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PROGRAMMES

# Agency

## Learners in charge

Teaching for Success

Simon Davidson



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# Introduction

## Agency in IB: Learners in charge of their learning

We all like to have some control over our lives and what happens around us. From childhood, we do not like to be forced to eat certain foods. We get frustrated when we lose control of our work situation. We feel inspired when we are in charge of something interesting or important to us. We like to be able to organize our own homes and our free time. We like to feel that we can influence events.

When I was a child in school, I liked it most when I felt in control. Sometimes this was in the playground, helping to organize football teams. Other times I worked out for myself how to calculate an integral, or I wrote the wording for motions for a student-run debating society. I was less engaged when I had to work in a specific way through an exercise that seemed irrelevant to me.

When I first started teaching, I disliked how little agency my students sometimes had, but I found it hard to balance controlling difficult classes with empowering them to learn in their own ways. Without knowing the term, and without the skills to do it, I always wished to give them agency, with more active roles in their own learning. Perhaps that is one of the reasons why I gravitated towards the IB programmes.

## Agency is a complex concept

Rather than merely ‘letting go’ of control, we, as teachers, look at how students can progressively ‘take control’ of all the aspects of their own learning, and eventually be in charge of their own lives. We keep both the student and their learning at the centre, as we see how a student becomes a ‘learning agent’ through ‘self-efficacy’ (their abilities and confidence to succeed in specific situations and accomplish tasks).

For us, agency does not take the rather weak meaning of an intermediary, like estate agents arranging the letting or selling of properties. Rather, an agent is in charge of themselves. This is worth more than James Bond’s ‘double 0’ code – students are all special agents of their own learning.

Agency highlights how people act, how they make decisions and how they learn to think for themselves. The concept of agency helps us avoid some of the traps common to student-centred learning, such as dwelling too long on a student's particular likes and dislikes. Instead, it brings out what is central to their learning: how students make decisions; how they develop organizationally; the skills they need to manage their own learning. It shows how they self-evaluate and set goals.

This book is about putting the spotlight on such learners and what learning means to them. It does not claim to introduce brand new insights, but it brings together some important ideas and concepts, under the umbrella of understanding the implications of agency for learners who use the four IB programmes.

## ■ Chapter previews

We begin with an overview of agency in Chapter 1. The following three chapters (Chapters 2–4) look at the three aspects of agency identified by the IB: voice, choice and ownership. A student's voice helps them when working out and expressing their own thinking, as well as being aware of the thoughts of others. Choice moves beyond simply selecting preferences, to being aware of one's own learning and considering options before making choices. When their voice is heard and their choices respected, students develop their sense of ownership. This brings the intrinsic motivation and responsibility for one's own learning that leads to long-term success.

Chapter 5 looks at the relationship between agency and the most relevant models of learning for the IB. These models are developing, due to advances in psychology and changes in society, and they present new challenges and possibilities.

Chapter 6 looks at the extra need for agency in the twenty-first century, while Chapter 7 looks at the tradition of developing agency through the IB programmes, for example, in the core of the Diploma, and how approaches to learning provides a useful language for continuing to enhance agency in IB learning.

Chapter 8 looks at how the work of Carol Dweck can help us provide students with mindsets that support agency. Chapter 9 looks at how students with individual learning needs benefit from a particularly strong focus of agency, so that they learn to take charge of whatever modification or accommodations will make them most successful.

Chapter 10 emphasizes how a deeper and more authentic sense of rigour comes from a thorough approach to agency – sometimes it can look like the most rigorous approaches come from a tight sense of control from teachers and school management.

Chapter 11 looks at how agency is not just individual. It arises from a healthy community which jointly owns learning, with a clear sense of purpose, and with roles and relationships that support students with developing their voices and making their own choices.

Chapter 12 looks at how teachers can also foster interaction, by using forms of interaction and planning that promote agency most effectively. Chapter 13 then looks at how play promotes agency, and how flow and gamification can enhance learning.

Chapter 14 looks at service learning, which can provide one of the most meaningful contexts for students to develop and apply their own agency to real-world situations and genuine needs. It is not only students' learning that benefits from agency. Teachers' professional learning, as well as their actions, are at their best when they have meaningful voices and choices, and when they take ownership of their professional growth. This is explored in Chapter 15.

Chapter 16 concludes by summarizing the potential and the challenges of making agency central to our vision for learning.

## ■ Not only IB

This book is written particularly with IB schools in mind, and to work across the four programmes, but the ideas are relevant to all forward-thinking educators. Best practice is not, of course, limited to IB schools. Many teachers wish their students to become autonomous and empowered learners, who will develop the tools to continue learning throughout their lives. This book stems from IB practices but it is not written to be exclusively used by IB schools, and blends IB vocabulary with terms commonly used elsewhere.

## ■ How to use this book

Naturally, since readers are also agents in charge of their own thinking and professional practice, one should feel free to use the book in any way that is helpful. To help with this, each chapter starts with an 'In a nutshell' summary of the chapter. Some readers may prefer to read only the summaries before choosing which chapters are most relevant to read in depth. Some may prefer to read individually, others as part of a professional learning community. This book is only a starting point. Be an agent – make its ideas your own!



# What is agency?

## IN A NUTSHELL

- Teaching has traditionally been very teacher-led. Even in student-centred approaches students' perspectives can be overlooked, and they can be very dependent on their teachers for organizing their learning.
- The concept of agency helps us to better focus on how students can increasingly determine and drive their own learning.
- We use agency to look at students' self-efficacy – their ability to be autonomous, to organize and carry out courses of action to attain their own goals.
- This extends across three interconnected aspects: voice, choice and ownership.
- Agency has huge implications for how we develop our school community, communication and interaction, and the professional development of our staff.
- To help show agency as a continuum, I introduce four levels of agency which I will develop for voice, choice and ownership in the following chapters.

## Agency

Students develop agency as they learn to run their own lives and take charge of their own learning. Agency grows when they talk about their learning and their lives in ways that are meaningful to them. We see their agency when they are involved in decisions about what and how to learn, so that *their* school is about *their* learning. This is quite a contrast to traditional schooling, where students are recipients of learning that is laid out by the teacher under the assumption that responsible professionals organize almost everything for the students. Perhaps some of the following scenarios are familiar to you.

### ■ Scenario 1: Copy and recall

Now, boys and girls, copy down the sentences on the board and write them out ten times.

I hope that this is only familiar as a history lesson, a stereotype from when learning was dominated by a narrow model of teacher-centred transmission. It harks back to a previous age, before the exciting, modern world of photocopiers, countless worksheets and glorious electronic devices. We think back to when students were seen as passive receptacles of teaching and were drilled until they learned something or gave up. We can be happy – smug even – that we have moved well beyond such outdated and ineffective lessons.

## ■ Scenario 2: PowerPoint

Technology now provides a much more attractive ‘glossy’ approach to information transmission. Many of us are familiar with the ‘death by PowerPoint™’ lesson, where information is shown between impeccable transitions, with colourful pictures, and sometimes, if we are lucky, engaging animations.

Thinking about agency makes us focus more on the students’ role. They still often watch and listen, waiting to be guided step-by-step about what to write. We can make it seem slightly more modern by calling it ‘concept-based’ and flashing definitions of big ideas on the whiteboard for students to copy without really understanding them, but their role only changes slightly. When we provide adult language definitions of abstract notions such as ‘connections’ and ‘causation’, we have to be careful in case biddable students repeat them back to us without thinking through for themselves what they mean. Students can seem to have become thinkers, if we do not think too hard about it, because they repeat our ‘educated’ voice rather than developing one of their own.

Agency helps by focusing on the students themselves, their thinking and their roles. When we listen attentively to students’ voices, we start to hear when too much is just echoed back from adults rather than what they are genuinely thinking through. When they only have passive roles, they do not take any significant decisions.

## ■ Scenario 3: Teachers’ assessment

We can also reduce agency in much subtler ways:

I’ve noticed from your last assessment that you need to improve your tables recall/paragraph structure/spelling/biology diagrams. (Select whatever is most relevant to your own teaching.) Practice like I told you and I will test you again at the end of the week.

This seems much better. It is apparently informed by data, but these students are still receiving the teacher’s plan uncritically. They are being processed. Agency helps recognize this by putting a spotlight on how students are thinking, evaluating, creating and inferring for themselves – how much they are true IB learners.

## ■ Change of emphasis onto learning

Agency is a change from looking at teaching. Instead, it looks at what each student learns to do for themselves, throughout the learning process.

In the past our schools have catered mostly for groups of learners, for classes of kids, with a one-size-fits-all approach. Arguably, many students felt disenfranchised in the midst of that, as they just had to sit and do what they were told. Lessons were delivered to students who were passive in the way that they received that.

[core-ed.org/research-and-innovation/ten-trends/2014/learner-agency/](http://core-ed.org/research-and-innovation/ten-trends/2014/learner-agency/)  
(Accessed 14 June 2019)

It is not that we have failed to make learning active and engaging. It is just that busy learning does not in itself ensure that students are developing their voices to the full; making increasingly informed choices; owning their learning.

It can be tempting to look at early learners busily playing together, or primary children concentrating, or secondary students studying hard to learn content, and say that they are getting everything that they need. However, our goals should go beyond students being busy and engaged. Some students are particularly happy when they are busy and do not have to think for themselves! The role of the students in their thinking, the choices and the decisions they make, is just as important.

The real test of engagement is not in being happily busy, but in having a drive to be a learner, and in gradually taking over all the aspects of learning until you can learn independently, in school and throughout the rest of your life. Agency requires more than a ‘hands on’ classroom where students can be physically active, but mentally dependent on teachers. Agency requires a ‘hands on – and think it through for yourself’ classroom.

Applying the ‘used to think/now we think’ routine from Visible Thinking, we used to think that active learning was sufficient to have students become lifelong learners, but now we think that they need to become agents in charge of their own learning. You can read more about Visible Thinking on their website: [www.visiblethinkingpz.org/VisibleThinking\\_html\\_files/VisibleThinking1.html](http://www.visiblethinkingpz.org/VisibleThinking_html_files/VisibleThinking1.html).

#### ■ Scenario 4: Science

I have seen countless science experiments, even in IB schools, when the students are given materials, a set of instructions to follow and a table to fill in. Because it is an IB school, they may have a ‘prediction’ to write and then perhaps forget, and a conclusion to write, which is sometimes even dictated so that students get the perfect notes they ‘need’.

Agency helps us turn around our approach so that experiments become a way for students to think through concepts for themselves. Young learners might be seeing for themselves how mud can become sticky. Chemistry students might think through for themselves the possible structures of ozone (O<sub>3</sub>) and how to explain them, or work out how to design an experiment that tests for energy changes from one form to another. It helps ensure that they are authentically involved in making choices, explaining their thinking and designing experiments.

This takes much longer. It needs a high level of expertise and engagement from teachers, who have to follow and guide students' thinking carefully. However, agency is worth all the hard work! It provides students with the deepest possible learning – and also develops the skills needed to excel in Diploma Programme (DP) internal assessments – so it is best to start as early as possible.

### ■ Great examples

There are great examples at all age groups of IB learners taking control of their learning, from very young students selecting activities and challenging themselves every day, to Diploma students organizing their own Creative, Activity, Service (CAS) activities or Extended Essays (EE). To see how this works, and to make this situation the norm, we need to look at the decisions students make and the skills and habits they are developing that will sustain their own learning. We need to see how much of the learning came from the teachers, and how much from the students themselves.

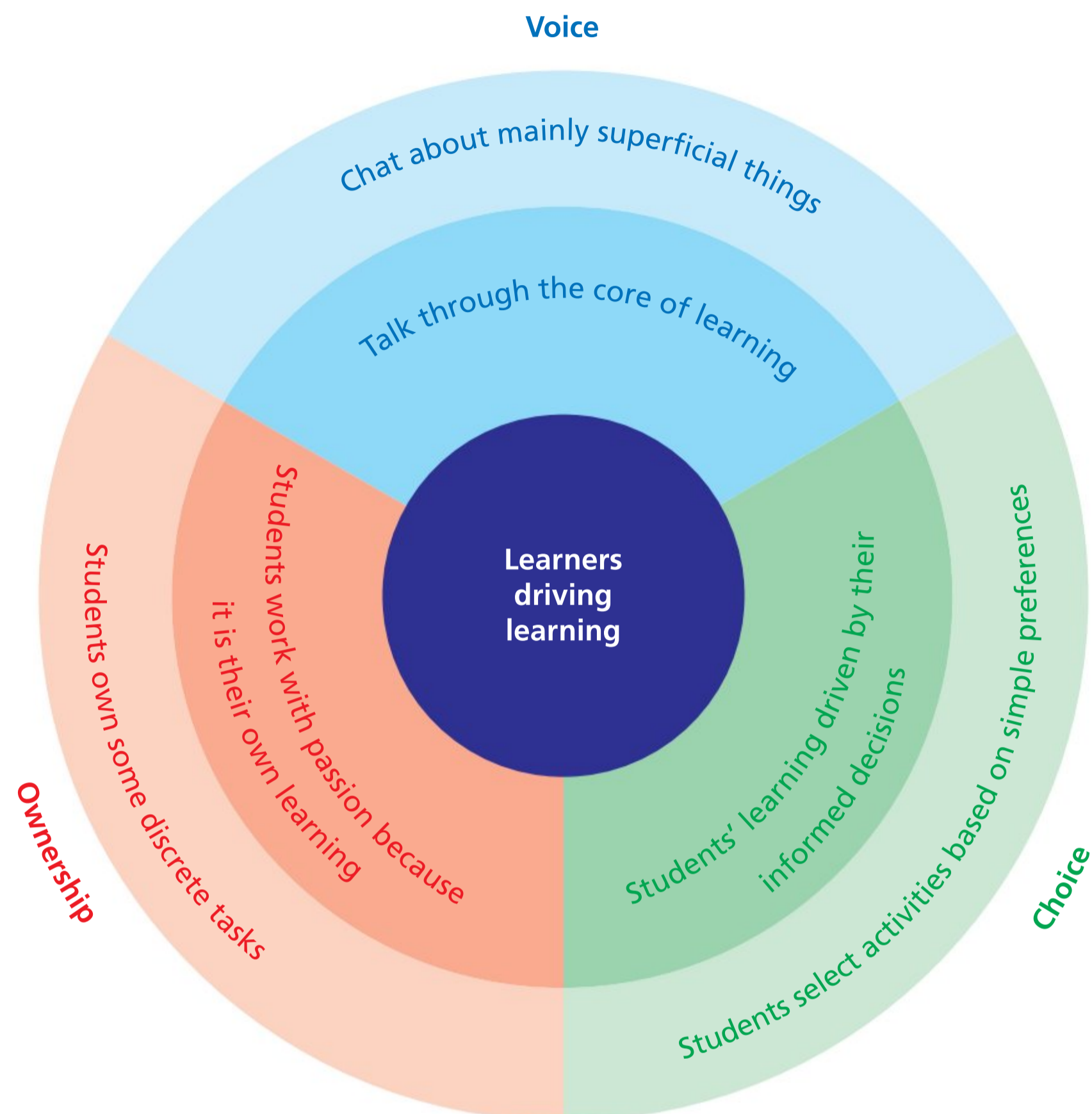
### ■ What is agency?

This takes us to a closer look at the definitions of agency. In the social sciences it can be:

- an actor's ability to initiate, plan and maintain a programme of action, or
- an actor's ability to act independently (Campbell, 2009).

We need to examine the different aspects of students taking control, and agency provides a set of ideas in how to do this. A key term here is *self-efficacy* – the ability to be autonomous, to organize and carry out courses of action to attain desired goals (Bandura, 1997). We can see education as the process by which students develop their abilities to think and act for themselves in a variety of powerful ways, across the curriculum and applied to practical situations.

Since we will look at agency mainly from an IB point of view, we will now look at the IB's approach to agency, which helps identify its key features.



A cross-section of how agency is driven by voice, choice and ownership.

## ■ Agency in the IB

Agency has formally been part of the IB Primary Year Programme (PYP) since October 2018. However, all IB programmes have had student agency since the founding of the DP in 1968, when it went beyond simply providing an internationally recognized university admissions qualification for mobile young people. The IB has always had high aspirations for developing mature young people with the personal and mental qualities to act as responsible global citizens. The start of the IB Diploma has included three core elements (Hill & Saxton, 2014), which all develop students' agency:

- In the Extended Essay students develop and follow their own lines of research.
- In Theory of Knowledge (TOK) they study multiple perspectives about knowledge and develop awareness and agency over their own thinking.



Students engaging in service in the community develop self-efficacy.

- As part of CAS, students engage in service where they make decisions and are responsible to a breadth of physical, creative and social engagements. CAS should never, of course, be about counting service hours. At its best it has always been about developing responsible students with self-efficacy.

### ■ Enhancing the role of agency

In the enhanced PYP, launched in October 2018, agency now plays a key role. It is likely to have a similarly explicit role in the other IB programmes in the future; it is emerging as a major organizing theme. Since the enhanced PYP was launched, every IB school that I visit says that ‘agency’ is the new element that makes the most difference, and that it is relevant across all their programmes. However, there is still a huge variety in what agency looks like in different schools, with different schools having different insights, as we learn together how best to use the concept of agency to develop our students.

### ■ The three aspects

As part of the extended PYP, the IB identifies key aspects of agency (IBO, 2017).

Agency is the power to take meaningful and intentional action, and acknowledges the rights and responsibilities of the individual, supporting voice, choice and ownership for everyone in the learning community.

IBO, 2017

Voice, choice and ownership are all expanded in the coming chapters (specifically Chapters 2, 3 and 4), but here's a very brief overview.

### ■ Voice

Voice provides students with the ability to express themselves and be heard. It emphasizes learning from a students' point of view. They talk and listen meaningfully about themselves, their learning and their learning community.

Voice is relevant for all ages: young learners are beginning to express themselves outside the home, while adolescents need to spend time developing their abilities and sense of self. All adults in school need a voice to be fully part of the community.

### ■ Choice

Choice can be much more than making a simple option within an activity. For students to make good choices, they need to develop their metacognition and self-regulation. They need to be aware of their learning journeys and be involved in setting and monitoring their next steps. This helps them make informed decisions about their learning. This is vital for having truly effective differentiation, which rarely works smoothly and consistently with only the teacher making choices. Well-developed choice also leads to thoughtful action, which is more likely to be initiated by learners the more they are used to making important choices.

### ■ Ownership

Students are more motivated and successful when they have control over their learning and when the learning is connected to their interests. They understand school as *their* community which sustains *their* learning. Ownership increases as their voices are heard and their choices are respected.

For students to become self-directed learners who own their learning, they need to share the responsibility for their learning. Responsibility needs some student empowerment which is grounded in shared values and purpose, so a well-functioning learning community plays a central role.

Owning their learning helps students become citizens in charge of their lives and, if we have done our job properly, citizens who are internationally-minded and own their responsibility to act ethically.

### Aspects of agency

#### Voice

- Communicate
- Self-advocate
- Include all voices – equity and international

#### Choice

- Students making decisions about their learning
- Using metacognition
- Setting goals and selecting strategies

#### Ownership

- Identity as agent in each subject
- Shared responsibility
- Shared ownership of the learning space

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### Communities for agency

Culture of respect, positive relationships

#### Teacher roles

- Executive
- Setting direction and providing provocations
- Planning for students to plan for themselves

#### Student roles

- Becoming self-sufficient
- Discussing and debating ideas – with each other, not just through teacher
- Self-management and executive functions

The three aspects of agency and the two communities for agency.

## ■ Different levels of agency

Students cannot get to the deepest level of agency straight away. That is normal – and quite okay. Agency should not be seen as an intimidating and unrealistic learning utopia, but a progression from low agency to high agency through which both students and adults move.

I therefore suggest various levels of agency for each dimension of voice, choice and ownership. These approaches are not meant to be definitive, but to present some of the dimensions along which students, and other learners, develop.

I encourage readers to develop their own rubrics to match their circumstances.

## ■ Level 0: No agency

The teacher decides everything. Students follow and demonstrate successful compliance. They may be successful in narrowly-focused assessments, but they do not develop agency and are not prepared to organize their own learning in later education or in life.



■ **Level 1: Apprentice**

Students are getting started on agency. They are learning to use their voice, making relevant choices about their learning, and have some sense of ownership.

■ **Level 2: Capable**

Students are working effectively on their own learning.

■ **Level 3: Accomplished**

Students are agentic learners with a mature approach.

■ **Level 4: Exemplary**

Students are doing something extraordinary. Perhaps they are taking charge of extended projects, where they think critically and sustain their own work, or perhaps they are combining many aspects of agency. They are certainly well-prepared for life's great challenges.

## IN A NUTSHELL

- There are many different aspects of voice, from simple listening in a discussion about how students feel, to systematically developing students' abilities to consider and express their voices about key aspects of learning and contributing to how a school is run.
- All staff across all subject areas inside and outside the classroom are responsible for developing students as communicators.
- A particular use of one's own voice is *reflection* – a voice of self-awareness about learning. This voice guides and directs one's own learning and can initiate action.
- As they develop their own voices, students need to *listen to all voices*. This is fundamental to equity and inclusion in the school, and to international mindedness. It includes hearing and valuing different community languages and dialects, including the non-standard dialects of disadvantaged students, and seeking out traditionally unheard voices.
- Voices are developed through students taking roles that articulate issues, and through learning to say things even when they are difficult.
- Students' voices should have an impact across the life of a school. Teachers can draw on student voice by systematically collecting feedback from students and using this to guide planning and learning. Schools can draw on student voice for guidance and to inform governance.

## Communicators have a voice

The IB places a great value on communication (IBO, 2017).

'Communicators' is a key part of the Learner Profile, so that students:

... understand and express ideas and information confidently and creatively in more than one language and in a variety of modes of communication. They work effectively and willingly in collaboration with others.

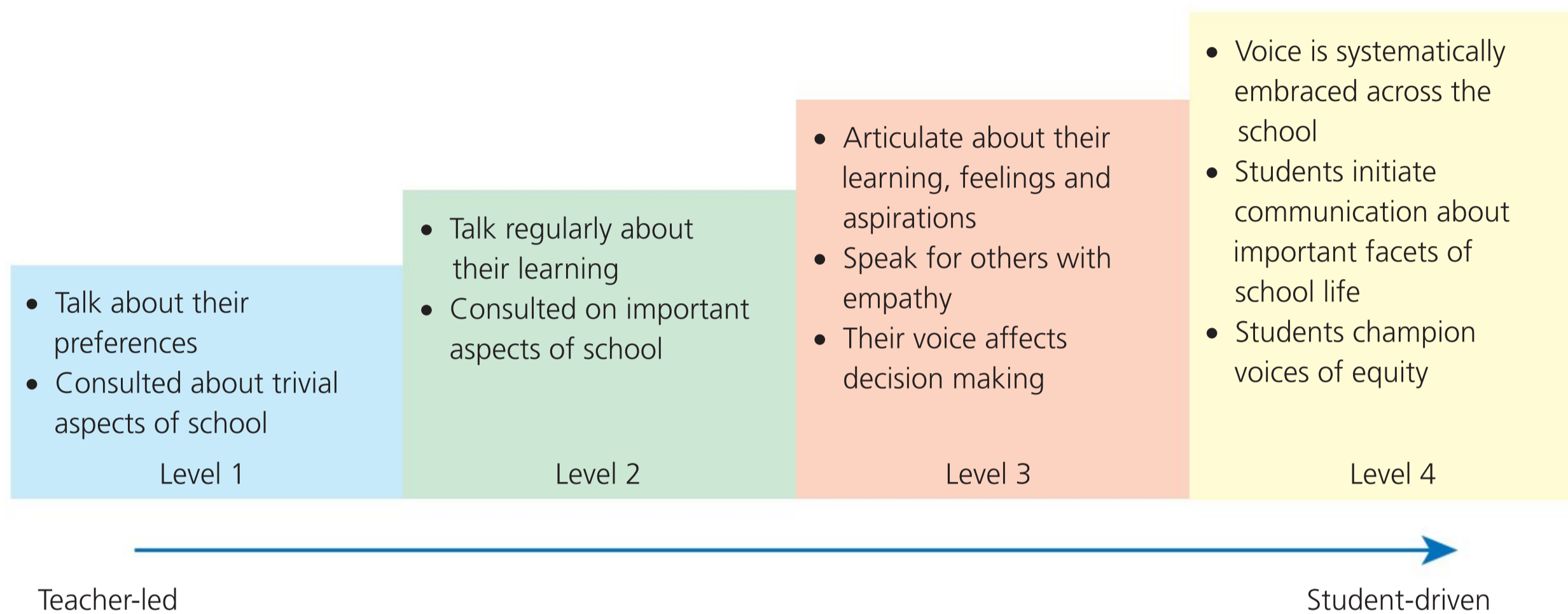
IBO, 2017

This core value is strengthened in the voice component of agency. Communicators have a voice. We want our students to be seen and heard, to be articulate about their learning and about their lives. Internationally-minded citizens also listen to global voices and strive to understand them – even those that they might disagree with.

### ■ Many levels

Voice has a huge scope, from asking students what they would like to choose in free-choice time, to consulting focus groups or a school council before deciding the strategic direction of the school. Although developing voice does not fit a linear spectrum, there is some progression in how students develop it.

Students have to first build a set of ‘voice’ skills, where they can articulate their preferences, beliefs and aspirations to themselves and to others, before they can be thoughtfully included in governance. With this in mind, I propose four rough levels of voice (as well as a level with no voice).



The four levels of voice development.

### ■ Level 0: The teacher’s word is law

- This is seen as an outdated attitude to voice – in many nineteenth-century classrooms, for example, students had no voice.

### ■ Level 1: Apprentice

- At this level, students are starting to talk about their preferences and their satisfaction with their learning, but at a very simplistic level. They can answer surface-level questions about opinions and feelings.
- They are consulted on mainly token issues, but rarely about planning or issues central to the school. This is not to say that talking about simple things is not valuable – it can often be an important part of building relationships. However, the voice journey needs to go deeper.

### ■ Level 2: Capable

- When students are capable users of their voice, they are consulted on important things – although the consultation process is still mainly initiated by adults.
- Students also talk about their learning regularly throughout the day, with a focus on what works effectively for each student, including at least some evidence. (*How do you learn this best? How do you know?*)

- Students do not only articulate the positive – they are confident to express a broad range of reactions constructively and to identify some problems, as well as talking genuinely about what engages them.
- Teachers model and scaffold voice by talking the students through their own learning and their classroom organization. Adults also talk to students more about what is important to them. Remember, voice is never one way.

### ■ **Level 3: Accomplished**

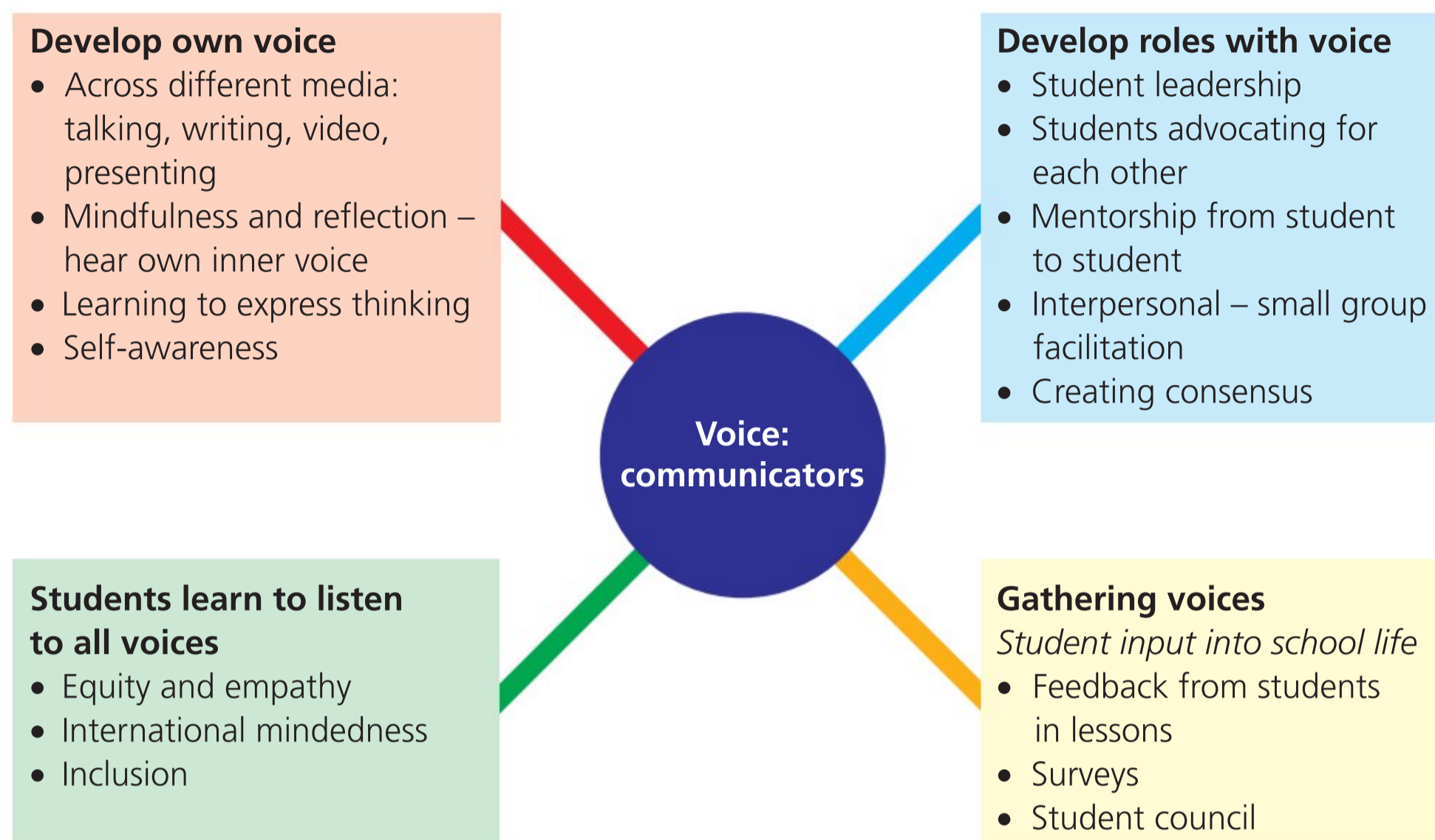
- Accomplished students participate actively in decision making. They can help articulate what actions to take and give evidence of their achievement.
- They talk about important aspects of their learning and identify both significant strengths and issues to address. They are included in addressing some of the big issues of learning, such as planning and assessment.
- Accomplished students actively embrace equity. They are part of an inclusive culture that ensures all students' voices are heard. By this level, students are promoting equity themselves.
- Students articulate possible strategies as well as feelings and aspirations – with only some prompting.

### ■ **Level 4: Exemplary**

- At an exemplary level, student voice is systematically developed in the classroom and throughout the school. It is used to help evaluate the overall direction of learning, and it has an impact on improving the quality of learning.
- Students independently make connections and articulate them.
- Student leaders drive some aspects of decision making in the school, with adults in supportive roles only sometimes.
- Equity has a high priority, including articulating voices outside school.
- Students respond to each other's contributions as much as the teacher's.

### ■ **Key features of voice**

- 1 It is the role of all staff to help students **develop their own voices**. They develop them across all subject areas – and this is key to being communicators.



The key features of voice.

- 2 As they develop their own voices, students need to **listen to all voices**. This is fundamental to equity and inclusion in the school, and to international mindedness. It includes hearing and valuing different community languages and dialects – including the non-standard dialects of disadvantaged students.
- 3 **Reflection** is also a form of voice – a voice about your own learning. As reflection develops, students use an internal voice about their learning to guide and direct. They form questions, make decisions and propose and initiate action.
- 4 Students **develop roles** with voice.
- 5 **Teachers** can draw on student voice
- 6 **Schools** can draw on student voice for **guidance** and involve it in **governance**.

## ■ Developing students' voices

Developing students' voices includes getting students to express themselves clearly and making sure that the voice includes a clear focus on learning.

### ■ Get students expressing themselves clearly

All teachers develop the Learner Profile, so all help their students to become communicators. This means that whatever subject one teaches, students are taught to express their thoughts orally, to find their own voice in writing, and perhaps to extend their voice through other media such as video.

The first step can be simple – teachers talking less. In classrooms where the teacher does most of the talking, it is difficult for students' voices to resonate. This is one of the biggest errors in traditional classrooms, and it sometimes remains in IB classrooms where the teacher keeps too big a role for themselves.

As a rough guide, teachers should not talk more than ten minutes in one period. Even if a class of 20 has as much as half an hour of discussion in a period, ten minutes teacher talk leaves only one minute for each student. Twenty minutes teacher talk would only leave 30 seconds per student.

It is useful for teachers to try using a timer to see how much they really talk – most of us are surprised by how much of the discussion we dominate. Chess timer apps are useful – instead of swapping over time between playing white and black pieces, you swap over from teacher to students' turns to see easily how much time is given to the teacher and how much to students.

A simple way of extending voice in class discussions is to encourage students to respond to each other – not always going through the teacher. The teacher just becomes a facilitator of turn taking, rather than the master talker. Paired talking routines are also invaluable in increasing talk time per student. Students can turn to a talk partner at any time in a lesson, to discuss the content and how they are learning it, so that they develop their voice across their learning.



Encouraging students to talk with each other is a powerful tool in developing student voice.

### ■ Simple talk about preferences

Talking about preferences generally begins when teachers talk to their students about what they like and dislike, often offering some of their own preferences (the teacher is also part of the community), and to model the conversation.

Sometimes adults ask students quite conventional questions that they have answered many times before and may have become routine. They ask about what students like to do outside school, what their ambitions are and maybe about their preference in fashion or music, for example. This works well as an ice breaker, so that students become comfortable and confident talking, but is only a starting point. The goal is to move on quickly to more substantial matters, such as their genuine passions and personalities, and to develop their voice about learning.

### ■ Voicing passions

We want to move beyond conventional answers to hear about students' genuine passions – both to build relationships and to incorporate these passions into planning. This means we need to hear students' ideas and understand how they think. We need to hear about their knowledge and experience.

It is easier to make learning interesting and owned by students if we can connect learning goals with their interests. If they are interested in Minecraft, soccer, ballet or video games, this can become a good starting point – providing it connects to important aspects of learning. If students' interests can connect with curricular goals, they will learn better than starting with a topic that they do not initially care about.

### ■ Focus on learning

We want to plan time for ongoing classroom listening routines in which students 'talk out' their thinking as a community. It is useful to have some regular prompts. The easiest start with what students like and how they feel about their learning.

- What do you like most?
- What is most frustrating?
- What you do want to do better?
- What was surprising for you?
- What would you like more time to think about?
- What do you want to learn next?

