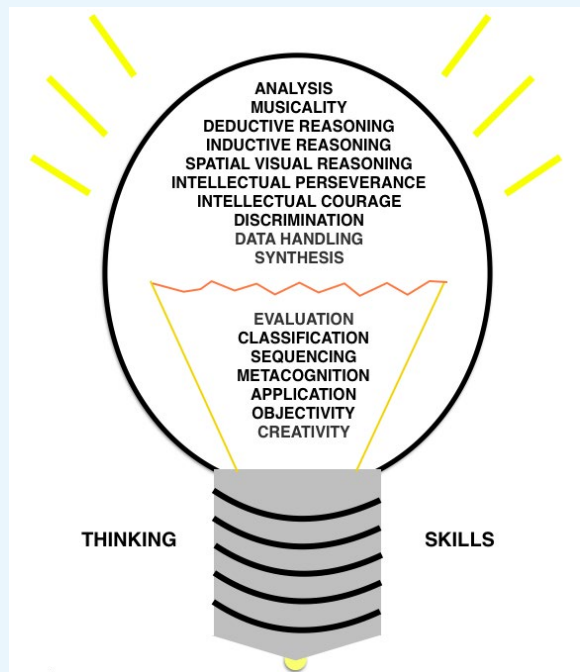
Most schools have a set of educational objectives, skills and attributes, which the curriculum and extra-curricular programmes are designed to promote. A similar set of objectives are defined by Cambridge as the learner attributes. However, unlike examination results, which provide objective data against which to measure performance, the softer skills and attributes – teamwork, leadership, environmental awareness, empathy – tend not to be so easily quantified and measured.

The story began at SCIE after the Council of International Schools accreditation visit suggested that a clearer definition of international-mindedness should be created and that measures to assess the effectiveness of its implementation be devised. The first stage involved identifying the broad aims of the curriculum, supplemented by a range of activities designed to promote those skills.

The first area to be developed was international-mindedness. The process began with staff seeking to identify what was meant by international-mindedness in the context of our school and our country. We agreed upon a set of strands, running through the whole curriculum. In each scheme of work, opportunities were identified to address the most appropriate strands. These key activities, which addressed each strand, were then plotted on a **whole-school patchwork**, showing how the various strands are embedded in the curriculum. A similar process then took place for the remaining areas, including social skills and thinking skills.

The various skills and attributes within each category were identified, individual courses were examined and opportunities for promoting these skills and attributes were considered and plotted on the patchwork. We were then able to show how the various aspects of the curriculum are embedded into the courses.

Case study 5: continued



SCIE set out clearer definitions for thinking skills and social skills



We could also map the development of these skills throughout the four-year teaching programme on each subject curriculum map. View example of business studies curriculum map at www.cambridgeinternational.org/images/411331-business-studies-curriculum-map.pdf

In addition to identifying the activities, we felt that it would be beneficial to develop a method of recording students' involvement. Given the difficulty of conducting formal assessments of these skills and attributes, we felt that student participation could be recorded as evidence of the process taking place. At the same time, we had

a separate community service and extra-curricular programme known as the Development Award. This required students to meet certain standards in non-academic activities and community service.

Case study 5: continued

Rather than having two separate awards, the sensible option was to combine these two into the Global Citizenship Award. By doing this, we created an integrated programme which ensures that the educational objectives of the College are being addressed through both the taught curriculum and co-curricular programmes.

The Global Citizenship Award was created with four levels:

Y10 Global Freshman Award

Y11 Global Sophomore Award

Y12 Global Citizen Award

Y13 Global Leader Award

At each level, there are three standards available: Award, Merit and Distinction. Students earn points from their teacher, which vary depending on whether Bronze, Silver or Gold is awarded, and by the nature of the task. For example, each hour of community service earns 10 points. We required a system to allow teachers to input records of student activities and for students to be able to check their progress towards the award. This was done via the College Information Management System, which had the added benefit of creating a record of activities and achievements for students. This record can be used when writing pastoral comments for reports or when writing references for university applications, and can generate a non-academic transcript for students to exemplify their rounded education experience.

The programme was introduced in 2016–17. It will take at least one year to find out how many points students earned on average and to set the future levels accordingly. As time passes it may be necessary to adjust boundaries as students become more engaged in earning points. To add validity to the Global Citizenship Award programme, and to increase the interest of students and parents, it was decided that three of the annual student scholarships should go to the highest scorers in the Global Citizenship Award.

We hope that the end product will be an integrated system, which effectively recognises and records all aspects of the students' non-academic experience at the College. It will promote the skills and attributes which form part of the core values of the College and will generate a record of achievement for students. The project also helped to engage staff in the schemes of work and aligned them more closely with the College's educational goals. On the whole, it was a valuable and worthwhile project.

