

Connecting purpose to practice

Building philosophical foundations and relevant practices within an elementary school - A way forward through collaboration and investigation

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Abstract

This project is the result of a learning journey toward affecting change in teaching practice through the development of a set of principles that guide teaching and learning within the school context. The purpose of the project was to deepen my understanding of the underlying principles of education and design a resource for teachers to use to bridge the gap between our beliefs about learning and our practices in the classroom. By reviewing current scholarly literature related to the principles of education, this project provided the means to compare and explore current practices in our school as they relate to the current research on how students learn effectively, and for developing a common purpose toward which to strive as a school community. Throughout the process of developing this project, it became clear that collaboration, ongoing reflection, and a common understanding are key factors in building an effective learning environment. In order to be purposeful, our practices need to be grounded in strong philosophical foundations. When teachers have strong beliefs and clear understandings about their purpose, their practices will change accordingly. Ongoing professional learning is essential and regular review of the principles that guide our teaching, and their related practices, are critical for effective change in improving learning for our students.

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Chapter 1

Introduction and Background

(Beliefs, context and researcher orientation)

In order for us to be effective as educators, and as educational institutions, I have come to realise and understand that our philosophical foundations need to be clear. By regularly refining and redefining our purpose, clarifying and reflecting on our collective goals and developing our understanding, we pave the way for effective learning. What is our purpose? What are our goals as educators? What are our beliefs about the way in which children learn? What do we understand about education and our roles as teachers? What are our challenges? What are the possibilities and opportunities? Once we have clarified our own values, beliefs and understanding of education as they relate to the school's mission, our practices in the classroom will become more relevant and meaningful. Our teaching strategies, as well as our curriculum, need to evolve from our understandings and uphold the beliefs that we have defined. In order for us, as leaders, to guide our schools through the process of clarifying our purpose, and redesigning teaching around what we believe about student learning, it is essential that we are informed, knowledgeable and committed to developing a professional learning environment. It is my belief that change is more likely to be brought about when common goals are developed through collaboration and a collective understanding. A mission based on a clear and compelling vision that is constructed together and "owned" by all, encourages commitment, offers purpose and inspires change.

A school's mission cannot stand alone. As many have said, a mission has the capacity to build a team if it is current, collaborative and part of the everyday focus of the

organisation (Fisher, 2013; Parsons & Beauchamp, 2012; Fullen, 2011; Senge, 2011; Wheatley, 2005). This understanding resonated with my own view in relation to the vision and mission at our school. We need to understand the relationship between our mission and current research on education, and how it will translate into the classroom. Principals, Vice-Principals and teachers need to be clear on the philosophies that underpin the mission of their school in order to implement the practices that support the beliefs that lie therein.

Teachers need to have a deep understanding of the philosophical foundations¹ that drive teaching and learning in the school. As a result of undergoing the accreditation process of becoming an International Baccalaureate (I.B.) World School, I realise the importance of my role as Vice-Principal in the elementary school, in working collaboratively with our teachers to define our core beliefs and establish a set of guiding principles that will help to shape our practices in the classroom, and frame the development of our curriculum. My aim for this project is to re-define our purpose, create a process by which to investigate our practices collectively, and develop a set of principles that support the understandings and beliefs embedded in our school mission. The intention is that these principles will guide our future practices in the classroom. By deepening our knowledge of education and educational theories, we help to ensure that our practices are informed by research and evidence, and by recognising and defining our areas in need of growth, as they relate to the learner, we will be able to establish a common purpose from which to move forward in improving learning for our students.

¹ In this context, philosophical foundations refer to learning principles; the beliefs, understandings and theories that we have about the nature of the learner and the way in which children learn.

When teachers within an organisation develop a common understanding of learning principles through collaboration and reflection, teaching and learning is strengthened. According to I.B. practice, a school is considered to be a community of learners, and collaboration between teachers, students and parents is seen as foundational to learning. Additionally, I.B. practice requires schools to be committed to effective on-going professional development in order to embrace change for the betterment of student learning. The knowledge base that informs effective practice continues to grow and change, which makes it necessary for teachers to be life-long learners (IBO, 2009; Stoll & Fink, 1996). Professional learning is therefore an essential component of a high functioning school community where purpose and practice are seamlessly connected.

Throughout the process of developing our guiding principles, the teachers in our school would have the opportunity together to explore the research that supports optimum student learning. Key to building a culture of collaboration is the establishment of positive working relationships. The relationships that we cultivate within our learning communities help to facilitate effective learning and drive teams successfully towards a common goal. Margaret Wheatley (2005) writes that life is a web of relationships from which systems are created that offer support and stability, and that life is a system that seeks organisation. She further suggests that together humans have enormous capacity and that by working together towards a common goal, we build relationships based on a shared sense of purpose, and we accomplish more. We learn, communicate, exchange ideas, create information, analyse the results of our efforts, adapt and evolve together as we learn and are clear about our purpose (Wheatley, 2005). Healthy, vibrant organisations have a clear but flexible common purpose. They allow for the exchange,

adaptation and evolution of ideas, and they also value the personal contributions of individuals.

The works of John Hattie and Dylan Wiliam have been significant sources of information throughout this project. Hattie's (2012) research on visible learning helped to clarify the impact that we, as teachers, have on student learning. He stresses the constant need for reflection and readjusting how and what we teach based on evidence of student learning and progress. It is clear that learning will be stronger if students know where they are going and see the purpose of what they are doing. This serves to highlight the crucial role that teachers have in making learning transparent, and in helping students to develop motivation and the habits that lead to self-regulation. Hattie's work helped to guide my thinking and further develop my understanding of what quality teaching looks like. Research by Black and Wiliam (1998), and Wiliam (2011) was instrumental in guiding and developing my understanding of assessment for learning, and reinforcing the argument that learning and assessment are interdependent. The writings of Swaffield (2008) have also served as a practical resource that has further enriched my understanding and guided our implementation of assessment for learning within the classrooms.

Project Context

According to Wagner et.al. (2010), our education system was designed for a different world. Students are entering the work place without the necessary skills to succeed in today's world. They are unprepared for college and the skills required by employers are in short supply. In order to function productively in today's world, Wagner et.al. (2010) have identified nine key competencies needed by workers in the economy of

today; however there appears to be a disconnection in what schools and employers believe to be adequate workplace skills. Students today are growing up with a very different relationship to authority and self-control, which further adds to the growing disconnect between schools and reality. This “perception gap” reinforces, more now than ever, the urgency for schools and school systems to adapt and change. Wagner et.al. (2010) stress that change needs to take the form of reinvention, which implies functioning differently, as opposed to reform which suggests only doing better than what it always professed to do. I believe that a good amount of responsibility rests on schools to help students develop the skills required to be creative, innovative, and to think critically, in order to adapt to a constantly changing work place.

In my experience, teachers often appear to have strong philosophical views about teaching and learning, and many are able to discuss the theories and principles of learning quite competently. However, there is very often a disconnect between their beliefs and their practices within their classrooms, which leads me to question the depth of their knowledge and understanding of these ideas. In fact, both Timperley (2012), and Curtis and Carter (2008), suggest that teachers actually do generally lack solid philosophical views of teaching and learning, which they believe clearly results in this disconnect. I find that teachers are too often caught up in curriculum content and meeting prescribed outcomes. Teaching often revolves around delivering content through, often unrelated, activities with little regard for developing a deeper understanding of the learner and the nature of learning. Common themes that surface through conversations with teachers both inside and outside of my own context tend to indicate that there is a lack of commitment towards school missions and guiding principles, that missions and visions

lack meaning and that teachers do not really have anything to do with them. Many teachers are not even sure that a school mission exists in their schools and they are unaware of the existence of any principles that may guide teaching and learning. In some schools where guiding principles do exist, they appear to be unrelated and are seen as a “tag along” which often remains in a binder somewhere forgotten. Many reported a lack of connection between mission and practice and fail to see purpose in having a mission at all. It is clear to me that purpose is not defined in many schools and therefore individual goals are random and lacking in direction. Without clear collective goals it becomes difficult to establish consistency in teaching and learning within a school, and change tends to manifest itself in unrelated and often contradictory “pockets”, if at all.

In my own particular setting, collaboration and professional learning are embedded in the culture of the school. Our relationship with the International Baccalaureate Organisation certainly drives this culture and helps us to focus on a collective purpose. This being said, there still tends to be a disconnect between philosophical beliefs and practice. For example, teachers talk about how all students learn in different ways and make different connections activated by their prior knowledge, yet they still expect all students to have grasped a concept at the same time and in the same way once it has been “taught”, or the lesson has been delivered by the teacher in a lecture to a whole class of students. Our teachers also tend to experience difficulty each year during the process of establishing goals for their professional growth plans. Goals can be random and unrelated, which leads me to question their purpose. I believe that by collectively and collaboratively developing a set of guidelines that articulate our beliefs and inform teaching and learning, we give teachers a tool to which they can refer to guide

their teaching practice, a foundation on which to develop their goals, as well as the opportunity to dig deeper into current research on teaching and learning.

Justification and Objectives

Although we have a strong vision and mission at our school, our classroom practices need to evolve so that there is congruence between the two. According to Black and Wiliam (1998), teachers need to see examples of what “doing better” means in practice. The intention of this project is to draw together and extend the thoughts and ideas that emerge from the reading material and the discussions that ensure about our beliefs regarding teaching and learning, and to help educators identify the practices that optimise student learning. It is important that we are all able to speak with clarity about what we do and why it is important to us. A clear set of guiding principles or beliefs about teaching and learning will hopefully help us to do that. These guiding principles would be written as belief statements, and would need to be broad enough to accommodate individual teaching styles and methods to allow teachers the opportunity to be creative and innovative in their practices. We can all have the same beliefs and goals related to teaching, but how we get there may differ. The learning opportunities we offer students should allow for autonomy and individual teaching style so long as they are congruent with our shared beliefs about the learner. As educators continue to re-examine their understanding of teaching and learning the guiding principles will evolve. They will provide the basis for reflection and help teachers to refine and gauge the value, relevance or significance of their practices and programmes. The process of collectively examining the practices within the classrooms, building philosophical foundations and establishing a common purpose, I believe, will help principals and teachers to develop the practices that

support a school's shared beliefs around teaching and learning. Through the practices that we identify as supporting our purpose, we strive to build a school culture where all learners, both teachers and students, feel confident to take risks and make mistakes, and where they respond positively to critique and use it thoughtfully to move forward in their learning. The intention is that this project would give other school leaders a framework around which to develop their own set of guidelines for teaching and learning, and hopefully inspire further ways of going about developing professional learning in their school settings.