At its most simple, students say what they feel about their learning. Just asking, ‘What did you learn well today?’ gets the conversation going. Students are used to non-searching questions about their favourite subjects. However, this can remain shallow unless we refocus on how well the processes of learning are working, and how they are or are not leading students to success. Students can talk about what works best – including evaluating and expressing how they are making progress – in their own words and using scaffolded phrases that become part of their repertoire of self-expression.

- What are you most proud of? Why?
- What helped you learn the most? What wasn’t useful?
- What could you do differently next time?
- Have you noticed anything today about how you learn best?
- What is most important about your learning?
- What is your next step?
- How will you know when you have been successful?

Their voice should consider how other people think:

- What do other students think about it? What are the different opinions?

## ■ Reflection as a voice

This brings us nicely to how students develop their voice in reflection, which brings in yet another Learner Profile attribute.

### ■ Reflective

We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

IBO, 2017

As students become reflective, they articulate their ideas, their thinking and their learning.

A first step in reflecting about learning is helping students to communicate what they understand about their learning. Sometimes this is limited to students giving short answers to questions about their emotions as well as their achievements.



When teachers begin with reflection, often they only look for a simple emotional response. They might ask, ‘How well did you learn today?’ and ask their students to colour in a smiley face, a blank face or a sad face. Alternatively, students colour in green, amber or red traffic lights, or give thumbs up. Optimistic students tend to give more positive answers than those that are more reserved, reflecting their emotions as much as their learning.

In more effective reflections, students answer about success with simple evidence. Try asking: *Which success criteria did you achieve? How do you know? What did you do that helped you learn most?* This makes the conversation more evaluative and productive, because it helps students have a voice about learning as well as their feelings.

As much as we can, we should make sure that our questions deal with what makes learning effective: *What strategies did you use? Which were most effective? What stopped your learning from being better? What are your next steps? How will you complete them? When do you expect to complete each step?*

### ■ Reflection as voice to others, self-voice or chore

We need to have some formal processes for reflection, which typically includes students filling in reflection forms. We need to be wary that these can become tiresome and counter-productive if they are overused, since students can quickly discover which artificial and formulaic responses teachers accept. Reflection is a habit of mind that students can develop through regular short oral discussion as a class or with talk partners, as well as through longer exercises.

It is also important to keep a growth mindset, where reflection guides future action more than identifying blame for past actions. Eventually, reflection develops an internalized voice that guides improvement and helps students self-regulate their actions.

### ■ No poster child

A poster can be a useful tool for getting students to communicate their learning, but beware – they can become overused in progressive classrooms. They are fun and accessible, but it is easy for students to fill up their design and voice time on aspects of the poster which aren’t relevant to their message. Perhaps they spend a lot of time choosing colours they like or intricately decorating it, instead of paying close attention to the message they are forming and how clearly they are expressing it.

### ■ Student-led parent-teacher conferences

One of the most powerful ways of developing and showcasing students' voice is when they lead their conference with their parents or guardians. It is amazing how learners as young as three can lead their own conferences when they are properly prepared.

It becomes a periodic focus to review their learning, reach conclusions, and to articulate them as clearly and confidently as possible. This shows that they are partners in learning, not just recipients, and that their understanding of their learning is as important as their teachers'. We know that we have developed their reflective voice well when student-led conferences need hardly any extra preparation.

### ■ Students read their teachers well

It is important to bear in mind that many students are reluctant to say they do not understand. Even in a happy classroom, students try to overstate how secure they are with concepts – especially with teachers they get on well with, and so do not want to disappoint.

Students are great at reading their teachers and knowing what they want to hear. Since they were born, they have been watching adults carefully and looking at what pleases them. They may give you the feedback they think you want and, at least in primary school, say that you are the best teacher in the world. They will say they particularly loved the lesson that you loved to teach. They may echo your dislikes or frustrations. We have to work particularly hard on students' voices for them all to be happy to say they do not understand something.

They are also experts in knowing if a question is asked genuinely, or if it is a ritual question, part of a hollow school script. We can ask questions, but if the answers do not count, the questions do not count much either. We need to actively look out for predictable questions and answers, knowing how well students will give us the voice they think we want, rather than their own one.

### ■ Do something about what you hear

Saying 'meaningful' does not make it so. Student voice is not simply about giving students the opportunity to talk or write about their opinions and ideas; it means that their ideas and opinions matter and make a difference.

Ask yourself the 'so what' question: *What changes because of what students say?* If nothing changes, the questioning is not authentic, and students

will quickly work out that we are just going through the motions, although perhaps with good intention. Students can be exceptionally quick to pick up when adults do not follow through on what they say. Meaningful *voice* leads to meaningful *choices*.

### ■ Contribution of mindfulness

Some schools find that mindfulness activities can feed into students becoming more aware of their emotions and more able to articulate them to others. As students develop awareness of themselves and each other, they are better able to articulate emotions and to hear, validate and respond to the voice and concern of others.

### ■ Students learn to listen to all voices

#### ■ Voice or voices?

It is better at times to talk about voices rather than voice. When only one voice is heard, it is not an internationally-minded community, it is a silo. The world is full of many voices, and students with agency can often use several voices. Truly internationally-minded students learn to listen to and understand many of them throughout the educational process – starting with the voices nearest to them. Here we have more Learner Profile connections.

#### ■ Principled

We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.

IBO, 2017

Principled students need to listen to voices that address dignity and rights everywhere. They need to listen to voices about actions and consequences.

#### ■ Open-minded

We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.

IBO, 2017

Open-minded students listen to voices from their own and other cultures. They appreciate the voices of different traditions and diverse values.

This includes aspects of equity, which should be a key feature of every internationally-minded classroom across the curriculum. Equity requires a language of active listening, in which students develop an awareness of diversity. They start to understand, appreciate and value different voices. Open-minded students learn to articulate these voices. Students with the most agency also promote them when they are not sufficiently heard in their communities.

When many students come from communities with Non-standard English, it is a challenge to both model and develop Standard English, while respecting the integrity of various dialects. In monocultural schools, we need to actively introduce other voices, through literature, videos and speakers. These should be given high status platforms, such as assemblies, particularly for traditionally low status voices.

This can be one of the more challenging aspects of voice. It means encouraging all students to share their thoughts, even those hesitant to speak. It involves students challenging each other's ideas and working hard to understand each other's viewpoints and perspectives. Teachers need an awareness of different cultures and genders, and they need to demonstrate that equity is a key value by responding to all voices equitably. We know that equity aspects of voice are thriving when students promote equity themselves, and when students support other students and advocating for them.

### ■ Develop roles with voices

As well as classroom discourse, we develop student voice by developing roles alongside it, which become part of the rites and rituals of the school and its culture. Students can learn to scribe for discussions and take notes that express their points of view. They can learn to facilitate small group discussion. All students can advocate for each other, especially looking out for anyone who is marginalized.

In assemblies, for example, there could be several routine slots for students' voice. They could make the announcements, with as many students as possible trained up as public speakers. They could regularly present their learning in ways that they decide and design for themselves. Students who have been charged to listen to different people in the community can hold a slot for reporting back on their views. Some schools also select students as ambassadors to present the best of the school to visitors, which can give them another

platform for talking about what makes their learning special. Remember though, that promoting these different roles should not take students out of class too regularly. Their learning time is, of course, very valuable.

### ■ Students talking to other students

Developing students' voices can have unexpected results. Students do better when they give advice. We may think that getting advice is more helpful than giving it, but research by Lauren Eskreis-Winkler and her team (Eskreis-Winkler *et al.*, 2018) shows the opposite.

Eskreis-Winkler did some research comparing middle school students who gave advice to younger students with middle school students who got advice from expert teachers. It was those who gave advice that spent more time on homework during the following months. Also, 'Strugglers who gave advice, compared with those who received expert advice, were more motivated to save money, control their tempers, lose weight, and seek employment.'

### ■ Drawing on student voice to improve learning

Adults may be good at listening, praise speaking up or be keen for students' feedback – especially positive feedback. But they also need to explicitly teach students how to articulate ideas and offer a structure to support those ideas. Otherwise most pre-adolescents, who want to please their teachers, will say that everything is good. Many adolescents, who may be reluctant to talk to adults about their feelings, will say a brief 'fine' or an 'everything sucks'.

Reflection will not be fully owned by students if it is a routine that they only do a couple of times a year. It is more effective when scheduled at least weekly, ideally with a form tutor helping students to use it as a vehicle for their own learning.

Students are experts about their classes – they are in class every day after all. They have a lot to say about how their school is run and how to improve their education. Sometimes we focus on non-academic issues, such as school meals. Most students have plenty to say about the canteen, but they can rarely find solutions to improving food, so it is better to switch focus and talk about learning.

Learners of all ages and stages can talk about ongoing issues. Try asking the following questions:

- What parts of the room work for you?
- How well do you learn from different types of homework?
- Which subjects do you not like? What needs to change?

- What are your goals? Do you know how you are meeting them?
- What would you like to do differently?

Even when students do not organize something – consult them. They can give valuable advice on activities, inquiries and projects. It is best to be explicit about how you will use their input, and make sure that you follow through. If there are reasons that you cannot take on their advice, it is very important to explain to them why, so that they learn more about the practical organization of their school and know that you have listened to them.

### ■ Student voice in planning

Student voice can contribute tremendously to planning, unless of course we have planned everything out before we hear it. We shouldn't plan too much, too early. Of course, plan out a strong provocation that will 'invite the students in' and get them excited to explore the topic further. If we plan too many of the details of a unit, then there is no scope for students' voices to have an effect. If you know exactly how every lesson will go, what the students should think, then you can become deaf to students' voice about how a unit could proceed.

One simple technique is to deliberately leave time unscheduled to be organized after listening to students. Another is to frame activities to draw on different students' voices, particularly where students can articulate different cultures and so promote international mindedness. You can give students a voice before you put anything on the wall about the direction of the unit – the best plans include their ideas.

Some schools have student representatives in some curriculum planning meetings – especially when they are discussing the key ideas that will form the basis of the inquiry. This helps make sure that the main ideas of a unit are relevant and are phrased in a meaningful way. We wish to avoid having sophisticated Central ideas (PYP) and Statements of inquiry (MYP) that are only presented top down to students. If they aren't meaningful to students, think again about the big ideas and then adapt – it is better to have a less refined central idea that is meaningful and owned by students, than a perfect one that leaves them cold.

### ■ Working continuously with student voice

Sometimes voice is not planned for, but a responsive teacher picks up on their students' thinking. A good example of this came from a colleague's class when I was a principal. My school was preparing to celebrate its

twentieth anniversary. Our PR department – well-meaning but disconnected from students and their voice – decided that it would be great to release lots of helium balloons.

At the time, a Grade 3 class was studying habitats and had just learned about the dangers of plastic bags for sea creatures. Instead of being excited about lots of balloons, they asked their teacher if the balloons might be dangerous to wildlife, just like plastic bags. They researched it together and found that they were. They used their persuasive writing technique from a previous writing unit to write letters to me asking for the balloons to be stopped, and to find a way of celebrating which caused less environmental damage. Their voice was heard loud and clear, and we didn't release any plastic into the atmosphere.

### ■ Surveys

Technology has now made it very easy to distribute and analyze surveys. Students can answer very short surveys at key points in a unit to help guide what is coming, or to give quick feedback at the end of the unit. Student end-of-year reviews of teaching help enormously with reflections and planning for the following year.

When you survey all students in a school about what they think makes a good teacher, the results are typically very thoughtful and useful for all teachers to hear. One can have older students help analyze the results – although they may need a mentor. They can also present it to a staff meeting, so teachers hear the voice directly. For younger primary students, older students can help with recording.

### ■ Bullying

An unfortunate aspect of school life that needs to be voiced and listened to systematically is bullying. It will be happening somewhere in your school – if you are not hearing about it, then vulnerable students are not getting a voice.

### ■ Schools and school systems involve student voice in governance

Student voice deserves to be heard beyond the individual classroom. Students from the upper end of the PYP onwards can make fruitful contributions, not only to their own courses, but to bigger school issues. They can contribute to reviewing teaching and counselling. They can talk about safety and facilities. They can have valuable insights about how effective student-led parent-teacher conferences were for their learning.

### ■ Student focus groups

School governors may also wish to meet with focus groups of students regularly to hear directly about a broad range of issues. This is an important symbol of student voice. It can even be chaired by students as soon as they develop the necessary skills. Such students benefit from some access to data, provided that it is fully anonymized. Anything with identifiable students, such as Diploma options with less than five students, cannot be shared.

### ■ Student Council

Another key channel of student voice is the Student Council. Sometimes this can be a token forum, where some students, sometimes the popular ones and sometimes the most conformist ones, are allowed to deal with peripheral issues. Student Council supports student voice best when they have a significant role in the overall governance of the school. For example, when looking at bring-your-own-device policies, ask what sort of device they would prefer to use. Or when looking at curriculum pathways, ask what their ambitions are. Students are close to the impact of many decisions and are the end recipients of everything we do – they have lots of experience to articulate and their school lives are very important to them.

The youngest students may need some help. At first, they may start by talking only about trivial things. If so, it is part of the school's duty to develop their voice further until they talk about what is deeply important to them about school.

### ■ Strategic reviews

Student voice is an important part of any strategic review process. In particular interest groups, students are normally the least tarnished by politics and pre-set agendas. They bring a grounding of what the schools are really about, with key insights into what life is like on the receiving end in the classroom that cannot be heard from other stakeholders.

### ■ Connection with choice

*Voice* is closely linked to *choice* – and not just by rhyming! Hearing someone's voice is not worth much if it is heard and then ignored. Voices need to be listened to and validated, especially in the classroom, where students' voices have a history of being ignored. Sometimes we need students to stop talking and get on with doing things – and they can be involved in deciding what ... which brings us to choice.



# Choice

## IN A NUTSHELL

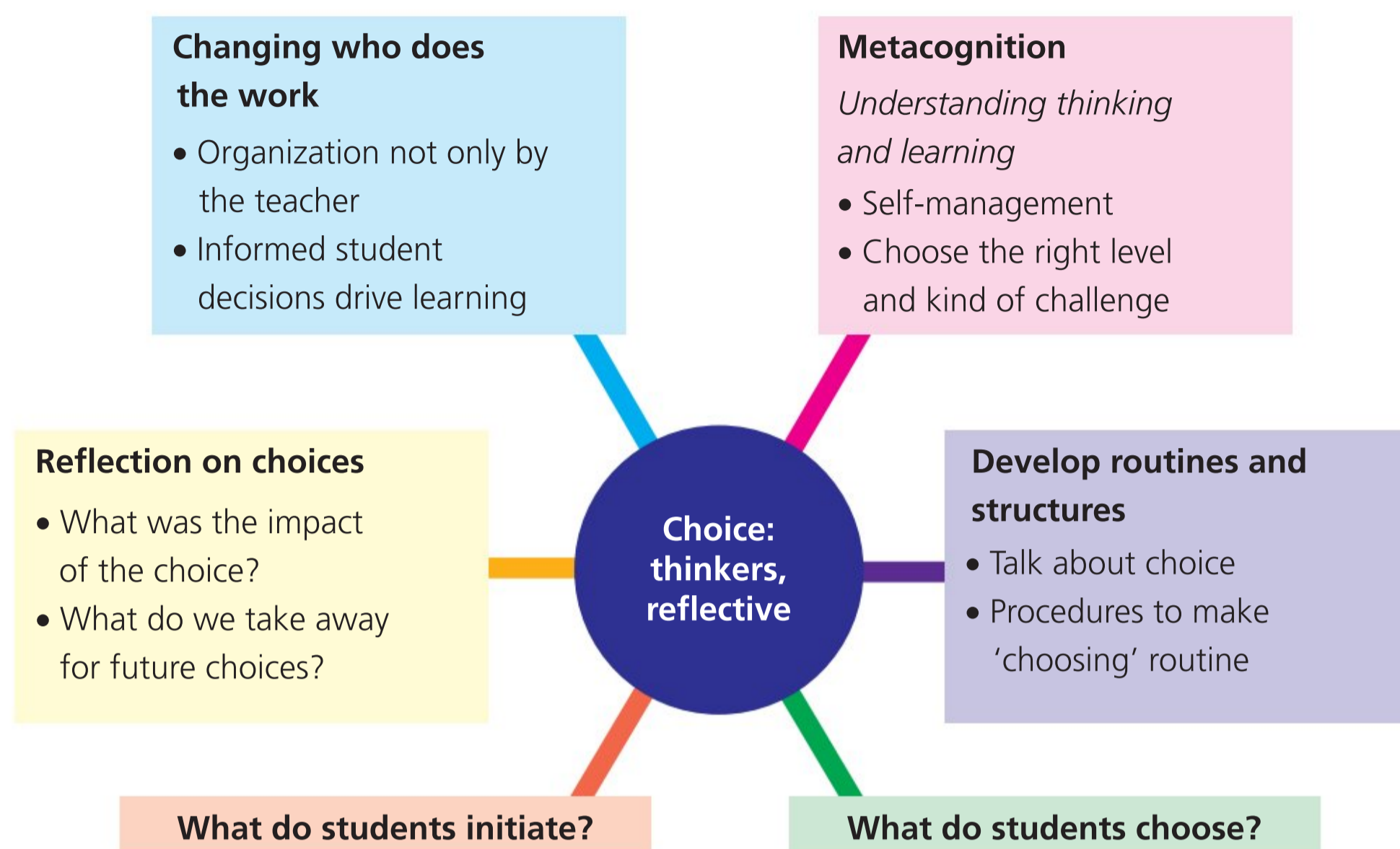
- Choice is not merely about doing what you want. It is also about students learning to make informed decisions so that they can self-direct their learning, set goals and monitor their own progress.
- Choice may start with making a simple option within an activity, or thinking about which partner is helpful to work with. It can develop through many levels, leading to students who can think through complex options in Personal Projects or Extended Essays. Ultimately it leads to successful people who make good choices and act on them.
- Choice also leads to a shift from the teacher having to make all the decisions for all of their students, to students sharing the work of fitting learning around their individual needs and passions.
- Student choice helps us make metacognition practical, as we think through what learners need to know about their learning in order to make good choices. It shows us what students need to be aware of in their learning journeys and what they need to be involved in setting and monitoring their next steps.
- Choice involves learning to set goals and select strategies. It means knowing how to choose the right level and type of challenge, and choice helps students own the challenges they select.
- As well as building choice across our programmes, there are some ambitious approaches to learning based largely in students' choice, such as 'Genius hour' and 'twenty per cent time'. In the IB, choice plays a key role in major projects like the PYP Exhibition, the MYP Personal Project, the Extended Essay and the CP Reflective Project. It underpins much of student ownership.

## Choice and decisions

When I go into a kindergarten classroom and I see all students' work looking identical, my heart sinks. I fear that the students have had no opportunities to make choices. Sometimes it is even worse, and the near perfect work makes me suspect that teaching assistants have done so much of the work that students have had little chance to develop their own skills either.

Choice does not just mean picking an activity – anyone can do that. Powerful agents of learning can do so much more. They build on their voice, to move from articulating ideas, to taking action based on how they understand their learning. Whereas *voice* is about expression and respect of ideas, *choice* is about actually taking ideas and using them – making clear and productive decisions. Agents can decide things for themselves. Decisions give students power and ownership.

Agency makes us look at which decisions students make and how they make them. We need to look at their role in planning and organizing. Since students with agency are becoming autonomous, they are learning to make decisions for themselves.



It is important to reflect on student choice as a way of encouraging agency.

Sometimes they will learn from choosing well; sometimes they will learn from how choices haven't worked. If they make unwise choices, and they will, we will help them to get themselves back on track.

They will likely start with many short-term choices about what they do next. Over time they become expert in setting priorities and goals and in monitoring themselves. They gradually learn to make responsible choices about their learning and their lives. They start with what affects them personally – small and big choices about their learning, their recess, after-school time and life outside school. Eventually they help with choices that affect the whole school system.

As students learn to make productive choices, they learn to initiate action towards their goals and to adjust their plans as they go along. This will form the basis for how they act independently in school, in their communities and in life.

Agency does not mean students are able to make completely free choices, of course. We cannot let children choose to run out into a busy road. They cannot choose exactly what they will learn on any given day, since we have some important concepts and skills that we know they need to master. They choose within strict boundaries.

Student choice, of course, is not new. Even in my own education, at a state school in 1980s Scotland, half of my final year of physics was based on a project that each of us chose. Back then, though, we were given little preparation or support. It was sink or swim. Most of us who took physics

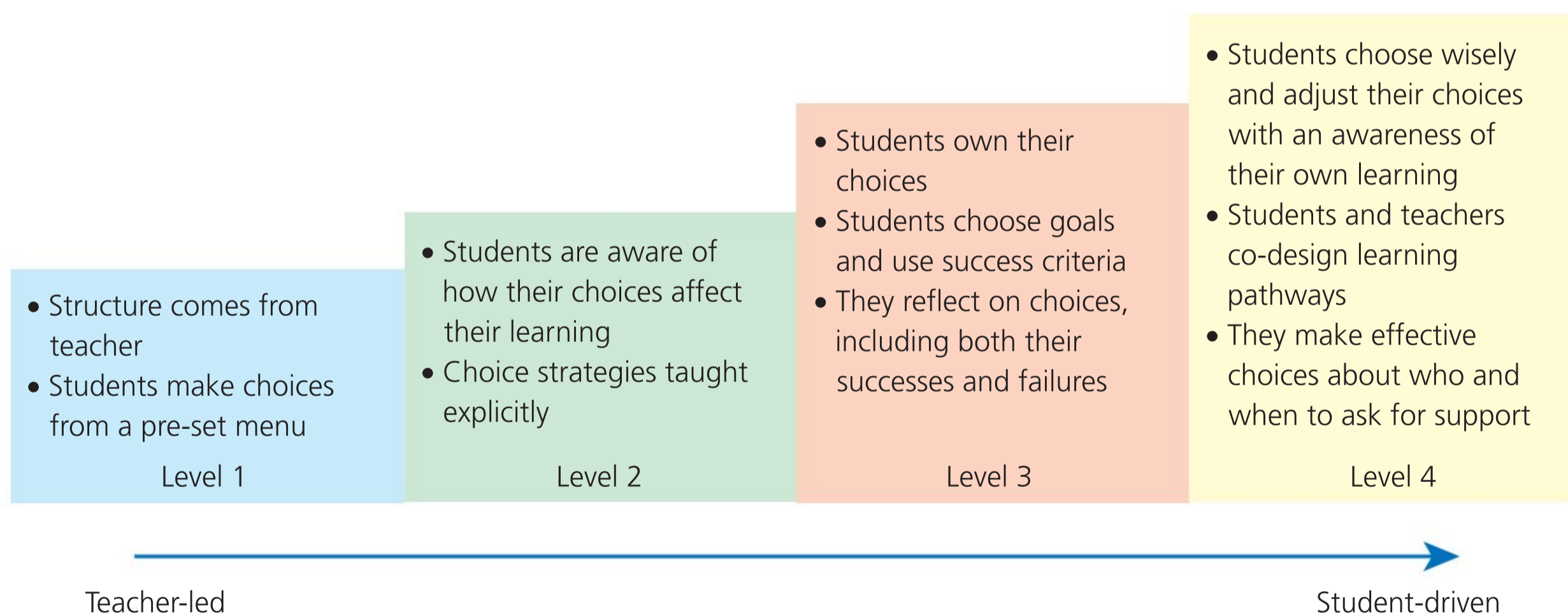
in our final year were capable students, but many of us did not have a clue what to do. I have fond memories of a creative atmosphere as someone chose a project on the acoustics of guitars and another made sure that he needed a strobe lamp to play with. These helped us to choose distraction – unfortunately for most of the year.

Teachers in IB schools often invest considerable time in guiding students in how to decide things themselves and carry out their decisions. This is paid back with huge interest later when students can act independently on their own well-founded choices and so need less teacher direction. When we invest time in helping students to make good choices about their own learning, we make learning more sustainable.

Once the work has been put in and students know what to do, teachers are freed from making every decision about every student. Students need less ongoing supervision about daily minutiae and teachers can concentrate on the depth of their learning. Students' learning becomes more effective and they are better prepared to carry on learning throughout their lives.

## ■ Levels

Levels of choice move from simply choosing what you do next, based on unquestioned preferences, to students examining their passions and weaknesses, strengths and motivations, so that they can determine the paths of their studies and their lives.



The four levels of choice development.

### ■ Level 0: Everything is decided by the teacher

In traditional approaches, there is little place for student choice. Perhaps secondary years students can choose some electives. There may be different mathematics courses, but teachers do most of the placements. Students are

left with only making superficial choices, like the colours of their binders or the names of their groups. Some schools may include ‘lifelong learning’ in their mission statements, but students do not develop the agency needed to make this happen while in school.

### ■ Level 1: Apprentice

- Students make choices regularly, mainly from a pre-set menu.
- Many choices are about selecting one-off activities.
- There is no particularly deep structure behind providing choice, just a set of options. The choices are not yet contingent on explicit reflection or self-assessment.
- Students have some feedback to help start their ‘metacognition’.
- Students need to interact with the teacher regularly.
- Teachers plan activities and select most materials.
- Some teachers mainly talk about choice when discussing behaviour. They may use phrases like ‘Did you make a good choice?’ when a student does not conform to teacher expectations.

### ■ Level 2: Capable

- Students have some awareness of how their choices affect their learning. They are learning to use self-assessment to make informed decisions.
- Students make some choices about strategies and resources. Teachers provide a range of assignments, end points and pathways, and students are able to select from them.
- Students need less teacher interaction, as they make many choices independently to sustain their own learning. They may make independent decisions about, for example, where to work and the order of completing tasks.
- Students make good choices about formats for their creative work, such as a video, a blog post or a podcast.
- Teachers teach choice strategies explicitly.

### ■ Level 3: Accomplished

- Students now own many of the choices – but are still monitored and mentored by their teachers. Students check in periodically, often taking the initiative to do so when they need to.
- They set many of their own goals.

- Students make well-justified decisions about important things.
- They can reflect on choices, including both their successes and failures.
- They can make choices in planning their assignment timelines and aspects of their own schedule.
- Students often select the best place for them to work productively, perhaps in a different part of a building, such as a library, a media centre or art and design facilities.
- They use success criteria and self-assessment to help make informed choices.

#### ■ Level 4: Exemplary

- Students know how to choose wisely and make exemplary choices. They adjust their choices as they go because they are aware of their own learning.
- Choices go beyond what they are provided with, and at times they initiate choices. They may decide on an action to take or use their voice to advocate for their own learning.
- Students and teachers co-design learning pathways.
- The student is experienced in selecting both end goal and intermediate ‘check-in goals’, for which they have responsibility.
- They choose where to work, provided that the school building design and organization provides suitable break-out spaces.
- Students are fully accountable for their choices and results, but have the freedom to pursue them in the way they know best.
- They are responsible for asking for adult support, and make effective choices about who and when to ask for support.

#### ■ Learner Profile connections

As usual, the Learner Profile can help guide our thinking. Two particularly relevant attributes are thinkers and reflective.

##### ■ Thinkers

We use critical and creative thinking skills to analyze and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.

IBO, 2017

Thinkers make choices and they exercise initiative. They make ethical choices.

### ■ Reflective

We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

IBO, 2017

Choices about learning emerge from students understanding their *strengths* and *weaknesses*. Reflective students ask: *How am I doing?*, *What should I do next?*, *How will I learn best?* They then make decisions accordingly.

### ■ Simple choices

The simplest form of choice that students make is perhaps in ‘free choice time’ or ‘golden time’, when students have a free choice of what to do from a familiar menu. Sometimes this comes as a relief from programmes which are heavily teacher-directed for the rest of the day. If this is a completely open choice, students may fall back on familiar activities. It is best to have a menu, which can change regularly, excluding non-productive tasks and promoting new possibilities. This is an art that is highly developed in many early childhood settings.

Choice can become embedded as part of many class routines, so that making choices becomes natural. Regular reflection questions like ‘How did your choice work for you?’ help students learn how to choose well. Choices can include:

- the order of their activities
- which texts to read from a short selection
- which mathematical problem type to solve
- what product to create
- which big question about the topic to explore.



What are my choices?  
What did I learn from yesterday's choices?  
So what should I do today?

### ■ Learning menus and choice boards

When there are large blocks of time, students can work through a ‘learning menu’ – a sort of flexible ‘to do’ list. This can contain both ‘must dos’ – which students have to do, but they can choose the order; and ‘can dos’ – extensions or preparation work that students choose based on their needs. They can be used for:

- independent learning time
- flexible time, when some students have finished other tasks
- primary classes at the start of the day, if some students arrive earlier than others.

There should never be times in class when students have nothing to do because they are finished, and choice boards provide a much better use of time than traditional fallbacks such as reading. Reading is, of course, so vital for students’ development that it should be scheduled as a priority for all students. The students who need scheduled reading most are often the students who rarely finish other tasks early.

### ■ Choosing groups and partners

Although this is one of the more common student choices, it is not the easiest to organize well. All experienced teachers are aware of how students’ choices of their own partners and groups may not be the most helpful for learning. There have to be boundaries and guidelines about choosing productive partnerships, not just friendship groups. Motivated students will move quicker to select fruitful partnerships, since they want to work with people who will help them get the job done well.

I do not recommend students spending time choosing names for their groups. This normally has little relevance to the concepts they are trying to master. If you must do it, have a fixed time span – such as 60 seconds – so students learn to form a consensus quickly, which is a key skill in itself. Most of their class time should be focused on the inquiry that the group will be working on.

### ■ Choosing where to sit

When learning to select a place to work, many students need regular reminders about the criteria they might want to use to choose. This is different than telling them what choice to make, as they still actively select a place. Depending on the activity, they may want to consider: being close to resources, being able to see helpful displays, sitting in places that facilitate helpful postures for writing or reading, giving themselves space to concentrate, and the social groupings nearby that support or distract.

## ■ Designing classroom layout and more

Student choice can go even further when students have a role in classroom design. Many age groups have successfully helped design learning spaces, from PYP students choosing classroom furniture, to DP students designing their study lounges. This leads to good designs that fit the needs and preferences of students, as well as helping the students who were involved to learn authentically about design thinking.

## ■ Avoiding too much choice

In all these options, remember that having too many options can make choice more difficult. Research from Berry Schwartz (Schwartz, 2004) in grocery stores found several downsides to providing too many possibilities. If there are too many options then it is hard to make a choice, and people are less happy with the choices that they do make. When we provide students with too many choices, it is difficult for them to direct their attention, and it is difficult to ensure that students get feedback on the choices that they do make.

## ■ Metacognition

Choice really gets exciting when students develop their metacognition – their awareness of their thinking and learning. Then they can start to take control of how to sustain and improve it. At times the term ‘metacognition’ seems a little abstract, but agency helps make it practical, with definite implications for students’ learning.

- Voice – we make sure students learn to talk about their own thought processes.
- Choice – we help students make informed decisions about their learning that lead to observable activities and actions.
- Ownership – students are not only aware of their learning journeys, they are aware of their own roles in their journeys and they understand the ways in which they can affect their journeys.

## ■ Executive functions

One reason that it is harder for students in lower grades to set their own pace and manage their learning is that their ‘executive functions’ are not yet fully developed. Executive functions are the brain’s cognitive control processes, such as organizing, planning and prioritizing; regulating their emotions and self-monitoring (keeping track of what they are doing).



Executive functions develop over childhood and adolescence, and in fact the relevant parts of the brain are not fully developed until students are in their twenties (Anderson, 2002). When students find it hard to self-regulate, it is often not their attitudes that are at fault, but their biology – their brain development and brain chemistry. It is no surprise that our students do silly things at times – the relevant parts of their brain aren't yet fully developed. Of course, this does not mean that we give up on helping them plan and self-monitor. Instead we need to scaffold executive functions particularly carefully. We can provide them with external forms of executive functions that students can use as their brains are developing, for example, planning sheets and checklists that fill the gap.

We can make executive functions more concrete with questions like:

- What are the individual steps? How will you monitor them?
- What choices are you making? What outcome do you expect? How will you know if you reach it?

We can ask them to make their response to feedback explicit:

- What feedback did you receive?
- What will you do about it?
- Which choices might you change?

### ■ Metacognition and reflection

Well-designed reflections can develop metacognition powerfully. A prompt that leads to a mere 'I feel fine' statement hasn't helped much, but at its best, reflection is an action-oriented evaluation that illuminates learning. The best reflections include the agency of choice:

- What decisions did you make about what to do? Which decisions would you change with hindsight?
- How do you learn best? Is that the same as your class colleagues?
- What problem-solving strategies did you apply? Which will you apply next time?
- How did you plan your writing? What worked best?

Reflection does not have to be only an end-of-unit activity. It is most effective when it is a process that continues throughout the learning, as students self-evaluate during each lesson so they can make informed decisions about how to learn and what to do next. Or, in the case of a badly-informed decision, what they can learn from it. This can be as simple

as having students who choose a writing prompt adding a sentence on ‘why’ they chose it at the end of their text.

### ■ Students using ongoing assessment

Formative assessment is not just for the teacher. Students can be involved in tracking their own learning – both their achievements (what they can and cannot do) and their progress (what they can do today that they could not do before – which is very motivating).

At its most essential, students need to be able to answer:

- What are you doing well?
- What do you still need to learn?
- Which specific skill or concept will you learn next?
- How might you learn it?

Over time they can use and then take charge of a variety of monitoring tools, such as checklists and graphic organizers.

### ■ Choosing goals and levels of challenge

When students are aware of their learning, they are ready to be involved in goal setting. There is more about goals in the following chapter on ownership, as goals chosen by students become goals owned by students. We want to support risk-taking, but it is best to also have some low-critical choices with which students can get going.

Differentiation is hard. The only teachers who think that they have nailed it are those who misunderstand it, sometimes thinking that it is only choosing a particular level of worksheet. We may be able to categorize students into different ability groups, but no one can completely adjust levels of all kinds of challenge to all students. Students with agency help.

### ■ Making up and selecting problems – within a boundary

Arithmetic gives a clear example of a common starting point. If a student is trying to multiply, say, 2-digit numbers, it does not matter exactly which ones they try. Let them choose and check with a calculator. They are autonomous learners, setting and checking their own challenge. When they want a bigger challenge, they can be risk-takers and set themselves challenges with ‘more difficult’ numbers.

Division is more complicated, since remainders ‘get in the way’. This can be even better for thinkers. Students can, when they are ready, accept the challenge of spotting patterns in which numbers ‘work’ and which ones

‘don’t work’. Similarly, some equations balance easily. For older students solving quadratic equations, they may start with equations that work easily, but they only become mathematicians when they start to try lots of equations and see what happens to different ones.