“ The Global Citizenship Award ensures that the educational objectives of the College are being addressed through both the taught curriculum and co-curricular programmes. ”

ShenZhen College of International Education

Case study 6:

Developing the Cambridge learner attributes at Bromsgrove International School, Thailand

The reward system at Bromsgrove is unique in developing our learners' awareness of the world around them and of the competences they are developing every day within and outside the classroom. We have created our own, bespoke Learner Profile, which all staff use to develop attributes which all our students need in order to become successful global citizens who are reflective, creative and responsible, and also ready to lead and inspire others.

All students at Bromsgrove from early years through to Year 13 engage actively with the Learner Profile. Recently we recognised the need to develop the areas of service and leadership among our students as the next stage of the development of the Learner Profile. So we came up with the concept of the Bromsgrove Badge and the Bromsgrove Award. These, along with the Learner Profile, help our students to develop the competences required for success in their Cambridge exams.

The Bromsgrove Badge and the Bromsgrove Award are opportunities for students to show how they have progressed in the different aspects of the Bromsgrove Learner Profile and also look at Service and Leadership in the Upper Key Stages. Primary students work towards the Bromsgrove Badge, with Years 2–4 focusing on the core attributes of the profile. Students have to complete six tasks to earn each Bromsgrove Badge. We decided that a more prescriptive approach would be most effective with our youngest learners. During Years 5 and 6, students engage in student leadership activities and in Year 6, complete a student leadership project that counts towards their Bromsgrove Award.

In Secondary, students independently choose a specific attribute to work towards to develop their unique portfolios, with different Key Stages focusing on different areas. They set their own targets, with guidance from their form tutor if required, to allow them to explore areas about which they are truly passionate. When they have achieved the targets, they will have earned the right to apply to be considered for one of the Bromsgrove Attribute Awards.

In Key Stage 3, students focus on the following attributes:

Curiosity, Risk Taker, Determination, Team Player, Positivity, Kindness, Independent

In Key Stage 4, we add:

Service, Creativity

The award culminates in Key Stage 5, when they also explore:

Leadership

To develop this attribute, Sixth Form students lead the student committees. They also lead extra-curricular activities, which has a direct impact on younger members of the school community.

An important part of the scheme is that students are required to take ownership of their work. They can document their progress in any medium, and the response has been exceptionally creative and varied.

Students are encouraged to see the Bromsgrove Badge and the Bromsgrove Award as a long-term project, not simply a tick-box activity. This complements our school's vision to develop life-long learners who are committed global citizens. We celebrate the success of students in a termly Bromsgrove Award assembly and it is also a key part of our BEAM (Building Effective Attitudes and Mindsets) Pastoral Programme.



View Bromsgrove Badge 'curious' tasks at: www.cambridgeinternational.org/images/410941-bromsgrove-badge-curious.pdf



View Bromsgrove Badge 'independent' tasks at: www.cambridgeinternational.org/images/410943-bromsgrove-badge-independent.pdf



View Bromsgrove Badge 'teamwork' tasks at: www.cambridgeinternational.org/images/410942-bromsgrove-badge-teamwork.pdf

Case study 7:

Bringing ancient education traditions into the 21st century at Confucius International School Qingdao, China (CISQD)

Confucius International School in Qingdao, China (CISQD) was founded in 2009 by the direct descendant and current head of the Confucius family. It is the first educational initiative of its kind to unite the best practices in Western teaching with Confucian teaching and principles.

Confucius considered that a primary goal of education was to produce capable individuals (*xiancai*) – whom he also called *shi* (gentlemen) or *junzi* (men of quality) – who ‘combined competence with virtue’ and whose subsequent careers in administration and government would bring about the ideal of a kingdom managed with integrity. Confucius believed that education plays a fundamental role in the development of society and of individuals. By raising individual moral standards, it renders society more virtuous. His ethics, philosophy and politics are a cohesive unit, rooted in ‘humanity’ or ‘benevolence’ (*ren*).

Confucius’s philosophy of education focused on the ‘Six Arts’: archery, calligraphy, computation, music, chariot-driving and ritual. These concepts have been modernised and made relevant to the modern world at CISQD, while retaining their essential meaning, to form the basis of a broad and balanced curriculum. Newly enrolled CISQD students are provided with the Confucian Six Arts Passport, which will document their engagement in all aspects of the Six Arts throughout their time at CISQD. Documentary proof of continuous engagement in the Confucian Six Arts is a graduation requirement of CISQD and will be a component of the graduation requirements for all CIS schools.

See Case study 16 in Chapter 6 which considers how the Confucius International School develops student leadership based on the Six Arts programme.

Acknowledgments:

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