Definition of terms

- Guiding principles – Guiding principles are a set of beliefs and understandings around teaching and learning that help to inform practise
- School culture – A school's culture is shaped by its history, context and the people in it (Stoll, 1999). The basic underlying traditions, beliefs, assumptions and routines that the school encourages, maintains and reproduces, helps to define its culture. Culture is how we think about our environment and the way in which we do things at our school. Through the development of a set of guiding principles we will determine the practices that will support a learning culture in our school that acknowledges the importance of relationships, life-long learning, risk-taking, openness and mutual respect.
- Formative assessment - Formative assessment is defined by many in a variety of ways. However, the definition the most suits the purpose of this study is one that is put forth by Black and Wiliam (2009), who propose that formative assessment encompasses all those activities undertaken by teachers, and/or by their students,

- which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged.
- Self-regulated learning - Self-regulated learning is an active constructive process whereby learners take control of their own learning and use a number of tools to set goals for acquiring new knowledge, select strategies that help them to progress towards the goals they set, and monitor their progress as they encounter new knowledge and understandings through the tasks in which they are engaged.
 - Ownership of learning – Ownership of learning puts students in control of the learning process; how the task is determined, performed and finally reported. When students become owners of their learning, they have developed sufficient insights into their own learning to manage the process and improve their understanding (Wiliam, 2011).
 - Student-engaged assessment - Student-engaged assessment involves students in developing their own understanding of their individual competencies, of where they need to go as learners and how to get there. It puts students at the centre and in the lead of their learning, and it requires them to understand and invest in their own growth. Student ownership of learning increases when students are given the tools to understand and assess their own strengths and challenge (Berger, 2014).

Project questions

In order to bring continuity to student learning, how might educational leaders facilitate the process of developing a set of principles that articulate a shared sense of purpose, as defined in the school's mission, and around which to build their curriculum and inform their teaching practices?

What is the relationship between a school's mission and current research on education, and how will it translate into the classroom?

How will defining beliefs about student learning help to bring clarity and continuity to student learning?

What are the practices that are most effective in supporting student learning?

Project Outline

My project is an example of how schools might go about developing a set of guiding principles that define the school's philosophy with regards to teaching and learning. It includes a suggested set of guiding principles as well as an example of a self-reflection continuum, with guiding questions, which teachers can use as a tool to develop and evaluate their teaching practices and their skills as reflective practitioners. The intention is that the school's guiding principles will offer a standard to guide teaching practice and will grow and develop as teachers continue to re-examine their collective understanding of teaching and learning.

The guiding principles include statements that describe beliefs about:

1. Growth and development of the learner, with an emphasis on building relationships and constructing knowledge
2. Teaching and learning, focusing on practices that promote learning, including inquiry, formative assessment and feedback, and self-regulation
3. The learning environment, including the physical space and the learning culture

The development of these statements would be guided by, and grounded in research, aiding in the professional learning of the teachers involved and resulting in deeper

understandings of learning principles and, hopefully, increased implementation of practices that further enhance learning. Through the appreciative inquiry process, school communities will have the opportunity to identify the current practices upon which to build, and determine a starting point for establishing common understandings and developing their shared beliefs. The research undertaken in the literature review will help to guide the professional learning of the educators involved in developing the belief statements. It is intended that, throughout the appreciative inquiry process, deeper understandings of learning principles will develop, and schools will begin to see increased implementation of related practices within the classrooms. The project document includes:

1. The research that led to the suggested belief statements
2. An articulation of the practices that support these beliefs
3. Evidence within the classroom that could be seen as an indication of successful implementation of these practices.

Chapter 2

Literature Review

The themes in this review relate to the nature of teaching and learning. The review will also help to clarify the value of professional learning communities and how they help to bring about change through a deepened, collective understanding and the development of a common purpose. Further to this, it will demonstrate the importance of building relationships that foster growth, collaboration and reflection. As studies demonstrate the importance of the role of leadership in facilitating opportunities for professional development, I felt it important to include research that demonstrates the need for active leadership. The literature review will draw on research that identifies effective leadership practices as well as the knowledge, principles, and skills with which educators need to be equipped in order to develop their practices effectively to meet the needs of learners. The exploration of this literature will provide a background to the issues that challenge the need for change, growth and the development of a common understanding in schools. I will be examining research that centers on the following themes:

1. Building a culture of collaboration and reflection through effective leadership.
2. The nature of the learner in the context of learning-focused relationships.
3. The nature of teaching and learning, with a focus on:
 - Constructivism, social-constructivism and inquiry
 - Self-regulation
 - Formative assessment and feedback
4. The nature of the learning environment in the context of:

- The learning culture
- Where learning takes place; within the community and the physical space within the classroom

Building a culture of collaboration and reflection through effective leadership

It is clear that effective leadership is at the core of developing collaborative and reflective professional learning communities and maintaining school cultures that continually move forward. Effective educational leaders are always open to new learnings as they realise and understand that the journey keeps changing. Leadership that supports change and instructional competencies, and that encourages participation and innovation, forms the heart of a healthy school. The role of school leadership is changing from one of predominantly management and dealing with administrative issues, to one of instructional leadership. Reeves (2006) suggests a definition of leaders as being “the architects of individual and organisational improvement” (p. 27), which moves away from the “myth of leadership as heroic solitary enterprise” (p. 26). Studies by Frey and Fisher (2009) show that the principal has a crucial role in improving student achievement, and in helping teachers to move forward in improving their practice. They argue that it is the principal “who guides teachers to improved practice” (p.18). Parson and Beauchamp (2012) investigated the successful behaviours and actions of administrators in five highly effective elementary schools that make them good places for student learning. They noted that principals were united in their practice and led their schools without “power over” but rather “power through” others to implement the shared vision and goals of their schools (p.697). Teachers involved in the study participated themselves in the leadership of the school and, in so doing, interacted with and influenced others (Parson and

Beauchamp, 2012). Clearly, relationships and a common goal of creating positive learning experiences for their students formed the foundation of their success in moving teaching and learning forward.

Active participation by leaders in professional learning, alongside teachers, has far reaching effects in cultivating relationships of trust and respect, and in maintaining a positive and dynamic learning culture within a school. Parsons and Beauchamp (2012) found that in schools where leadership is effective, principals are knowledgeable, still connected to the classroom, and teachers feel that they are one of them. Kaser & Halbert (2009) confirm the need for school leaders to be “knowledgeable about contemporary approaches to learning if they are to make the shift from a focus on sorting to a passionate commitment to learning” (p.80). They stress that “knowledgeable leaders know what matters in teaching and learning (they can ‘walk the talk’) and as a result they are more able to deepen and extend teacher learning” (p. 81). The development of this understanding has been an important one in my learning journey as a leader. I have come to better understand the importance of demonstrating knowledge about the theory of learning, and the application of the learning principles to my own practices, in gaining the trust and respect of our teachers. I have also come to appreciate the importance of reflection and commitment to life-long learning in developing learning relationships that promote discussion, collaboration and deepen teacher learning. How can we expect our teachers to shift their thinking and implement these practices if we do not offer them the same?

In order to effect change successfully, leaders need to ensure that all stakeholders are included the development of common goals. Effective principals see that the

community works well together and they trust and respect their staff and the work that they do which, in turn, encourages trust and respect among their staff. Helping their schools build a common language and vision is what effective leaders do. It is clear that the shared mission in effective schools is lived, and that all members of staff know and work at it (Parsons & Beauchamp, 2012). Without a clear goal that encompasses the vision of all stakeholders, change lacks direction and loses its purpose. According to Senge (2011), one of the most important factors for schools in accomplishing effective change is having a clear “understanding of their fundamental purpose and a set of guiding ideas that govern them.” He further states that, “the most fundamental and sustainable changes always seem to begin when the members of the faculty and the administration sit down together and ask each other: ‘Why do we exist? What do we want to accomplish? What do we stand for? What do we believe about teaching and learning?’ ” (Senge, 2011, p 574). Fisher (2013) concurs that, in order to carry out a shared vision, teachers need to be involved in the building process, the development of the programme as well as in its daily implementation and on-going review. It is evident that teaching and learning is strengthened when teachers within an organisation, through collaboration and reflection, develop a shared vision and a common understanding of the learning principles that support their vision. Nurturing strong ties among teachers and cultivating their collective beliefs, can help schools increase student achievement (Moolenaar, Slegers, & Daly, 2012). When teachers within a school collaborate and rally around a higher purpose that has meaning for individuals they begin to think not just about “my classroom”, but also “our school” and the system as a whole (Fullan, 2011).

Collaboration calls for deeper thinking, shared responsibility, trust that allows for vulnerability, commitment, and accountability, and it leads to a shared interpretation of beliefs and goals and a commitment towards achieving them. A school culture that values the role of collaboration and supports professional learning communities that help to develop the skills of teachers, will positively impact student learning. By deepening our knowledge of educational theories, we help to ensure that our practices are informed by research and evidence, and by recognising and defining our areas in need of growth, as they relate to the learner, we will be able to establish a common purpose on which to move forward in improving learning for our students. A mission based on a clear and compelling vision that is constructed together and “owned” by all, encourages commitment, offers purpose and inspires change. Reflecting on these research findings drove me to consider ways in which I could facilitate opportunities for our teachers to re-examine the beliefs that underpin the statements in our school vision, as well as reconnect and recommit to our mission. As leaders we need to understand that teachers, too, bring along different experiences, are at differing points in their understanding and have different needs. By establishing a dynamic and collaborative learning community where educators are comfortable, willing and excited to share their experiences, understandings and misunderstandings with one another we become better equipped to support the growth of our students. Through our sharing we leave the door open for more ideas and richer learning experiences.