Often it does not matter which text from a particular selection a student uses. For example, you may have a group of writing prompts which would all generate suitable text. If in doubt, let students choose which ones. If some are slightly easier or more challenging, let the students work that out – by asking the critical questions about their choices.

As students learn to self-monitor to self-adjust the level of challenge, they are able to have continually tailored work. The class moves from differentiation on a number of levels to personalized learning directed at individual students – a level of focus unimaginable without involving students in making good choices.

### ■ **Go slow – and keep in mind that one size does not fit all**

If you try to let students choose too much before they are ready, you may be heading for disaster. It is safer to release control from teacher to student gradually, as students develop the skills to own and drive their learning – and to be ready to take control back again whenever necessary. Some students may need more control than others before they are ready for more autonomy. They may benefit from the role models of more independent students so that they know how to make better choices. None are likely to have fully developed executive functions yet.

### ■ **Choosing strategies**

When goals are established and owned by students, you and your students can go about selecting strategies for getting there. Obviously the strategies and possibilities that you provide will depend greatly on the range of subject-matter that students are inquiring into. Here are some possibilities to facilitate choice.

### ■ **Develop a bank of resources**

There can be practice cards, vocabulary extensions for languages, mathematics manipulatives, writing planning templates, calculators, different scaffolds for the research process ... the list is endless.

With more advanced levels of choice, students can focus on particular skills they have realized they need to develop, and select focused activities that they will benefit from. It is becoming more common for teachers to use

an electronic bank of resources that support particular skills. It takes time to collect and organize such banks, but they can be refined and used over and over again, so it is time well spent. It is not necessary to aim for a few resources that work for everyone, but to have at least one support that is meaningful for each student. Digital banks allow for plenty of options, for example, writing supports can include many types of prompt, provocation and stimulus, as well as many models of high-quality writing – from professional writers and previous students.

### ■ **Schedule optional mini-lessons or workshops that students can choose**

Most classes have a broad range of skills to develop, such as a range of writing skills or mathematics strategies. Many students benefit from short, focused (5–10 minute) teacher-input ‘mini-lessons’.

It can be useful to plan a short series of these mini-lessons and have students choose which to sign up for, according to their needs. If most of a class sign up, it becomes a good whole-class mini-lesson. If you have weekly goal review meetings, they are a good place for reviewing choices of workshop selection.

### ■ **Set regular conferences**

Student choices can be reviewed in periodic one-on-one conferences between a student and the teacher. There are many areas in which regular conferences in learning add a lot of value – such as writing conferences and talking about projects. Provided you have regular ‘conference time’ when students are working without need of direct teacher support, students can choose when to make an appointment in one of these conference times.

Set a minimum and maximum number of conferences in a cycle – all students need to be accountable for setting the time or have a time imposed on them. These conferences should lead to students choosing, with support, appropriate goals and strategies. It may take some time for some students to get on board, but the extra effort will pay off – it can transform them into real lifelong learners. Outside of conferences, teachers can still work individually with students as needed to help them understand their own progress and to set goals.

If you have a public display of conference appointment times, students can sign themselves up – perhaps adding a focus that they would like to address and a piece of work they will bring to discuss.

### ■ When students do not respond

Sometimes a student is not yet ready to respond to challenges. Doing nothing cannot be an option – they can be put to work helping others while they are becoming ready to embrace their personal challenge. Some students need time to choose. It is sometimes worth just talking about life, not just tasks, which helps build a relationship and may uncover what will really motivate them.

One example of choice from my own education is when I was part of a small class of teachers who met every two weeks while we were studying for an additional qualification. Each session focused on a sample of professional literature around a different topic. Rather than giving us a standard set of essay questions, we had to write and answer our own question based on what was most pertinent to us from the literature. We all found this very satisfying – we owned our essay title, and it spoke to themes we were interested in. The lecturer had better essays – and did not have to put together a broad set of questions every two weeks!

### ■ Traps that reduce choice

We also need to be aware of traps that reduce student choice.

### ■ Over-planning

Often, conscientious teachers plan very hard. They make lots of, hopefully, well-informed choices. That can be wonderful. It can also stop learners being able to plan for themselves. Teachers too often work within systems of accountability that can be depowering, for example, by asking for a level of detail in plans too far ahead of time. Planning thoroughly is not always diligent. Thinking out too many details without leaving spaces for students to influence the planning can be unconsciously negligent.

There are two problems. First, the teacher does not always know what is best for everyone – they need to involve students. Second, over-planning stops the students learning to make decisions – one of the most important learning outcomes.

### ■ Classroom displays

Another time when teachers can be over-conscientious is in preparing the learning space before the school year starts. I used to think that the best classrooms were prepared well ahead of the start of the school year. Not so. The more that is set out before the students arrive, the less students can be involved in making choices. Teachers are taking their agency in classroom preparation very seriously, but not leaving any space for student agency.

### ■ **Over-planned extra curricular activities**

The same issues arise after school. We can have our children's best interests at heart when we try to organize as much as possible for them. We become master schedulers and taxi drivers, shuffling loved ones around between dance lessons and sports. Our children have some choices to make. They may prefer modern dance or ballet, soccer or music.

Sometimes there has to be some long-term planning and commitments that children are not yet ready to make. Team sports need teams with team commitment and effective scheduling – valuable life skills. People doing the arts need consistent practice in order to develop a base of expertise. However, sometimes children rarely experience being bored or the creativity that stems from boredom.

### ■ **Advanced choices structures: Genius hour**

'Genius hour' comes out of Google's '20 per cent time' – an innovative structure that allows students, or adult employees, to choose what to work on. This approach originates from when Google™ allowed some of its employees to choose what to do for a certain percentage of their work time. It has been credited with providing lots of innovative results, including gmail, Google maps and Google Earth™.

Genius hour does not have to be exactly 60 minutes, of course. The point is to provide significant blocks of time where students can choose what to work on. Sometimes it can be scheduled in the 'dead time' around testing or after exams before new classes start.



Giving students time to explore their own interests can be a powerful way of encouraging agency.

### ■ Phase 1: Idea generation and pitch

One approach is to start by defining the purpose, how much time is involved and the necessity of having a valid ‘product’ or idea at the end. Next, let students list all the passions that they might want to work from, and then delete the ones that might not work – adding other ideas as you help the students think through what they want to learn.

You support students’ voices if you ask them to present what they wish to learn. Public presentation gives students some peer pressure to follow through well on their plans. It can be useful to restrict them to a 30–60 second ‘elevator pitch’ with a maximum of four resources – props, slides or posters. They should state:

- what their product is going to be
- what they will learn
- why they want to learn it
- what their plan is for finishing the task – a brief timeline of how they will finish their product.

### ■ Phase 2: Research

Students research their area and document what they learn. Research can involve talking to people and watching videos – you can research before you can read!

### ■ Phase 3: Sharing and getting feedback

The classroom community is a very helpful resource and a great source of feedback – provided that students share effectively. If they share blogs or videos they can get electronic comments from other students. Otherwise, feedback slips are useful.

### ■ Phase 4: Presentation

Forms of presentation depend on the products and age group.

### ■ Phase 5: Reflection

Learning is only consolidated when students reflect and draw conclusions for their future projects. Possible questions include: *What did you learn? Which parts of the process were most effective? Which did not work well? What will you continue learning? What will you do differently in future projects?*

### ■ **Optional: Grading**

Grading does not always add as much value as a thorough reflection, and younger students are normally happy without grading. However, secondary students, backed up by many school administrators, are very keen to have a number or a letter as their main item of feedback. They want to see the rubric ahead of time and know what gives credit. If the rubric focuses on the product, many students will rush through the process. If it focuses on the process, they are more likely to focus on learning.

### ■ **Major IB forums for extended choice**

Effective methodologies for big IB pieces of work is very well catered for elsewhere, so I will not expand on them beyond saying how a Genius hour model can prepare students well ahead of time to innovate independently in their PYP Exhibitions and MYP Personal Projects.

If Grade 5 teachers find that their students struggle to pick suitable topics for their Exhibition work and to select and stay on a timeline, then future cohorts need more experience in making significant choices ahead of the Exhibition. A few short cycles of Genius hour may help. Similarly, it is not always easy for students to pick their Personal Project, or to develop motivating research questions for the Extended Essay or Reflective Project. Therefore, it is useful to ensure all students have a solid experience of Genius hour or something similar before they start their big agency work.

### ■ **Link to ownership**

Of course, voice, choice and ownership are very closely entwined. One of the biggest advantages of students making choices about their learning, is that it leads to a huge sense of ownership, which brings us to the next chapter.



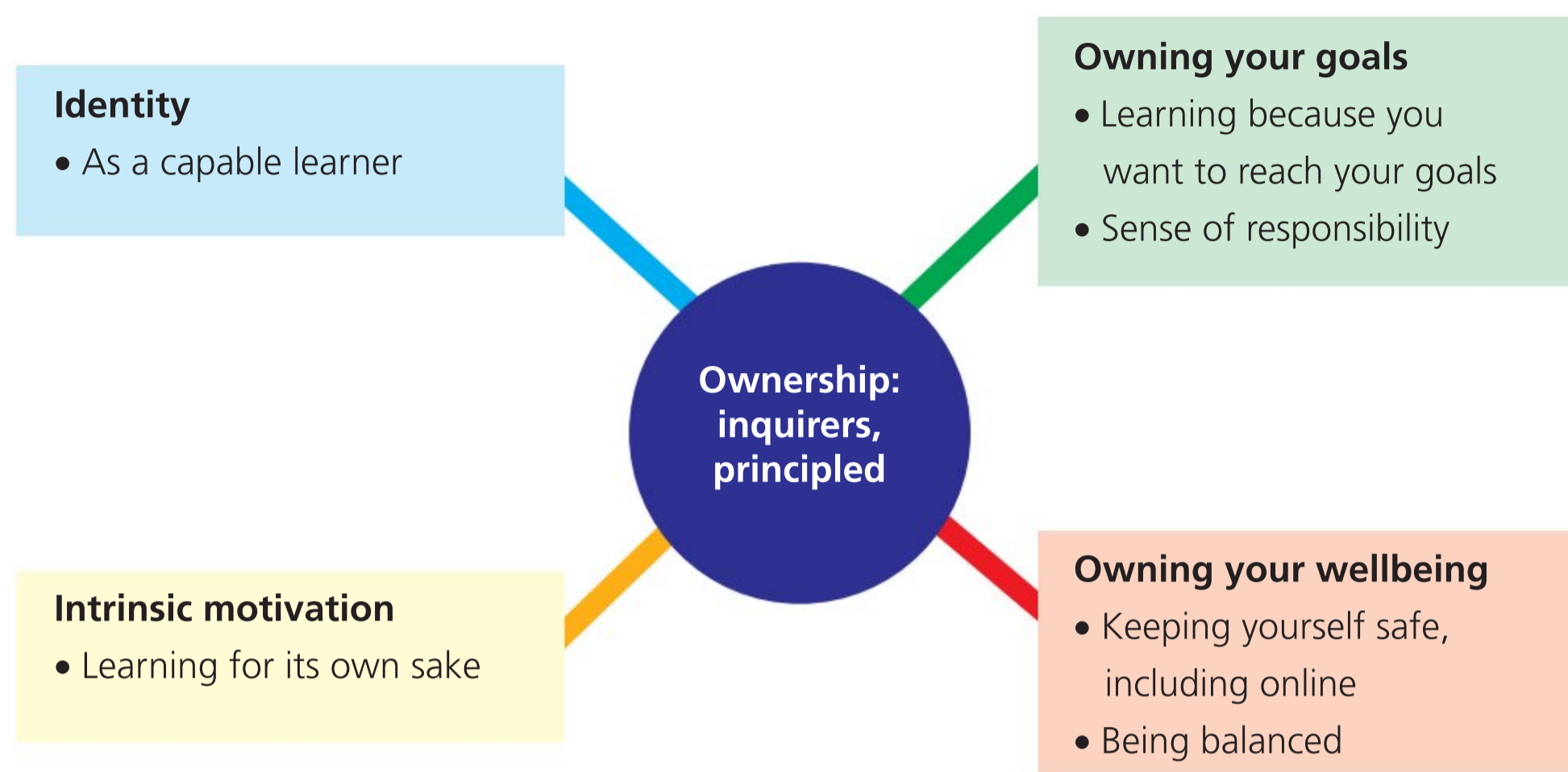
# Ownership

## IN A NUTSHELL

- Ownership emerges from voice and choice. It is a culture as well as a skill set. It starts when students own a few tasks, and develops as they take control of more facets of their learning and wellbeing.
- A large part of ownership is identity. When students see themselves as writers, scientists, artists and so on, they identify more with what they are learning.
- Along with a sense of control, ownership provides intrinsic motivation. When students believe that a task is their own, they are more able to work with passion, and to carry it through as thoroughly as they can for its own sake. If they are only responding to a set of demands from someone else, they may do the minimum.
- Ownership also brings a sense of responsibility. Ownership of shared norms for behaviour, often through essential agreements, helps peer pressure work for the good of the students. Health and safety are only really effective when students own their own wellbeing. This is especially important for online safety and prevention of bullying, when adults will not necessarily see incidents occurring.
- Ownership of learning can be fostered through co-designing goals, perhaps expressed in shared rubrics. These need to be owned by all students, not just the most dominant ones.
- Ownership is hampered when we use too much jargon about learning.
- An opposite to ownership is the 'not invented here syndrome' where students, or professionals, are demotivated by tasks that are thoughtlessly imposed on us.
- Transferring ownership to students is not easy. Teachers have to let go, follow students' questions, and occasionally let students subvert learning, while still remaining focused on high-quality learning.

## Ownership is a motivational pleasure

One of the greatest pleasures of being a teacher can be owning your classroom. It can be a safe space where you have autonomy – which keeps teachers motivated and successful. But you cannot keep the pleasure all to yourself. Your students need to share it. They also need to share the control of their learning – this helps make them more motivated and successful. A school is a place for students. It is their community, founded for their learning. Ownership integrates many aspects of learning. It has less of a discrete skill set than voice and choice, but it needs both of them. It develops as students' voices are heard and their choices respected. It needs students to share the responsibility for their learning. It exists partly in the mindsets of the learner and teacher, and allows students, as co-owners, to take the initiative.



Ownership exists in the mindsets of learners and educators and is important in developing a sense of agency.

### ■ Owning vs renting

Compare owning and renting a house. When you own a house, you are free to make home improvements. House owners often spend considerable amounts of time and money making their homes better. There is much less motivation to do home improvements on a place you rent. One might do a minimum amount of maintenance, but few renters invest in anything substantial in someone else's property. Similarly, when students own their learning, they will want to solve their problems and create solutions. They will be eager to succeed and proud to show off their work.

Students are going on a learning journey. If they are at least involved in choosing the destination and route, they will want to continue. If they feel that they are kidnapped, they will struggle and try to break free.

### ■ Learner Profile connections

Ownership is fundamental to students being *inquirers* and *principled*.

#### ■ Inquirers

We nurture our curiosity, developing skills for inquiry and research. We know how to learn independently and with others. We learn with enthusiasm and sustain our love of learning throughout life.

IBO, 2017

Ownership means students searching for answers to *their own* questions. It provides them with the enthusiasm for sustaining lifelong learning.

## ■ Principled

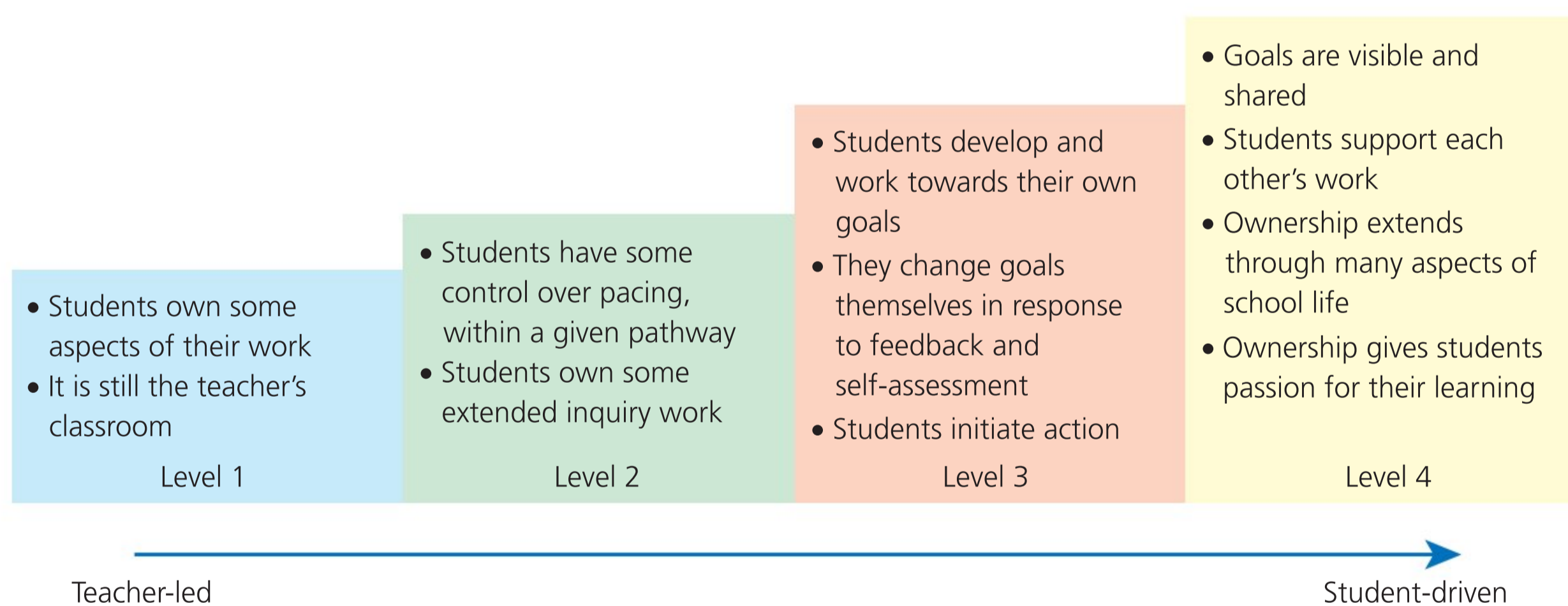
We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.

IBO, 2017

Students act more consistently with others when they own their own ethics, and we take responsibility for the actions that we own.

## ■ Levels of ownership

Although ownership can be powerful, we cannot simply hand over control to the learner. We daren't abdicate our roles completely and risk a *'Lord of the Flies'* scenario. Rather we work within a community model, where leaders, teachers and students all share ownership. We shift ownership of learning to students gradually as they learn the tools, frameworks and strategies that they need to be successful.



The four levels of ownership development.

## ■ Level 0: The teaching staff own learning

When there is no ownership, teachers make all the decisions. They set all the goals and track the students themselves. Displays are entirely based on the teachers' ideas. This makes some students feel comfortable and secure, but all students are highly dependent on the teacher, and some become bored and disruptive. We typically blame these students, saying it is because of their problems, and not because of our approach to the classroom.

### ■ Level 1: Apprentice

When teachers start passing ownership to students, it has to be done gradually. It takes time for students who aren't used to agency to develop the skills, attitudes and understanding necessary to own their learning and their classroom community.

- Students own some discrete tasks – they may talk about ‘my writing’.
- They take control of classroom displays, within an overall structure provided by teachers.
- Students are involved in some decisions, but some involvement is only token, and it may include only selected students.
- Students start to take more pride in their work, their class and themselves.
- Students' motivation is a mixture of intrinsic and extrinsic.
- The most important assignments are still decided by the teacher.
- Goals are generally managed by the teacher, who also manages pacing, but students have some influence, which they enjoy. Goals are mainly academic and often set for the whole class. They rarely change in response to learning.

### ■ Level 2: Capable

- This is a learner-centred approach where students are regularly co-owners.
- Students have more control over pacing, often within a pathway devised by the teacher or a textbook.
- Students are informed and consulted about the overall whole-class goals.
- Student questions become more genuine and complex, which tap into the students' own desires to learn rather than mechanically brainstorming questions on sticky notes or posters.

### ■ Level 3: Accomplished

- When ownership is fully embedded, students drive much of the learning.
- Each student develops and works towards their own goals, which are dynamic and responsive to feedback and self-assessment.
- Students are intrinsically motivated by their learning.
- Some students lead some aspects of goal setting.
- All students initiate action at least some of the time.
- Adult-initiated activities share some decision making.

### ■ Level 4: Exemplary

- Goals are visible and shared – the community helps each other achieve their aims.
- Students share ownership of assessment.
- Students are self-starters who initiate activities, and share their goals, purposes and strategies with adults as mentors.
- Students feel ownership through many aspects of school life.
- Students have internalized their ownership and work with passion about their learning.

Be prepared to start at level one with new students. It is great when you have self-motivated students with well-developed skills for learning. Teaching is considerably more of a challenge when students come to the class with little ownership of their learning journeys. We need to be realistic and bear in mind that not all students want to learn all the time and some aren't ready to drive their own learning. Level one is about gradually shifting reluctant students to take ownership of small parts of lessons or their own work, or to provide students who have been spoon fed with experiences of ownership that they find fulfilling. It is about developing their intrinsic motivation and helping them develop the skills to learn.

That said, some of the greatest ownership of learning is with the youngest students who, although they are new to school, can be experts in organizing their play around their interests and needs.

### ■ Identity and ownership

The most successful students have a strong sense of identity as learners across many aspects of life. Children and adults who see themselves as learners actively look for experiences that help them learn, and engage fully with their learning. They 'trust their direct personal experiences and their ability to learn from them' (Rogers, 1964; Carr & Lee, 2012).

We want our students to become thinkers and scientists, writers and problem-solvers, and so on. We reinforce these identities by using language of identity in our classrooms. We can use phrases such as 'as a writer' about their text choices, and 'what will you, as a scientist, measure next?' when having them think through their experiments (Ritchhart, 2015).

As well as successfully mastering subjects, both separately and when they apply them in transdisciplinary work or interdisciplinary units, we want our students to have identities of success in approaches to learning. They should

talk about their identity as thinkers, capable communicators, organized achievers, successful researchers and socially skilled learners. When students lack these identities, we can help them by talking about times when they have had success and have demonstrated that identity.

We develop identities as leaders when we give students responsibilities and talk about them as owners of specific areas. We can give teams ownership of improving learning spaces, we can give crews ownership of organizing technology, or we can give reading gurus ownership of identifying books their peers might love.



Educators can encourage ownership in students by giving them responsibilities, such as identifying books for their peers to read.

### ■ Intrinsic and extrinsic motivation

Ownership helps develop intrinsic motivation – when we do something for our own enjoyment and satisfaction and for the love of the performance. Intrinsic motivation can be much more powerful than extrinsic motivation – when we do something for an external reward.

### ■ Encyclopedias

Intrinsic reward can be even more powerful than big corporations. In 2001, when Wikipedia™ was launched, few people would have thought that it could compete with the resources Microsoft™ put behind their encyclopedia, *Encarta*. After all, Wikipedia relied almost exclusively on volunteers who wrote articles for free just because they wanted to and who had a sense of ownership over the articles. Eight years later *Encarta* stopped being produced, unable to compete with highly-motivated, although unpaid, writers who owned their contributions to Wikipedia.

### ■ The Sawyer effect

Psychologists talk about the ‘Sawyer effect’, after Mark Twain’s story in which Tom Sawyer had to whitewash his Aunt Polly’s fence as a punishment. When he managed to make his friends think that painting a fence was fun, they actually paid to do it for him. The Sawyer effect is how a task can become an unpleasant chore when we feel forced to do it. When we choose to do something and make it our own, the same task can be a playful pleasure.

### ■ Rewards can undermine attitudes

The outcome from the fictional Sawyer story has been reflected in scientific experiments. For example, Mark Lepper and David Greene researched pre-schoolers who liked to draw (Lepper *et al.*, 1973). They divided the children into three groups. The first were told that they would be getting a nice blue ribbon as a reward if they kept drawing – similar to what we often do to reinforce behaviours and values. The second group had the reward as a surprise. The third just drew for fun. After two weeks the researchers looked at what children chose to do in their free play.

One might have expected the children who received the rewards to draw more – which is what we hope for every time we reward behaviours in our classrooms. On the contrary, the two groups who didn’t draw for a reward kept drawing with the same enthusiasm as before, but the children who drew with a promise of a ribbon chose to draw much less. Play had turned into work. Rewards can undermine intrinsic motivation and ownership. Rewards can harm the performance they seek to promote because they undermine intrinsic motivation.

Extrinsic punishments can be equally counter-productive, as a daycare centre in Israel found out when they wanted to deter parents from arriving late to collect their children (Gneezy & Rustichini, 2000). A fine to punish late-comers didn’t make parents turn up on time. In fact, more arrived late, even when the fine was taken away. The ownership of responsibility was destroyed by the symbolic punishment.

### ■ In school – intrinsic motivation

Since extrinsic rewards are very common in school, we need to be very careful that they do not undermine the learning and values that we seek to reinforce. In the short term, students may work for external rewards like grades or house points. We need to be very careful that the positive behaviours end up owned by the students and not the reward systems, so that they become part of the students’ identities and patterns of living.

It is tempting to over-use external motivation. It often works well in the short term. Early in my career I used points for behaviour, which worked exceptionally well the first week I tried it. In the second week it was less effective. In the end I gave up. Over time, relationship building and developing a strong sense of shared purpose makes more of a difference.

### ■ **Self-determination theory (SDT)**

SDT is a theory, developed by Edward L Deci and Richard Ryan, that can help us understand the motivations behind behaviour (Deci & Ryan, 1985). It looks at how we can achieve ‘inherent growth tendencies’, which come in three areas, closely related to agency.

#### ■ **Competence**

We seek to control outcomes and experience mastery. Students need the experience and identity of mastering challenges.

#### ■ **Relatedness**

We learn in a community. Students need to interact, to have relationships with others and to care for each other. They need nurturing from the social environment of the school.

#### ■ **Autonomy**

In a learning community, autonomy is about being in control of what you are doing rather than being independent of others. It is all about agency (Deci & Ryan, 2000).

### ■ **A balance of ownership**

Teachers also need ownership, partly for their own intrinsic motivation, and also because teachers have well-developed expertise about their age groups, their subjects and learning. Although students have some control, teachers need to keep enough of the initiative to make sure that learning addresses key aspects of each area of inquiry.

Teachers can push students to think in new ways and to access the powerful ways of thinking that humans have developed over the centuries. The most agentic of students would not be able to reinvent this learning all by themselves. However, students also need to be able to frame and explore their questions and find their own answers. They should be questioning their own answers and answering their own questions.



## ■ Finding passions

Finding intrinsic motivation is partly about identifying and fostering one's passions and owning the purpose for learning. However, we cannot wait for someone to show us our 'one and true' vocation. We may not find one best fit or it may take years to emerge. In the meantime, you have to find how to bring passion to what you do and what you learn. It is just as important to learn to be passionate about many things and to learn to bring the passions we have to challenges that may initially seem dull. Balanced IB students have learned how to find passion for many subjects.

## ■ 'Not invented here' syndrome

The importance of this area first hit me when I introduced a new maths programme to my school. I chose it, but with only a little consultation. There wasn't really a problem with the programme that was chosen, but there was a huge problem when teachers who didn't have any ownership of the choice resisted it. When it was my programme, people didn't let it work. Over time, I learned to pass ownership to teachers, and when they felt it was their programme, they all made it work. No one wants their own projects or ideas to fail. You have probably experienced something similar in your school.

It is the same for students. When they have something imposed on them, they have little emotional stake in making a success of it. When students have played an important role in developing something, they will do all they can for their idea to work out well.

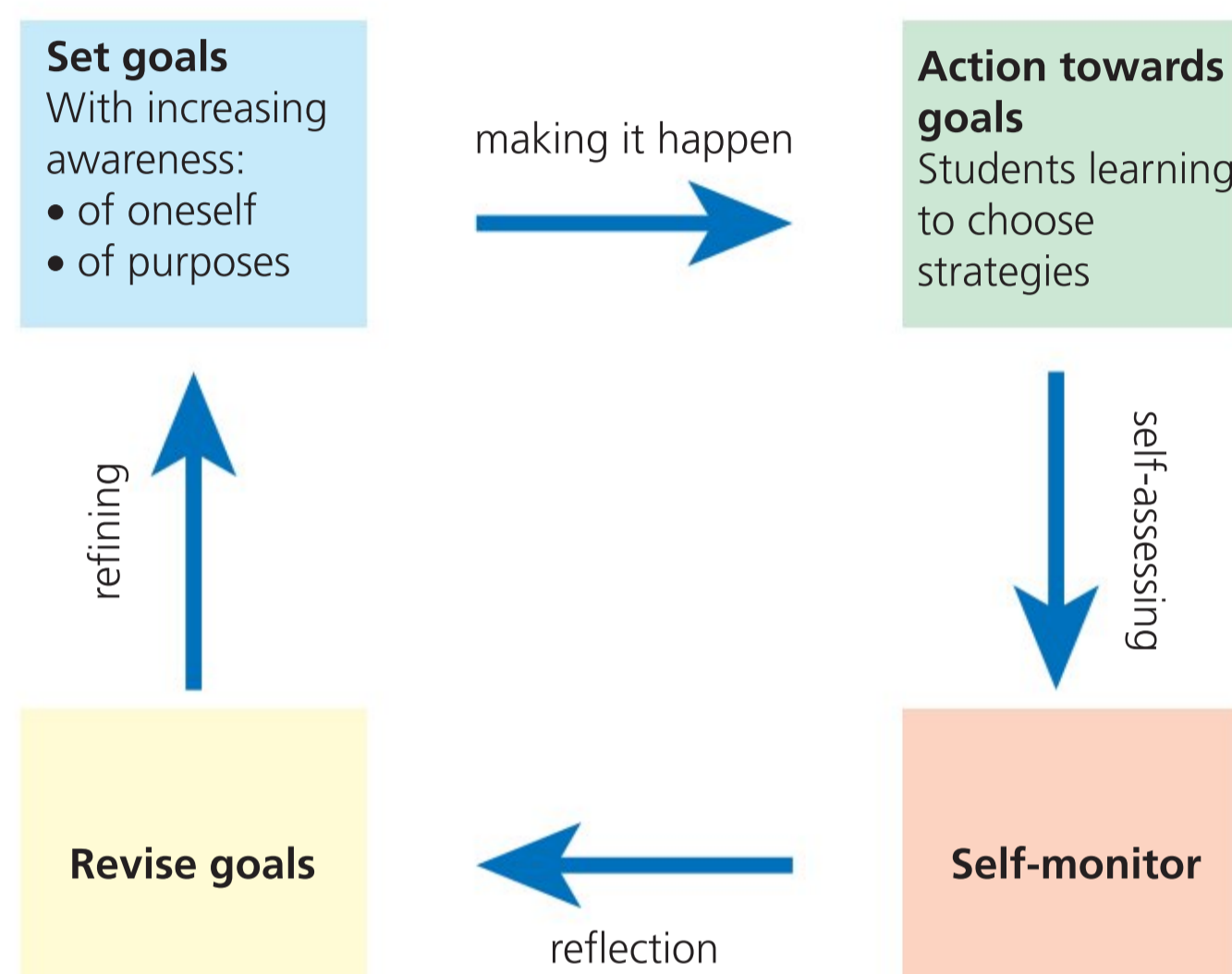
A first obvious, but fundamentally important, step is to use the language of ownership in class. Talk about 'your learning ... your success ... your work ... your assessment'. Do not say 'my test' but rather 'your chance to show what you have learned'.

## ■ Whose goals?

Avoiding the 'not invented here' syndrome, 'invented here' implies ownership and sharing of goals. If you see them as *your* goals, and you believe you are capable of reaching them, you are likely to get through any challenges on the way. Students who understand their targets and how they are making progress can have more ownership of their learning.

When I visit a classroom, an easy way to gauge the students' agency is to ask them what they are learning and why. If they name the topic, they aren't focusing on goals. If they can explain success criteria in their own words, they are doing well. If they know why the goals were chosen, they are doing brilliantly.

Setting and monitoring goals can be very natural. Have a look at children playing Minecraft™. They set clear goals. They also self-assess continually – although they aren't putting grades into a portfolio and building up a wad of rubrics and evidence. Rather they track how they are getting on. If they need help, they may choose to get support from a friend or an online video. They check for mistakes and then adjust what they do.



Setting individual goals and encouraging self-assessment can develop ownership in students. This four-step process is a good way to sustain motivation.

## ■ Goal formats

Professionals and students are often asked to formulate goals in specific formats, such as the SMART format for specific, measurable, achievable, relevant and time-bound, with occasional variation on some of these words. Smart, ironically, is a bit of a dumb acronym, since the S is redundant – try to write having a measurable goal that is not specific. You would also be ill-advised to measure something that is not relevant. The most important skills for students and adults alike to develop come in the M and T aspects, and it takes some learning for our students to be able to use and own both aspects.

### ■ Measureable

Measurable goals have clear success criteria. We ask our students: *What does success look like? How will your progress be seen? How will you track it?*

### ■ Time-bound

This is one of the hardest aspects for children, adolescents and even many adults! It is especially important for students who are learning to manage their time, as well as for schools and organizations which are seeking to get things done.

### ■ Living

Productive goals are also alive. When students own them, they use them to guide and nourish their learning. There can be a tendency to put goals into ManageBac or file them in a folder and leave them until the next monitoring period. In this case, the goals and timeframes are useless. They should guide learning and be accessible – students need to use them and revise them continually. If they are online or in a binder, they need to be opened and activated every period where they can guide learning.

Teachers can ask regular questions that students internalize over time and learn to ask themselves: *What are you learning? What will success look like? Are you on track? What goals are you changing?*

### ■ Make purpose easy to understand

Because education is so complex, we often have broad and ambitious goals that can be hard for students to really understand, and even harder for them to own. We work hard to carefully craft central ideas that condense significant areas of knowledge, through complex language and concepts, into a sentence. We seek wording that embraces a universal truth. Then we give it to eight-year-olds and hope that they can think of it as their own!

It is not only about having the best ideas. It is about connecting important thinking and the students that you teach, or rather whose learning you facilitate.

### ■ Breaking down big goals into next steps

Big goals cannot be used until they are broken down into manageable chunks which students can understand and complete as independently as possible. Students need to articulate steps before they can be involved in choosing strategies. Better still, they need to make them their own, and work towards them, with the teacher acting as a guide and a key resource. This can be as simple as students stating where they are, what their next step is, what they will do to reach it and how long they will take to get there – all can be adjusted as they go.

### ■ Acceptable evidence

Just as *Understanding by Design* (Wiggins & McTighe, 2008) asks teachers to consider ‘acceptable evidence’, students can benefit from similar prompts about how they will show they have mastered a goal. We cannot expect the levels of finesse that adults would provide, but we can expect students to be able to answer: *How will you know and show that you have met that goal?*

### ■ Self-paced learning

As always, technology can be a distraction or an enabler. When I was in school, many, many years ago, we had an SRA box (a box filled with work in different levels) with coloured levels of tasks. We self-corrected and moved up levels – making sure that our progress was not suspiciously fast when our marking was ‘generous’. Progress was linear and along one pathway for all students.

Nowadays, we have programmes such as Khan Academy, where students can modify their learning, modify their paths and own their pacing. We also have flipped classrooms, which blend students independently reviewing instructional content with working as a classroom community to iron out difficulties, clear up misconceptions and extend the learning. A student can own how they pace their review of the content, pausing and repeating when they need to, and they can choose which questions and proposals to bring to the class.

### ■ Importance of owning and managing goals

This self-management is arguably more important than any of the specific content for PYP and MYP students. If they learn to take charge of their learning, and have a base in each subject, they can fill in any specific gaps when they need to. This is especially important for mobile students who may change school, and possibly even country and educational system, and who need to be empowered to manage gaps and transitions for themselves.

### ■ Be sensitive with group decisions

If all the class decide something together, there is a chance that some students will dominate and not all students will have ownership. Unfortunately, because the quieter students may be the ones not dominating, their lack of ownership may be missed since those who drove the decision may communicate their ownership most strongly. Where possible, each student should make choices that they own.

### ■ Jointly owned rubrics

Goals are often clarified through rubrics. Sometimes well-designed rubrics from teachers help illuminate what a great product will look like. At other times students are better involved in sharing the design process. One way to do this is to project a blank rubric using a data projector or document camera, and draw out from the students the characteristics of the final product. This helps them simultaneously reflect on expectations and set goals. Examples of previous high and low quality work helps students think through qualities that are otherwise too abstract.

### ■ Danger of work at home

Be careful – ambitious parents may also take ownership of their children’s work. Energetic weekend activities may not be driven by students’ interests and passions, when parents’ ‘help’ ends up displacing their children’s own ideas. It is important to plan PYP Exhibition work so that the most important decisions are made in school, so that you can be sure that it is actually the students who are making them.

### ■ Wellbeing and safety

It is very important to share ownership of safety and wellbeing with students. Although it is up to adults to devise and run approaches to safety, adult-owned safety is never completely reliable – when your back is turned, accidents can happen. When students aren’t agents of safety, they will put themselves in danger. Student-owned safety continues when adults are not present, and student-owned risk assessment helps them think and avoid dangerous situations.

It is not enough to present well thought out rules in a top down approach like, ‘Here are the rules for working safely in a laboratory’. One should also ask: *What could go wrong? What do we have to do to keep safe?* When students use their voices and think through consequences, then they take ownership of their own safety and that of their friends. Otherwise students with agency may take the initiative to follow dangerous options they think about, some of which may be inviting. If they own their safety, they may realize the risks in time to change what they do. They may avoid being the kind of risk-takers who get hurt. Safety limits other aspects of agency. We can let them choose danger with traffic, chemicals or electricity.

As an aside, a bit of research I remember my youngest brother doing as a teenager was when he found out how to make explosives from fertilizer. In a pre-internet age he found the information in the library, and spent many happy hours blowing up tin cans. He had hours of fun and a real sense of ownership. However, it could have ended in tragedy. With hindsight it would have been better for this ownership to have been blocked or redirected.

### ■ Online safety

It is particularly important that students learn to manage their online safety and wellbeing. Unfortunately, peer pressure and bullying are common in areas of the digital world that children access without adults present. Adolescents seek their own space. That is why they always invent new words

or adopt different patterns to their parents. We want them to be able to explore safely and develop independently as communicators, but also avoid unnecessary risks.

Teenage years have always been hard for many children. They value peer approval greatly and peer culture often creates an adult-free and unregulated space. Here there can be body shaming and bullying. Prejudice against students from different backgrounds or with learning differences is hidden from adults. Inappropriate photographs can be shared. Aggressive texts can be circulated.

It is difficult to make such behaviours impossible. Digital devices are too widespread, and too important to our students. We have to make sure that our students own the solutions, as well as their devices. Our online safety culture has to empower students not just to know patterns of behaviour, but to understand how to evaluate and avoid risks, to keep themselves safe now and in their futures. They also own problem-solving and are able to take the initiative to solve peer problems and to develop principled and caring behaviour when it is not easy.

This is not to say that we, as the responsible adults, do not also have to own completely the safety of students in our care. Of course we do. That includes being firm when students exhibit negative or anti-social behaviour. It is how we exercise and share this control that is important. When student ownership, peer pressure and responsibility are highlighted and extended over time, we will have the biggest effect on the most students.

# Agency and models of learning

## IN A NUTSHELL

- Before constructivism, a behaviourist approach dominated. It is still used regularly in behaviour and reinforcement work, but it is less applicable for higher-order thinking. It provides little scope for agency – although students who understand how reinforcement works can make choices that improve their deliberate practice.
- The cognitive revolution gave students a more active role in their own learning. Constructivism presents a picture of children actively exploring concepts to understand how they work. Piaget’s original model dealt little with school, but inspired educators to provide more active learning and exploration.
- Other psychologists, such as Vygotsky and Bruner, added a social dimension, helping to highlight how learners feed off their peers and social relationships. Their work provided ideas like internalization – where activities and language become part of a students’ way of thinking – and scaffolding, where ‘more knowledgeable others’ help students learn.
- Social constructivism presents a model for how children have a very active role in learning and assimilating existing concepts. This was enough for students when knowledge was more static.

This chapter takes a brief look at the role of agency in a few models of learning that are particularly relevant to IB teaching – especially valuable in highlighting students’ active roles in developing their own concepts. One advantage of IB programmes is they have a well-developed approach to learning which draws on a predominately constructivist paradigm that facilitates many aspects of agency. Before looking at constructivism, it is worth looking at what went before it and is still influential.

### ■ Behaviourism

The first major twentieth-century theory of learning was behaviourism. It is based on the work of BF Skinner, who developed theories of learning and behaviour based on studies of the behaviour of pigeons and rats, which he extrapolated to provide implications for humans.

Skinner and his followers saw how these animals adapted their behaviour to various stimuli and so developed the theory of ‘operant conditioning’ in which learning was facilitated through:

- positive reinforcement – when a reward encourages a behaviour
- negative reinforcement – when a ‘punishment’ discourages a behaviour.

### ■ In schools today?

Although this is a very basic way of thinking about behaviour, it still has plenty of influence in schools today. We see behaviourism at work whenever teachers reward or punish behaviours. We see it in drill work and

repetitive practice. We use verbal reinforcement when we say, ‘good job!’ These reinforcements can be useful – there may be some place for them in a balanced school – but there are many limitations.

We can use operant conditioning for basic classroom management, so that we have a suitably calm and organized learning atmosphere within which to provide students with situations where they have agency. Behaviourism can also be useful for developing performance of specific skills, automating basic tasks and freeing up brainpower for higher order work, so that students can focus on complex ideas.

For example, when students can spell many words and write legibly without thinking, they can concentrate on plot and character. When they can manipulate numbers easily, they can concentrate on their equations. There is also a role for knowing facts. Students need to be able to recall important information quickly. Using learning terminology efficiently makes a particularly useful contribution to enabling students to talk and write fluently and accurately.

### ■ Lack of agency in behaviourism

Behaviourism is an accurate scientific study of a very limited range of circumstances. Although it is helpful for looking at some positive automatic behaviours and skills, it does not even begin to address how to develop independent thinkers and learners. It is based on the teacher, or trainer, providing training in discrete items to learn. Learners then do what they are told, without agency. They may learn how to follow a procedure for a specific type of problem, but they do not learn to solve problems themselves or to think creatively.

For students to develop agency, they cannot be passive recipients of these programmes, but they need to know when to select them to reach a goal or a next step. They learn how to choose practices that will work for them. They can see how they can learn facts or vocabulary best using the ‘intermittent reinforcement cycles’ that behaviourism shows are most effective. For example, they can use language flashcard apps to help learn vocabulary they know they need to remember. They also can learn the limits of behaviourism – in this case that knowing some de-contextualized vocabulary is only one step in learning a language, and they also need to experience authentic communication in order to develop fluency.

### ■ The cognitive revolution

During the mid-twentieth century, developmental psychologists moved away from looking at conditioned behaviour, to instead investigate all the



complexities of human thought. They looked at how children learn to make meaning from what they see, and included many more aspects of learning. They researched the role of memory and attention, and included problem-solving and the roles of emotion.

### ■ Constructivism and agency

Jean Piaget and his work brought a huge change to how we understand thinking and development. It shifted our understanding of learning away from behaviourism, which sees learners as passive recipients who need 'conditioning'. He investigated how learning came from 'biological maturation' and from 'interaction with the environment', which gave children a very active role in developing their own concepts.

He is partly known for his theory of how children develop through discrete stages of development. Some aspects of this were later discredited, for example, by Margaret Donaldson in her thoroughly readable book, *Children's Minds* (Donaldson, 1978).

The second aspect, children's active role in building understanding of their environment, led to constructivist approaches. Constructivism looks at the thought process behind the behaviour – how people think and learn to think. It is all about mental models of the world and how they develop. It presents a picture of children actively exploring concepts to work out how they work. Piaget's original model (1936) dealt little with school, but inspired educators to provide more active learning and exploration.

Learners are seen as agents because they have an active role in thinking through how the world works. Even if they receive information passively, the process of understanding it is active. When their new experiences do not fit their models, they mentally struggle and actively adjust their models to make sense of them. They create the meaning, interpreting their experiences and making connections with prior knowledge.

Children construct an understanding of the world around them, then experience discrepancies between what they already know and what they discover in their environment. This means that well-designed learning helps students discover the relationship between bits of information for themselves.

Although Piaget's work was more about development than learning, it has strongly influenced learning. Many educators came to believe that children learn best through actively exploring and trying things out. Teachers began to focus more on the process of learning, not just on the content to be learned. They used active methods that required children to rediscover or reconstruct 'truths'.

Piaget talked about learning from ‘disequilibrium’ when you encounter ideas that do not fit your current way of thinking, so collaboration meant that children could learn from others who thought differently. Following this, we deliberately set ‘provocations’ that force children to reassess and extend how they think.

Rather than mental models, in the IB community, we talk more about concepts and ‘big ideas’. Rather than looking at transmitting these concepts, and students being conditioned to memorize their definitions and characteristics, we expect children to think them through for themselves. We expect them to solve the problem of how ideas fit together.

### ■ **Misconceptions**

If we rush through content, we may forget that learning is not only about gaining new ideas. It may be additive as students gain new insights or transformative as they change old ones, and it can be useful to also subtract some ideas that do not make sense.

Constructivism is useful in helping us provoke students to confront things that do not fit. We put them off balance (or, as Piaget would say, in disequilibrium) and they struggle with ideas until they work out a more accurate way of thinking.

### ■ **Constructivist agency**

Constructivism can be thought of as the beginning of agency, because it sees how learners think for themselves. They are agents of their own concept development, agents of their own minds. However, students’ thinking was still seen as existing in isolated individuals. They were not involved in planning or organizing. Their voice was not necessarily developed. For that, one needs to add a social dimension.

### ■ **Social constructivism**

#### ■ **Vygotsky**

Lev Vygotsky was a Russian contemporary of Piaget, but his work wasn’t well known in the west until it was translated in 1978 (Vygotsky, 1978). He also died very young – at only 38. Vygotsky’s work helps us broaden our view of learning from just looking at isolated individuals, making sense of their world, to including social interaction and the role of the community. This makes him a ‘social constructivist’.

Students are still seen as making their own meaning, but the community and environment also has a central role. It affects how we think and what we think about. Vygotsky wrote about ‘internalization’ – how activities and language start off as social and shared, and then become part of our own individual thinking. Classroom dialogue becomes part of how students think – changing form slightly as it is internalized.

### ■ Zone of Proximal Development

Vygotsky is also famous for the Zone of Proximal Development (ZPD). (We can also talk about Desirable Difficulty.) ZPD means we can only learn concepts within a level just beyond our current independent level. Applied to agency, students working around level one for an area cannot even begin to address a level four agency situation – they will not know how to make sense of it.

They need a level of agency just higher than what they have been doing in the past. They also benefit from working with a more knowledgeable other (MKO), who has a slightly better understanding of or a higher ability level than the learner with a particular task or concept. This MKO might be a teacher but may well also be a peer who has already developed more agency.

### ■ Bruner

Another psychologist’s work worth mentioning is Jerome Bruner (Bruner, 1960; 1961; 1966), who drew several implications for education. Bruner was also interested in how learners construct their own meaning, including symbolic thinking. His work implies that teachers should provide students with the information they need, but without organizing it for them. It is not our job to transmit knowledge. Instead we create circumstances in which our students use and develop their thinking and problem-solving skills, which they can then transfer to a wide range of situations. They end up with more thinking power and agency.

Bruner also introduced the concept of the ‘spiral curriculum’, which is embedded in many scope and sequences as well as ‘transdisciplinary themes’ and ‘global contexts’. Because we want students to think through and organize their thinking, and over time take charge of it, we start with a simplified level that they can own. We then revisit the concepts several times at more complex levels later on. This approach should mean students can solve increasingly complex problems by themselves.

A spiral approach can also be applied to agency – coming back regularly to expand student voice, choice and ownership. We can start with a very simple level one agency challenge and add agency in increasingly complex ways.

### ■ Scaffolding

Bruner introduced the term ‘scaffolding’ to describe all the supports that help a student work on more complex work. It extends a student’s ZPD, allowing them to be successful in more difficult tasks. Scaffolding could be support from a more knowledgeable person, resources or organizational tools. Using the building metaphor, we put scaffolding up before construction to make it possible to build ideas. When the building is safe, we then take the scaffolding down – gradually removing the support until the student is working independently.

Scaffolding is an art. If we give students too many scaffolds, they get bored. They lack agency because too much is done for them. If we do not provide enough scaffolds, students cannot do the task themselves and get frustrated.

As we remove scaffolds, especially those around organizing their learning, students control more of their learning. This includes making more choices. If we have done our job right, they will have internalized enough ways of setting goals, planning tasks and keeping their own learning on track. We pass control to students, who make more choices, develop their voices and take ownership. In brief, they have internalized agency, and so they will learn successfully in the future.

### ■ Conclusion

Classic constructivism models work well with agency. The student develops their own concepts, provided we create the right environment, including provocations, materials and social exchanges. The classic models deal mainly with developing concepts, although we can extend some of the principles to other aspects of agency.

This would have been a comprehensive approach if the concepts students learned were sufficient to get through life – but they no longer are. Therefore, in the next chapter we will look at the changing demands on learning.

# New demands on learners

## IN A NUTSHELL

- Although there has always been a segment of society with agency, the proportion of the population with agency has generally been low throughout history. In many periods, this created a stable arrangement which worked for the elite, where those with less power had stable roles which often required a willingness to follow systems. Education for the masses was enough when it helped them follow procedures well.
- Receiving a historic body of knowledge successfully is no longer enough. Students need to: be comfortable with organizing themselves and taking initiative, be able to learn new things throughout life and take control of the learning process. People without agency become people with few choices, who may lose out as social and technological changes pose new challenges and offer new opportunities.
- Although some skilled roles will disappear, there will always be a place for ‘creatives’ and problem solvers – making the ability to manage oneself and embrace challenge hugely important.
- Many new roles also demand well-developed social skills. Our students may find themselves working in flexible teams or exchanging ideas with others. They need additional competencies, which have been described in several ways, such as ‘21st Century Skills’, ‘Future Fluencies’, ‘the Four Cs’. These cannot be learned through didactic approaches.
- Today’s new citizens also have to find their place in a demanding, complex and changing world. They have to embrace many voices and think critically to avoid information silos and misinformation, and they have to understand large amounts of data. In short, they have to be prepared to live lives of agency.

## Continuity and change

It is no coincidence that the interest in agency is coming up at the same time as society is changing. In the last few decades, many social values have transformed, and new technologies have permeated, our lives. Global connections and relationships are developing and adapting. It is only natural that our models of learning have to change to meet the new demands.

It is not, though, just a story of change. Human nature is essentially still the same, and societies pass on many ways of thinking to their successors. There are many lines of continuity, as well as changes.

Throughout history there have been people in society who have learned through agency, and who have developed agency. The transformations that we are going through are partly a reflection of their impact. Many empowering aspects of education for agency have been visible for centuries, but often were only available to a small elite.

The best educated people since the Enlightenment have been able to research for themselves. Although they didn’t have Google, they had the

crucial research and thinking skills. They could locate resources – just not online. They selected and rejected sources to fit their needs. They evaluated and interrogated them, analyzed and interpreted them. They synthesized ideas and presented conclusions to their peers. The key thinking skills have been well-developed in some for a long time.

Reading has also had a privileged place in western thought for a long time. It has changed the way that educated readers think, supporting perspective-taking and empathy, helping readers develop knowledge and logical reasoning (Wolf & Stoodley, 2007).

The pace of reading is still developing, with increased literacy and widespread short texts. Many more people are now able to read, with global literacy rates going up from 12 per cent in 1820 (van Zanden *et al.*, 2014) to around 86 per cent by 2015 (The World Bank, 2019). For these readers, digital technology has promoted increased skim-reading of many types of text, but may be reducing deep reading. We see this in our students, who are very familiar with reading and writing short texts, but may need encouragement to ‘read long’ when they have so many possible distractions.

## ■ Education reflecting bigger changes

Current changes in education reflect changing social organization and work patterns. Throughout most of history, the majority of humans have lived subsistence lifestyles, working in agriculture. After the Industrial Revolution, a significant proportion of the population began living in towns and cities, but many came to be human parts of a factory approach that someone else devised. There is little agency needed, or allowed, on the classic production lines popularized by Henry Ford.

During this age, a minority of people were needed to develop new systems, actively solve problems and initiate better ways of doing things. The majority of schools were designed to develop specific skills and capabilities without developing agency. A transmission model fitted them well.

Nowadays, roles that have little agency are rapidly being replaced by social change and technology. For example, at the start of the twentieth century, many people entered domestic service. According to the 1891 census of the UK, around a third of women aged between 15 and 20 were in domestic service, mainly as maids (statistics from ‘A Vision of Britain Through Time’, 2019). Now there are few maids in the developed world, and instead machines help with the laundry, washing dishes and cleaning.

## ■ Change to work that needs agency

We can summarize the changes in work as from ‘algorithmic’ to ‘heuristic’, with algorithmic work needing little agency. Algorithmic work is when you have a defined process to follow, which gives a result you expect. It is common in manufacturing, delivering packages or filling supermarket shelves. Such jobs have little role for questioning, innovation or creativity. Education for algorithmic jobs help students follow a set of instructions carefully, and without questioning. They are jobs without agency.

Algorithmic jobs have often had the worst conditions. Currently algorithmic workers may not even have secure employment. If they are forced, like many delivery drivers are, to be independent contractors, it is not easy for them to achieve agency even over their conditions of employment.

Heuristic work has no algorithm to follow. Therefore, heuristic workers need to have autonomy in their work so that they can solve problems and innovate. They devise ideas and strategies. They use well-developed social skills to collaborate until they find a solution. These are jobs full of agency. (Teaching is almost all heuristic – there are few scripts that you can blindly follow for all students.)

In the late twentieth century, many algorithmic tasks in developed economies were moved offshore. Now many are being automated. The remaining algorithmic jobs can be the ones with the poorest conditions. We need to educate our students for heuristic work.

## ■ Vocational learning

At times, politicians focus on providing training for specific jobs. That might satisfy businesses who want to address their specific short-term interests, but it cannot be the whole story. When vocational training only develops job-specific and algorithmic skills, students aren’t prepared for the long term with the ability to learn and to self-manage. That is why the IB Career-related Programme’s core and ATL are so important in providing agency.

## ■ Spreadsheets

A good example of technology changing work from algorithmic to heuristic comes from the changes in record keeping because of computerized spreadsheets. Before the computer age, accounting clerks calculated on large ledger sheets. This involved many accountants and analysts tediously calculating arithmetical operations. A smaller number used the results, but had few opportunities to experiment with different options because of how demanding it was to make calculations.

The move to computerized spreadsheets has had two huge consequences:

- The algorithmic jobs, the jobs without agency, have disappeared. Hardly anyone is employed to compute arithmetical calculations any more.
- New heuristic jobs, the jobs full of agency, have appeared. Now that you can change a variable in Microsoft Excel and see what happens, you can do sophisticated modelling. Data can be analyzed and interpreted in many creative ways. We can experiment, draw conclusions and decide how to act.

It is often best to hire employees who are self-starters and learners – other specific skills are quick to teach, but dispositions are very hard to develop in adulthood. Agency takes longer to develop, so it is best to hire adults who developed it throughout their childhood.



Technological advancement is one of the ways that the nature of employment has changed, and therefore the skills we teach and learn. Having agency over how we use technology is important to develop at a young age.

### ■ It's not only about the technology

Sometimes it can be tempting to look at changes as being only an increase in technology, and to think that students are ready for the future because they use apps like Instagram or Snapchat obsessively. However, they are only prepared if they have agency over these tools. Can they identify and evaluate the sources of information? Will they reject unreliable information? Can they apply information to new areas? Can they use it to solve problems? Can they focus as well as browse, dive deep as well as surf? Some of the key powerful thinking skills have not changed.

### ■ Few stable jobs for life – need to keep learning

The other huge change that requires more agency is the change in work patterns, in which many more people have changed how they work



within a career, or have changed career completely. There aren't many straightforward vocational paths anymore. It used to be that guidance staff could, for some students, help them choose a career for life. Now choosing well by yourself is even more important – because you have often to choose again and again.

### ■ **Managing your own learning**

Since work patterns can be more flexible and changeable, there is continuous new learning without necessarily having anyone to guide you through it. We need the agency to organize our own learning – including self-regulation, critical thinking and communication.

### ■ **Just-in-time learning**

One approach we probably all use to some extent is just-in-time learning. The phrase 'just in time' is best known, of course, for just-in-time (JIT) manufacturing, when components arrive just in time to be used.

The learning equivalent is when we learn what we need as we need it. For example, I regularly do small DIY tasks at home which need skills I don't always have. I don't do a full course in home improvement with modules in everything I might possibly need to know. Rather, I look up what I need to know as I need it. This uses many skills of agency – self-assessment to identify your skills gap, finding resources, completing the learning independently, looking for other resources when you aren't quite sure what to do.

Of course, such learning is much easier when you already have a conceptual base. Following electrical work videos would be highly dangerous if you do not understand circuits and voltage. Visual interpretation is vital for following even the simplest furniture assembly guide.

Another example familiar to many teachers are ICT courses. If you do a course too far ahead of time, you have forgotten it by the time you come to use it. If you learn 'just in time' you can apply it directly to your own situation and consolidate the learning.

### ■ **Massive Open Online Courses (MOOCs)**

MOOCs are online course that are both free and open to anyone to join. There are now MOOCs about almost anything you can think of, providing an affordable and flexible way to study new ideas and develop new skills.

In theory, anyone can study anything for free. In practice, these courses only work when you can bring highly developed agency including independent

learning skills. You need great self-motivation to learn without direct interaction with a learning community. An open schedule means that you can fit your MOOC in with life's other commitments. However, without strong self-management skills, MOOCs can fail because great intentions get squeezed out by other commitments and procrastination.

## ■ Citizenship demands

Jobs are, of course, not the only part of life. As we go about our lives as citizens, we have more challenges that agency and thoughtful education can help us overcome. We are surrounded by information, sometimes highly selected and targeted to influence us. Our world is rich in data – at the risk of offending traditional arithmetic teachers, data skills are now more important in life than long multiplication.

We may have access to a wealth of news and information, but this does not always make us feel informed and empowered. According to Adam Greenfield (Greenfield, 2017), it gives us a 'low-grade sense of panic and loss of control' about problems we cannot solve. We are exposed to so many difficulties of many types and from many places that we become habituated to them, and no longer react emotionally. It is hard to counteract that by teaching students about more things that they cannot directly affect – best to make sure that global themes also touch on something small and local that they can influence.

With so much information, often controlled and streamed to affect us, we want our agentic learners to pursue the different sides of a story for themselves. The aspects of voice that involve understanding and articulating a variety of voices and perspectives are particularly important.

It is not enough just to broaden our sources. Another skill that has become increasingly important is narrowing. This wasn't very hard in the days when a school library might have only a few books on any subject, most of which weren't appealing, and there were few other ways to look something up.

Currently, students have a plethora of options, not just in research, but throughout everyday life. We continually look at options and select our own choices. Now that information is widespread, and with fewer gatekeepers to publishing, its quality is highly variable. Students need to make active choices, that previous generations did not have to consider, about what is reliable and which information to use.

## ■ Twenty-first century skills

It is not enough to look at how to learn previous material effectively as empowered learners. Our students, and also ourselves, have to address additional challenges. To summarize:

- The classic content of a quality education contained many key skills – reading and researching, the ability to read, scan, hold an argument – that remain highly valuable.
- Today's students will have few opportunities for satisfying algorithmic work – they need the agency to complete the heuristic work.
- They will also need to keep learning across their lives, and to organize much of that learning themselves.
- If they are going to be effective citizens, they need the ability to seek alternative voices, understand many perspectives, evaluate them and come to conclusions.

Many educational thinkers have set out to address these complex issues. The additional competencies are described in many ways, such as 'twenty-first century skills'. Lee Watanabe-Crockett talks about 'Future Fluencies' that encourage problem solving, creativity and higher order thinking (Watanabe-Crockett, 2018). Some schools focus on the 'Four Cs' of communication, collaboration, critical thinking and creativity. In this light, the move towards agency is a great way of highlighting important educational values that have been articulated by many leading thinkers.

For IB schools, the story does not stop there, because these skills have been increasingly articulated in IB programmes. The next chapter explores how.

# IB, agency and skills for learning

## IN A NUTSHELL

- IB students have played an active role in their own learning since the beginning of the Diploma Programme in the 1960s. As other programmes developed, they shared this vision of active and responsible learners, but with features adapted to the different age groups.
- Each programme has significant opportunities for extended agency, through the Exhibition of the PYP, the Personal Project and community projects of the MYP and across the core of the CP and DP.
- These opportunities work particularly well when students have experienced challenges with extended agency beforehand, for example, through mini-exhibitions in earlier grades of the PYP and meaningful projects as part of MYP units.
- Approaches to Learning (ATL) help students manage their own learning and master the broad range of the twenty-first-century skills mentioned in Chapter 6.
- Now that the role of ATL has been clarified as a continuum across all IB programmes, it provides an important way of embedding voice, choice and ownership across them.

## Agency from the start of the Diploma

The Diploma Programme developed students' agency from the outset, even before the term itself was coined. In fact, one of the main advantages of the DP is that it prepares students so well for their subsequent education and work precisely because it develops their agency.

IB students are clearly successful. The Higher Education Statistics Agency (HESA) compared IB students with matched A-level students and found that the IB students were more successful in several ways: they were more likely to be admitted to the top 20 universities, and more likely to achieve a first class degree; they were likely to study a STEM subject; in addition, a higher proportion of IB students went on to further study after they finished their degrees ([www.ibo.org/research/outcomes-research/diploma-studies/](http://www.ibo.org/research/outcomes-research/diploma-studies/)).

IB Diploma students seem to learn well and sustain their learning well beyond high school. What makes the difference? Most IB classes spend a considerable amount of time with students learning to organize their own inquiries, and reflect on and communicate their conclusions in a variety of ways. Even when course teachers have little background in constructivism, students will still develop content as well as the comparable students studying for A-levels. Their agency is amplified through how many internal assessments are organized. Their learning is constructed so that they become articulate and independent thinkers as they reason about subject matter. This is especially true across the programme. It is particularly strong in the DP core, which encourages students to take ownership of key elements of their learning.

## ■ Demonstrating agency in specific subjects

In the Theory of Knowledge (TOK) course, students take ownership of reasoning. As they learn about the different kinds of knowledge and the ways that knowledge claims are made, they can decode other voices and they develop their own logical voice. TOK classes involve lively dialogue in which students can take ownership of critical thinking. Typically for DP courses, students have to develop their own presentations and their own essays, which show how they can address important ideas.

The Extended Essay makes a huge contribution to how students take ownership of their studies, and their preparation for university-level independent work. They are mentored through making a sophisticated choice, as they select a topic and then draft and pin down their research question. Students are not spoon fed. They refine their own ideas and filter evidence. They construct their own outline and are responsible for writing and polishing a lengthy essay.

Students do as much as they can for themselves – with scaffolding from a supervisor and the school, giving them an experience of taking ownership of critical thinking and research that prepares them well for university study; especially compared to other students who can be pushed through exams by micromanaging how they tackle one question type after another.

The third part of the DP core is also full of agency. Students self-manage creative work, physical activity and service which addresses an authentic need. They extend their agency as they reflect on how successful their approaches are, using outcomes that show how effective their choices and ownership were. The CAS outcomes are all about increasing agency (IBO, 2017).

### **1 Identify your own strengths and develop areas for personal growth.**

When students understand more about their skills and abilities, and how they learn, they can make better choices throughout their studies and their lives.

### **2 Demonstrate that challenges have been undertaken, developing new skills in the process.**

Students take ownership of their learning when they have to show for themselves how new challenges have led to new learning.

### **3 Demonstrate how to initiate and plan a CAS experience.**

Their ownership goes back to initiating and actively planning what they do – agentic students cannot be passive followers who produce good work only because someone else says how to do it.

**4 Show commitment to and perseverance in CAS experiences.**

A huge amount of agency is the ability to successfully carry something through when it is difficult. Agency in easy things is not so much of a challenge! When students learn to carry things through in difficult circumstances, they can be agents throughout life. There is nothing wrong with letting things be quite difficult for your students. It may seem hard to add CAS demands on top of all the other pressures of the programme, but it turns out very resilient students. They might not like it now, but it will make them more successful later in life.

**5 Demonstrate the skills and recognize the benefits of working collaboratively.**

Students increase their agency when they work well with others. As you will see in Chapter 11, communities help agency thrive. CAS students reflect on how their work is enhanced by working with others and so understand better how much more of an impact they can have as part of a team.

**6 Demonstrate engagement with issues of global significance.**

Students' agency needs to matter. There is little point affecting something completely insignificant. If you can only deal with trivia, you have trivial agency. As students learn how to approach and affect important issues, they become more powerful and more relevant to the world beyond the classroom.

**7 Recognize and consider the ethics of choices and actions.**

Agency has responsibility. When you develop agency, you should be accountable for the impact of what you change.

All seven aspects are important for the kind of student the IB promotes, so all need to be present in an IB student's CAS work.

IB students also have the benefits and pressures of a wide range of internal assessments (IAs). They cannot have the luxury of going passively through their courses and then cramming for exams near the end. Neither can IB students rely on finely honing exam technique and then regurgitating someone else's ideas. They develop their voice through oral presentations and commentaries. They have to design and carry out science experiments. They need to undertake their own mathematics investigations. They may engage with a real-life business problem. In geography they have to go out and do fieldwork. If they do arts they have to develop performances or an exhibition with their voice and rationale as artists. In short, IB students have to be active in the field of every subject that they study.

Compare this experience with a student in a performance-oriented A-level school, who is carefully monitored and tracked to squeeze out all possible marks. Not only do they have little agency, but even their teachers have little agency, as much of their work is determined by the syllabus and mark scheme. Much of the tracking does not typically focus on students learning to take charge of their major strengths and weaknesses, but tells them which gaps to fill. They can be well prepared for a few hours in an exam hall, but they may not necessarily develop the wider range of skills they will need for life.

### ■ Across the continuum

As the other IB programmes were added, they took into account the special characteristics of each age group. The youngest students learn more through play. Because primary years teachers usually work across several subjects, they can work more freely across subjects and provide extended time for large Units of Inquiry. The MYP addresses the needs of adolescents, who have a solid grounding from the PYP. They are ready for challenging work across the eight subject groups, attacking challenging projects and undertaking action and service more formally. It supports an age group that can be even more obsessed with identity and peers than others. The DP and CP have to be constructed to prepare students thoroughly for many after-school pathways, with specific needs. Therefore they each have special features that they gain.

### ■ Career-related Programme (CP) – agency for careers

The Career-related Programme (CP) has always had a focus on agency through Approaches to Learning (ATL) skills and the core. ATL has always had a special place in the CP. It was originally thoroughly developed as a discrete course and it is now extended by integrating it across the programme. Just as DP students develop agency as researchers in the Extended Essay, students carrying out their Reflective Project have to take significant responsibility for an extended piece of work for which they take as much ownership as possible. They also take ownership of Service Learning, similar to CAS in the DP mentioned earlier.

A more unique aspect of the CP is the development of personal and professional skills. This has a practical approach that develops the students' capacity to take responsibility for themselves, their studies and their work, including practical problem solving, as well as ethics, thinking skills and self-management. Along with language skills, and the academics of the Diploma courses, it prepares students with the self-direction needed for agency and success.

## ■ Middle Years Programme (MYP)

MYP students are at a key time in their development. They can focus on their sense of themselves and how they can take charge of different aspects of their lives. As students enter adolescence, they can take on more extended self-regulation skills. Their frontal cortex is developing, so they are starting to use its executive functions, but only with suitable scaffolding and support. They are better able to set and manage goals, manage time and self-evaluate, provided that they have opportunities to do so.

Since its beginning, the MYP has developed agency through the idea of 'learning to learn'. ATL in MYP includes an emphasis in understanding ways of thinking that prepare students for TOK. Over time its role has been expanded so that it supports all the agency skills mentioned previously. MYP students are also often learning to take more responsibility for their out-of-school activities.

They develop their agency through their community projects. They have to find a purpose for in-depth investigation and then take ownership of it independently or in a small group. They carry out sustained, self-directed inquiry, not just for the sake of research, but so that this research leads to action. They need to develop their voice, so that they communicate to all the different people involved.

MYP students take charge of community studies and service throughout the programme. This is expanded on in the chapter on agency in service learning (Chapter 14).

In the final year of the programme, students have opportunities for extended agency in their Personal Project. They can choose their topic. They take ownership of how they develop it and present their findings. Personal Project is often seen as a culmination of five years of ATL skills – it reflects all the agency that they have developed over the programme.

## ■ Primary Years Programme (PYP)

The PYP has made agency explicit in the enhanced version. Even before then it had many implicit aspects of agency since it developed from the International Schools Curriculum Project in 1997.

- It puts students at the centre, with students working as active inquirers.
- It has always had a portfolio system that brings tremendous ownership, provided that it is managed to regularly draw out students' voices about their learning, and to help them make choices. It has to be much more than a paper-sorting exercise ahead of student conferences.