What do we understand about education and our roles as teachers? How do our practices support the beliefs that we have about the way in which students learn? Helen Timperley (2012) suggests that contradictions continue to exist between “what is known

about effective teaching practice (which teachers often say is their preferred practice) and what actually happens in the classroom” (p.4). Both new and experienced teachers still tend to use more structured teaching experiences over student oriented and activity enhanced teaching practices (Timperley, 2012). According to Curtis and Carter (2008), teachers often lack philosophical foundations, and teacher education efforts often tend to focus on “how-to” skills rather than raising philosophical concerns or challenging teachers to question the purpose of their practices. In order to be effective, Timperley (2012) suggests that teachers need to learn not only what to do, but what it means to be a teacher. She suggests that effective teachers are “adaptive experts” who are responsive to all of their learners, and know that they need to recognise the assumptions that support their practices (Timperley, 2012). She further suggests that teachers who are “adaptive experts” consider the context and the particular needs of their students and go about actively seeking in-depth knowledge about the content of learning and how to teach it effectively (Timperley, 2012). Curtis & Carter (2008), agree that teaching strategies should flow from a consciously defined belief system, and that our teaching practices should reflect our values and understanding of education. When we are clear about our educational values and understandings, it is likely that our teaching practices will be more thoughtful and effective. By combining knowledge, expertise and resources, we can maximise our effectiveness in ensuring that we are meeting the needs of all learners.

Related belief statement:

Collaboration fosters a culture of innovation, collegiality, consistency, and support.

The nature of the learner in the context of learning-focused relationships

Students bring a diversity of experiences, skills and abilities. They have differing backgrounds, they think differently, react differently and their understandings grow from the personal connections they make. How they interpret and attach value to information differs according to individual experiences. It is the role of the teacher to facilitate connections between the prior knowledge of the individual learner and new knowledge that emerges from new experiences (IBO, 2009). Vygotsky's theories of scaffolding and the "zone of proximal development", and Gardner's theory of "multiple intelligences" help us to understand the many modes of learning that students have, and the important role that adults and teachers play in enhancing learning (Vygotsky, 1978; Gardner, 1991). The challenge is how to help students to gain the skills and resources necessary to understand and take responsibility for their learning.

Boekaerts (2010) agrees that students acquire knowledge in different ways, but also stresses that motivation and emotions form an integral part in bringing meaning to learning. She explores the effects of motivational beliefs and emotions on student learning and illustrates how negative and pondering thoughts of anxiety and concern can take over the processing capacity of the working memory which, in turn, slows down our ability to understand and incites error. Conversely, positive emotions of accomplishment induce feelings of satisfaction which can result in either the learner stepping back and relaxing, or being further motivated. Motivational beliefs can be positive or negative and are based on the experiences we have, the performance of others in relation to ourselves and our perceptions of the feedback we get from others, whether intentional or unintentional. The motivational beliefs that students have of themselves governs how

students will relate to the learning tasks and situations they encounter. Motivational beliefs are therefore important as they determine the choices that students make about the amount of effort, time and persistence they will invest in the face of difficulty (Boekaerts, 2010). Our emotions are constantly directing our thought processes, and the beliefs that we have in our abilities as learners have a significant impact on our learning (Boekaerts, 2010; Dweck, 2009). Clearly emotions play a significant role in influencing motivation. Schenk (2009) believes that “all of our lessons are processed and evaluated to some extent by their emotional impact, including the unintentional actions of the teacher, and the content the lesson itself” (p.112). When teachers are aware of the emotional impact their lessons have on individual students they will more likely be able to craft their lessons carefully to monitor the emotional impact and engineer experiences to ensure that the students make the emotional connections they need to maintain and increase motivation (Schenk, 2009). It is essential that teachers are consistently aware of the emotional well-being of their students and really understand who they are and what they believe about themselves as learners. Teachers play a vital role in helping students to develop favourable motivational beliefs about themselves as learners and in encouraging students to self-regulate their learning.

Boekaerts (2010) stresses that teachers need to be aware of the motivational messages they send in the way they communicate, teach, and select learning engagements for their students. Through their feedback, the climate they create and the learning engagements they present, teachers either both energise students and enhance learning, or demoralise them and inhibit learning (Boekaerts, 2010). She concludes that teachers need to be trained in how they can provide the support for students to develop the emotional

and motivational competence they need to “deal with the internal and external roadblocks themselves” (Boekaerts, 2010, p. 107). Absolum (2010) agrees that motivation forms the background upon which everything else is built, and that the teacher has a fundamental responsibility in managing and nurturing a positive motivational climate in the classroom. The teacher must be responsive to the individual needs and interests of the learner, as well as aware of the cultural and social contexts which surround the individual learner, affecting their lives and their learning.

Absolum (2010) points out that, “Teaching and learning is founded on the quality of the relationship built between the teacher and student” (p.29). Curtis and Carter (2008) confirm that “You can have extensive curriculum goals, but if children don’t develop strong relationships, feel comfortable to make choices, take risks, or try new things, learning outcomes are likely to be limited to behaviour compliance and recitation, not the intellectual curiosity and emotional security that sustains lifelong learning and altruistic endeavours” (p.23). Relationships built on honesty, openness and respect help to increase feelings of self-worth and optimise the opportunity for learners to build their own motivation to learn.

Mendes (2003) believes that students respond to us because we care and because they like us. He adds that “to build relationships in the classroom, teachers need to know their students, their own strengths and limitations, and how to connect with students by demonstrating genuine interest in them” (p.59). Teachers need to be aware of the impact of their own behaviours on students and their learning, and on the extent to which their own values and philosophies relating to learning pervade their classrooms and affect students’ experiences (Cushman & Cowan, 2010; Dweck, 2006; Hattie, 2012). The

perceptions of students are not always aligned with how teachers perceive and experience the same action, and when teachers lack the understanding of these differences they can unintentionally cause tension in the classroom and erode feeling of self-worth in their students.

Cushman and Cowan (2010) conducted a small scale, qualitative study in two elementary schools in New Zealand involving 12 and 13 year old students. This age range was chosen because of their growing awareness of interpersonal relationships and ability to articulate their understandings and perceptions of self-worth. Four teachers from the two schools, who demonstrated general characteristics of a ‘well-rounded’ classroom teacher, were selected to take part in the study. Teachers were individually interviewed and asked to rate the importance of their relationship with students on the students’ self-worth, using a 5 point scale. Four to five students from each teacher’s class were randomly selected to take part in 45 to 60 minute focus group interviews. The study reports on the responses of teachers and students to questions about self-worth in the classroom. Both teachers and students indicated that positive relationships between teachers and students enhance students’ good feelings about themselves, which in turn contributes positively to student learning. Positive relationships were seen as “those that included recognition of each student’s individuality—emotionally, socially and academically” (p.87). Students spoke of the positive effects on motivation and confidence brought about by teachers showing a personal interest in them, and teachers recognised the value of connecting with students in ways that enhance the learning experience and identify their needs as individuals. The study also identified that trust is a critical part of the student–teacher relationship and essential to the development of self-worth.

Interestingly, the issue of praise and self-worth surfaced in the study. While students felt uplifted by praise, they felt that when praise is “overdone” it loses its impact and becomes meaningless. Teachers also cautioned against too much praise and being sensitive to students who are not comfortable in being singled out publically (Cushman & Cowan, 2010). A learning environment where positive relationships are cultivated and maintained allows students to thrive. The IBO (2009) sums up the role of the teacher as providing “a secure learning environment in which the individual student is valued and respected, so that the relationships students establish with each other and with adults, which are of central importance to development and learning, will flourish” (p.42).

This body of research emphasizes the role that teachers play in promoting student self-worth within the classroom and beyond. The impact that teachers have on their students is considerable. As educators we need to be consistently aware of and monitor the effects we are having on our students. The evidence that we collect through monitoring our impact on students, and the feedback we receive from them should guide the decisions that we make about how and what we teach (Hattie, 2012). The research has convinced me how essential it is for teachers to really know their students and fully appreciate the levels of understanding at which each learner is functioning. They need to know how they think and learn, what their misconceptions are, and where they get stuck, so that they can adapt and adjust their teaching strategies to help students move to a deeper understanding. When we show genuine interest in our students and their thinking, we increase their ability to develop their own ideas and understanding. When children are encouraged to be “risk-takers” in their learning, and mistakes are looked upon as an integral part of the learning process, we help to build confidence and encourage

innovation. When teachers listen to their students' points of view, allow them time to express their ideas and opinions and have a voice, they promote a healthy culture of learning. In order to learn effectively, students need to feel safe, valued and supported. The building of relationships should form the basis of our practices in the classroom and needs to be our overarching theme that is fully articulated in our guiding principles. We need to further examine the relationships that exist between our teachers and our students, and identify instances where the emotional and motivational needs of our students are not being fully met.

Both Michael Absolum and Carol Dweck have had a powerful impact on my thinking, and have been instrumental in increasing my determination as a leader to help develop and nurture a 'growth mindset culture' in our school. My belief in the potential of our students and of our teachers is reinforced by the understanding that learning hinges on relationships built through trust and respect, and on environments that support communication, collaboration, and inquiry.

Related belief statement:

In order to learn effectively, students need to feel safe, valued and supported.

The nature of teaching and learning

Hattie (2012) suggests that the quality of teaching has a measureable impact on student learning and that what we do or do not do in the classroom directly affects student progress. He reinforces the importance of teachers "knowing what students already know, know how they think, and then aiming to progress all students toward the success criteria of the lesson" (Hattie, 2012, p.39). The need for teachers to become aware of which of

their teaching strategies are working or not, and to understand and adapt to the situations and contexts of their learners is crucial to learning. To what extent does our current facilitation of learning respect the nature of each learner?