- Student questions have always drawn their voice into what they study.
- The action component is an invitation for students to initiate and manage their own responses to issues that they discover.

Just as the other programmes have an extended project with lots of student agency (the Extended Essay, Reflective Project and Personal Project), the PYP has the PYP Exhibition. Students have significant responsibility for deciding their own direction and carrying through their work, including choosing their topic, within the school's general direction, and framing their questions. As with the other extended agency projects, students are most successful if they have already experienced ownership of significant choices and challenges. Therefore many schools have increased the opportunities to work with high degrees of agency before the PYP Exhibition, for example, from a mini-exhibition the year before or through large challenges in previous units.

### ■ Approaches to Learning (ATL) – agency across all areas of learning

ATL is all about agency. It is all about making learners autonomous, able to manage their own personal organization and their emotions. They learn how to learn, with powers of the mind and ways of thinking which enable them to take charge of new learning, new situations and new challenges.

Since 2018, this has five areas, common across all programmes:

- Thinking
- Self-management
- Research
- Communication.
- Social

These are all huge areas, which can be subdivided according to the age and the existing agency levels of the students. (For example, the MYP divides each area into ten clusters.)

How can we maximize the agency in ATL? As a rule, help the students take charge of their own ATL. For example, make sure that Research is not a set of skills that they apply by rote when a teacher insists, but rather consists of information tools that students learn to use by and for themselves.

### ■ Connecting experiences

ATL connects these areas across all subjects, so that students' agency is consolidated not fragmented. Using ATL language consistently helps students make and explain the connections between both what they learn and how they learn.

### ■ Thinking skills

In many ways, the ATL skills are a way of bringing alive the Learner Profile, of making sure that it happens in the classroom and around the school. One of the clearest examples of this is how ‘thinking skills’ develop ‘thinkers’. Thinkers understand how to approach complex problems and to think through ethical decisions.

Thinking skills provide agency when students know for themselves how to play around with ideas and pose problems. They have agency when they can think critically and creatively, and they have the metacognition to know how they do so. They own their thinking when they can experiment for themselves how to apply it to real-world contexts, and understand what their learning is really about, and how it matters.

### ■ Research skills

Research skills ensure that students do not only want to be inquirers, but that they have the skills to carry out their research and come to their own, valid, conclusions. They learn to use many different types of sources, and how to validate, compare and contrast the information that they find.

They gain agency in research as they learn how to seek information, draw their own conclusions and develop their voice in articulating what they have learned. When students can find things out for themselves, and know which conclusions are valid, they are in control of information. They develop a deeper understanding and eventually, we hope, some wisdom.

### ■ Communication skills

These skills also develop the Learner Profile. They make explicit what being a communicator is all about – developing their voice and understanding the voices of others.

Students gain agency when they are confident speakers and presenters. They become agents of their own written and oral communication, formulating arguments and expressing them to diverse audiences and in different media. They become powerful listeners when they can understand and interpret many voices, draw conclusions and take into account the different viewpoints that they hear.

### ■ Social skills

Students with great social skills become agents who thrive in teams and communities. They act ethically because they are caring and respect others. Agents value teamwork and use it to get things done. They can collaborate successfully because they accept responsibility and have the skills to resolve conflict and solve problems together with their team members. You cannot have agency unless you can form and maintain positive relationships. People with the most agency can take leadership roles and work well as a team member when others lead. Social skills can make teams, and adult lives, both fair and productive.

### ■ Self-management skills

Choice and ownership need strong self-management skills. To own any complex work, you have to organize tasks and manage your time. You have to be in control of your own state of mind and motivation. You are in charge of your 'next steps for learning' and how they lead to a bigger goal. We also want our 'balanced' students to manage themselves outside the classroom. We want them to own behaviour and choose safe and healthy lifestyles.

### ■ Challenge of content and skills

It is not always easy to prioritize agency, even when we know that it has a bigger impact on our students' futures than much of the content that they learn. In the CP and DP, success in all forms of assessments is vital for admission to the next stage of education. It is not straightforward to provide time for student agency when teachers and students are faced with a large amount of course content and the pressure of ongoing formative assessment. PYP and MYP students also often sit state or national tests which evaluate content rather than the skills of learning.

This can give a tension between preparing students to do their best on a particular test, which might include spoon feeding exam material for short-term recall, and developing them as great thinkers and independent learners. Sometimes we have to be pragmatic and focus on test success for short periods. When doing so, the more you help your students take ownership of the shortcuts you take, the more they can also be pragmatic when they need to.

At the end of the day, more self-efficacy is likely to have more impact on students' lives than a couple of extra points on exams – it is not only our world averages that are important, but how we prepare students for their future, and their own agency which will stay a part of them well after the exams are over.

# Mindset and agency

## IN A NUTSHELL

- There are two relevant meanings of 'mindset': a general sense, talking about an overall way of thinking, and the specific use by Carol Dweck.
- In this second sense, Dweck noted how learners can have either a fixed mindset, where they view ability as a fixed facet of who they are, or a growth mindset, where they see that they have potential to grow. Clearly a growth mindset is more conducive to learning. Agency can help develop this mindset, and mindset research gives us a good insight on the role of agency in fostering lifelong learners.
- Students with agency have positive mindsets. They know that they can learn, they understand how to grow and they embrace challenge. A growth mindset is at the heart of being a successful risk-taker.
- We should also pay attention to a false growth mindset, when you think it is only about effort, and are unaware of the wide range of factors that can trigger a fixed mindset. It is hard work developing growth across the board, but well worth it, because a growth mindset is essential to becoming a successful agent of your own learning.

## Two types of mindset

Two meanings of the word 'mindset' are particularly relevant to agency. In the first sense, a mindset is a set of assumptions and ways of thinking. It is a person's worldview or philosophy of life. There was a 'Cold War mindset' in much of 1950s America. We may encourage an 'entrepreneurial mindset' in which people are keen to act on their creative ideas and try to make them work. We wish to encourage an 'inquiry mindset' in which we value asking questions and pursuing answers.

The second, which I will focus on, comes from the work of Carol Dweck (Dweck, 2006). In her book *Mindset: The New Psychology of Success*, Dweck says people can be placed on a continuum based on where they believe ability in any area comes from. The extreme at one end is a 'fixed mindset', a belief that ability is based on innate intelligence. The other extreme is the 'growth mindset', when you think that you can create your own success if you work hard, learn and keep going when things are difficult. A particular mindset is not only a belief about our learning. It plays out in how we react to different situations, especially in how we approach challenges and how we respond to a failure.

## ■ Agency as a way of thinking

The first, more general sense, is useful for our overall view of learning.

Agency is not a skill but a mindset.

Nicole Bien, Head of PYP

We have a worldview in which learners are active, becoming increasingly self-directed, with all the implications this brings. This understanding permeates this book, so it does not need a chapter of its own.

We do need, however, to be careful of how the term ‘mindset’ is used around us. It can be used as a platitude that draws on positive associations, without necessarily getting to the ‘so what’ of what will actually be different in the classroom. We need to see the impact on how students will learn better. Therefore we do not wish to use mindset as a value statement without seeing the connection to the most important aspects of what goes on in a classroom. We want to see students learning that they are agents, and being able to talk through examples of how this gives them voice, choice and ownership. We should hear examples of how they are mastering approaches to learning and becoming successful through their own work.

Above all we want to hear how they have growth mindsets, and regularly face difficult challenges that they struggle with and learn to overcome. This takes us on to the second sense of the word.

## ■ Dweck’s work on mindsets

In 2006, Dweck published *Mindset: The New Psychology of Success (Ibid.)* which popularized two different beliefs about ability and which lead to two different approaches to challenge.

According to Dweck:

In a fixed mindset students believe their basic abilities, their intelligence, their talents, are just fixed traits. They have a certain amount and that’s that, and then their goal becomes to look smart all the time and never look dumb.

In a growth mindset students understand that their talents and abilities can be developed through effort, good teaching and persistence. They do not necessarily think everyone is the same or anyone can be Einstein, but they believe everyone can get smarter if they work at it.

[onedublin.org/2012/06/19/stanford-universitys-carol-dweck-on-the-growth-mindset-and-education/](http://onedublin.org/2012/06/19/stanford-universitys-carol-dweck-on-the-growth-mindset-and-education/) (Accessed 26 June 2019)

## ■ Risk-taker connection

A growth mindset is an integral part of being a risk-taker. One of the main strengths of being a risk-taker is how we approach challenge. Here is a quick reminder of the attributes of a risk-taker:

We approach uncertainty with forethought and determination; we work independently and cooperatively to explore new ideas and innovative strategies. We are resourceful and resilient in the face of challenges and change.

IBO, 2017

Risk-takers embrace uncertainty, and persevere when they face challenge and change. They understand the role of taking risks in growing mentally. This is closely related to a growth mindset, and is a key part of the success of students with agency.

## ■ Why this is a change

The fixed mindset approach is deeply embedded in previous views of intelligence. IQ approaches throughout most of the twentieth century measured what was believed to be a fixed quota of intelligence. This gave everyone a certain potential which dictated much of what they could manage to learn.

Many students labelled as high potential would rather avoid challenges than risk not succeeding in a challenge, and undermining their image. Others think that when they have to struggle it is because of their low potential, not because struggle is actually a key part of high-quality learning. They avoid struggle, and thus reduce their learning. Students labelled as low potential often do not see the point of trying to overcome challenges.

## ■ Impact of the self-esteem movement

The self-esteem movement had very positive intentions, but didn't necessarily have a positive influence on children. As many well-meaning adults hoped to give the message 'believe in yourself', they praised children, regardless of how they were doing, and whatever the effort or success. Rather than praise and value the learning process, including the struggle and the success, students were also reinforced when they stayed well within their limits. Adults avoided talking about how effort connects with learning and with eventual success, and inadvertently reinforced children's ideas of their own limits and their fixed mindset.

### ■ Impact on school of fixed mindset

As you would expect, students do better when they believe that intelligence is changeable, that they are agents of their own learning who can change how well they do. When students with a fixed mindset underperform, they doubt their own abilities. Next time they face a challenge they are less likely to think they can succeed, and so they try less, accepting setbacks as failure, which leads to a vicious cycle of low performance. Those who believe that they are gifted avoid risky challenges in case they fail and harm their high ability status.

Research shows that mindset can have a big impact on how well children learn (Blackwell *et al.*, 2007). Students who believe that learning is about continuous improvement do better than those who believe they are ‘gifted’. In fact, students labelled as able often refuse to try, as needing to make an effort is a sign of weakness. The self-esteem movement can reinforce this dangerous attitude.

If we look carefully we can detect mindsets whenever we give feedback. If students are only eager to hear about what they got correct, they probably have a fixed mindset in that area. If they are interested in why they got something wrong, they may have a growth mindset. If our focus is on students’ attainment – their grade or placement on a rubric – then we are reinforcing fixed mindsets. If we give feedback that focuses on how to change and next steps, then we are talking about growth.

### ■ Impact of a growth mindset

When students realize that their intelligence is not fixed, and that they can increase their abilities, they are more likely to be risk-takers who embrace challenges, who show determination and work through difficulties.

We can apply growth mindset to anything we want to learn – no area of achievement needs to be fixed. We can grow our academic behaviours. Any student can improve their approaches to learning. Some students are aware of their poor social skills and need a growth mindset to improve them. The growth mindset allows students to sense their agency in each area, understanding their capacity to improve and eventually be successful.

### ■ The importance of struggle

It would be nice if powerful learning was a smooth journey, where students developed incrementally every day. Unfortunately, it is not. Failure is an important step to deep learning, and students need to experience struggle.

They also need to know that struggle is okay – it is a sign of learning. If students say that their teacher makes everything easy, they probably aren't learning as much as the student who says, 'This is really hard – I really have to think in class.'

Going back to the Zone of Proximal Development (ZPD) from Chapter 5, we learn most when we are working slightly above our current level of understanding. As soon as it is easy, we are no longer in our ZPD and we have to increase the challenge to learn more. Mistakes mean that we are still learning. As soon as we get everything right, we are not learning any more. Parents who think their children are doing very well in maths because they get everything right should be upset that their children aren't struggling more! In fact, the children who struggle with a subject should be happy that they are learning so well! It is important to see that mistakes can be great. They are opportunities to learn.

### ■ Teachers reinforcing mindsets

One of the quickest ways of stripping agency is to reinforce a fixed mindset. It is easy to do. We just look at students who have problems and do not imagine them overcome. We say that agency is only for the more able. Students pick up our thoughts and believe that they will not grow much. Or we have set expectations for students and do not challenge them to stretch themselves further. Or we let the more able students sit back, stay in their comfort zone, and not take risks.

One of the most powerful interventions a teacher can have is to build a growth mindset in whichever area is problematic. We can prime a growth mindset. Never say, 'You did well on a test, you must be intelligent.' Rather say, 'You must have worked hard and achieved well.' In research, students whose growth mindset was primed selected harder work.

### ■ Triggers

Mindset research shows that we cannot treat a growth mindset as a single goal that we reach and then rely on – nobody has a growth mindset in everything all the time. To complicate things further, we can have triggers that put us into a fixed mindset on a particular task, even in an area where we normally have a growth mindset.



A trigger could be doing something outside your comfort zone – part-time risk-takers beware! Alternatively, meeting someone who is better than you at something you take pride in can often put you back into a fixed mindset.

Mindset work is hard work for teachers. It is not a quick fix where you show a PowerPoint and put up a mindset poster. You have to look carefully at the triggers for all students – and understand what pushes each one into a growth mindset and what sets each one back into a fixed mindset. Anyone who says ‘I have a growth mindset’ has probably missed the point. We have to understand our own triggers and slowly overcome them in each area.

This is especially true as children enter adolescence, so it should be a key focus in the final years of PYP and as students enter the MYP. This age group can benefit particularly strongly from trying different strategies for learning, and taking charge of making sure that they can choose something that works. In some ways this has more impact than individual academic skills, so that they enter the high school stage knowing that they can learn, and how they learn.

### ■ False mindsets

Dweck talks about ‘false mindsets’ because it is easy to use mindset language but without grasping the full implications of her work (Dweck, 2008). It is tempting to give non-specific praise about having a growth mindset, or to just focus on effort alone. Old habits die hard, and using some mindset vocabulary, but with the methods of the self-esteem movement, have the same results as smothering children with other praise whatever they do.

Praising children for trying hard, even when they fail, will not in itself promote a growth mindset. If we praise effort without growth, we are only using the growth language in a previous approach, and students may still see themselves as incapable. If they haven’t overcome a problem, they haven’t added agency. They have to learn how to embrace and use mistakes as prompts to persevere, do something different, so that they succeed in the end.

We have to be disciplined to focus praise on learning: both the learning process, and how it leads to change and new thinking, however much our assessments focus on final products alone.

### ■ Risk-taking with agency

It can be useful to focus on how we approach obstacles to risk-taking with agency. IB learners should:

- embrace obstacles and mistakes
- become even more invested when faced with challenges, until they overcome them
- work until they have succeeded.

This contrasts with the fixed mindset approach which sees an obstacle as a lack of ability, and means the student backs away from the challenge.

### ■ Willpower

Roy Baumeister and John Tierney provide another way of thinking about overcoming difficulties in their book *Willpower* (Baumeister & Tierney, 2012). They compare the brain to a muscle, because willpower can be developed in some ways that parallel muscle growth.

A particularly important aspect is that using willpower is draining. As you go through a day, trying to keep your growth mindset going, your willpower drops. (After a stressful day, we are much more likely than usual to give in to temptation, perhaps by having unhealthy foods or binge watching something on Netflix™.) However, over time, when we ‘work out’ our willpower, it gets stronger. We gain resilience.

### ■ Be careful about identity

We have to be careful when reinforcing identity. As mentioned in Chapter 2, we wish our students to see themselves as writers, readers, scientists and so on. We want to connect this to their growth mindset identity as capable, as a writer, of overcoming challenges in writing.

We do not want to reflect too much on various students’ preferred learning styles, what they are best at, and consequently, what they are not good at. The wrong reflection questions can reinforce a fixed mindset, and can blind students to the possibilities of change and reduce their agency. Don’t ask, *What am I like?*, ask *How well can I do something?* and *How do I grow?* (Zimmerman & Cleary, 2006).

When using the Learner Profile, make sure that these aren’t seen as fixed traits. Make sure that you are aware that a ‘thinker’ is growing many thinking skills, and can develop them or play safe when threatened. We

want to ensure that the Learner Profile phrases like, ‘I am a communicator’ or ‘I am a thinker’ traits are not seen as fixed. We can also talk about how we can become thinkers, and how we can learn to communicate better.

### ■ Growth mindset and self-regulatory skills

Students’ awareness of how they can grow is closely linked to knowing that they can successfully manage themselves. They develop and use a growth mindset when they set goals, self-monitor in achieving something difficult, manage their own time and evaluate their own learning. The most enabling reflections emphasize when students have succeeded through struggles and how they have overcome obstacles.

### ■ Actively teach students that the brain is plastic

One way of helping students embrace a growth mindset is teaching them about neuroplasticity. Not, of course, that the brain is made of PVC, but that it can change over time. We used to think that as people aged, brain connections became fixed. Developments in neuroscience have now shown that the brain never stops changing. We can always learn.

The growth mindset is understanding that we can take charge – be agents – in helping and using this flexibility. We can improve our brains by choosing hard tasks and sticking to them. We can encourage students to pay particular attention to plasticity when they know that they are struggling.

### ■ Ability grouping

One of the biggest ways that mindsets are reinforced institutionally is streaming. Students are placed by their ability, which is assumed to be their innate limits. If they work hard, perhaps they will do well for their stream. This seems logical when you work within a fixed potential model of ability, especially when you prioritize the success of the brightest students. However, research indicates that overall, students in settings with streaming make slightly less progress than pupils taught in mixed attainment classes (Steenbergen-Hu *et al.*, 2016).

The impact of overall attainment is slightly negative, but streaming does make some things easier for teachers, because there is a narrower range of students to address. However, it carries the risk that it is easier to ignore the differences between students and just teach to the middle of the class. More importantly, it can reinforce attitudes that performance is based on stream and innate ability.

# Agency and inclusion

## IN A NUTSHELL

- Modifications and accommodations for individualized learning needs are more effective and sustainable when the voice of the students themselves is included, and they help to make choices that work for them. The more that students own and drive these modifications, the more sustainable they are throughout the students' education and, if necessary, beyond.
- Specific adult supports can be very helpful for developing particular skills, but it should not be at the cost of students becoming autonomous. As they go through formal education and then through life, students themselves may be best placed to self-advocate, and to organize their learning around what works best for them, provided that they have the tools for agency. They need the voice skills to self-advocate, the choice skills to select the modifications and adaptations that work for them and the ownership to take charge of their own learning.
- **Voice** works best in schools that appreciate diversity, with a culture that embraces the rights of everyone to have their needs met. Students need to be aware of their own needs and to be able to articulate them. In an inclusive culture, students will also use their voice to advocate for the needs of others. We know that voice is solidly in place when IEP goals include self-advocacy, as well as other aspects of agency, as a matter of course.
- **Choice** includes an ability for students to take action on modifications and adaptations. Students can be involved in selecting the strategies that work for them. When they choose strategies and accommodations, and reflect on how they were effective, they become empowered to continue to modify their own paths to learning independently.
- Only if students with learning differences end up **owning** their learning, including how to modify it, will they be well prepared for their next stages of education and for life. Neither students with special abilities, nor those with unique challenges will be able to rely on future teachers and workplaces to make modifications. They will, through developing agency, be able to rely on themselves. It may take considerable creative thinking and many struggles to provide agency, but that is what will lead to eventual success.

## Student agency

This may be the most important chapter for some students. Student agency underpins successful personalized education. Therefore, it is especially important for those with some sort of exceptionality – perhaps special gifts or abilities, perhaps a unique difficulty or just some differences in the way that they learn.

Historically, individual needs have been overlooked. In many parts of the world, until recently, students with learning needs were either ignored or stigmatized, and their potentials were regularly overlooked. Many teachers lacked skills to recognize, understand and address the huge range of differences in learning that humanity brings to schools. They were excluded from challenges rather than supported.

Some students were able to be successful often because they eventually took their learning into their own hands. They became resilient and self-motivated and managed to find agency for their own learning. They are the successful few. Many others, sadly, fell along the wayside.

Today we are much more aware of different learning needs, but many education systems are overloaded. We have some exceptional specialists, and some great teachers, but overstretched teachers are not always able to make suitable modifications for all students.

The most successful students, with unique abilities and flaws, learn to make sure that they have whatever adaptations they need, so that learning works for them. By the end of high school, they take charge of their own individual learning, and can carry it through further education and life.

Agency for inclusion ranges from students being able to make a start on their own learning by themselves, to students developing their own learning programme. Making learning accessible to all means making sure that everyone can take charge of some aspects of their learning. This happens best when we develop all aspects of students' agency.

### ■ Gifted and talented

Discussions about inclusion tend to start by looking at difficulties, which can be complex and time-consuming. Obstacles to learning can dominate so much that we rarely focus on exceptional strengths. Students with particular strengths may need regular extensions, alternative work or additional challenges.

The 'gifted and talented' may have extension periods outside regular classes, but often sit and wait when they have finished the same tasks as others, or have some quickly downloaded, but hopefully suitable, extension task. Realistically, their needs can never be consistently addressed by busy teachers throughout the school day. However, they can learn to be agents in their own extension task. They can learn to self-advocate, to select the challenges they need to thrive, and own their unique learning journey.

### ■ Voice: self-advocacy skills

Although all students need to develop their voice, students with any individual needs require particularly strong self-advocacy skills. Otherwise their needs may be overlooked. It is highly unlikely that all of their teachers will be fully aware of their needs and be able to adjust their teaching to them all the time. If they learn to deal with that, they will be ready for further education, which will have similar challenges, and for employment,

where they can be sure to meet employers and colleagues that will not be tuned in to their different ways of learning. The students who have learned to self-advocate will be more successful (Hadre & Reeve, 2003; Zhang & Law, 2005).

### ■ **Atmosphere of inclusion**

Self-advocacy only really works within a culture of respect that embraces diversity of learning needs as well as appreciating diversity of culture or background. Some 'experts' still use a clinical model which focuses on 'deficits'. When they do so, particularly if they wish to talk to students, respectfully encourage them to talk about 'differences' instead. It is best to promote more positively how learning can be different and still valuable, rather than only focusing on deficits. This can use a diversity model, similar to promoting ethnic and cultural diversity as positive values.

One can talk about 'neurodiversity', to embrace some people who are 'wired differently' than 'neurotypical' people. This breeds much more informed and healthy attitudes than talking about 'normal' and 'deficits'. It is also more accurate. For example, people on the ASD spectrum not only have differences in communication and behaviour, which can be difficult, but also an ability to focus clearly on tasks and on detail.

Dyslexia, too, is a difference not a deficit, and can bring some cognitive advantages as well as reading and organizational disadvantages. People with dyslexia can be better at big-picture thinking, spotting patterns and creative problem-solving (Schneps, 2014).

Inclusion culture often starts with having all students frame arguments about rights and needs, before students with specific needs become able and confident to speak for themselves.

### ■ **Students not only dependent**

Students who self-advocate blast away pre-determined ideas about dependency and helplessness. They communicate their own rights and needs. The most effective students have a growth mindset about dealing with their own needs, and a growth mindset about how they can alter other people's approaches (some of the time) and get around ignorance (which unfortunately they may need to do in the future).

### ■ **Provide modification to develop voice**

Some voice roles may need curriculum modification, just like other areas of the curriculum. For example, a student with a learning disability in writing

may not be able to express their voice sufficiently in writing, and so will need to use other means – perhaps recording it in audio form, or using speech recognition software. Similarly, students with speech impediments may need additional support or alternative formats to present to the class. This needs to be a priority so that their voice is fully developed and heard.

### ■ **Advocates – supportive voices**

Of course, students do not only speak alone. Their voices can resonate with others.

Parents always mean well! They simply want the best for their children. They bring commitment, a knowledge of their children, and often provide continuity with previous and subsequent education.

Their voice can be essential, bringing key insights about their child. They can also say and do too much, and so reduce their child's own agency, and that of the school, and so inadvertently do their children harm as well as good.

One may have to work strategically with parents to make sure that their voice is very productive. They bring key information to discussions. They often bring time commitments. They know what their children like and what they are good at. They have the most detailed idea of their children, since birth. However, over-empowered parents who are ill-informed about the learning process are not helpful.

For their voice to be relevant, they also need information about and relationships with the school. They need to know about school processes and policies and how an IEP works. They need to know who the people in the school are, and their different roles, and who to go to for issues. They should understand how parents can be most productive, and what to avoid.

### ■ **At least one advocate**

Most students need at least one adult voice to advocate for them. Homeroom teachers and inclusion teachers often gain an additional role as a champion, guiding and amplifying the voices of those who need it. In a crowded curriculum, the voice of individual students can otherwise be crowded out. Often, just one adult can make a huge difference.

### ■ **Students advocating for other students**

A big part of voice in a learning community is how students look out for each other's needs in their classrooms, and hopefully in later life in their wider communities. Through working with students with learning

differences, provided these differences are articulated and valued, they understand how different people learn and work differently. They learn to advocate for others when they need it. They are better prepared for life.

Speaking for peers can be a very effective action in which students' learning is improved. Teachers may set the boundaries, but it is only when everyone shares the work that all students fully thrive.

## ■ Choice

Whereas voice is about self-advocacy, choice is about self-determination. Students with individual differences need to learn to determine their own paths. Over time, they learn to select the help that they need, or choose alternative goals, or different ways of showing their success. If they have difficulty writing, they may choose to show understanding in a video. If their reading is slow, they may choose to have the text earlier to preview – but only if they are given the options.

Research shows that students with inclusion needs benefit substantially when they have the skills to actively make choices about their education and their lives (Wehmeyer & Schwartz, 1997). This brings benefits in education, in the workplace and in their personal lives.

## ■ Know what you need

The first step in making choices is to know what you need. Then you need the options and the self-determination to actually do it. Of course, knowing what students need is hard work. It is very individual – no learning difference affects all students in the same way. There are many dimensions, such as their existing skills, their strengths and weaknesses. Each difference of disability may have many details. Students and teachers all need to understand how it affects their daily activities, and how it changes communication and social interactions.

Useful questions to support choice include:

- Which choices will improve your skills?
- Which choices will compensate for your weaknesses and develop your strengths?
- Which of these supports helps you work independently?

## ■ Provide options

For example, students new to English might benefit from an online dictionary or simpler text. They may prefer it when vocabulary is pre-taught,



or they may prefer to be given texts to translate themselves ahead of a task. Some might find it useful to get handouts early so that they can read ahead and look up new words, pre-teaching themselves.

Options need to provide access to the full curriculum for each student, which may mean a school needs to develop its resources. For example, a visually-impaired student can only make choices about topics if the content they want to choose is available to them, which may require text-to-speech or Braille conversion technologies.

### ■ Ownership

Students with individual needs benefit particularly strongly from all the usual work on ownership. However, because their learning can be complex and ‘managed’ by many adults, they are at a greater risk than others of losing ownership of their learning.

We can counteract this by ensuring that, as much as possible, they own their own goals and strategies. Their individual goals will be particularly personalized and productive. The greater role a student has in forming, articulating and using a goal, the more they will own it and keep it in mind when things are tough. With ownership, the strategies they have been taught become their own solutions to their own challenges.

Note the importance for dyslexia students of making them advocates for themselves. A key aim for support when they are in the primary stage is to teach them to own their success and to be able to voice their needs to teachers before they reach the secondary stage, as they may well meet uninformed teachers even in the highest quality schools. They will certainly need to self-support in higher education and in employment. They need to know what modifications they need, perhaps selecting texts, using audio versions and having organizational scaffolds. They need to be able to voice them clearly whenever necessary – to be in charge of their own support.

### ■ Whose Individualized Education Plan (IEP)?

If we use them strategically, IEPs can be a useful tool in sharing ownership of learning. They provide a clear focus on how learning is personalized – covering content, modified goals, strategies to use and assessment tools. IEPs should also include goals for self-advocacy (voice) and self-determination (choice). If we want to share ownership of the IEP, then we need to include different voices in putting it together, and in monitoring how well it is working.

Students will have the most agency when they are involved in choices about what they will learn, and how they will learn. Monitoring will be more effective when students share ownership of making sure that they are learning properly. Response to intervention models work best when students are included in their own conversations. They learn, after trying an intervention, what they respond best to.

### ■ **Agentic teachers**

Students with inclusion needs often have some teachers who encourage self-advocacy and some who resist. Students may be able to survive that, provided that they have one great adult who can encourage agency. The resisters provide a target for respectful push back which teaches the resilience and strength that all students need, especially those with specific needs.

### ■ **Teachers with growth mindsets for inclusion**

In addition to students, all teachers can be agents, who take ownership of the success of all of their students. A few abdicate responsibility for the very students who need them most, sometimes because they do not realize how they can help.

Teachers with growth mindsets know they can become experts in all of their students. Some teachers may find unusual needs act as a trigger to put them back into a fixed mindset. Did they have the training? Are they the kind of teacher who deals well with a particular inclusion challenge? If not yet, then they can be the kind of teacher who can find out how to deal with it.

### ■ **Transition to higher education**

As soon as students graduate from the Diploma Programme or Careers-related Programme, they become fully responsible for advocating for themselves and their specific needs. The supportive roles of parents change, and universities cannot provide support in the same way as schools.

In this age group, it is highly likely that some instructors and administrators may not be aware of students' needs. These students will succeed if we have ensured they have agency (Lynch & Gussel, 1996). That is the 'summative assessment' of our work with them.

## Agents of rigour

### IN A NUTSHELL

- One of the big reservations about letting learners have agency is the amount of accountability that we all work within. Students have to show success, but that can be either a well-drilled but shallow familiarity with content, or mastery with the ability to build on that learning in the future.
- It is worth looking at ideas of rigour. Some concentrate on the quantity that is learned, accepting spoon-feeding from teachers, providing students end up being able to do or recall lots and lots of slightly trivial things (in a test, for example). Others concentrate on what students can do for themselves after the course has finished.
- As we wish our students to have agency, we may focus on the second view, but we need to be able to justify our effectiveness to those who concentrate on the former. It is worth showing how agentic learning can be the most rigorous learning there is.
- We also wish to make our students' agency as rigorous as possible. We see this in the final assessment, as students make choices and use their voice in IAs and in the final assessments of the PYP and MYP units.
- Learning is more rigorous when it reveals and overcomes misconceptions – which is done more thoroughly in learning with agency than in content memorized and tested by multiple-choice quizzes. We also know that something is learned rigorously when students can apply it to something else.
- To look at learning rigorously we have to track not how well each student is succeeding, but how well they are making progress from their starting point. Students develop their own agency when they are involved in this process.

## True and false rigour

Rigour is a complicated concept. Both students and adults sometimes say that the most rigorous classes are the ones that feel most difficult. They may have lots of content to memorize in a short amount of time. 'Busy rigour' is easy to see – the difficulty comes from the quantity of things to learn, not their qualities. Real rigour is much more subtle. It includes mastering complex ideas and students taking control of learning so next time they can do something for themselves. It involves agency.

Since true rigour (or rigorous rigour) is difficult, we can have pressure to substitute it with false rigour, which often undermines working towards deeper goals. Parents and governors are often looking for the more trivial proxies for rigour, while we are trying to develop students as agents, who do not always show the same proxies, but may be working more thoroughly towards deeper capacities. There can seem to be a dichotomy between rigorous education and agentic systems.

Because deep learning is hard to see, we sometimes look for more simple measures of rigour. We look for something to seem hard, or to have lots of content. Sometimes our proxies are things that do not really matter, and only distort our view of quality. Sometimes they aren't even much to do with learning – for example, whether or not students wear a school uniform.

Another proxy for a rigorous education is 'seat time' (Kohn, 2015). It looks like students work hard when they sit busily at their desk for hours, even if they are just filling in sometimes mindless worksheets. Students who are compliantly sitting may be busy but they often develop little agency.

False rigour can also focus on facts alone. It seems as if students are learning well when they can repeat many facts – even if they cannot use them. Facts that have been taught historically provide continuity; so many parents are reassured when their children can recall the same things as they did when they were students themselves.

It is not that learning facts is not valuable. Learning facts helps us become good learners of content, which is important. We also know many facts which are a key reference in understanding the world. Many of us can recite bits of poetry that we learned in our youth, which is only positive. However, their true value comes not just from the information itself, but from students using it and taking ownership of it. They are only useful when we have the skills of putting them in context and using them, which take just as long to learn. This is not shown clearly on tests of recall.

False rigour has students being spoon-fed by the teacher so that they are kept very busy, but with only trivial tasks, without agency and with too little depth. For example, they may have lots of 'busy' homework with no challenge, and, therefore, little learning. They may not be released to do a huge and productive challenge, nor provided with the support and scaffold to tackle it, in the mistaken idea that support prevents rigour.

Perhaps the most common expression of false rigour is narrow assessment. Factual recall is easy to assess, and it can appear superficially like it is rigorous, so it is over-used. The skills of agency are often under-assessed because they are harder to teach and assess – but they are even harder to live without.

It is tempting to use low-quality tests, such as pop quizzes, that test the recall of facts in short-term memory which are unlikely to be remembered much later. Multiple-choice tests are popular because they are very easy to give, and they seem superficially rigorous because they give a clear score. However, the score does not necessarily reflect the important aspects of learning.

<b>False rigour</b>	<b>True rigour</b>
Students repeat teachers' choices	Students make choices
Lots of content, but with mainly predictable answers to predictable questions	Students need to think for themselves how to use information and concepts
Work is busy and teacher directed	Work develops skills of agency, including ATL

### ■ Students joining our classes with false rigour

Most of us have had students entering our class with lots of content knowledge but too few independent learning skills. Some come with glowing reports. They have appeared to be very 'bright' when spoon-fed to complete simple tasks, but they cannot organize themselves across more than one period. Their learning lacks rigour about what they can do for themselves, leaving huge gaps to fill when they enter the demands of IB programmes.

We cannot reject false rigour without replacing it with something more powerful. The choices of agency do not bring a free-for-all for students, but shared responsibility for their impact. Students try out frames for thinking about choices. They demonstrate mastery of concepts and skills – perhaps in their own ways. However, they only make them well with guidance, and with prompts to reconsider when their choices are leading them astray.

### ■ The big challenge of true rigour

One of the biggest challenges for agency is to show that students are learning a lot, and learning lots of the right things, when control shifts away from the teacher. When students have been making choices and developing their own work, we cannot simply have a quiz to show if they recall some information that we have tried to transmit to them.

Long-term rigour is about what students can do for themselves after the class has finished, but we cannot just hope that our teaching is effective because of our belief in deeper learning. If students are agents, they can show us how they can do more things for themselves. Their learning will not be perfect. They will have mastered some ideas and they will still misunderstand others. They will be skilled in some areas, and less competent in other tasks.

True rigour comes from embracing this complexity, and using evidence for how learning has changed our students. When developing agency, students share the ownership of their own progress. Agency in rigour changes two things:

- We include students in the process of gathering data, drawing conclusions and setting action. This can be as simple as asking them to

show you what they are learning, tell you about what is going well and not so well, and saying what they will focus on now. It is always grounded in evidence, with examples of what is changing for them.

- We make sure that we assess students' agency: how their voice is developing; how effective their choices were; how they made the learning their own.

There are a few challenges to bear in mind along the way. Rigour brings a huge cognitive load that few students manage by themselves. Students have to face misconceptions, which rarely come through their own voice. They need to face other ideas that contradict their own. They need provocations that encourage them to reconsider their positions. They need to move from what they are already familiar with towards more generalizable truths.

Not all truths and learning paths are standardized. The more students make choices about their learning, the more variety there will be in how and what they are learning. We have to focus on the bigger standards and big goals, and make sure that they are achieved with rigour. Within these, students can select their own micro-goals, purposes and strategies for themselves.

Students have to demonstrate what they have learned. They have to be able to both identify skills that they have just learned and understand what suitable evidence of learning involves.

Since they are choosing positions, they need the reflection skills and voice to reconsider and alter their views according to evidence. This is very useful in avoiding the socially segregated thinking that emerges when people only connect with like-minded people.

#### ■ Include measures of agency

Sometimes accountability processes squeeze out agency because they do not include enough measures of agency. Unfortunately, the metrics of contemporary educational accountability sometimes need to be expanded to serve our students well. We know that developing students' ownership and choice skills will keep them achieving better not only this year, but throughout their future. It is worth investing time in this.

In IB schools, this can come through regular tracking of agency within ATL skills for the age group. We make measurable the things that are truly valuable.

## ■ High stakes testing

High stakes tests are now a fact of life. In the USA, students need to show their learning in state tests and in MAP. English schools and their students are judged by their SAT scores. This provides schools and students with a challenge that we cannot ignore, and with quantitative data that we would be foolish not to use fully.

As much as possible, we can use the inevitable testing processes to increase students' agency. It is good information, but test results by themselves do not make a difference. Educational leaders and teachers only have agency when they have the data analysis skills to use information well.

We can use students' conventional testing to develop their agency in small ways. Since many online tests now provide results almost immediately, we can frame reflection questions to help students take ownership of how they have performed, and what they can learn from it. Testing systems that take months to provide information are too slow, as their relevance to an individual is lost over time.

Students need to integrate test information into their 'progress profile' about how they are doing and how they can do as well as possible. Students normally have an informal mental profile of how they are doing, but making it explicit helps them combine different information and avoid misunderstanding themselves – many students are too hard on themselves and some do not easily see their areas of strength and weakness. Helping them use evidence gives them the tools to be in control. In short, it helps them to be rigorous.

External testing can also be useful to teach students how to work strategically to be successful. At times this will include 'playing the game' of showing off your learning in distorted circumstances. We can explain to them the game and let them play it for a short time. It is useful to learn how to cram and forget, but not of course to spend all the year cramming trivial knowledge you will then forget.

## ■ Dangers of testing

As described in Chapter 4, extrinsic rewards distort motivation. This can be as true for teachers, administrators and managers as it is for students. Rewards for test scores do not necessarily sustain the best professionals – who are in education because they are passionate about their learning.

Another risk when systems over-emphasize high stakes is that it encourages cheating. For example, there is controversy in England where schools artificially boost their scores by 'off rolling' – excluding weaker students from

their rolls and their data in a whole manner of ways, to artificially boost their performance.

There is a temptation to boost scores by teaching students to look for cue words in arithmetical problems, rather than to interpret mathematical situations. Students also lose out when, instead of rich learning experiences, they practise and practise how to answer a certain format of test questions. They often have a passive role, learning what the teacher says is good for the test. They are learning, but not necessarily what they need to learn to take charge of their futures.

### ■ **Abusing tests to get compliance**

We may hope to use tests to see who needs help, to modify learning and teaching. However, we often use them, particularly in secondary schools, to pressurize students into doing things they are not interested in. We say what will be on a test so they pay attention and complete their assignments. If we lose their interest, we surprise our students with a pop quiz to ‘fake rigour’. Even essay answers can be a test of how to regurgitate some information in one particular format than a test of how a student has developed their own voice or can make good choices.

### ■ **Using evidence**

#### ■ **Reflective students use evidence to make choices**

We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

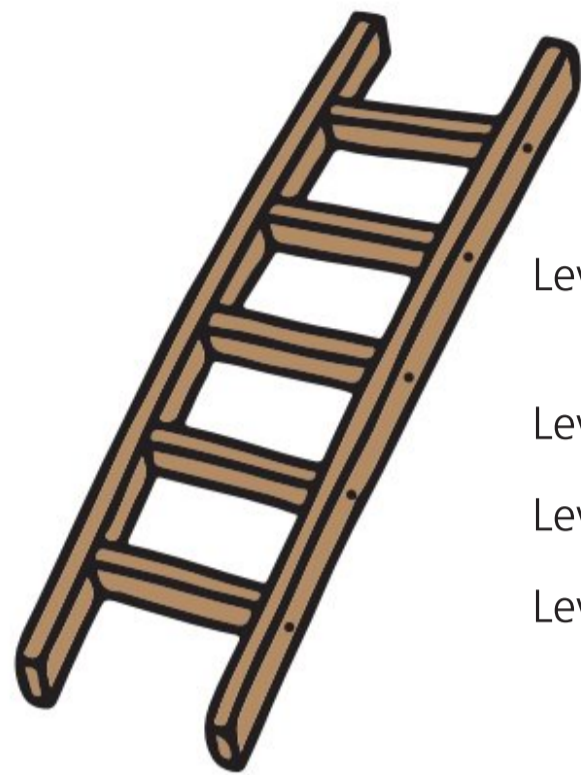
IBO, 2017

A key part of being reflective is to examine evidence of learning. When we share this problem-solving exercise with our students, we help them to be reflective thinkers, with ownership of their learning, including problems and solutions.

At its most simple, we look at what the student could do beforehand and what they can do now. We ask what the differences are, what helped make improvements and what to focus on next – leading to informed choice. Productive reflection leads to a decision point, perhaps about long-term goals, perhaps about ‘next steps’, perhaps about strategies. Sharing evidence with the classroom community helps too, for example, pooling what has worked in reading can help students choose which books to read or which literature group to join.



Level 1 choosers may set themselves targets under teacher guidance, while more advanced choosers know when to set and modify their own targets.



Level 4: Students involved in developing learning pathway and materials

Level 3: Students place themselves

Level 2: All comes from teacher, including placement

Level 1: No success criteria

### ■ Data gives unexpected answers

A key test of whether you are learning from data is to ask yourself if it has changed your own choices. If you only see what you thought you would see, you haven't gained any insights.

When you have clear evidence about the difference something makes to students' progress, it can change your choices. For example, when I was a principal, I introduced a particular approach to phonics that we believed would be helpful. Our PYP coordinator wanted to see if it was working and compared four-year-olds using the programme with five-year-olds using the previous approach. We hoped that the four-year-olds would be doing well, but we were surprised that they were already ahead of the five-year-olds. Therefore we made a choice – we extended the new approach to other grade levels much faster than expected. The teachers and teaching assistants who came into the approach all noticed a big improvement and appreciated it. Data had done its job.

Looking at data often shows unexpected side effects, and so it can help us make informed choices. For example, some English schools pooled data to look at attendance and noticed a spike in absences of disadvantaged students on 14 December. This was mysterious until they realized that 14 December is Christmas Jumper Day – a fun fundraiser for students who could easily buy a novelty jumper, but embarrassing for those who could not. When schools looked at the data, they could make more informed decisions about how to have inclusive celebrations (George, 2019).

We are truly rigorous when students and teachers alike make informed choices, using many sources of data. Although we have to be wary about

the impact of some forms of external testing, we should fully embrace all forms of data. It is about using what you know and what you can find out to improve learning. For students, teachers and administrators, agency includes using lots of evidence to make good choices.

The Data Wise Improvement Process from Harvard Graduate School of Education (Parker Boudette *et al.*, 2013) has many helpful steps, including spending time developing assessment literacy, so that we can gain as many insights as possible from the data, and to create a data overview, that helps give a clear picture of learning that draws from many sources of information.

The data overview can start with a simple list of what you have available. Data is not of course, just high stakes results. You have skills checklists and progress records. Data does not need to be numerical. It can be as simple as a short piece of work with success criteria – like a rubric or essential question. It is about learning all you can from all sorts of information. It is all forms of evidence – representing the richness of IB learning.

It can be easy to read into what we expect to see in the data – but we can undo the habit just as well as our TOK students can. We can start with making statements about what we see, not what we believe. For example, ‘I notice that when I ... then ... happens.’

I remember watching two consecutive portfolio conferences. In one, a student made a belief statement saying, ‘I am a thinker when I do math.’ In the other, the student explained how he thought through a mathematics problem. The first gave a plausible belief, the second described evidence about this thinking. The first repeated shared beliefs about learning, the second was actually thinking about evidence of learning.

### ■ **Alternative assignments and assessments**

Remember that assessments are only about finding out – change them when they do not work, and involve learners in finding alternatives. If a student complains that they do not find an assignment interesting, then ask them to propose another way of showing their learning. The requirements can be quite simple: providing evidence of achieving the learning objective; and needing as much work as the original assignments. Students choosing their own form of evidence generally feel ownership and do the assignments particularly well.

## ■ Portfolios

When students maintain their own portfolios, they can track their work and take ownership of how it is developing. When used regularly and expertly, they have a clear idea of their big goals and next steps, their landmark achievements and their strengths and weaknesses. Alternatively, portfolios can be a huge waste of time and paper. To make sure portfolios develop agency, you might like to consider:

- **Voice:** Do you get a sense of how the student expresses themselves as soon as you read their portfolio?
- **Choice:** Who chooses what goes into the portfolio? What criteria do they use? Do they use portfolios to make choices about future learning? Does the portfolio record both choices and their impact?
- **Ownership:** Do students run them as their own documents? Do they take pride in them? Do they want to update their portfolios for their own satisfaction, and not only because there is a key deadline, like a portfolio-based conference?



Individual and unique portfolios are an outlet for student agency.

Keep portfolios alive. Use them for decisions. Make sure students use them to review their work to choose where their focus should be improved and to see what strategies for learning work best for them. Digital platforms can help greatly. They provide a workflow that students can own and where students can upload work easily, so that it includes their choices. Their voice can include images and video, as well as text. If they upload examples of decisions about learning, they show the evolution of their own thinking and agency over time.

Even pre-school children can take photos and videos easily – although they may need support from adults to annotate them and to foster reflection.

However, this adult time is well spent focusing on higher-order skills, rather than compiling journals and scrap books for each child, as was common in the past.

# Communities of learning agents

## IN A NUTSHELL

- Learning always takes place within a community, whether with traditional teacher-dominated dynamics, in which only the teacher has agency, or within the wide variety of relationships that underpin a modern classroom. When we consider the community, we can understand agency in a very human way – personalized to the people we work with, both students and colleagues.
- To understand how a community works, we have to understand its culture, as well as the relationships and the people. The culture includes values, reinforced by language, actions and routines. In a culture of agency, there is a culture of developing people – a fundamental characteristic of best classes and staffrooms.
- Relationships have an especially important role. Classrooms fostering agency need relationships with trust, in which students can be autonomous thinkers and risk-takers. They need relationships that encourage voice, choice and ownership.
- We can also examine how different students learn to take many roles as part of a community. A well-functioning community has roles which insist that voices are heard, and that ownership is shared. These do not have to happen at once for all students. Lave and Wenger showed a model of Legitimate Peripheral Participation, in which newer members of a community are prepared for taking on new roles by engaging actively with others who have those roles.

## Humanizing agency

We sometimes get caught up with the formal side of educational achievement. We look at clearly articulated educational standards, procedures and policies. We examine individual cognition and how various concepts might be developed. We look at trends in test scores and ponder how we have specific aspects of learning.

These are all important, but they need to be balanced by a more personal approach. Schools aren't merely educational factories, producing a product. We also need to keep a focus on what makes us human – a very social species – and what it means to be part of a community. The nature of the community has a huge influence on the ways that students understand and carry out their activities, and therefore, in turn, on their agency.

Focusing on the community gives us a powerful perspective that emphasizes how we come together with shared values and create a shared sense of purpose. The community shows the role of ritual and shared routines that create meaning and provides a productive environment for working and learning. It supports building relationships and a wide variety of roles. It shows how language has an important role in relationships as well as communication. The IB places a tremendous value on the role of community for both students, in their classroom communities, and practitioners in their

communities of practice. For example, it allocated a section of the Enhanced PYP to the role of community (IBO, 2018).

### ■ Shared purpose, values and language

Learning does not happen to students as isolated individuals. They learn with each other, and from each other, and sometimes even in spite of each other. It happens as part of a community. But what makes a community more than a collection of people in the same space?

One answer is culture, which is founded on shared values and a sense of purpose. We can think of culture as what is understood without needing to be said. It is the implicit and explicit assumptions: the way we do things in a school, a country or a classroom. Culture embraces our expectations, values and beliefs. It includes our customs and patterns of behaviour. It includes both senses of mindset from Chapter 8. Learning communities have a special kind of culture because the roles and values include feedback and progress.

The language of the community develops the kind of relationships that emerge. Adversarial language, such as, ‘If you don’t finish your work by the end of the period you will stay in for recess’, sets up roles where the teacher sets the boundaries, measures success and controls sanctions and rewards. The term ‘work’ instead of ‘learning’ also underlines a value of completing tasks rather than developing new capacities.

The language of agency involves the students’ thinking: *How am I getting on with my task? What obstacles am I finding? How can I overcome them?* This sets the difficulty as a challenge for the students – with the student having agency in finding a solution.

### ■ Rituals

Rituals are a valuable part of every thoughtful community. They free up working memory so that students can do difficult things. Ironically, fixed routines and structure support a community of creative inquiry because they stop you having to think about routine things, so you can focus on the more difficult aspects. They help people relate to each other, so that they do not need to expend emotional energy all the time to negotiate simple things.

Rituals can support or undermine agency, for example:

- Students can chair assemblies, symbolizing their voice, or a head teacher can lead them from a podium at the front, demonstrating how they alone drive what happens in the school.
- Displays of student work can reflect student agency or external control. Work with agency will be varied, echoing the many voices and ideas

of students. Beautifully displayed but identical work may show skills development directed by the teacher, but it is a clear indication that students have had little agency.

- Decisions on which work is graded, discussed and praised underpin community values.
- Classroom talk shows values about how the community works as well as what kind of learning is most important. It can deal with behaviour and compliance, or respect and students' own ways of thinking. It can focus on big ideas or discrete knowledge.
- Agentic classroom discourse includes many extended ideas from students, and connects them to the values of the school and the language of IB. When students make the values their own, they will express them in their own ways.

## ■ Displays

Displays are a key way to communicate our values. They make learning public, presenting what we value as great learning, and will, ideally, also include the processes behind them as being equally important. To have a continuous impact, they need to be kept alive.

Psychologists talk about habituation – how the response to any frequently repeated stimulus reduces over time. Our brains cease to notice something that stays the same unless we interact with it. (Much to the annoyance of my wife, I cease to perceive the piles of paper around my home office.)



Displays can communicate values and are a great way of presenting learning on the walls – but they should be kept alive.

Anything that has been on the wall for more than a few weeks is no longer seen, except displays that students refer to and use. Great Learner Profile displays and stunning action walls have a fantastic impact for a short time and then are no longer seen unless they change.

Interactive classrooms can have a ‘what we are learning’ section, perhaps with a learning intention and a student voice comment about what will be successful for them. Any additional challenges/risk-taking areas need to be updated. Students need to be encouraged to add to displays, with teachers helping them print out work if needed, and take down work as soon as it loses its impact.

Shared display areas can be difficult to keep updated, but also provide an opportunity to develop agency through having a rota for which students will take ownership of them for a manageably short period.

Displays have much more impact when they aren’t put up in isolation. For example, a poster saying ‘we don’t like bullying’ has only a little effect by itself. It becomes part of an anti-bullying culture when it is backed up by symbolic places like a friendship bench and routines to stop bullying being silent. Regular ‘check in points’ with a homeroom teacher/form class or pastoral team demonstrate that it is taken seriously, as well as providing time and space for student voice about their own experience. Then the display is a reminder of key values that students know from their community – provided that it is changed regularly.

### ■ Set up a classroom community every year

One of the most important jobs of a teacher at the start of any school year is developing the culture and routines. This can take weeks, but the time is well invested, as a positive culture will have a huge impact on learning throughout the rest of the year. Principals and their teams also renew their school communities every year – or more often in transient communities. Community renewal has three important areas:

- establishing a clear purpose
- identifying shared values and understandings
- establishing both the routines for smooth running and the rituals that underpin the core beliefs that keep the community together.

### ■ Relationships for agency

From the time young babies first become aware of their parents, relationships are central to people’s lives. Many aspects of identity and learning are

formed and transformed through relationships. They provide the context and atmosphere within which students make their own meanings about how learning takes place.

To develop a sense of agency, teachers need to have relationships of partnership. They are the proverbial ‘guide on the side’ rather than a ‘sage on the stage’. We can use the language of partnership so that students articulate ideas: *What are we learning?* and restate common purposes: *Why are we learning this?*

### ■ Chat helps relationships

Communities do not only value each other’s voices through exchanging deep and meaningful information. Chat is an oil that keeps communities running smoothly. As we pass our neighbours, we often exchange words about trivial things. We might discuss the weather or a recent sports result. We do not do so to build meteorological or athletic concepts, but to build and sustain relationships.

Similarly, schools benefit from a little talk, some banter that increases rapport, as well as more focused conversations. Productive classroom chat helps include everyone’s voice in low stake comments, priming the atmosphere for later, more substantive talk. Students will often do this between themselves, often having the same conversation many times, perhaps about a favourite dinosaur, or about which superpower might be better.



Chat in the classroom can be a productive way of including everybody’s voice and sustaining a sense of community.



Like many aspects of education, we need to be balanced. If a teacher does not chat to support relationships, the classroom community will be poorer. If there is too much chat, you lose the focus on big ideas.

### ■ Relationships for agency in learning

The deeper levels of agency include an awareness of the responsibility of one's own actions on the environment and on others. Learning how to help a community thrive involves understanding more about the effect of what you say and do has on how other people think and behave, and the choices they will make.

The most positive relationships embrace feedback and challenge. Learners also have to learn that sustaining good relationships involves being a communicator, expressing their opinions clearly and listening to others whenever any issue arises. Trust is also important, especially when working with more problematic students. In a traditional model, the teacher checks everything. There is not any trust, but students may be on task and complete assignments on time. It may not seem like there is any problem, except for the amount of teacher time and effort that is wasted in classroom management. This most simple model may look rigorous and accountable – but if students do not have any agency, they may not be developing any sustainable learning skills. The most basic step to agency is learning how to self-regulate to keep oneself on task.

The job of a teacher who develops agency is very complex – they have to be risk-takers. They have to let students go slightly astray at times, not too far of course, and ensure that students get feedback that is clear and that they can own, so they learn to make better choices and they can be trusted later.

### ■ When students aren't ready

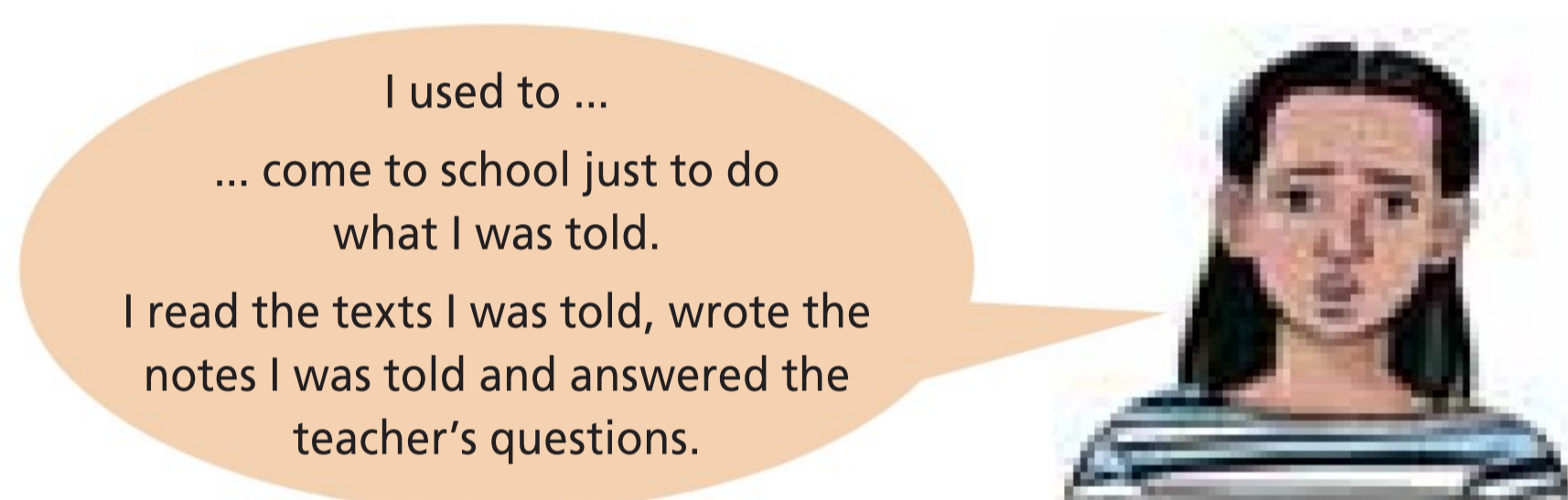
We cannot let anyone risk messing up their final Diploma. Until then, the more chances that students have to make their mistakes early the better. If an earlier assignment is slightly late, students are in a zone of learning self-management.

It is tempting as a teacher to try to second guess students. We are more expert. We like to rephrase what they say and correct it. Sometimes we take over their voice rather than let the students share their opinions and ideas in their own ways. It takes a conscious effort to suppress the natural tendency to interfere with students' original thinking rather than build on it.

Instead, make a conscious decision to develop students' voices with clarifying questions, and for other students to respond instead of you. Allow students genuine choice, even if their choices are not the ones you would make. Ensure that there is plenty of time allocated to reflection and self-evaluation so that over time students can make choices more quickly, accurately and with ownership.

This can be difficult in a busy Diploma course, because of the pressure to cover a large amount of material, so the more agency that has already been developed through the PYP and MYP the better. These courses contribute as much through developing the students' agency as their acquisition of subject content.

### ■ Roles



Now I ...  
... come to school and think about what I need to do.  
I make decisions for myself, with help from the teacher and my friends.  
I solve my own problems.  
I compare, contrast and find connections.  
I think about how I could learn better tomorrow.

The relationship of mutual respect between the teacher and students affects roles. The teacher no longer becomes the central figure in the class, through which everything moves. This may sound easy in theory. However, there are management roles that need to be right. The teacher still needs to be in control – safety, behaviour and purpose still come from the teacher. The teacher is the chair, the community elder, and the final arbiter of all disputes. We want an empowered community that does not resemble *Lord of the Flies*! As the chair of the community, the teacher sets up the purpose of the class and ensures that there are clear and shared ground rules – and makes sure

that they are applied. The difference with a classroom for agency is that important roles are delegated to students. As the class community becomes established, management roles can be delegated. Initial procedural aspects like taking the register are often the first to be given away. Timekeeping can be useful too. Often students like to monitor others' behaviour, frequently more than their own, but sometimes they become too zealous in watching others. Refocusing on one's own choices and actions may be needed.

You can delegate most when you have strong relationships. As we move from the teacher in complete control, relationships become central, so time spent on building trust and relationships with a common purpose is time well spent. Strong relationships are both warm and demanding – based on respect and not ceding any ground about the key values of keeping learning central, and insisting on respect for all other students.

### ■ Essential agreements

Essential agreements are perhaps the most common way of articulating shared expectations in IB schools. They play a key role in agreeing who can choose what, when and how. They are the shared rules of the community, the ground rules of how the class will work together to create a smoothly running, respectful environment, with all students having a voice.

Establishing essential agreement provides an excellent opportunity to talk through agency, providing shared expectations that students will develop their voices and make thoughtful choices about their learning. To model voice, a teacher can talk through their own beliefs and values, and the IB Learner Profile, and then ask students for theirs, using their own language. We can ask students to identify for themselves what the obstacles to learning may be, and how they plan to monitor their own learning.

Agreements may also include simple behaviour, such as:

- We work quietly so that we do not disturb others.
- We listen carefully to other students.

They may be about attitudes:

- We are prepared to make mistakes and learn from them.
- We try difficult things even if they scare us.
- We make thoughtful choices to support our learning.
- We make sure that everyone is included.
- We are open-minded – we listen to, consider and value other perspectives.

These are, of course, just examples, and should not be copied. The students' own voices are best. It is best if your essential agreements do not sound completely polished and normal – if they are authentic then they will be, like the most enjoyable classes, a little quirky.

Essential agreements do not need to be rushed and finished in one session. They can be developed over time as students learn more about what helps their own learning. The slower they develop, the more student ownership there can be. It is especially important to actively review and adapt them, not just refer to them, as the need arises.

### ■ Legitimate Peripheral Participation (LPP)

Lave and Wenger introduced some useful ways of understanding how people develop roles in a community when they investigated several 'communities of practice' and how newcomers join them (Wenger, 1998).

Their communities of practice have three features that are all useful in classrooms:

- **Mutual engagement:** Members of the community have norms and build collaborative relationships, which bind the community together. This relates to the rituals and relationships mentioned earlier.
- **Joint enterprise:** They have a shared sense of purpose and connection. This relates to the values of the school and classroom, which need to be established at the start of each school year, and developed and renegotiated by the members of the community.
- **Shared repertoire:** Communities, like classrooms, have established ways of working.

Lave and Wenger found that newcomers join these communities first by taking part in simple, low-risk activities. They introduced the term 'Legitimate Peripheral Participation' (LPP) for how newcomers join the community of practice.

In a school context, think about how a student who speaks little English might join a classroom which has English as the dominant language. They may observe what is going on but not understand very much. They may join in with activities without really knowing what they are about. Another example is when a student joins a science class having done very little self-directed lab work, and is a passive member of an experimental group at first. Similarly a student who has done little inquiry work can struggle to make sense of how a unit of inquiry works, and it may seem like they are just following along.

According to LPP, their participation can be legitimate. It helps them know the ways of the community they are joining, so that they become a valid and valuable member of the community of learners over time.

They first take part in simple and low-risk tasks that are productive in the classroom. Through these they gradually get to know the way the classroom works. Then they get involved in tasks that are more and more central to the big issues in classroom learning, such as global concepts and leading inquiry (Lave & Wenger, 1991).

The ‘take away’ for classrooms is that participating on the edges of the activity can be legitimate, at least at first. We do not need to force students to take roles, but we do need engagement. This is particularly important for understanding students who enter on the periphery for any reason. We need to see them involved, but do not need to be too concerned at first about whether or not they demonstrate, for example, all the approaches to learning skills that we look for in their first units.

Another application of LLP is that when students are led didactically through a high-quality way of working, they gradually learn how to take the role of an accurate person. This may not in itself develop agency, but it develops expertise which is needed for full agency on difficult tasks.

### ■ Students’ roles

It can be useful to identify some roles for students and give them practice in carrying them out – perhaps with explicit descriptions of each role and verbal prompts. Common roles include:

- A *summarizer*, who listens to other students’ voices and gives a quick recap to check that everyone understood the same thing.
- A *strategical thinker* to describe possible strategies, ask the group if they will work and help make a choice.
- An *editor* to check text or mathematical calculations for accuracy.
- Literature circles may have roles like *researcher*, *facilitator* and *wordsmith*.
- Science experiments may have an *equipment technician*, a *data recorder* and a *communicator*.
- A mathematics group may include a *questioner*, a *summarizer*, a *strategist* and a *clarifier*.

The more explicit the roles are, the more the students will be able to draw on this experience later to choose the appropriate roles and carry them out independently, or with only a little guidance. The more they are modelled on real-world roles and jobs, the more they will have enduring relevance.

## ■ Challenges of group work

Group work may bring with it a few challenges. Group work may take a lot of time, even for simple tasks, unless students learn particularly well how to make choices about their use of time, and to stick to their choices. Until students learn to work efficiently, they may spend lots of time just negotiating simple things that do not really matter. One of the worst examples is when they start each activity choosing a name for the group, when it has little relevance to the purpose of the task or to developing their learning roles.



Defined roles within group work are a useful way of providing structure and ensuring everybody participates.

Another danger of group work is giving tasks that are not carefully designed to provide different roles for different students. Inexperienced teachers often give a task to a group that could be done individually. Without clear roles, in the end only one or two students do the tasks, with the others unofficially taking the role of passive observer.

To avoid this, careful design provides some separate accountability for each different aspect of the task. Although this takes quite a long time with students who are not used to it, the investment is worthwhile. As students learn to be accountable for different roles, the classes become more efficient so that over the year more time will be spent on high-quality learning.

### ■ Have explicit systems for helping each other

The more that students own systems for helping each other, the better. Teachers increase agency and free up their own time if they set up systems that students can use themselves. Students with the most agency will also be able to help develop and improve these systems.

A simple way of doing this is to have a chart in which students list the ways that they could support ‘their friends’, and ways in which they would like to be helped, and then build in a community support time into the schedule. For students who do not sign up, there needs to be an alternative task – ideally not too engaging, so that students may be more motivated to help or ask for help.

Another system that provides ownership roles for students is running activities. Many schools have had great success when students have leadership roles of, for example, drama, dance, origami and chess. This is not new – when I was about 16 I led my school debating club for a year. It was entirely run by students. I co-wrote a motion every week, and almost always spoke on it. It wasn’t the highest level of debate, and I didn’t learn any of the research skills of a teacher-sponsored club. However, I learned to get the motion in on time, and it was ‘our club’.

### ■ Communities with agency embrace diversity

We can use agency to help think through inclusion in our classrooms. It helps us see which students have only minor roles or are marginalized.

With *voice*, we want all voices to be heard and valued by the classroom community and the school, especially those that are normally on the periphery. Voices should reflect all the different social groups and cultures of the community. This needs a special effort with non-native speakers. Both parents and students with non-dominant home languages may need support in being fully integrated. For example, parents may not attend parent workshops without language support. Their voice, however, is valuable and can be heard, through special meetings if necessary.

We can also check if all parts of the classroom and parent communities have equitable *choice*. Typically, unless we intervene, some groups are more influential in decisions than others. Similarly with *ownership*, we wish to avoid only some groups having a sense of entitlement. The shared purpose with shared responsibility should bring shared ownership.

### ■ Preparation for global citizenship

If we do our jobs properly, students learn to participate in local communities, to exchange ideas and to assume their responsibilities on a scale that is meaningful to them. They can gradually extend this to global citizenship as they extend the shared purpose through taking increasingly wider perspectives. Only after appreciating the interconnections of their own classrooms, are students ready to extend their awareness of our diverse yet interconnected world, for example, through MYP Global Contexts or PYP Sharing the Planet units.



Students must first educate themselves in and around their local community before using this as a platform for exploring global citizenship.



# Teacher roles and fostering interaction

## IN A NUTSHELL

- Agency does not only change the roles that students take. It also transforms how teachers act. Agency is a change of emphasis, in which teachers step back to allow their students to flourish. We look at how teachers can reduce what they do so that learners share agency in important things.
- This brings many dilemmas in finding a balance between how much to plan out in detail and what to consciously leave to co-plan with students. Teachers planning for agency is in itself partly preparation for the classroom community.
- Teachers also plan forms of provocation and interaction that encourage students to think and speak for themselves.
- Within their planning, teachers provide overall scaffolds that support students with developing their agency.

## Teachers stepping back

As teachers and school leaders, we all have busy and very responsible jobs. We are accountable for learning and have a huge role in planning and assessing. We embrace our responsibility and sometimes do too much: we put up displays before school starts; we plan details ahead of seeing students' interests; we design activities before letting students show us their misconceptions.

Agency puts the spotlight on the students – their voices, their choices and their ownership. Even so, it still takes self-discipline to step back and wait to hear their voices and choices before planning the details of our classes.

### ■ Planning for students to plan

Agency brings a change of emphasis where we work out how students will plan, reflecting that we no longer use a model where the teacher passes knowledge into an empty vessel. Not only are students learning what to do with their knowledge, they are learning how to find it.

Teachers aren't, of course, abdicating responsibility, but sharing it. Students are making decisions about their learning, including choosing some of the directions that it will take. The teacher, rather than planning everything, sets the overall direction and then works alongside the students who set their own mini-goals, identify next steps and think about possible strategies.

This creates a shift in how a teacher's time is spent, including a need to provide one-on-one time for students, rather than being able to lecture all students at the same time.

## ■ Overplanning

It is tempting to start the year with the first units thoroughly planned out. This is repeating a unit that may have been great with last year's class – leaving no agency for this year's class. It could be presenting a unit that went fantastically for a colleague – in which case even the teacher has little agency.

When planning with agency, first identify what students can and cannot bring. They do not know the concepts behind the work. They do not know the key questions of the field. They are still learning to plan and organize themselves. Agentic planning sets out the big issues and questions, but involves students in collaborating and co-constructing learning and learning goals.

Thorough planning ahead of a unit is still fundamentally important, but with agency it is refocused onto clearly identifying the purposes and standards, providing options and having strong provocations to draw students in. After that, planning involves students.

When exams approach, it may seem like best practice to come fully prepared with completed exam outlines, revision schedules and practice papers. Then there is no planning left for the students to learn from, and no way for them to make the plans their own. They do not learn how to plan their own exam preparation in the future.

## ■ Routines of success and of thinking

Deep thinking is important, but we cannot think hard about everything, all of the time. Humans have evolved to use heuristics – mental shortcuts and rules of thumb that help us make a choice without analyzing something completely. We learn routines that take care of many parts of any task automatically, so that we can concentrate on the highest elements.

This is also true in classes. Spending the first month of the school year in setting up basic routines may seem at first glance like you are not plunging quickly enough into challenging thought. It is important to establish efficient routines that take care of the small things, so that you can then focus properly on the big ideas.

## ■ The central role of language

Language is at the centre of every classroom. Every IB teacher is a language teacher, developing their students as *communicators*. This is more than just a value or belief – it brings a whole set of demands. It includes reading across

the curriculum – not just using reading, but developing students' abilities to interpret, analyze and assimilate what they read across all subjects. It embraces writing to develop students' voices across all areas of inquiry.