The construction of knowledge

Our goal is to engage students in their learning and to support and develop student ownership of learning. We want students to believe in themselves as learners, to challenge themselves, to persist and to enjoy learning. We want them to know how they learn; we want them to experience success and to develop the confidence to become advocates for themselves. Educational theories tell us that students are competent, curious and creative constructors and co-constructors of knowledge and understanding. They tell us that learning occurs when students construct knowledge through active engagement and interaction with others, and they communicate understanding through dialogue and collaboration. Vygotsky defined learning as “the creation of meaning that occurs when an individual links new knowledge with existing knowledge” (IBO, 2009). According to Piaget, learning takes place when children adjust their existing schemas to accommodate new information or knowledge (Powell & Kalina, 2009). Both views suggest that learners have beliefs about how the world works that are based on their own experiences and prior learning, and as they encounter new experiences and further learning, they revise their views, make new connections and change their thinking. It is, therefore, crucial for our educators to recognise this and put in place the practices that support these understandings, so that they can best serve our learners.

Carlina Rinaldi (2012) believes that learning “does not take place by means of transmission or reproduction” (p.125.) Her beliefs echo those of Vygotsky in that the

learning process, although an individual one where learners construct meaning for themselves, requires the reasons, explanations, interpretations and meanings of others to further build knowledge. This is the process of social construction; an understanding that learners co-construct knowledge through active engagement, dialogue, collaboration and interaction with others (Rinaldi, 2012). Constructivism is currently considered, by many, the best method of teaching and learning in schools today (Powell & Kalina, 2009). This belief is also held by the I.B. in the Primary Years Programme (PYP). In the PYP it is believed that students learn best with a structured, purposeful inquiry approach where they are able to construct knowledge for themselves through active engagement. The starting point is the students' current understandings, and the goal is the active construction of meaning through the building of connections between current understandings and new information and experiences, as students explore new content (IBO, 2009). Students create personal meaning when new information is presented; therefore, an understanding of where the student is at a given stage in their learning is necessary for effective implementation of the constructivist model. Researchers agree that learning involves people making sense of the world by building mental constructs about how the world works so that they can interpret new knowledge, which confirms that learning is not simply absorbing information but an active process of meaning making (Rinaldi, 2012; Powell & Kalina, 2009; James 2008; Vygostky, 1978).

My own view of learning is supported by the understanding that learning is individual yet socially constructed. We all make sense of things in unique ways as our understandings have been shaped by different prior experiences. As we interpret and reinterpret our experiences through interactions with others, we reconsider our

experiences and reshape our ideas that were perhaps more vaguely defined beforehand. Our own knowledge constructs provide the lens through which we view new experiences which, in turn, determines how we further disseminate experiences, filtering out some information and ignoring other (James, 2008).

Developing understanding of how the brain functions confirms this view. The brain is powerfully shaped by experience, and emotion and cognition work together to guide the learning process (Hinton & Fischer, 2010). The understanding that new knowledge is built in different ways based on previous learning is confirmed by neuroscientists who agree that this is central to how the brain learns (Hinton & Fischer, 2010). Because of this, as children learn they develop different underlying brain structures or different learning pathways. For educators, this reinforces the responsibility that teachers have in engineering a variety of positive educational experiences for their students, that take into account the development of both meta-cognitive and emotional regulation skills and offer multiple “entry points”, to accommodate individual learning needs (Gardner, 1991). Neuro-scientific research demonstrates that learning can be enhanced through the stimulation of the senses and by the way we design our learning activities to address rigour, challenge, pace and engagement (Andain & Murphy, 2008). As learning takes place through discussion and interaction with others, the teacher’s role becomes one of organising instructional settings to maximise opportunities for learning, which includes a balance of information, feedback and the development of challenging tasks that suit the needs of individuals.

Teaching strategies that allow students to construct ideas through their own personal experiences and processes, as well as through interactions with others, help to

build meaning for the student. Teachers need to facilitate this process in the classroom and make sure to be explicit when communicating concepts in order for learners to make the necessary connections to their prior knowledge (Powell & Kalina, 2009). In the constructivist context therefore, teaching becomes a vehicle to help learners to evaluate their existing mental constructs and adapt, extend or renew them in order to widen perceptions and deepen understandings. The development of conceptual understandings is emphasized in this context as they form the basis of our mental constructs (James, 2008; De Corte, 2010).

Critically teaching children about the world requires teachers to always be learners (Cowhey, 2006). Although great strides have been made in the understanding of learning, research indicates that school practices largely have not changed significantly to reflect these understanding (De Corte, 2010). Studies by Graham Nuthall (2002) reveal that the way in which students perform “is a function of their motivation and the extent to which they share the purpose and culture of the teacher” (p. 21). De Corte (2010) acknowledges that teachers, through their own knowledge constructs, “interpret the new [understandings about learning] through their past experiences and their often traditional beliefs about learning and teaching”, and that “this easily results in absorption of the innovating ideas into the existing traditional classroom practices” (pp.56-57.) Nuthall (2002) suggests that teachers make the assumption that because they are teaching, students are learning. This assumption is still notably prevalent in our schools today. Although teachers do profess to have an understanding of the way in which students construct knowledge, and I am sure they do, research indicates that there is still a disconnection between what they know and how they apply their understanding in

practice (Timperley, 2012; Curtis & Carter, 2008). My own experiences as a school leader somewhat confirm these views. We can talk philosophically about how students construct knowledge, but I regularly hear teachers lament about how they have spent time teaching a skill, concept or body of knowledge and when they return to it after a period of time the students just “don’t get it”, or have forgotten everything they learned. Often, they expect all students to enter their classrooms with certain skills sets and tend to lay the blame on previous teachers for not “teaching” these skills. Brooks and Brooks (1990) claim that the present curricular structure has engineered this outcome. It is not that they have forgotten, but that they never learned what we assumed they had. They assert that we expose students to material but we don’t allow them to learn the concepts (Brooks & Brooks, 1990). The bridge between understanding and application is still under construction.

Related belief statements:

Students are competent, curious and creative constructors and co-constructors of knowledge and understanding.

Students communicate and represent their understanding in a variety of forms.

Learning through inquiry

Inquiry is natural to how children and adults learn outside of school contexts, as they interact with others and the environment, and it supports the constructivist beliefs about learning. Kathy Short (2009) shows how young children embody inquiry in the way they engage with life and immerse themselves in what is happening around them. Their curiosity is piqued when something attracts their attention and this creates a “need to know” that they then explore through play, observation or pestering adults with questions. This curiosity leads to knowledge, which in turn leads to more in-depth

investigations, further supporting the construction of their understandings. Short (2009) defines inquiry as a “collaborative process of connecting to and reaching beyond current understandings to explore tensions significant to learners” (p.12). These beliefs centre on the feeling of uncertainty which encourages wondering and questioning, thus moving the learner beyond current understandings to new ideas and possibilities. According to Short (2009), this uncertainty needs to be coupled with “invitations” in order to motivate and encourage the learner to pursue those uncertainties or tensions. These invitations should beckon the learner and help them to feel safe to take risks as they work with others through the thinking process and pursue new ideas and possibilities (Short, 2009).

Good inquiries often arise when the world presents something powerful enough that students and teachers are compelled to pay attention, but teachers, with an inquiry disposition, know that well-chosen scenarios, stories or problems can evoke precisely this sense of wonder or puzzlement and they know how to make it happen. According to Clifford and Maribucci (2008), in a genuine inquiry the topic itself matters far less than the attitude students and teachers take toward it. Inquiry “happens” if students connect emotionally to the issue and are moved to ask why and explore the issue further. Inquiry is conceptual, problem-posing, problem-solving and collaborative (Short , 2009; Barell, 2008). It begins at the point of knowing and not knowing, therefore requires the learners’ own experiences and current understandings to provide the starting point to help the learner make the necessary connections for inquiry to begin. Thus, in order for teachers to captivate the attention of their students, the inquiry needs to be broad enough to so that everyone is able to make meaningful connections and contributions to the topic in order to further their own understanding. Identifying prior knowledge becomes crucial to the

inquiry process, and the role of the teacher is to immerse students in engagements that help them to connect to their own life experiences (Short, 2009). Inquiry depends on relationships and involves reaching beyond ourselves. It challenges us to reflect on our current understandings and collaborate with others to extend our thinking. Inquiry is about thinking. Davidson (2009) views inquiry as a creative and collaborative process in “pursuit of new understandings by applying, adapting and recombining different concepts and skills”, and that “the process requires and develops a set of powerful ways of thinking, *the tools of inquiry*” (p.27). Inquiry learning is therefore a perfect fit for the social constructivist classroom.

Social constructivist teachers design purposeful engagements that connect to the world beyond the classroom and create educational contexts that enable children to utilize their own skills and competence as they inquire into the world around them. They seek out and value students’ point of view in order to understand their reasoning, give context to the learning and make the learning experiences meaningful for individuals. Social constructivist teachers acknowledge that the whole classroom is a community of learners, including the teacher, and offer opportunities for students to engage in dialogue and collaboration to help build the learning capacity of their students. They invite learners into the decisions about learning, use a variety of assessments and experiences to tap into the strengths of their students, and they use the evidence to plan the next stages of the learning. They stretch student thinking by engaging them in problem-seeking and problem-solving activities. Social constructivist teachers build a classroom culture of questioning and deep thinking, in which students share their theories and learn from discussions with teachers and peers.

Dewey pointed out as far back as 1916 that “all which the school can or needs to do for students, so far as their minds are concerned, is to develop the ability to think” (p. 262). It was his belief that that education should teach us how to think rather than what to think. The constructivist model of learning recognises thinking as foundational to learning. When critical and creative thinking skills are embedded in the learning engagements in our classrooms, we encourage independence and enjoyment of learning that is motivated by inquiry. According to Andain & Murphy (2008), this independence and enjoyment can be sustained throughout our learning lives.