### ■ Questioning for agency

Traditional questioning has simple answers. Students learn early how to play the game of 'guess what's in my head' with their teachers – trying to find the words that get a 'well done' rather than using questions to pursue new understanding of an intriguing area. They think about what the teacher wants them to say, rather than search for truth.

Questioning for agency requires students to think for themselves. The teacher does not ask many closed questions, with short predetermined and predictable answers. Instead, questioning for agency dwells on a few open-ended questions, with plenty of possible answers that students can consider, and which lead students to pose further questions for themselves.

Rather than the teacher always reacting and evaluating responses, the teacher acknowledges all responses, but often asks other students to evaluate the reply. Sometimes, to avoid any dependency, the teacher might not react at all, and only chair the class thinking through responses for themselves.

Questioning does not only belong to the teacher. We may start with our questions – strategic essential questions or teacher questions that start the ball rolling, but classroom questioning should not stay with the teacher for too long. Students with agency build on each other's answers. When classroom talk is owned by the students, as time goes on they will argue, mainly respectfully, with each other without turns needing to be directed by the teacher. They build on the questions of others. We can help develop this by asking students to summarize what the last person said and why they do or do not support it.

### ■ Using Bloom's Taxonomy

Since we are teaching students to own their questioning, we need to teach them how to improve their questions for themselves. They can use Bloom's Taxonomy to help them. Bloom's Taxonomy is essentially a way of categorizing levels of thinking, named after Benjamin Bloom who chaired a committee which categorized domains for learning objectives – cognitive, affective and sensory (Bloom *et al.*, 1956). We usually only think about the progression for the cognitive domain.

His committee ranked thinking skills into six types, with increasing cognitive demand: knowledge, comprehension, application, analysis,

synthesis and evaluation. There is a 2001 revised edition, which may be better for some classrooms: *Remember, Understand, Apply, Analyze, Evaluate, Create* (Anderson & Krathwohl, 2001).

One simple use of Bloom's Taxonomy is to display the levels in classrooms. When students' questions are too trivial, ask them to look at the progression and see if they can raise the level of their question. If this routine is used regularly, students internalize it and over time increase the depth of the questions themselves.

### ■ Suggestions for agentic dialogue

We can often increase students' ownership of their thinking by changing a command into a question that involves choice. Here are some examples:

**Teacher as agent:** *Your next step is to ...*

**Student as agent:** *Perhaps, as a writer, you might be ready for ... What might you, as a scientist, measure? How might you draw a conclusion?*

**Teacher as agent:** *Do you have any questions?* (This often gets an automatic reply of 'no' since students do not want to appear uncertain.)

**Student as agent:** *What do you want to clarify? What do you want to know more about?*

**Teacher as agent:** *You have missed out section 3.*

**Student as agent:** *How can you know whether you have finished all parts of your task or not?*

**Teacher as agent:** *This is what you should have done differently ...*

**Student as agent:** *What were your problems? How did you try to solve them? What worked best? What else could you try next period?*

We can also make the language of initiative routine, to help students understand and own their thinking. We ask them to explain what they did and why. We can ask them for their plans for their next steps.

### ■ Provide many exemplars

If students are going to take ownership of good work, they have to know what it looks like. If they see plenty of examples of what good work looks like, they can see for themselves what to work towards, and can take more charge of their journey.

## ■ Checklists

Agency is not just about providing models of higher-order thinking. We also want students to take control of organizing the simple things. We help everyone when we scaffold practical ways of being more effective. A great example of this is the use of checklists; they free up working memory so you can concentrate on the big ideas, and still get the small things done. Checklists are used by airline pilots and surgeons alike to make sure that they do skilled tasks thoroughly.

## ■ Learning conferences

Regular conferencing between teachers and students is key to supporting agency. It enables students to have focus and direction in their independent work, and to draw from their own voice. These can be regular but very short – only a very quick exchange where the students explain what they are achieving and say how their progress (or even a lack of progress) will lead to new choices. Conferencing has several advantages. Conferences bring different kinds of dialogue than class and group discussion. The teacher gets to know all the students well. Students learn to plan. They are supported in interpreting assessment to understand their personal next steps and stay focused on them. Guidance can be ‘just in time’ – it can lead to a personal explanation, or a group mini-lesson, depending on the rest of the class.

Teachers do not have to say very much in conferences – it is often ideal just to sit and listen. Students often clarify their own thinking as they talk – an important part of voice. Teachers may not even have to provide direction. Students are agents – let them come up with their own solutions.

## ■ Challenges

Although they can be short, conferences require a high amount of teacher skill. Teachers have to be responsive and able to move across topics fluently. They need to remain open and curious – asking questions more than giving advice.

The shorter and more focused the conferences are, the more regularly they can take place. So they can focus quickly when the conferences happen, teachers need a system that works for them for keeping ongoing notes during other activities, regarding the feedback they might give each student – these notes will jog their memory. There should also be a system for noting down the outcomes of students’ voices and choices from the conference. There are a variety of digital tools that facilitate this – choose one that works for you. (Older and more experienced students can record their own notes.)

Conferences can replace some written feedback in marking. Students often respond better to short conference feedback than to copious amounts of written feedback. Why spend ten minutes writing a feedback note, when a two-minute conference is more effective?

### ■ Scheduling

It can be helpful to mix scheduled and spontaneous conferences. For maximum agency of schedule conferences, let the students choose their slots. They should have expectations for preparing for *their* conference, including selecting evidence of learning to bring with them and bullet points they want to consider.

### ■ Parking lot

A technique that I first used with adult groups, that I have since found works very well for children too, is the ‘parking lot’ for questions that cannot be answered then and there. They are written in a ‘parking lot’ space on the whiteboard or a flip chart, to keep and value students’ points without disrupting the flow of the lesson. At the end of the lesson, or when there is time in a subsequent lesson, their ideas can be addressed. Students can own the parking lot, adding questions of their own as they arise during activities, and they can even begin to address their questions.

# Self-direction, play and creativity

## IN A NUTSHELL

- Play is natural agency. It is learner-directed so that the player is in charge, often highly focused and passionate about what they are doing. This chapter looks at the characteristics of play, why it is important and how it can develop learning, not just in young children, but in learners of all ages.
- Play also often involves deliberate practice, an important way of developing a high level of skills. Children can set their own level of challenge through play, which is frequently just at the level they need to improve the most.
- Similar to play, we can be completely absorbed in tasks in a way that Csíkszentmihályi called 'flow'. When we have an appropriate level of challenge, sustained by feedback or self-monitoring, we can lose track of time because we are so engaged in what we are doing. To improve flow and play, we can set up contexts where students explore things for themselves, and make sure students have the basis of skills and the on-going feedback that they need to sustain their own engagement and learning.
- We often think only about children when we talk about play, and younger children when we think about play for learning. However, all age groups like to play (as we can see from the proliferation of gaming apps on smartphones). Sometimes play and playful attitudes can improve learning for anyone. Schools can develop immersive experiences through role play and simulation, where creative problem-solving can be a game that students own.

## Many meanings of play

Play has many meanings. It ranges from free play, for example, children deciding what to do with a stick, to highly structured activities, such as in playing music and organized sports. It includes multiplayer online games, cards and Sudoku. It can involve pretence and improvisation. People can play alone or interact playfully with others. It can include mimicry and performance. Play can be free exploration or follow set patterns. Some activities like marching can be fun for children, but if soldiers are marching to war, the game is over and the fun has disappeared.

We can play games and sports throughout our lives, but young children in particular can, at a moment's notice, start 'free play' – an extreme form of agency which children can own completely. They choose what they want to play and how it will be played. They often decide rules, and change them as they see fit. They try on many voices, sometimes to explore them, and often just for fun.

Play is a natural part of the human condition. When our species came of age, as hunter gatherers, we extended the role of play common in other mammals (Henricks, 2015). It is biologically driven. No one has to teach a child to play. It is a natural way of understanding yourself and learning to do things for yourself. It teaches people how to learn for themselves, acting

as agents in their own play situations. It is fundamental to the wellbeing of children and young people – emotionally, cognitively and socially.

However, the traditional transmission model of learning did not include play or playfulness and the approaches to learning that developed lacked the creativity, engagement and intrinsic motivation of play-based learning. Play is still often seen as what children do in recess to ‘let off steam’ so that they are ready for more serious learning – even in high-quality IB schools.

## ■ Five characteristics of play

Peter Gray drew out five key characteristics of play, which reflect many aspects of agency (Gray, 2009 and 2013).

### 1 Play is self-chosen and self-directed

Play includes choice and ownership. Children select activities that are interesting and relevant to their own needs and interests. Children are most engaged when they can lead their own play.

All children are usually free to choose during joint play sessions. One may propose an activity or rules, but everyone has to agree – they are free to quit and play at something else. Through play they learn about how their choices lead to consequences.

Adults enrich choice by providing open-ended materials, so that children can decide for themselves what to do.

### 2 Play is intrinsically motivated

Children have a strong innate desire and need to play. Play is done for its own sake more than for some external reward, perhaps because children use play to understand the world. They usually do not focus overly on what they create – they value the process more than the product, the means more than the ends.

Children want to keep playing with others, so as they learn the boundaries, they develop the self-control needed to co-operate with others, so that they can keep playing. Free play can also encourage risk-taking. When children play they often choose a hard way of doing something, whereas outside play we normally choose the easiest path.

### 3 Individually constructed

The freedom of children’s play is not total. It is freedom within a structure that the children themselves develop and that they own. Although they love to involve adults in their play, adults have to enter into the children’s world and follow the children’s rules.



The structure provides guidelines for the play and rituals that provide boundaries, but leaves scope for imagination, creativity and experimentation. These rules help children learn to manage their impulses and to co-operate with others.

#### **4 Play is imaginative**

When children enter play, they enter a world of their own, an imaginative world that they create. They act out fantasy situations, objects take on new identities and symbolic meanings. A box becomes a castle or part of an aeroplane. Cups contain imaginary drinks and plates are full of fantasy food.

#### **5 Children are alert and active, but not stressed**

Children are normally fully engaged and engrossed while they play. Play sustains attention over relatively long amounts of time compared to most adult-devised activities. They think hard about what they are doing, solve imaginary problems and pay attention to the rules they are using. Play provides a secure space for children to experiment with rules and risk-taking – fantasy worlds do not have the same consequences as real ones if anything unexpected happens.

### **■ Play in schools**

These characteristics ensure that young children's play provides them with a space full of the agency that they need to develop. They learn to be in charge of their learning. They extend their attention span. They learn to implicitly adapt their playful learning to their own needs.

One could argue that play is so important for young children precisely because it gives them the agency that they lack outside of play. They should follow other people's rules at home and school but they own their play.

Children often lack power, but in play they are free to make many choices, and can choose to change their choices whenever it fits within their game.

It is natural for children to choose something that they are interested in and that they can learn from. They have a strong natural desire to be active and to discover. However, not all children join in at once. Some need to watch for a while and get to know the environment and their peers. When they feel safe and know where things are, reluctant students join in.

Children's play can provide the most authentic assessment for learning. One can start by observing students, to hear their voices and understand their play worlds. Then you can prompt them so that you hear more about their

interests and the next steps that they are considering. They can explain the choices that they have made. We can document their ‘wow moments’ when they do something for the first time.



Play can provide the most authentic assessment for learning.

### ■ Beyond early childhood

The best early childhood provisions use play very skilfully to develop children’s agency and to develop their learning and their personalities through this agency. Children make free choices. They direct their own learning and use their imagination creatively. It provides learning that is joyful, challenging and full of interest.

Although these are all features that we hope will be sustained throughout all their education, the role of play usually reduces dramatically around the age of 5 or 6. When the transition into primary education does not build on play, children can lose their agency in learning entirely, and have to spend years building it up again. Within an inquiry approach, we can hope to continue some of the most important features of play, to have at least playful learning.

### ■ Provide the environment for children’s own exploration

Planning for play sets out an environment with possibilities for inquiry and playful creativity. Within that environment, children play, owning and initiating interactions and new ideas. We can extend that by providing older children and adolescents with environments that they can explore freely.

In playful learning, children lead the interaction. Teachers can listen to a child's voice and help them extend it. Teachers can add to learning through demonstrating how to do something, explaining concepts, or giving an *I wonder how ... ?* question. If children are struggling with something, we do not take over, but give only enough instruction for them to be able to complete the rest themselves. We do not impose something that would take the children out of the flow of their play.

In play, children use their voices to initiate iterations all the time. They share what they have made or drawn, and want to tell the teacher something. We can have something similar when older students develop their own inquiries.

Without playful learning, adolescents can become disengaged. They need creative outlets and free exploration too. Sometimes this can be through a free choice structure, such as Genius hour. At other times they can have hands-on exploration of materials, and they can play with ideas, for example, in mathematical investigations.

### ■ Deliberate practice

One of the reasons why play can improve learning is that it allows children to enjoy deliberate practice at their level. Deliberate practice is a key skill for successful learning and is crucial for developing expertise. Musicians learn how to focus on specific increments of expertise – the 'next steps' in their playing. The best golf players know how to work out flaws in their swing. Expert performance needs focused engagement over time. One commonly asserted indication of time is Anders Ericsson's claim that it takes 10,000 hours to become an expert. This was sometimes taken as though 10,000 hours was a sort of magic number you needed to achieve greatness – to become an expert or a sporting champion. The actual research was more nuanced.

When children are not getting the deliberate practice they need through their play, we need to find alternative ways to for them to learn to practice effectively and to understand how it contributes to their expertise. More importantly for educators, the quality of practice makes an enormous difference – which is something that we educators can affect.

The old phrase 'practice makes perfect' is only part of the story. Regular practice might include mindless repetitions, hoping it will become better. Deliberate practice is different from mindless practice. It is *sustained* and *focused* – just like young children's play. Where it differs from play is that it is *purposeful* and *systematic*. Although children's play has an important purpose, deliberate practice is focused on the specific goal of improving performance.

### ■ Learning how to practice

The way that deliberate practice focuses on a particular improvement is very important in getting rid of dull and ineffective forms of practice. It is one of the key advantages of learning an instrument that the instrumental tuition properly develops practice skills and the ability to focus.



Learning an instrument can be an enjoyable way of developing practice skills and the ability to focus.

When children learn how to practice for themselves, they are learning how to own a key aspect of becoming an expert. It is essential to their growth mindset and how they learn to own and work towards many practical goals. They learn to start with a clear purpose and split it into smaller steps. They learn to collect and use feedback that they use to keep track of their own progress. They avoid distractions, so that they can focus specifically on their next step. Mindless practice is quite different – students just repeat something and hope that it makes them better.

### ■ Strategies for increasing play in learning

Play and playfulness in learning can be developed through gamification, immersive experiences, absorbing problems with choice, and design challenges.

### ■ Gamification

Some games naturally facilitate learning, whether it is the physical and social learning of hopscotch or the logic of Sudoku. Gamification is

bringing elements of games to activities that do not normally have them. It can be a great way of encouraging deliberate practice where the implicit motivation makes learning more effective. For example, arithmetical calculations that some students find tedious can be brought alive when used in maths games.

Games are most engaging when they have an appropriate level of challenge and some feedback mechanism. Remember when you learned the strategies of tic-tac-toe/noughts and crosses? It was great fun until you knew the optimal strategy, and when there were no patterns left to discover it became boring. A frightening example of feedback is the addictive nature of fruit machines. Each turn gives a new possibility, and the opaque mechanism makes it particularly hard to predict, so we want to do more to see what will happen.

The motivation of games can also foster deliberate, but ultimately useless, practice. Children and adults can spend hours on game-based apps. They are addictive because these activities provide immediate feedback and incremental challenge, so that they foster the deliberate practice that our brains are hardwired to seek. That would be great if the skills they refine are needed – but expertise in Candy Crush is not a key life skill.

### ■ Immersive experiences

Another variety of games are immersive experiences, such as role playing and simulations which can be designed to improve performance. The stories engage people, and immersion engages hugely.

One example of this is a case study on how Bronx New School, in New York taught a unit called *Colonial New York: Developing Perspectives through Historical Role Play*. In this unit, fifth graders first develop a base of knowledge about the period, which enables them to then carry out role-playing activities and simulations. As they go through the simulations, they understand more about daily life in the period and can take on the perspectives of the different participants. This is a particularly useful activity for developing voice.

Students then create a colonial character. As the unit goes on, there is a back and forth between learning more information, and the students assimilating it through the point of view of their characters. This gives a high level of engagement, echoing the role play that younger children use to learn, but with a challenging level of content for their age group. Their ownership of their characters provides a very high degree of agency, leading to a high degree of engagement and learning.

### ■ Role play in university history

Role play does not have to stop as children go through school. Mark Carnes describes a particularly strong university approach in his book *Minds on Fire* (Carnes, 2018). He developed a role-playing game called *Reacting to the Past*, in which all students play a character from the time period they are studying. Each character is given an objective related to their character. For example, in studying the French Revolution, one student would be Louis XVI, who aims to preserve the monarchy through crushing the revolution. Another student plays Robespierre, whose aims include overthrowing the monarchy. If students are studying Ancient Greece, they will read Plato, Plutarch and Thucydides so that they can understand in detail the conflicts between the Athenians and the Spartans. Students act out their participant roles in various scenarios, requiring considerable research which is sustained by the emotional engagement of the work.

Students have considerable agency. They own their own character and organize their research to back up their character's purpose and points of view. As they debate, they develop their own voice as well as that of their character. The simulations have a very positive effect compared to more conventional assignments. Instead of just absorbing material, students embrace the material and use it for creative thinking. Their academic skills improve greatly, with a deeper knowledge of the historical period than their peers in traditional classes. Beyond that, their speaking, leadership and teamwork also improves.

### ■ Absorbing problems with choice

When we provide students with problems that absorb them, they frequently have some of the same features of high-quality learning as free play.

Students typically have very high degrees of agency, choosing and owning their approach. At the beginning, students can be set problems that they take ownership of. As they gain agency, they learn to modify and extend problems, and eventually they learn to set themselves their own challenges.

Technology provides more and more problem-solving opportunities, whether through programmable kits like Lego Mindstorms<sup>®</sup>, a programmable device such as Sphero<sup>®</sup>, or software like Scratch. The way in which kits are used is very important in how much agency students develop. If students follow the same set of instructions, they are not making choices or using their voices.

It may be useful to work through some set examples of code whenever a new technique is introduced, but most of the time, students with agency are finding their own ways to work on complex problems.

The problems with choice can come from any area of the curriculum, and may only need pen and paper, provided that there is a challenge that students can rise to. Older students can sometimes work alongside experts on real-world problems. Students often act with agency when given challenges like designing a restaurant, complete with branding, menus and budget. Students can take on extended design challenges in the arts, whether it is through fiction writing, developing plays, challenging pieces of music or the visual arts.

## ■ Flow

Sometimes a lesson seems to go on forever. Students watch the clock and get fidgety when the period is nearly up. Maybe they even start packing up while the teacher is still talking to sum up a lesson. Contrast this with children who are often so immersed in their play that they lose awareness of time and their surroundings – a state of ‘flow’.

The idea of flow was developed by Mihaly Csíkszentmihályi, who has one of the hardest names in psychology for English speakers to spell, since its pronunciation (Me-high Cheek-sent-me-high) does not match English phonetics (Csíkszentmihályi, 1990).

In a state of flow, our attention is fully focused on the activity, so much so that we can lose awareness of ourselves and of time. We are immersed in what we are doing, with complete concentration, so that tasks seem to come together naturally, without conscious effort, because we can apply the necessary skills.

Flow is the ultimate in intrinsic motivation, sometimes known as being ‘in the zone’. It can enhance creativity and the learning of new skills. Researchers also find that flow brings a deep sense of satisfaction, active enjoyment that is more satisfying and long-lasting than just a pleasurable experience. (Perhaps Mick Jagger didn’t have enough flow!)

To get to flow, students need to bring the level of skill that lets them take part. They also need an appropriate level of challenge. If something is too hard, they are overwhelmed, and they cannot be absorbed by the task. If it is too easy, it will lack the stimulation that flow requires. Flow also needs a growth mindset: the feeling that you can succeed, and ongoing feedback about your performance.

Flow is not always good. Casinos are great flow machines, with games designed to give immediate feedback and a feeling that a win is just about to happen. Gamblers can enter flow, lose sense of time, and before they know it, also lose a lot of money.

In education, we want the high performance and learning that flow can bring. When students enter flow they get absorbed by tasks, concentrate fully and learn more. The sense of gratification and mastery is a great motivator and brings confidence. At its best, it makes learning addictive.

### ■ Increasing flow

To enhance flow, we need to create the right conditions and then let students run their own learning. Students have to self-regulate when facing their challenge – they need to be good at choice.

Arguably the hardest element of getting flow in a classroom is setting the correct level of challenge. At its most simple, we can provide several levels of question, and allow students to start at any level they are comfortable with. They can move up when they sense they are able to. The more that they can correct their own work, the more immediate feedback they receive, and the more teachers can spend their time mentoring students. A large part of agency is teaching the students to be able to give feedback to themselves.

An increasing challenge to flow is distractions – not just in classrooms, but whenever mobile devices interrupt our train of thought. We can either switch them off, or teach students (and ourselves) to ignore incoming messages and carry on with the task we are getting absorbed in.

Inquiry can also support flow. It has what Sarah Fine calls an ‘intellectual playfulness’ (Fine, 2014), in which students can find flow as they experiment, take risks and set challenges for themselves which they find absorbing, achievable and attainable.

### ■ Fun in schools

Csikszentmihályi found that there are different types of pleasure. Flow, like rigorous learning, has a deeper kind of fun than simple pleasures. Flow in schools gives fun beyond the simple pleasures of ‘edutainment’.

Some activities can be simply fun. Students will like simple games and quizzes. Some like the pleasure of colouring in something easy. Some feel happy when they get rewarded with a star or, undermining healthy eating policies, a sweet.

However, this is not the deepest kind of fun. We wish to encourage the deeper enjoyment that comes from learning and from developing agency and responsibility. It is important to think through the difference, which is not always easy to see. The colourful teacher who puts on a big phonics song and dance, or has great anecdotes, may be providing the dopamine



buzz of high-quality learning, or may only be providing the pleasure of entertainment. A large part of the difference is the low cognitive load of simple pleasures compared to the ‘just right’ challenge of flow.

The deeper kind of joy comes from deeper learning, with a high cognitive load. There is a very satisfying kind of pleasure from mastery, from solving puzzles and from understanding something new. Students get a sense of fulfilment through agency and taking responsibility. This kind of learning is addictive, giving little bits of dopamine whenever we succeed – using our neurochemical reward system to keep us learning and succeeding.

### ■ Playful learning

There are a few areas that we can concentrate on to provide learning with productive pleasure rather than entertainment:

- The appropriate level of challenge is vital.
- Students need to have achievable goals.
- Flow is sustained by feedback and self-monitoring.
- Set up contexts where students can explore things for themselves, find their own feedback and adjust their own levels of challenge.
- Ensure that the overall school structure supports playfulness and the best features of play.
- Make sure that recess is not just about maintaining order in down time outside the classroom. Have choice activities and foster learning through play.

# Service learning and action

## IN A NUTSHELL

- Service learning can develop agency powerfully, as students develop habits of taking positive action so that they can make a difference as citizens, now and as adults. At its best, service learning provides students with a space to think about their learning and its implications for what they do, developing habits of changing their behaviour based on what they learn. Service learning can help students listen and respond to community voices – especially the marginalized ones that are often ignored.
- It is not easy to do well. If service learning is a formulaic process, students can end up wasting energy on predictable but ineffective projects, and then shuffling reflection papers when they are told to, without developing their own initiatives and self-efficacy. They can be happily busy, but not thinking about the impact of what they do.
- Focusing on the agency of the students helps make service learning richly rewarding for everyone involved. Their voices and choices are developed when it concentrates on their ideas and their own responses to their learning; when they appropriate the values of service; and when they share a commitment to community beyond the school.
- Another challenge comes when students learn about problems that seem too big for them to affect. To address this, it can be helpful to think about ‘everyday actions’ and ‘big action’. Everyday actions are small-scale responses which embed attitudes and habits of applying learning and living responsibly with others.
- Service learning can provide many authentic opportunities to develop student *voice*. They learn to articulate causes that they are passionate about and learn to communicate to get things done.
- Students have many opportunities to make thoughtful *choices*, but they may need guidance so that they do not fall back on the same familiar options all the time. With a little help, they can focus on issues that are directly related to them, their peers or their community. Where possible, these issues should also connect to major global issues that they are studying.
- Actions from service learning are powerful when students *own* them. The impact that students have on others, and on their own learning, provides intrinsic motivation, and demonstrates to students that they can be effective learners and doers.
- Service opportunities in remote places are expanding greatly. They can be fantastic experiences for young people, who can see a direct impact from a short trip abroad. We need to treat such trips with caution, though, as some of them do not work the way we hope. It is difficult to properly understand a local context in another culture, so we need to help students research what actually happens to prevent actions causing more harm than good.

## Service learning in the IB

The IB, since it began, has a special place for the agency that service learning can develop. It has a vision for developing citizens who contribute to society. In a sense, service and action is not a separate element, additional to normal learning. It is a key conclusion to the learning that is thoughtful and relevant.

In the context of the Learner Profile, it is about developing caring people who do principled things.

### ■ Caring

We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.

IBO, 2017

### ■ Principled

We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.

IBO, 2017

The IB goes well beyond simply setting exams that get students into university. High-quality service learning helps develop character and international mindedness. It gives students experience of improving the lives of others, of acting and making a difference. Service learning gives students agency beyond the classroom.

### ■ The service learning model

As you would expect from the name, service learning combines service and learning. The service implies that students have clear actions that have a positive impact on others. Learning insists that through their actions, students learn something worthwhile. For it to be effective there is a positive benefit on both the community that is served and on the learner that is serving.

A large proportion of what students learn through service is about their own agency. They develop important skills and see their effect. They manage themselves to complete projects. They take decisions and solve problems. They develop their responsibility and accountability. They develop their initiative, and see how they can apply their academic skills to practical situations. They also learn to understand the communities that surround them and their needs.

All age groups bring special qualities to service learning. Younger children have a passionate sense of fairness. They may have a limited sphere of influence, but they are highly engaged with both home and school, and can have an impact there. When they learn to respond honestly and ethically to their learning, they develop positive habits that can last a lifetime.

As they become adolescents and take on the MYP, students are able to work with more autonomy and maturity. They can organize and record their service more systematically and address more explicit outcomes. They can initiate and plan better to take on more responsible roles. They are also at

a stage where they wish to know more about themselves, and can consider more deeply the ethical implications of what they do. As students go through the MYP, their autonomy and responsibility can increase to prepare them for the highly rigorous approach of the DP and CP.

By the time they reach the DP or CP, students have a broad range of skills. They have a better understanding of global issues, such as poverty, literacy and environmental needs. Most have a maturity that deepens as they apply it to complex problems, and they initiate activities which have more and more impact on those they are helping.

### ■ The problem of big problems

IB students learn to look at the biggest issues there are. We want our students to learn about the most important aspects of our world. We ask primary years students to think through the challenges of sharing the planet. We ask adolescents to look to global contexts like fairness and development, and globalization and sustainability, that contain some of the biggest challenges of our age. This can make effective action difficult. Students are looking at problems that well-educated adults struggle to resolve. One way to address this is to consider both ‘everyday’ and ‘big’ actions.

Action and service are not only about grand gestures. Our students may not be able to produce harmony throughout the Middle East, or even within the country they live in, but we do hope they will contribute to solutions when they graduate from IB programmes. In the meantime, it is useful to look at different levels of action. In *Taking the PYP Forward* (Davidson *et al.*, 2009) I used these terms:

- **Big actions** for the large-scale actions. These can be impressive and can leave a deep impression on students. However, it is unrealistic for them to be a constant additional element in our already busy programmes.
- **Everyday actions** – service is embedded powerfully in students through encouraging good daily choices turning into age-appropriate daily actions. This necessitates ongoing reflection and develops deeply-embedded patterns of thought and action.

### ■ Big actions

We want our students to engage with the world’s big problems. They will want to respond to them. If they are involved in everyday action, we can relax more about the frequency of these big actions, realizing that they are exceptional activities with a high degree of challenge and often a significant time commitment that can’t be made all the time.

Sometimes these big actions can be key moments in a student's life and their identity. Most are group actions, which help students develop teamwork, often initiated by a sub-group of students. It is wonderful when students or sub-groups spontaneously initiate them, but it is not a problem when they do not – provided that they regularly initiate everyday actions.

They can realize that they have potential when they acted with agency and achieved something with a significant impact on others. As they see their potential for influence, some students develop their sense of purpose in life. They may have some of their first experiences in organizing an event, or in communicating to an audience beyond their family and school friends. For this to happen, the action does not have to be 'monster big'. In fact, if it is too ambitious, it is harder to complete independently in a short enough period of time, and some students may not see their individual impact or feel closure. Although the context may be global, it is best if the action is local, so that the students can have genuine impact and agency. When we are lucky, we can steer them to identify areas where their learning can be directly applied to the school community, for example, by promoting a healthy lifestyle throughout the school, or preventing bullying among their peers.

Choices may not, of course, work out exactly as planned. Students have agency – it is their action and they may be interested in a different direction, needing subtle redirection to find something where they can have a real impact.



Recycling and the use of plastics is one of the world's current big problems. Encouraging action on a local scale or within the school can have genuine impact and promote agency, while also developing an understanding of the problem.

## ■ Everyday actions

Everyday actions get away from the high stakes of big actions. There are many small aspects of school and community life that a student can respond to quickly and move on – low-stakes activities that happen all the time and can be embedded in the school day. Students can pick up a piece of trash or help someone who is upset. They can work as a group to remind each other about how to respond to or ignore social media.

Students' lives have important spheres of influence. Everyday actions focus on where they are most powerful. They may not all be global influencers on climate change, but they have a huge influence on playground dynamics, and on the wellbeing of themselves and their peers. These can be the most meaningful areas to children and young people, and elicit the best of their feelings about fairness and justice.

Reflection can also be short and regular – perhaps only a question or a comment. For big actions, it takes considerable time to ask first what the problem is, and then to ask what we can do about it. Since the reflections of everyday actions remain focused on students' spheres of influence, they sometimes have all the background they need to make a choice. At other times, they may need a lengthy discussion to analyze how students affect each other. On occasion, we can simply ask, *What can we improve?*

As much as possible, we encourage students to take the initiative. We love it when students choose to tidy the room and carry out end-of-day jobs perfectly. Some students will need help with these choices, so they are not completely genuine student-initiated actions – they just need to be done so that students develop the best habits of acting with others.

Because everyday actions are quick, they can become part of the classroom routines, helping students to regularly have a positive effect in small but meaningful ways. This regularity helps to embed agency, with an understanding that we can improve what happens to others all the time. These actions help students to develop empathy towards others, and making small-scale changes to behaviour adds up over time.

## ■ Adults find everyday actions hard too

Succeeding in everyday actions is not trivial. Acting on our choices is hard for all age groups – including adults. We can all find it hard to make our great choices lead to action. Sometimes we decide to exercise more, but never get around to it. We may choose to eat less junk food or spend more quality time with our children, but it is not simple to turn these choices into

clear actions. Most gym members rarely turn up after the first few weeks – we may all start out with good intentions.

Regular everyday actions build up over time. They develop students' awareness of others and their ability to carry through on their choices. As they grow up, their sphere of influence will expand. The more they have taken simple but effective action, and reflected on their choices, the more they will be empowered to address increasingly difficult areas, and make a difference to them.

The combination of special moments and everyday routines can have a big impact on students. That is why we have authors' visits and a regular reading programme. It is why we have special sports tournaments as well as ongoing physical education classes. Similarly, special service learning highlights can make a huge impression on students, and they also need to make daily choices about how to act in accordance with what they are learning.

## ■ Voice

All actions need communication. Students have to be able to get other people on board. They need to be able to articulate why something is important in a way that each audience will respond to. If they have suggestions for changing something for the better, for example, they need to suggest it in a way that decision-makers will respond to.

Actions help students address new audiences, sometimes with external agencies as well as all sorts of people around the school and its community. They need to communicate with partners in group actions. Their persuasive language can find a new focus as they apply it to new contexts, bringing a message that they care about personally.

Students need to have a strong enough voice to organize others – which can either be a challenge or a revelation, when a student finds a new level of confidence because they care about something. They can test out what people respond to, and what people ignore.

Charity work, unfortunately, has a history of patronizing voice. This is a very important aspect to consider for IB schools, in which many students come from an elite. Agency should not be superiority or arrogance, and IB students who are caring and principled need to develop a voice without any overtones of disrespect.

It takes a conscious effort to avoid stereotypes. Some age groups benefit from looking at old-fashioned charity adverts and seeing the traps that they fell into. Everyone benefits from getting to know more about those who they wish to help, and spending time listening to their priorities.

Sometimes the impact can be as simple as providing a voice for the marginalized, so that articulating their priorities is the key outcome of the service project. Students can learn to be a voice for those who do not have a sufficient voice of their own – perhaps younger students, perhaps those who do not speak the dominant language, or those who are socially excluded. They learn to speak on behalf of others and to promote their aspirations. They are learning to communicate in order to persuade people in influential positions to act. This is one way in which thoughtful and articulate IB students and graduates can be a tremendous benefit to the world.

### ■ Choice

We all prefer completely student-initiated projects when they happen. The dream scenario is when students come with a clear and suitable idea of what they want to do, and they can choose carefully how they want to do it. This does not of course, always happen.

Students are learning to make choices. Sometimes the choices they make may not be suitable. At other times, they do not know what to do and we have to provide them with options, and provide advice when the choices they are likely to make may be unwise. In short, as adults we help them find suitable activities, so that the choices they decide on will be wise.

Over time, students become better at identifying options and avoiding difficulties by themselves. We encourage them to keep their plans manageable – projects that they can realistically complete mainly by themselves.

Some say that an internal change of opinion is a realistic and manageable action. On the other hand, an internal action is not something that you choose – it is something that happens to you. It is best to focus on clear choices with visible impacts whenever possible, and to concentrate on everyday actions when there aren't any meaningful options for big action.

### ■ Ensure that actions have a positive impact and provide learning

We can almost always expect good intentions. These may not always be enough, however – some actions can cause more harm than good if they are not well thought out. We are the adults in the room, so our job is to help students avoid the downsides to their ideas that they may not have considered or yet be aware of.

It used to be common to give difficult students empty tasks as a way to get a break. Sometimes they would be busy sharpening pencils. Other times they would be out of the room taking messages to other teachers. Some



such tasks can develop relationships and responsibility. However, if the learning involved is less than the time it takes, learning opportunities were taken away from the education of those who needed the most support. This kind of approach has gradually disappeared as we get rid of classroom tasks with little learning, but we need to make sure that we do not have service learning projects that are similarly busy but non-productive.

Some classic areas to avoid are the default 'go to' choices for many students. They can hear about something sad and jump straight into an automatic response, such as a bake sale, rather than do the harder work of thinking through what will have the impact they look for. After a few years in primary education, students know a menu of action that can help them be busy, with work that they can roll out without thinking. However, the whole point of service learning is for students to think about important issues. We do not want to create busy bodies. We want purposeful activities, with outcomes drawn from what the students know about the issues.

- Collecting money for charities may be appropriate at times, but it needs to be more than a knee jerk response. It can provide students with something clear to do that does not need any engagement with the underlying issues. Sometimes it is better to focus on listening and learning.
- Bake sales are best avoided, if only for the sake of food hygiene and parents' kitchens. Parents can spend their money on buying ingredients, then clean up a messy kitchen, before giving their children more money to buy back the baked products. Children might get a great cooking activity, but normally it does not have anything to do with the actual cause.
- Fund raising activities like sponsored walks and car washes can develop specific skills like calculations, organization and customer service. They may also be a distraction from the issues.
- Another action to consider carefully, most common in PYP sections, is making posters about the cause students wish to champion. They are colourful and fun to produce, so they are a popular choice. Students need someone else's thoughtful prompting if they are to consider the environmental impact of using more paper and understand that too much paper in corridors is a fire hazard.
- Another choice, generally initiated by adults, can be using service learning to provide free helpers. Some forms of help, like a library or art assistant, may well involve learning. Others, like putting out chairs or being an usher for a school event, may be valid for a school, but are probably not service learning.

Students may not think about sustainability, so we have to bring it up. Some things like practical help at an animal refuge or community centre is hard to keep going in the transient population of a busy and varied school. However, commitment is a key quality we want to develop.

Students do not experience agency when the problem is too big for the time allowed. They may bring up global problems with no easy solution, such as dramatic natural disasters and the results of warfare. Often the event is far outside their experience and it would take several weeks of class research to really understand the situation. Without understanding, it is difficult to have thoughtful action, and we risk encouraging thoughtless action when actions are determined by simplistic emotional reactions. It is better to encourage something that students can complete.

### ■ Encourage productive choices

Service learning often needs some provocations to get students to think creatively. We want students to bring away information from what they are learning. We want them to consider the cultural backgrounds, values, opinions, beliefs and perspectives of everyone involved.

We may have to prompt for connections between what they learn in the classroom and what they encounter in the community, or what they would have encountered if their experience was broader. They may need to listen to visitors or read texts to gain a proxy experience.

We can identify situations requiring choice and action. Students may notice when social issues arise in the class, such as some children being left out in the playground, or bullying. Students may face choices about healthy eating. Perhaps they do not put their books away or pick up after themselves.

Other possibilities really depend on the school. Some have space for a community garden that students can design or maintain. Others are near to animal shelters that need volunteers. Some have nearby elderly communities who would benefit from some technical support from students who are fluent with modern gadgets.

We can also identify possible roles that students could choose. Older students can be helpful to younger ones if they report on what they did previously – what worked for them and what didn't. Perhaps they were a technology assistant, or they tutored younger students. Perhaps they found a long-term commitment hard and can explain why.

Although it hasn't been a traditional area of action, social media is an integral part of students' lives. They can help each other take advantage of its opportunities and help each other avoid its dangers.

## ■ Ownership

Agency is the students' power to take the action they agreed and to carry it out. When they have made their choices, with the level of guidance that they need, students can carry out their projects. The more they own it the better. It is not the specific work that is important, but the fact that the student is learning to take control of something bigger – but not too big, as we can't own a problem that is too big.

For adults, it is about planning for students to plan. We provide a provocation and set out time. We provide a structure with accountability that helps students reflect. We ask the difficult questions that draw out their voice. When students are working well, we foster their pride. Then we leave the projects for the students to take over.

## ■ Explicit rewards reduce ownership and agency

Sometimes it is tempting to give external rewards to validate positive choices. As in Chapter 4, we need to be careful that they do not reduce intrinsic motivation and ownership. Students who do actions for a reward are less likely to do actions for their own sake. If they are given a few dollars for taking out the garbage, they are less likely to take the garbage out when there is not a reward forthcoming.

We want our students to be the type of caring people who willingly and automatically complete household chores, or mow lawns, or look after young children. It is better to value and praise great actions, and make sure that you have provocations for, or difficult conversations with, students who struggle with taking other people into consideration.

This may be difficult in schools which use a formal service credits system. In such systems, the best aspects of service learning are given the most credit, for example, when actions involve substantial planning and organization. Less valued outcomes, such as fund raising, receive fewer credits. Points for things like representing the school in a sports event reward something that the student should be doing anyway, and undermine the student choosing to do it for its own sake. This is a better approach than merely counting hours, because it takes some account of the quality of service, but it still takes away from intrinsic motivation and can encourage students to look at the system rather than the impact on others and on the CAS learning outcomes.

## ■ Reflection

The most powerful evaluation of any service learning action is the genuine reflection of the students. Their agency is at its greatest when they realize that they can make a difference, or when they notice for themselves what to change and adjust in their own plans. The responsibility for planning and recording is a huge part of the agency of service.

The more students own their reflection the better. They can be responsible for tracking their impact at least from the PYP Exhibition onwards. At that stage they can also begin to use the MYP Service as Action learning outcomes, so that they begin to take ownership of them when the stakes are relatively low.

Students with high agency choose the tool that they think best – the most meaningful to them. They may reflect with a short narrative or by using art. Some may find conversations the best way of mulling over what they have done, while others may find diagrams useful. The actual format is less crucial than how it makes sense to the students. Try to keep the evaluation short and the reflection lively and relevant so that it becomes the students' own tool for their learning rather than a tedious, teacher-driven chore.

## ■ Focus on learning and impact

As well as students' learning and impact, ongoing reflection can focus on the task completion, with students monitoring and self-adjusting as they learn how to sustain their choices. As we saw in Chapter 8, failure is an important step to deep learning. Owning failure can be difficult, but with a growth mindset it can be a prompt for learning how to be truly effective.

As students go through their actions, we can use a similar process to the one we as adults use to review the events that we complete. Often two questions suffice:

- What worked well?
- What would you do differently?

We can add additional prompts to help students focus on their agency:

- Your role – what happened specifically because of you?
- Your impact – how was the problem improved?
- Your learning – which of the learning outcomes from your programme did you develop?

## ■ Service as tourism

Projects in the developing world can be very exciting. For some well-travelled students, it is perhaps only another exotic adventure. For others, it can be a unique opportunity to actively engage with another culture, and to practically address some of their challenges.

In spite of the high cost, with as much being spent on travel as on development, volunteer tourism is one of the fastest-growing sectors of tourism (Hartman *et al.*, 2014).

One role of adult leadership is to filter out good intentions that may have bad results. One common example is when unqualified volunteers are working with vulnerable children. We all know how much care is needed to ensure that staff and volunteers are suitable and qualified to work with our own children, but sometimes we overlook the same need for children in developing countries.

Some students will bring a set of specific skills they can transfer to local staff. Other times they are welcomed purely because of the financial input that they bring. Orphanages are perhaps the most popular volunteering destinations which can inadvertently do harm as well as good. They evoke a high emotional response, with children who are clearly needy and vulnerable.

Even with our help, at times orphanages often do not serve their children well and sometimes their children risk abuse. They can lack the individual care and attention that children need. In particular, a lack of stable attachment figures is not helped by introducing a stream of well-meaning teenagers.

If you look closely at the power structures behind some orphanages, you find that many of their children are not actually orphans. Some orphanages are run as businesses and use their children as commodities to attract well-intentioned tourists and volunteers who bring an income. The underlying problem is that their families are too poor to support them – which might be the better problem to address. Actions that prevent children from being sent to orphanages in the first place are likely to have the best outcomes. Better to help community projects that empower families to stay together.

Agency is important for the people our students help, as much as it is for our students. The more we train our students to pass on skills and to empower the people they work with, the more good they will do in their projects. The more they learn to develop agency in others, the better it will be for everyone they work with in their lives.

# Teachers are also agentic learners

## IN A NUTSHELL

- This book asks for many skills from teachers. We do not come into the profession with all of them, but we are also agentic learners who can acquire them.
- Teachers bring their own powerful and productive voices to their classrooms and their schools. Their days are full of choices as they make countless small pedagogical judgments and key decisions that affect young people's lives and futures. Teacher ownership of classrooms is motivational and allows them to cultivate their best professional skills with pride in a challenging profession. Only the teacher knows each class in depth, so they need the capacity to apply the curriculum in ways that will work best.
- Teacher agency does not mean working alone as individuals. Students benefit most when we work in cohesive and accountable communities. The best schools have coherent teams with their own agency. They share core units which individual teachers can own, adapt and develop for their students. IB schools work within a shared framework but have their own agency in how it is adapted to suit their needs.
- The best professional learning also reflects agency. Focused training should reflect teachers' voices and choices. Professional development and coaching is most effective when teachers take ownership of how they are constantly improving the ways in which they serve their students.

## Teachers with agency

Teachers need agency too so that they can shape their own work to make it effective. They need to choose resources that work for their students and to plan how they use their own time to make it most effective. They think about their students' challenges and eventually solve pedagogical problems. Unfortunately contemporary teaching is not always like that. There are many pressures for accountability, often in the hope of guaranteeing a high quality of teaching. Some educational systems can have a prescribed set of teacher competencies and a top-down control mechanism for 'quality assuring' their staff. This has reduced examples of poor classroom practice, but when we do not use them carefully, they reduce the agency of teachers, which is at the heart of excellent learning.

As professionals with agency, we want to use the indicators of best practice, not as instructions to follow, but as wisdom that we can learn from and use. This goes beyond teachers. In the best schools, all adults have agency. Assistants and dinner staff can take the initiative. PAs and secretaries work to solve problems. The best schools develop voice, choice and ownership across all staff and throughout their school community.

## ■ Voice

Teachers' voices echo everything that they bring to their classroom and their school communities. When teachers' voices are developed, their classrooms resonate with their personalities, values and beliefs. They bring multiple insights and make learning more personal and alive.

Teachers' voices can add a lot of value to curriculum development. Teachers interpret the practical impact of changes that are happening in the school. They sense pressure points that develop, so their voice helps bring out whatever areas of learning and school life are becoming important. This does not mean that everything has to be discussed endlessly – but that the most effective schools have forums that draw extensively on the voice of teachers and other community members. Voices might be heard through surveys, or the regular conversations that are part of thriving schools.

The most effective, and enjoyable, staff meetings tap into the ideas around the table. They have provocations that make everyone think and contribute. All voices, not only the usual speakers, are heard. Some might be more articulate voices than others, but all are heard – there is a professional growth from articulating almost any idea, provided we get productive feedback. Healthy professional dialogue includes disagreement and debate.

## ■ Choice

Teachers take professional decisions constantly. They plan and adapt curricula to their classes. They decide what each individual student needs. They make choices about assessment and communication. They determine topics and how to develop them. Teachers make many complex decisions every day, which have to take into account the many dimensions of every student. They actively look for needs, ways of adjusting learning and ways of helping different personalities to gain agency of their own.

For these choices to get continually better, teachers need to know about their students. They need to understand processes of learning and how they apply. Above all, and the most difficult to provide, they need time to review evidence about the impact of their choices on their students.

Thus, over time, teachers become more and more expert in choosing for themselves what works best. That is what makes educational systems like that of Finland so effective, and students in those systems perform better than those in more control-based educational systems such as those of the UK and the US.

## ■ Agency to develop the curriculum

One particular feature of IB is the number of choices that teachers can make about the curriculum. They have a lot of agency in how the curriculum develops and is applied, from the Diploma literature teacher who selects the texts that will work best with their students, to teams of PYP teachers who choose the central idea and the direction of every unit.

This does not mean that units are necessarily best developed by teachers from scratch, which would take too much time and expertise for the average school. There has to be a balance; if the curriculum is too pre-set it may not be relevant to students, and it may not get the best from the expertise and the passions of teachers and their community. When teachers are asked to design too much, teachers can be stretched too far, so that their capacity to be skilled agents is actually reduced.

This can be a particular challenge for PYP schools. For example, PYP teachers are sometimes asked to develop their own mathematics programmes from scratch. They sometimes struggle under this herculean task, and so fall back on worksheets downloaded from the internet because they have too little backup. This reduces their ability to make the kinds of choices that they wish to.

Agency is not necessarily about developing something from scratch, which can be very disempowering. Teachers with agency can, like Bernard of Chartres and Isaac Newton, 'stand on the shoulders of giants'. They can build new initiatives from what they did previously or choose existing high-quality frameworks. Agency is often about professionals becoming familiar enough with best practices to make them their own. The more we incorporate them into our own daily practices, the more we will have powerful learning for all students.

Teachers can have more agency when they spend their time making something that already works fit their classes, choosing what to use and solving the pedagogical problems that are posed by how it works for different students. Agency can be about how to work as you need to within restrictions – from the rigours of DP courses, to expectations from national or state standards.

## ■ Ownership

A huge amount of satisfaction in teaching comes from owning your classes. It is a special profession because of the direct responsibility for the next generation, with all the challenges and pleasures that this can bring.



Teachers can take pride in their relationships with their students. If they have their own classroom, they can organize their own space. Their work has huge impact, so at the end of the year they can look back and see the (hopefully very positive) impact they have had on their students.

The sense of ownership comes partly from having a high enough degree of autonomy, with the ability to make choices and take some pedagogical risks. This goes against the trend in some countries over recent decades, where teachers have been de-professionalized through highly prescriptive curricula, often down to specific scripts to use with all students. These scripts only help agency when they are used to provide teachers with ideas with which they can make their own choices.

### ■ **Communities of practice**

Like a classroom community, a staff community is formed by shared purpose and values, clear roles and a set of routines. The staff community is first brought together by a shared purpose, the education and welfare of the students, and common values. The IB Learner Profile provides a solid foundation for the values of IB schools, but these can be personalized as each school embraces them to establish values of their own. Schools benefit from having clear and practical principles of learning, such as avoiding too much teacher talk, and ensuring that learning is properly personalized. And of course, a clear commitment to agency!

### ■ **Community time**

Communities need time together to exchange ideas, listen to each other's voices and become a coherent whole. As much of this time as possible should be focused on the community's purpose – improving the learning of its students. Community members help each other with thinking through their key areas of agency, such as the choices that they are making about their students.

Communities of practice need time for evidence-based reflection. It is rare to have enough structured time to do this in depth. They need time for planning, for analyzing students' learning data together, and to work out the data's implications for teacher practice.

To get more time to work together with a student focus, the most productive work with colleagues often happens in teams – the functional unit of the community. Each team may have its own agency – its own responsibilities, its norms and protocols focused on its own needs.

As well as having sub-groups, a school community is part of a wider educational community. It is strongest when many staff are involved in their own professional learning networks, such as the IB Educator Network, accreditation organizations and local job exchanges.

### ■ Leadership for agency

Schools thrive when all kinds of staff bring initiative, communicate well and take ownership of their work. The easiest way for leaders to develop a staff with agency, should they be fortunate enough to be able to do so, is to hire only staff who will bring agency to their posts. Normally leaders work with a wide variety of personalities, so one of their most important roles is to help all staff develop their agency and apply it to the goal of improving the school.

### ■ Supervision that sustains agency

School leaders have an enormous responsibility to make sure that all students are learning, but they cannot possibly try to direct the learning of every student in a school themselves. They shouldn't even dream about wanting to try. Providing teachers with agency is not about leaders abdicating all responsibility for teacher learning – it becomes a shared responsibility.

In supervision for agency, leaders respect the voices, choices and ownership of staff, but provide external insight that helps teachers understand their work for themselves. This can be through an appraisal process, provided it is organized so that it amplifies the teacher choice and informs future choices. Principals with agency choose the overall focus for the school. Within that, teachers with agency evaluate how the focus applies to them and choose their own goals and strategies that support the school's goals.

Teacher voice comes through well-organized teacher reflection and self-assessment. This helps teachers think critically and creatively to decide what went well and what to do differently next time. Experienced leaders can help teachers frame their choices about their next steps in their professional growth.

### ■ Cultivating agency

As teachers, it is a pleasure to see our students develop their own agency and take over ownership of their learning. As teachers become leaders, their job changes so that the pleasure comes from seeing teachers developing their agency and working with ownership on what they do. There are some steps that leaders at all levels can take to help this happen.

First of all, leaders of agency work to help others achieve what they think is important. They support a culture in which risk-taking teachers can pilot ideas, adapt them, experiment and share what works and does not work so that all their colleagues benefit.

Leaders who develop agency regularly seek out the opinions of all staff in their teams. They make sure that they connect with the quietest voices as well as the loudest. They ask clarifying questions – they do not wait until it is scheduled on a staff meeting agenda, or until it is time for the annual survey. They use the most effective means of communication for each team member – face-to-face for some members, others might state their voice best in an email, and some may contribute most effectively to a brainstorming document, for example.

### ■ **Develop choice**

Listen to the choices of others, especially when they are different from your own. Some new leaders think that being a leader is about having to make choices themselves, rather than making sure that choices are made, respecting the agency of their teams. Leaders do often need to make clear choices, but only after having listened to others and taking their thoughts and preferences into account. Leadership for agency facilitates the choices of others. It provides the support team members need to consider options carefully and take pedagogical risks when appropriate.

Choice also helps new programmes work. When teachers have agency, they are more likely to solve problems. When a programme is imposed against their voice and choice, they are much less likely to make it work – see the ‘not invented here’ section in Chapter 4.

### ■ **Choice within boundaries**

Teachers allow students to make choices, but only within boundaries: they set the frameworks and expectations. Similarly, as a leader you have to respect voices, choices and ownership, but draw a clear line when something is not working.

Leaders also have to bring coherence to the voices on the team, which may be quite diverse. For example, if choices were totally free, every kindergarten teacher could choose a different approach to phonics, resources would be muddled and students would have to adapt to a different approach to reading every year. Leaders need to be highly skilled so they can simultaneously both insist on common approaches and yet cede control so that each individual can make it work in their own classroom.

## ■ Professional growth with agency

Teachers love to grow professionally, but do not always love their professional growth sessions. Most teachers hate to be passive. Personally, like many of our students, I get bored and restless within the first few minutes of a workshop where I have to just listen. Similarly, I have heard many colleagues moan when meetings are filled with ‘administrivia’ and become animated and engaged when it connects to the heart of their work – when they can contribute and develop some of their own expertise, and when they share in choices and decisions.

Perhaps you have also experienced ‘growth’ sessions with no agency, when there was a top-down approach that does not reflect the approaches to learning that the IB promotes for students. Even IB workshops are not immune, since their quality control provides a fixed agenda regardless of what the participants bring to the room.

Professional growth with agency recognizes that teachers are professionals with valuable insights, and embraces their voices and choices. Teachers make decisions about what they need to learn. This helps them work with a sense of purpose and ownership, so that they manage their own professional growth and contribute to the growth of their colleagues.

Teachers’ voices come through even stronger when they plan and present professional development sessions for their colleagues, and when they lead meaningful discussions or active learning sessions that draw on their expertise with students.

## ■ Choice and professional growth

Teacher growth sessions are usually more powerful when they respect the teachers’ agency, helping them achieve what they understand as important, rather than imposing something in a purely top-down approach. If you hear the phrase, ‘If you are an elective teacher/single subject teacher, this does not really apply to you’, then someone’s time is being wasted. When teachers choose their growth experience it tends to be very productive – most teachers do not choose to waste their own time.

One approach to choice is to provide a menu of different sessions. Teachers can select which sessions are most relevant to them to attend. Often, such sessions are designed and led by teachers who propose workshops that fit in with the school’s goals. Another approach is to involve staff with the selection of topics to address, so that they address as many teachers’ needs as possible.

Most schools will need to have a balanced approach, in which teacher choice and standard sessions augment each other. Some standardized input is necessary, if only to ensure consistent interpretation of best practice – all staff need a base of common expertise and the community needs some shared experiences. Agency is not just about being an individual – it is also about participating in community decisions and making sure that you can apply them to your own classroom.

Teachers work within a shared vision of school and approach, which may involve prescribed IB courses and methodologies. However, the actual training sessions should not be passive lectures. Active approaches enhance the agency of teachers and draw on teacher voice, just like they do for students, so that teachers can own and apply what they are learning in their own classes.

The common session will likely include some mandatory expert-led professional development when there are important school initiatives, or address fundamental responsibilities like child protection training or fire safety and first aid. Staff also need to take ownership of these sessions, so that they use them to grow and to play their maximum role in the community.

### ■ Just-in-time learning

Teachers can also select what they need when they need it. They develop technology skills as they approach units that need them. They look at communication skills just before report writing.

Sometimes this is facilitated by online courses, which can be harder to engage with and sustain than face-to-face sessions. These need time and motivation like any course. Without the direct personal interaction, teachers need to make use of any feedback mechanisms provided to keep them active.

### ■ Coaching for agency

In the traditional top-down model of supervision, a line manager directs the managed. They set targets and decide how they will be monitored. They may even prescribe how to get there.

In a coaching model, the coached teacher has more agency. They are supported through the process by a coach, but they still own their professional growth. The coach helps draw out their voice about their needs, and supports them with choosing their goal.

Goals are still written with reference to school purposes, just as students write their own goals with reference to their self-assessment and educational standards.

■ **Different models of coaching use different levels of agency (Robertson, 2008)**

- **Pure coaching** is non-directive. It fully activates agency. The coach only helps the coached teacher to help themselves. It assumes that the person being coached has the self-awareness and drive to be successful.
- In the **mixed model** the agency is shared with the community. It respects that some community members have special responsibility to observe and analyze. They play a central role in working with the people being coached to identify key issues. However, the coached teacher still works with agency to develop the professional skills they agree on.

In both models, the coach and the coached teacher have considerable agency. The coached teacher drives the process and is ultimately responsible for its success. They are responsible for clarifying their goals and for making choices about how to address them. They track their own progress.

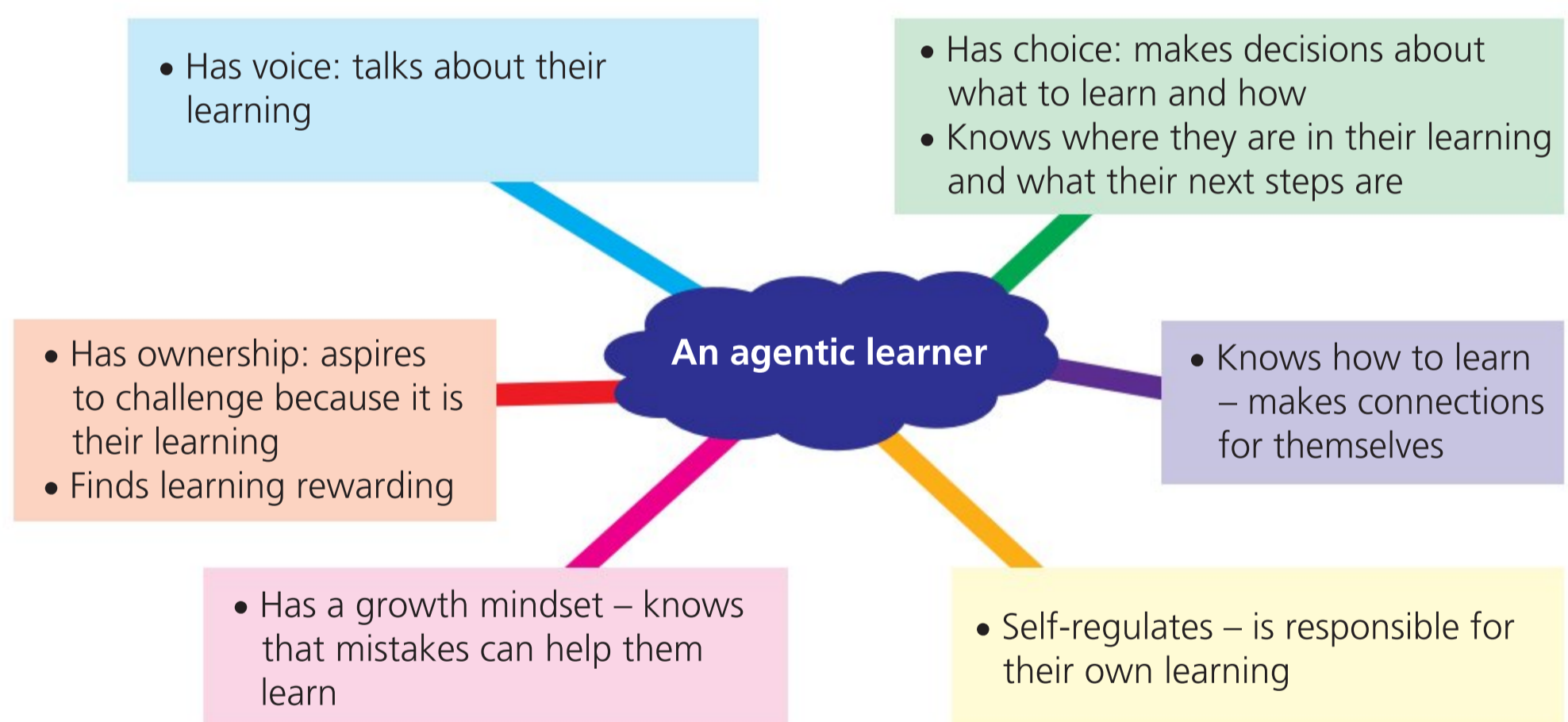
The coach also needs plenty of agency as they facilitate the growth and learning process. They need to work as inquirers and problem solvers as they seek to understand the work of the coached teacher and help them improve. Is this not also how we see our work as facilitators of students' learning, too?

# Conclusions

## IN A NUTSHELL

- Agency has huge potential to enhance learning. It captures many big themes in learning and helps to focus on students' roles and meanings. As learners take charge they are completely at the centre of learning – not just the focus of our planning, but taking over the planning themselves.
- Agency helps us avoid busy but meaningless lessons, since we listen to students' voices and provide them with choice.
- Like everything important in education, agency is not easy to make work. It risks becoming a buzz word and over-simplified so that it loses its power.
- There can be a false agency, in which students are not actually learning to take ownership of their work but are making only trivial choices or chatting without their voices making a difference to anything important. However, when we use agency well, it has a huge impact. When we unpack its value, and make sure that students learn to take charge of their own learning, they develop their voices, they make decisions well and act on them, and they take charge of their learning and then their lives. It creates truly life-long learners and valuable citizens for our planet.

## Agency is a powerful concept



Developing these abilities is a way of becoming not only an agentic learner but also a powerful learner.

Agency contributes to many areas of learning. Voice brings a wealth of communication skills and the ability to apply them to make things happen. It helps citizenship, as students develop their own voice and learn to listen to and articulate the voices of others. It supports their learning and contributes to a broad and inclusive global community – a very important challenge in our period of history.

Choice brings metacognition action. Students with agency are learning, not just to understand their own learning, but to make choices that use what they know to improve their learning. It helps make them reflective learners and thoughtful people.

Ownership makes learning sustainable long term. It helps students work towards mastery and their own goals. They work to be successful for themselves, rather than to survive another day in school. Since it is their learning, students are better able to stay focused over long periods of time. It helps students develop a growth mindset, so that they overcome the unexpected 'bumps in the road'.

### ■ Agency in traditional schools

Agency has become a key term in forward-thinking schools, where it resonates most, and where they are already working on these areas. The concept also helps in schools where a teacher-centred approach is deeply embedded, but the school wishes to move to better practice.

Agency provides a vocabulary for schools to share ownership of learning. When students learn to make choices about their learning, they are no longer passive recipients. Students who are thoughtlessly compliant think more about their own learning when they make choices. Resistant students are less likely to react against their own choices. Thinking about voice helps teachers move away from short recall questions to classroom discussion which focuses on students developing their voice and thinking for themselves.

Agency helps us concentrate on how students' learning will help them in the long term. Too much learning without agency fades away as students forget the details of what they learned. The abilities to communicate, to take decisions and to drive their own learning will stay with them forever.

To gain the benefits of agency, we have to make sure that it is not just a buzzword. As IB educators, we have the advantage of drawing on many insights into education across the globe. However, this brings the risk of being swamped by buzzwords, and the slightly over-abstract educational jargon that sometimes runs around IB circles.

We can talk about lifelong learners as a key value that everyone subscribes to, but without necessarily seeing all of the implications it brings, nor identifying specific steps that we have to take to transform learning so that our students have the self-efficacy and approaches to learning that will continue throughout their lives.





Teaching for agency takes a lot of thought and skill. Agency is not a magic word with special powers, or a once-and-for-all achievement. Rather it is a multi-dimensional shift with many possible progressions in many dimensions. If it is reduced to a buzzword that describes what we are already doing, it does not help students progress from low agency to high agency, and so it makes only a little difference to their lives.

If we only use the word *voice*, it can be limited to talking about trivial things. Students are great at repeating back to teachers what they think teachers want to hear.

*Choice* loses its power when students only make occasional selections of activities, rather than making decisions that involve them in continually thinking about their learning. Without enough direction, students will not be able to make choices that address big ideas or confront their misconceptions.

Ownership of learning is almost always powerful. However, without enough direction, students may choose to own trivial activities in which they spend a lot of time without developing many concepts and skills that will help them long term.

### ■ Making sure agency has impact

As we unpack the terms, we can ask how each of them makes a difference. We can ask the ‘So what?’ question or use the word ‘impact’. Agency has to change learning. It has to add value. We want to see a change in

how students are being equipped with a toolkit of what they can do for themselves. This gets us beyond the cliché to the heart of lifelong learning – looking at how students are taking control of their learning so that they themselves will sustain it into their next stage of education and beyond.

Perhaps agency is difficult for bureaucratic systems, but it will have a huge impact on the schools that are ready to embrace it fully.

We can use these ideas to seize our own agency – to make sure that we are empowered professionals who can make a difference. We can grab it for our students and use agency across the curriculum. We can make sure that all students, especially those with learning differences, have the agency they need to make sure for themselves that they will be successful.

Above all, agency is not just about ideas. It is about being able to speak and do things for yourself. Let's do it!

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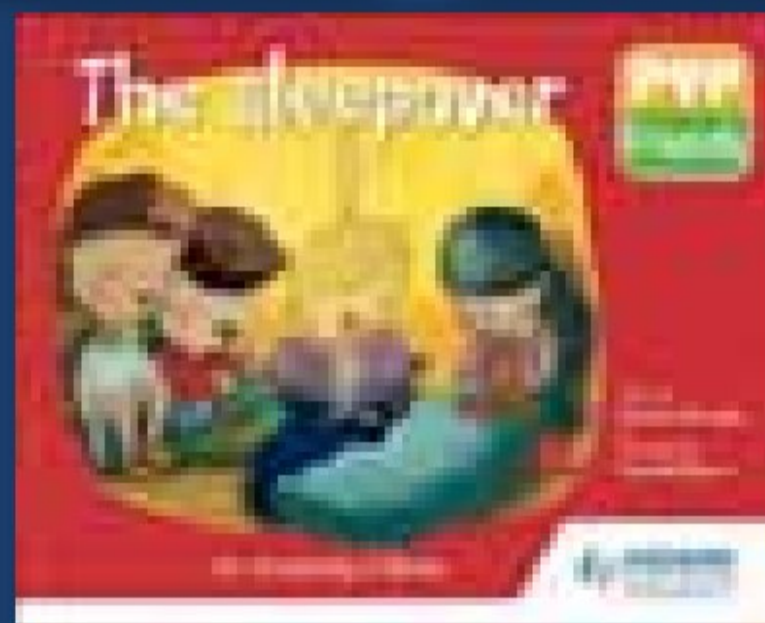
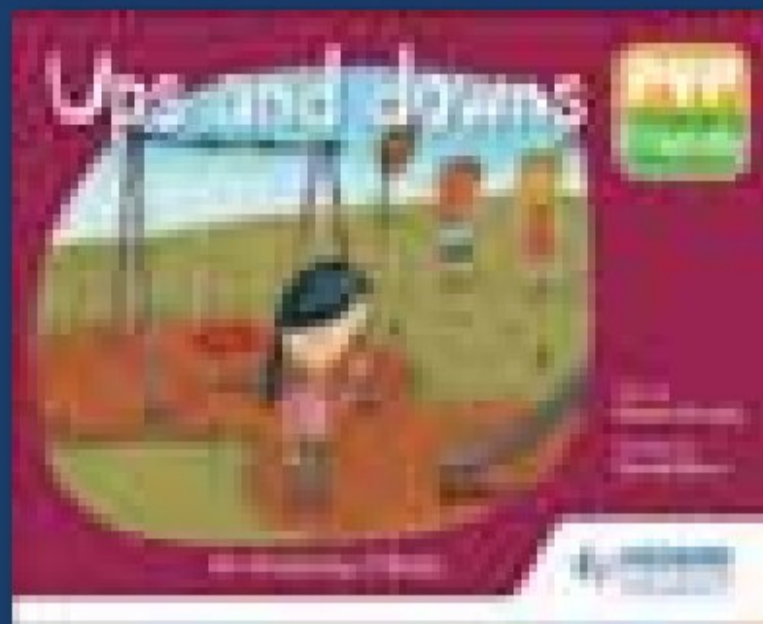


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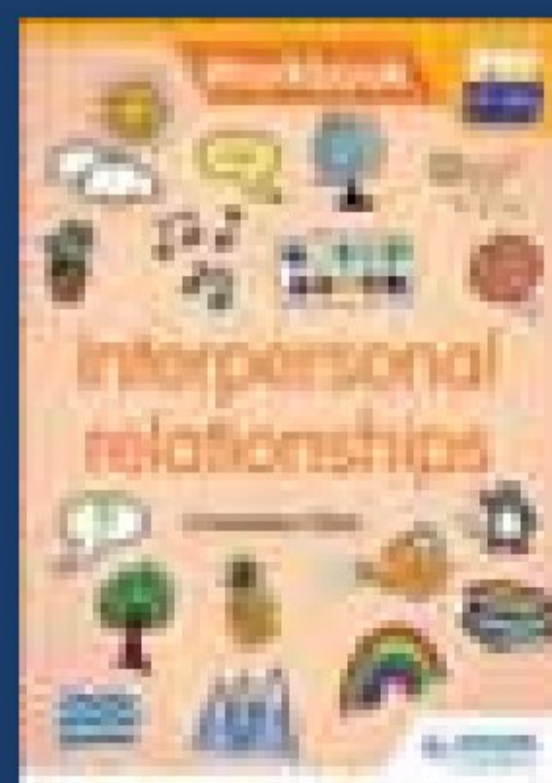
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