Related belief statement:

Students are natural inquirers who construct and communicate their knowledge and understanding through active engagement, dialogue and interaction with others.

Self- regulation in learning

As 21st century educators, there is little doubt that any of us would dispute the idea that our goal is for students to become self-directed learners who are inspired to develop their understandings, have the desire and ability to challenge themselves, and who will embrace their futures as knowledgeable problem solvers. How can we, as teachers, expand our practices to facilitate this for our students? Wiliam (2011) shows, “that activating students as owners of their own learning can produce extraordinary improvements in their achievement” (p. 145). This is echoed by Absolum (2010) who believes that students need to “become strong partners in the teaching and learning endeavor” (p.15), and further by Hattie (2012), who talks about teachers helping students to “become their own teachers” (p.1). All three authors acknowledge that student ownership of learning develops when learning intentions and success criteria are clear, and that students are able to think about themselves as learners. They know and are able

to articulate how their learning is going, and where they need help. As learning becomes self-regulated, students assume more control over their learning, and become less dependent on external teacher support as they engage in the process of learning. In order to sustain their motivation, self-regulated learners may adjust, and sometimes even abandon initial goals as they adapt to new understandings. They are aware of the quality of their own learning, are able to judge their performance against the standards and criteria that they set, and they seek feedback from external sources which include teachers, the contributions of peers during collaborative working groups, as well as the answer sections in textbooks (Butler & Winne, 1995). Self-regulation is about independence and owning the learning. When students own the learning, learning is transferred and understanding is enduring.

In order to develop as independent learners, Cowhey (2006) suggests that children need predictable structures and routines so that they become comfortable and confident and can then transfer their familiar skills to unfamiliar situations. Similarly, by sharing learning intentions and success criteria with students, and making sure that they are understood by the learner, we encourage independence as students are more able to experiment confidently and openly, and make connections across ideas. A common thread in research acknowledges that learning intentions must be shared with students so that they understand them, know where they are going and have a clear indication of what success looks like (Berger, 2014; Hattie, 2012; Wiliam, 2011; Absolum, 2010; Swaffield, 2008). Berger (2014) suggests using learning “targets” that provide students with tangible, manageable and understandable goals to work towards. In providing these goals, he believes that we help students to define what they are learning and why they are

learning it, and we enable them to monitor their own progress towards that goal. These goals provide students with short term success which helps to increase motivation and give them a sense of purpose as they meet with success (Berger, 2014).

Self-regulation in learning also calls for personalisation and appropriate levels of challenge that are congruent with the developmental needs of individuals in a diverse classroom community. When students are challenged within what Vygotsky (1978) defines as the zone of proximal development, the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers, they are more likely to be motivated and develop independent learning habits (Powell & Kalina, 2009; Vygotsky, 1978).

The ability to apply meaningfully-learned knowledge and skills effectively and creatively in different situations should be the ultimate goal of education and learning today. De Corte (2010) suggests that learners need to develop what he refers to as “adaptive competence”, requiring the learner to transfer knowledge and skills to new learning tasks and contexts which is central to life-long learning (p.45). An important element of adaptive competence is the development of skills in self-regulating one’s own learning and thinking (De Corte, 2010). In order to support the development of adaptive competence and self-regulation in learning and thinking, we need to release the responsibility of learning to the student. Our classroom practices and cultures need to shift towards learning that is active, constructive, experiential, cumulative and collaborative, and where learners are able to construct meaning through their own individual processes and set goals that suit their individual needs. Constructive learning

involves interaction with the environment and is about the process rather than the product. It is also self-regulated as individuals are active participants in their own learning process both meta-cognitively, motivationally and behaviorally (De Corte, 2010).

It is clear that the teachers at our school have an understanding of the students in their care, but they need to bridge the gap between knowing their students and providing them with the appropriate tools and challenges that enable each of them to grow as self-regulated learners. We most definitely need to provide students with a clear vision of the intended learning and align our learning engagements with the intended learning outcomes.

Related belief statements:

Regular, consistent routines and clear learning intentions help students to become independent, self-regulated learners.

Students do their best when the learning is personalised and provides appropriate challenge.

The role of formative assessment in teaching and learning

Research shows that formative assessment is at the core of effective teaching. William's (2011) definition of formative assessment highlights five strategies that are key to cultivating an effective learning climate:

1. "Clarifying, sharing and understanding learning intentions and criteria for success.
2. Engineering classroom activities that elicit evidence of learning.
3. Providing feedback that moves learners forward.
4. Activating students as instructional resources for one another.

5. Activating students as owners of their own learning”. (p.154)

Clearly, the first priority of assessment should be to promote student learning. Black and Wiliam (1998) indicate that by improving formative assessment practices learning standards can be raised. Effective assessments engage students in reflecting on their learning and give both teachers and students an opportunity to analyse learning, and understand what needs to be improved. Assessments are considered formative if they provide information for teachers to use as feedback to modify their teaching and learning activities to meet the needs of their learners, and if students are able to use the feedback to adjust their thinking and move forward in their learning. Assessments that tap the prior knowledge of students, allowing learners to connect current understandings and target objectives, assessments that guide planning of instruction and help to improve the quality of instruction, and assessments that provide feedback at each stage of the learning process to move learning forward, help to “build the bridge between teaching and learning” (Wiliam, 2010, p.137).

Feedback as formative assessment

Researchers agree that feedback is an integral part of assessment for learning and foundational in facilitating self-regulated learning (Swaffield, 2008; Nicol & Macfarlane-Dick, 2006; Black, Harrison, Lee, Marshall, & Wiliam, 2004). Traditionally feedback focused on information provided to students by the teacher after a task has been completed or a test administered, which really only seeks confirmation of a student’s knowledge prompted by the test or assignment questions. In formative assessment, however, feedback has a multifaceted role in guiding cognitive activities in which knowledge is constructed (Butler & Winne, 1995). Wiliam (2010) points out that

“feedback should focus on the specific features of the task, and provide suggestions on how to improve”, and that feedback “should focus on the “what, how and why” of a problem rather than simply indicating to students whether they were correct or not” (p.141). Tomlinson (2014) agrees that formative assessment should be accompanied by feedback that helps the student know what to do to improve. Often feedback and formative assessment is still seen as the responsibility of the teacher. Teachers convey information about what is right or wrong about the student’s academic work and its strengths and weaknesses, and the student is required to use this information to make improvements. This, according to Nicol, & Macfarlane-Dick, (2006), makes it difficult for students to become empowered and develop the self-regulation skills needed to prepare them for life-long learning, as they are denied the opportunity of actively constructing, through discussion, an understanding of the strengths and weaknesses of their work for themselves, and therefore regulate their own performance. They also suggest that this process of transfer neglects to take into account the way feedback interacts with motivation and beliefs. Research does show that feedback has a major impact on how students feel about themselves. This impact can be either positive or negative depending on the type of feedback and how it is given, further influencing learning and achievement (William, 2010; Hattie & Timperley, 2007; Nicol & Macfarlane-Dick, 2006).

How we provide students with feedback is therefore vital. Feedback comes in many forms and, as teachers interact daily with their students, they need to be constantly aware of the messages they sending their students, whether intentional or unintentional. Hattie and Timperley (2007) believe that the purpose of feedback is to bridge the gap

between the learner's current understandings and their goal, and that effort is more likely to increase when the intended outcomes are clear and when the learner's beliefs in their own ability to succeed is high. Researchers identify a number of principles of good feedback practice that they believe will help to strengthen the students' capacity to self-regulate their own performance. These include practices that help to clarify expectations, allow for the development of self-assessment in learning, offer high quality information to students about their learning and encourage peer and teacher dialogue around learning. They agree that feedback should focus on the process and progress of student learning and how to continue to move forward, as well as on the quality of the work. In addition, they agree that feedback should provide information on how to improve and that it should be given in such a way that students are able to make sense of it and make use of it (Swaffield, 2008; Hattie & Timperley, 2007; Nicol & Macfarlane-Dick, 2006; Black & Wiliam, 1998). Feedback that encourages positive motivational beliefs and self-esteem, and feedback that provides information to teachers that can be used to help shape their teaching, further supports self-regulated learning in students. When feedback is accompanied by effective instruction, learning is greatly enhanced (Hattie & Timperley, 2007).

In the social constructivist classroom, feedback is part of the ongoing dialogue between learners, where students and teachers interact and learn from one another (Swaffield, 2008). Active engagement allows students the opportunity to compare and share their understanding, try out and experiment with ideas, discuss efforts and perceptions, give feedback and try again. This provides for a rich environment where students are able to contribute their expertise and strengthen their motivational beliefs. It

also provides an opportunity to explore different perspectives to further deepen understanding. Feedback that compels learners to think empowers them to learn, and helps to move the learning forward (Tomlinson, 2014; Hattie, 2012; Wiliam, 2011; Swaffield, 2008; Black & Wiliam 1998). Feedback is thus foundational in facilitating self-regulation. Learners generate internal feedback as they monitor their progress and engage in a task.

Although we learn through social interactions, how we interpret and construct meaning from the information and experiences we encounter, is individual. Therefore, in order to offer effective feedback, understanding where each student is in their thinking, is key. The role of the teacher is to raise questions, to push learners to see how and where their opinions and answers hold up and where they do not, and to ask the right question at the right time in order to push a learner's thinking. Effective questioning enables learners to draw connections and deepen their understanding in ways that they may have never considered. Some useful questions that our teachers have been using to hand the learning back to students include: What do you notice? What puzzles you? Can you show me? Where do you see that? What do you mean? Why do you think that? Is that the same as what (someone else) thinks? How did you get that? What makes you say that? Through effective questioning that probes student response and allows them the time to collect their thoughts before responding, and by providing instructive feedback and involving students in the assessment process, we hand the learning back to the learner. Being able to explain their thinking to others helps students to deepen their own understanding. Once a learner has 'owned' the concept, they can generate their own examples.

Engaging students in assessment

Learning is fluid. Learners are different, their ideas are different and the connections they make are unique. Wiliam (2011) believes that all students have the capacity to become owners of their own learning, and highlights the role of student self-assessment in developing independent learning habits. He argues that students have the potential to “develop sufficient insights into their own learning to improve it” (Wiliam 2011, p.146). Studies show how the rate of student learning doubled when students were given carefully structured opportunities to develop their self-assessment skills (Wiliam, 2011). This clearly indicates that self-assessment by students is an essential component of formative assessment. It does, however, take a while for students to develop their ability to self-assess effectively. The process requires teachers to provide sufficient guidance that will help students to understand the main purposes of their learning and the desired goal, identify their present position in relation to the desired goal and thereby grasp what they need to do to achieve (William 2011; Black &Wiliam 1998).

Absolum (2012) believes that “students can learn to self-assess by first learning to assess the work of their peers” (p. 107). Interestingly, Hattie (2012) points out the fact that much of the oral feedback students receive in the classroom comes from their peers, whether it helps to enhance learning or not. He argues that it therefore makes sense for teachers to take advantage of this, and help to put in place interventions that guide students in giving effective feedback to their peers that will enhance learning. Gielen, Peeters, Dochy, Onghena, & Struyven suggest that the quality of peer feedback can affect its impact and that it is more important for a peer assessor to provide justification rather than accurate critique in the form of negative comments. Their study determined that the

effectiveness of peer feedback could be elevated through instructional interventions that help students to focus on the aim and criteria of the assignment, and that offer guidance in the form of prompts to ensure quality control. Further to this, they acknowledge that opportunities for collaborative problem solving where students are encouraged to justify their own ideas and explain their answers to each other's questions can be highly informative for developing peer assessment training (2004). Although we cannot expect peer feedback to be as accurate as that of an expert, by involving students in the assessment of their peers and by providing them with opportunities and guidance in justifying their feedback, we promote self-regulation and increase their ability to provide constructive feedback. This in turn helps students to become successful in evaluating their own efforts.

Studies by Yang, Badger, & Yu (2006) further address the benefits of peer feedback and its effect on learning. They found that, although students more readily incorporated feedback given by the teacher as the expert, peer feedback seemed more useful in encouraging student autonomy and appeared to bring about a higher percentage of meaning-change revision, while most teacher-influenced revisions happen at a surface level. It was felt that this was due to uncertainty created by peer revision which provoked discussion and prompted students to search for confirmation, leading to more self-corrections. This resulted in students acquiring a deeper understanding of the subject. Teacher feedback was accepted to a greater degree, but subjected to misinterpretation and miscommunication. The study suggested that teacher feedback lowered students' self-corrections, because students assumed that the teacher had addressed the errors and no further corrections were necessary (Yang, Badger, & Yu, 2006). The study shows that

peer assessment needs to be seen as an important complementary source of feedback in the classroom.

By involving students in the assessment process we allow them the opportunity to understand and invest in their own growth. In this way the role of assessment moves away from one of evaluation and ranking students to one that motivates them to learn. When students are engaged in their own assessments they become empowered with the understanding of where they need to go as learners and how to get there. Student - engaged assessment builds independence, critical thinking skills and perseverance. It requires self-reflection, collaboration and responsibility which leads student to become positive citizens (Berger, 2014).

William concludes that “reflecting critically on one’s own learning is emotionally charged, which is why developing such skills takes time, especially with students who are accustomed to failure”(2011, p. 158). By sharing learning goals with the students, promoting the belief that ability develops over time, providing feedback that guides future action and making it more difficult for students to compare their achievements with the achievements of others, as well as by using every opportunity to transfer executive control of learning from teacher to student, teachers can help to “activate students as owners of their own learning” (p. 152).

If we encourage the development of autonomy in learning where students are active in managing the learning process and able to develop their own skills of self-regulation of learning, their need for feedback diminishes (William, 2010; Hattie, 2012). Every learner has potential. It is the role of teachers to harness that potential and work to help our students to become effective, independent, life-long learners who make a

positive contribution. We need to help students understand themselves as learners, manage themselves as learners, and develop their capacity to work independently. By structuring the environment to allow students to have greater power over their learning, we enable them to become fully engaged in their own learning process. When students can identify their own needs as learners they are more able to navigate their own way through this world of ever-changing knowledge. “When students take responsibility for their learning they see themselves as the key actors in their own success” (Scott Hartl, cited in Berger, 2014).

A classroom that supports learning is one in which assessment and learning is interwoven and interdependent. Wiliam’s (2010) point about formative assessment functioning “as the bridge between teaching and learning” is echoed by James (2008), who further links assessments and learning, but adds that the relationship between learning and assessment is not always as aligned as it should be. This is particularly relevant today as the rate at which our understanding of how people learn has accelerated, whereas developments in assessment tend to focus more around advancements in measurement technologies, without consideration for new learning theories. This suggests that teachers need to think carefully about whether their assessment practices do in fact support their views on learning (James, 2008). Wiliam (2010) explains how the concept of formative assessment has developed and expanded in recent years from a “focus on feedback to a wider perspective on classroom practice”; however, often “in classrooms across the world, evidence about the success of learning activities is typically collected only at the end of the learning sequence” (p. 136). He believes that that the

summative function of assessment is still dominant in classrooms, which tends to overshadow the use of assessments to guide teaching and learning (William, 2010).

All too often summative assessments take centre stage and what teachers refer to as their ‘formative assessments’ are in fact mini summative assessments that allow teachers to collect a series of grades along the way to use as a final measure of performance when wrapping up a section of the curriculum. I often struggle to see a correlation between the learning and the teacher-designed summative tasks, which do not necessarily allow individual students to demonstrate their enduring understanding through the “one test fits all” scenario. It is crucial that teachers build a deeper understanding of assessment for learning and begin to see the power of assessment **as** learning, in order to better support individual students through their learning.

As we have made increasing efforts throughout our school to implement formative assessment strategies, and included students more actively in the process, we have certainly noticed increased student engagement, increased ability to reflect on their own understandings and a greater willingness to act on feedback given by peers and teachers. We have noticed too, that peer feedback tends to be more actively sought and acted upon, although students do like final validation from the teacher. Teachers in the younger grades are steadily realising that their students are also capable of, and enjoy, providing one another with constructive feedback, and that by supporting students in developing their abilities to provide effective feedback for one another, they are helping to cultivate a climate that paves way for genuine self-regulated learning.

Related belief statement:

Student progress is understood to be a learning continuum; students are unique, they learn in multiple ways and at different rates.

Feedback is an integral part of formative assessment that guides teaching and learning.

The nature of the learning environment

The learning environment needs to support the beliefs and understandings that we have about the learner and the nature of learning. Both the physical space and the learning culture, which for these purposes includes the academic, social and emotional climate of the classroom, contribute to the learning environment, and play an important role in supporting student learning. The beliefs that we have about students being competent, curious and creative constructors and co-constructors of knowledge and understanding, that they construct knowledge through active engagement and interaction with others, and that they communicate understanding through dialogue and collaboration should guide the way we engineer our learning environments. If these are truly our beliefs, then we need to ensure that the environment supports active involvement of students in the learning, with an emphasis on student thinking and making that thinking public (Black et. al., 2004).

The learning culture within the classroom environment

An environment that fosters imagination encourages risk taking. When children are encouraged to be “risk-takers” in their learning, and mistakes are looked upon as an integral part of the learning process, we help to build confidence and encourage innovation. In studies conducted by Cushman & Cowan (2010), teachers tended to agree that a classroom culture built on trust and emotional safety helps to develop an environment in which the students want to be. Teachers agreed that they need to model the kinds of behaviours and attitudes they hoped their students would emulate in the

classroom and wider school community (Cushman & Cowan, 2010). As teachers model empathy and talk about the value of effort and making mistakes, they create a climate of acceptance and determination. By providing feedback that is not attached to a grade, and by offering opportunities for students to collaborate with one another, we encourage openness and ensure a safe environment for imagination and risk-taking to flourish. Students become motivated when they feel successful, when they find things interesting and absorbing, when there is an appropriate level of challenge, and when they feel that what they are learning has meaning and value. When students are interested and can connect emotionally, they are more likely to engage in the learning. When teachers listen to their students' points of view, allow them time to express their ideas and opinions and have a voice, they promote a healthy culture of learning.

Learning within the community

In an IB school it is believed that learning takes place when it is connected to what is genuinely a part of the world around the student. The environment should play a role in helping students make connections between life in school and life outside of school. The students are then able to see that learning is connected to life which helps to ensure that a strong foundation for future learning is established (IBO, 2009). When learning is connected to the real world, students are able to explore concepts from multiple perspectives and make connections that are relevant and meaningful. It seems to me that too often conversations in our classrooms have revolved around content and questions that steer the learner towards a pre-determined response, without necessarily considering the real purpose of the learning. As we examine our purpose as educators, through our school missions, we see more and more reference to citizenship, the

education of the whole child and how to develop young people who can go out into the world as compassionate, life-long learners who, through their actions, make a difference in the world. Community action or service is becoming increasingly part of the learning environment in schools today and is often mandated as a requirement for graduation. Service and action provide the opportunity for educators to help their students get involved in the 'real world'. According to Furco (2010), service-learning is "one of the fastest growing educational initiatives in contemporary primary, secondary and post-secondary education" (p 228). In a learning environment that embraces service and action, students are able to grow both personally and socially, and develop the skills needed to solve problems, resolve conflict and think critically and creatively. Service-learning hinges on a purpose and provides an opportunity for teachers to hand learning back to their students.

Furco ascertains that academic service-learning helps to build self-confidence and empowers the learner. When students are engaged in "community service projects that matter to them" and are given the opportunity to plan and carry out their ideas themselves, as well as take responsibility for both their successes and failures, they become agents of their own learning. He further suggests that students are more invested in the learning tasks and their intrinsic motivation increases, as does their commitment to see the task to completion (2010). Learners who have a strong sense of purpose and fully understand the value of the task are more likely to initiate activities and maintain their effort (Boekaerts, 2010).

In an International Baccalaureate (I.B.) school, service and action are viewed as "an important part of students' active participation in their own learning" (IBO, 2009, p.

26). It is an expectation of the I.B. Primary Years Programme that “successful inquiry will lead to responsible action, initiated by the student as a result of the learning process” (p.25). While developing their programmes, teachers seek to design environments that offer all students the opportunity to engage in purposeful action that will facilitate personal growth (IBO, 2009). When learning is authentic and a part of the world around the student, it becomes more meaningful and therefore enhances the engagement of the learner (Furco, 2010). Furco further points out that when students are involved in service within the community, the partnerships they develop play an important role in keeping them committed, as they feel that their work is being validated by adults in the community. This, in turn, enhances overall success in school (Furco, 2010).

Action that students take as a result of their learning, can be considered an effective assessment of student learning, a clear indication that learning has transferred, whether it be a change in thinking or an act of responsibility and respect for others and the environment. For it to be successful, action and service need to be modelled by teachers and quality, purposeful opportunities for service-learning must be included on the agenda. For service-learning to be purposeful it needs to be intrinsic and not just something that has to be checked off because it is a requirement, as I fear is the case in many circumstances. If we are to be successful in our efforts to engage our students, enhance achievement and develop their ability to self-regulate through service-learning, it is essential that we provide high quality purposeful academic service-learning opportunities, where teachers help to develop partnerships within the community, engage them in the assessment process, and let go of control, so that the students “have the power to choose to act; to decide on their actions; and to reflect on their actions in order to

make a difference in the world” (IBO, 2009, p.25). Furco concurs that if service learning is to be effective it needs to occur when it adds value to the learning and overall education experiences (Furco, 2010).

An environment that supports the beliefs and reflects the values we have about our students and their learning, is one that is flexible, where students have choice and where independence is fostered through clear routines and expectations. The environment that we want for our students is one that invites wonder and nurtures curiosity. Student questions give us an entry point into discovering things about student understanding and learning, and by including their wonderings in the learning we show that we value their input. Teachers who make use of provocations that stimulate investigation, ask probing questions and use thinking prompts to invite questions, help to create environments that foster curiosity. When we engage our students emotionally and engineer environments that provide new, real life learning experiences, which give purpose and relevance to learning, and allow for discovery and personal exploration, we assist students in becoming active participants as they build an understanding of the world around them. By creating environments that promote reflection, discussion and collaboration, and in which students feel safe, valued and supported, we help students to “own the learning process”.

Learning within the physical space of the school

The academic, social and emotional aspects of the learning environment have been explored more thoroughly within the sections on relationships and the nature of learning, as they are interdependent. However, within the context of the academic, social and emotional development of the students, the design of the physical learning space in

relation to 21st century pedagogy is an area that needs to be further examined if education is to take a whole child approach. How can we design our learning spaces to optimise student learning? How can the learning space play a role in ensuring that students are engaged, supported and challenged? The layout of the physical space should foster communication and investigation, and support the building of relationships. According to Rinaldi (2006), there is a clear relationship between the quality of the space and the quality of the learning. She believes that children's competence and motivation can either be enhanced or inhibited depending on the nature of their surroundings. Educators of the Reggio Emilia approach refer to the environment as the "third teacher" (Rinaldi, 2006). This belief recognises that the way in which the environment is engineered can invite harmony or discord, it can exhaust or energise, and it can either foster or hinder collaboration, investigation and self-sufficiency (Oken-Wright, 2009; Rinaldi, 2006; Curtis & Carter, 2003). Reggio Emilia educators prepare the environment carefully and intentionally to provoke the intellect of their students. I believe that the Reggio Emilia approach is certainly one that supports our beliefs and therefore one from which we can learn.

According to Curtis & Carter (2003) the environment can influence the people who use it, in a variety of ways, depending on their dispositions at the time. It can inspire, over-stimulate or bore, calm or agitate those in it. Because our students spend a good part of their day in the environments we create, it is essential that we pay close attention to how the environment is affecting individual students. The layout of the physical space needs to be welcoming; it should create a sense of belonging, and the arrangement of structures and objects should encourage choice, problem solving and discovery (Curtis &

Carter, 2003). Spaces designed with flexible options that can be moved and rearranged for different purposes, and open-ended materials that engage the senses and provoke intellectual engagement, foster creativity and innovation.

In order to accommodate 21st century learning, we need to move away from the typical box-based design of most current schools that support the factory-model agenda, towards more innovative classroom spaces that support innovation and active engagement (Washor, 2003). Washor claims that research conclusively shows that the design of the school environment leads to significant and substantial differences in learning achievement; however, at this point little has been done to connect pedagogy to architectural design. Schools today need to be accommodating of learning styles, the use of technology in lieu of a text-based environment, and real-world learning (Washor, 2003). As schools move away from a teacher-directed, whole-group approach to instruction, towards a collaborative culture of students at work, we need to support room configurations that replace rows of seats with learning centers, team teaching, as well as independent student learning (Pearlman, 2010; Washor, 2003). The financial and practical implications for redesigning schools are significant, but by enlisting the creative and innovative capabilities of our students, I believe that we can adapt and transform our existing spaces to support current pedagogical understandings, and provide a personalised and inclusive environment, which is flexible in the face of changing needs.

Related belief statement:

The learning environment should inform, intrigue and inspire; it should provoke inquiry and support active learning.

Conclusion

Positive relationships are crucial to learning. When schools strive to develop positive relationships between students, teachers, parents and the wider community, they build trust and respect for one another, which paves the way for effective learning. By helping students develop the ability to self-regulate and by structuring the environment to allow students to have greater power over their learning, enabling them to become fully engaged in their own learning process, we put students at the centre of their learning. Our goal as teachers is to ensure that every learner is motivated to be there. “We want all learners to be able to say what they are learning and why, and be able to describe how they are progressing and how they know they are progressing. We want them to be able to say that they are in charge of their learning” (Absolum, 2010, p. 79). In order to achieve the goals set out in our mission, it is important that we, as teachers, help our students to realise their potential, understand and manage themselves as learners, and develop their capacity to work independently. Upon reflection, I feel that one of the biggest difficulties for teachers in moving towards a truly student-driven learning environment is the ability to step back and hand over control to their students. In order to shift our thinking and make the necessary changes, we need to continually look for ways to improve our programme and work together to implement effective practices and approaches that will best meet the needs of our students. By involving students directly in the learning process, we help to build communities of caring, life-long learners who will use their knowledge and understanding effectively to help create a better and more peaceful world (IBO, 2009).

Chapter 3

The process of developing these guiding principles was something I designed to help facilitate the kind of process with which we, as a school, were going to engage. What I am reporting on in this chapter is primarily this hypothetical design as a general guide for how anyone interested in this process could move forward with it. Subsequent to my designing it, this appreciative inquiry process was carried out with the educators at my school. This ‘real-world test’ has given me an opportunity to gauge the effectiveness of the design process in action, and to provide (in very general terms) some suggestions for facilitating the process.

The Process

An appreciative inquiry can serve as a valuable means through which to examine one's current practices, setting a positive tone throughout the process of defining and developing the school's beliefs and supporting practices. The discovery phase can help to illuminate and highlight the practices that best serve our students, and subsequent discussions will allow schools to establish the factors that contribute to the value of these practices. Demonstrating an appreciation for “what is good” in our schools will give us the licence and freedom to recognise and accept the deficits without negative constraints of uncertainty. The dream phase will allow schools to concentrate on the positives and expand on the good, and, hopefully, open teachers up to consider different ideas, explore new possibilities and build on one another's suggestions. The process of further developing understanding through collaborative, professional inquiry learning in the design phase opens up possibilities for arousing interest and enthusiasm, further promoting a culture of learning that allows communities to find common ground on

which to build their visions for the future, as they look towards implementing their guiding principles.

The building of relationships should take the centre stage throughout the appreciative inquiry process, in order to contribute to a successful learning culture among teachers and the leadership team, and strengthen the ability to work together as a community of learners. The process will give teachers the opportunity to reconnect with their own teaching aspirations, as well as to make personal contributions towards a collective understanding of their roles as teachers, thereby taking ownership of a shared goal.

DISCOVERY

Opportunity for Reconnection and Appreciation

Re-examining the school's vision and values and investigating how teachers feel about the school culture, offers a logical starting point for the appreciative inquiry process. This gives schools the opportunity to establish how connected their teachers feel towards the beliefs that underpin these statements. In the context of my school, *Memoirs of a Goldfish* by Devin Scillian, provided a useful and meaningful context through which to connect with one another and to set the tone for the year. We all have our strengths and weaknesses and what we bring to the table ourselves helps to contribute to our school culture. After reading the story and some discussion about working together in harmony, teachers paired off for a ten minute "walk and talk". Their mission was to find out something about their walking companion that they did not know before and report back and share their new knowledge about their partner, with the larger group. This activity

helped to establish a feeling of good cheer, optimism and collegiality. Teachers really appreciated the opportunity to make connections with new staff and reconnect with their colleagues. Discussion about how we can all contribute to the well-being of our community ensued, and connections were made to the mission, vision and values of our school.

Stoll and Fink (1996) offer a set of cultural norms that apply when creating a healthy school culture. These norms (Appendix A) can be shared with teachers, discussed and used as “touchstones” throughout the appreciative inquiry process to reflect on individual contributions and journeys, as well as the effectiveness of teaching practices within the context of the school culture. They include:

- Shared goals – “we know where we are going”
- Responsibility for success – “we must succeed”
- Collegiality – “we’re working on this together”
- Continuous improvement – “we can get better”
- Lifelong learning – “learning is for everyone”
- Risk-taking – “we learn by trying something new”
- Support – “there’s always someone there to help”
- Mutual respect: “everyone has something to offer”
- Openness – “we can discuss our differences”
- Celebration and humour – “we feel good about ourselves”

Further focus group discussions and reflection around the norms suggested by Stoll and Fink (1996) will help to develop an appreciation of what schools are doing well and in what areas they need to focus their attention and develop further.

Spending time as a staff reviewing the vision and values of the school, and looking at ways in which the vision is being brought to life within the classrooms, the school and the larger school community, provides an opportunity to reconnect and focus on the commonalities that draw the school community together. The following suggested questions (Appendix B) provide a starting point for discussion and reflection: Why is it important to have a vision? What are the values embedded in our vision? What are the key themes that emerge from our mission? How does the vision relate to your own personal values and philosophical beliefs about teaching and learning? How do you see yourself in the mission, what would your contribution look like? How do the values and themes in the vision relate to the students and parents? How could the vision and values guide your thinking about what you teach, how you teach and why you teach the way you teach?

The dialogue/interview matrix (Appendix C) offers a useful tool for interacting, sharing ideas, and drawing out information and understanding about teachers' own personal beliefs related to learning. The intention of this activity is to encourage personal reflection, promote discussion, and help to illuminate some of the current practices in the school that motivate and engage students, encourage ownership of learning, and support the beliefs within the vision of the school. Group learning is rich. We all bring different ideas, experiences and perspectives. During this activity in the context of my own school, I found that many different ideas arose during discussions, some of which I did not

identify during my own initial investigations. This encouraged me to sift further through the related research and view the readings from the literature review with a different lens, deepening and extending my own understanding. My experience during this project has certainly inspired me to reflect on the value and strength of collective understanding. I also have realised that the process of building understanding and developing the belief statements has proved to be a significant part of the project. The changes in practices that have occurred along the way, I believe, have been due to the sharing of personal reflections and the collective development of our ideals. The opportunities for team learning that we offer our teachers help to build capacity for collaboration and strengthen the relationships within a school community.

DREAM

Images and Visions of Growth - New Professional Learning

This stage of the appreciative inquiry consists of several jigsaw reads (Appendix D) that could span a number of sessions. The goal is to set about systematically defining the school's philosophy with regards to teaching and learning, and develop some kind of standard by which to evaluate and develop current teaching practices. The jigsaw reads provide the opportunity for teachers to delve into current research about teaching and learning, thus extending their understanding and further developing their insights, which will, hopefully, help to elicit the changes we hope for in classroom practices. The following description of how I went about working with the teachers in my school to establish some common belief statements provides an example of how schools could carry out this stage of the process. Initially I planned to establish three statements that synthesised our understanding in each section identified in the literature review, building

a culture of collaboration and reflection, the nature of the learner, the nature of teaching and learning and the nature of the learning environment. I was looking to tie together our mission with pedagogy, current thinking in professional research and how they translate into the classroom. A few sessions were spent reading and discussing various articles and chapters that emerged from the literature review. These we found to be valuable resources for the purpose of defining and articulating our core beliefs about teaching and learning. Group discussions gave teachers the opportunity to analyse and synthesise the material, and draw out several ideas from the readings that we believed were essential to effective teaching and should guide our practices in the classroom. This was also an opportunity for us to outline some of the practices that support these beliefs as well as identify evidence within the classrooms that could be seen as an indication of success. From this information I was able to develop ten belief statements that would define and articulate our core beliefs. These sessions were very productive and the teachers were highly engaged. The discussions that ensued were rich and a number of practical applications were generated which were readily received and implemented right away.

Chapter 4

The Project

DESIGN

Aspirations for strengthening existing initiatives - The document

The project consists of two parts. A resource document that outlines the supporting research, some related practices and the evidence of successful implementation, and a self-reflection checklist and continuum for teachers to use to evaluate their practices and set future goals. The ideas and suggestions that I have put forth in the resource document have been informed by the discussions we had as a staff at my school. Their thoughts and opinions have been taken into account in how I have framed the recommendations in this document, which will now serve as a resource or reference to which teachers can return when reflecting on their practices. The related self-reflection checklist and continuum provides a tool that will help to guide teachers through the reflection process as they analyse their practices and set their professional goals for the following year. Once teachers have established their goals through the use of the self-reflection checklist and continuum, they can then refer to the resource document to help further guide their direction and support their action plan related to the professional goals they set for themselves. The resource document will help to guide teachers and educators to further reading and research, suggest some practices that would help enhance their teaching in the area related to their goals, and give some indication of what it might look like in action.

Guiding Principles – Resource Document

In order for us to be effective as teachers, our philosophical foundations need to be clear. What is our purpose? What are our goals as educators? What are our beliefs about the way in which children learn? What do we understand about education and our roles as teachers? What are our challenges? What are the possibilities and opportunities? Once we have clarified our own values, beliefs and understanding of education, our practices in the classroom will become more relevant and meaningful. Our teaching strategies, as well as our curriculum, need to evolve from our understandings and the beliefs that we have defined.

In the attached document I have drawn together and extended the thoughts and ideas from the research material and the discussions that arose during the discovery and dream phases of the appreciative inquiry, and have established a set of 10 related core principles that define the school's beliefs around teaching and learning. It is important that all teachers are able to speak with clarity about what we do and why it is important to us. These guiding principles will hopefully help to do that. A set of guiding principles governs the school's purpose and articulates what is believed about teaching and learning. They offer a standard by which to shape teaching practices and frame the development of the curriculum, and should grow as schools continue to re-examine their understanding of teaching and learning. They should also provide the basis for reflection and help teachers to refine and gauge the value, relevance or significance of their practices, programmes and units. The document identifies the research that supports the belief

statements. It also defines and articulates the practices that uphold these beliefs, and provides examples that could be seen as an indication of success.

In an IB PYP school, we support the views and principles of the inquiry-based model of learning, which provides the framework for teaching and learning. However, in order for genuine inquiry to really take hold, I believe that certain fundamental understandings need to be inherent in classrooms.

- 1. In order to learn effectively, students need to feel safe, valued and supported.**
- 2. Regular, consistent routines and clear learning intentions help students to become independent, self-regulated learners.**
- 3. Students are competent, curious and creative constructors and co-constructors of knowledge and understanding.**
- 4. Student progress is understood to be a learning continuum; students are unique, they learn in multiple ways and at different rates.**
- 5. Students do their best when the learning is personalised and provides appropriate challenge.**
- 6. Students are natural inquirers who construct and communicate their knowledge and understanding through active engagement, dialogue and interaction with others.**
- 7. Students communicate and represent their understanding in a variety of forms.**
- 8. Collaboration fosters a culture of innovation, collegiality, consistency, and support.**
- 9. The learning environment should inform, intrigue and inspire; it should provoke inquiry and support active learning.**
- 10. Feedback is an integral part of formative assessment that guides teaching and learning.**

With the emphasis on building relationships and an understanding of how children learn, teachers work to develop an environment that supports communication and collaboration, offers opportunities for exploration, experience and expanding possibilities, and creates communities of critical inquirers who reflect on and take action in the world, as a result of their learning.

THE GUIDING PRINCIPLES THAT SHAPE OUR PRACTICES

BELIEFS and SUPPORTING RESEARCH

PRACTICES that SUPPORT the BELIEFS

EVIDENCE of PRACTICE

1. In order to learn effectively, students need to feel safe, valued and supported.

“You can have extensive curriculum goals, but if children don’t develop strong relationships, feel comfortable to make choices, take risks, or try new things, learning outcomes are likely to be limited to behaviour compliance and recitation, not the intellectual curiosity and emotional security that sustains lifelong learning and intrinsic endeavours.” (Curtis and Carter, 2008, p. 23)

“Students respond to us because we care-and because they like us.....To open the relationship door, teachers need to understand their students’ world. To build relationships in classrooms, teachers need to know their students, their own strengths and

Throughout the school, teachers work to develop **safe, supportive and nurturing** environments that promote a culture of learning and allow children to have a voice.

Teachers listen to the children’s points of view and allow them time to express their ideas and opinions.

Teachers work to establish strong **relationships** with children and their families. They provide opportunities to share family/cultural stories and build a sense of community.

Teachers encourage students to reflect on their strengths and uniqueness and help them

Students are happy, feel safe and able to work independently. They work and interact collaboratively and confidently.

Students share their experiences and personal stories. Parents and visitors share their experiences and expertise.

Parents and visitors feel welcome and comfortable. They note the positive climate, the enthusiasm of the teachers and the excitement of the children as they learn about the world around them.

Students set realistic goals for themselves and are able to reflect on their strengths and areas for growth.

<p><i>limitations, and how to connect with students by demonstrating genuine interest in them” (Mendes, 2003 p. 56).</i></p> <p><i>“Emotional processing by the student has a profound impact on how the student learns and should not be underestimated. Even minor comments uttered in passing may be harboured by the student for years and may influence their actions” (Schenck, 2009 p.112).</i></p> <p><i>“All of our lessons are processed and evaluated to some extent by their emotional impact, including the unintentional actions of the teacher, and the content of the lesson itself. By understanding how emotional processing works, educators can more directly design and control the emotional impact of a lesson” (Schenck, 2009 p.112).</i></p> <p><i>“The teacher needs to provide a secure learning environment in which the individual student is valued and respected, so that the relationships students establish with each other and with adults, which are of central importance to development and learning, will flourish.” (International Baccalaureate,</i></p>	<p>to recognise and develop the areas that challenge them.</p> <p>Children are encouraged to be “risk-takers” in their learning and mistakes are looked upon as an integral part of the learning process.</p> <p>The attributes of the IB Learner Profile are modelled and taught explicitly.</p> <p>Opportunities are provided for students to develop and practise the social skills and self-management skills of the PYP.</p> <p>Accepting responsibility, respecting others, cooperating, resolving conflict, group decision making, safety, codes of behaviour, and making informed choices are modelled and explicitly taught.</p>	<p>Students are recognised and appreciated for their talents and individual backgrounds, and feel comfortable and confident within the classroom setting as well as within the school community.</p> <p>Students and teachers practise responsible behaviours and behaviours that reflect the IB Learner Profile.</p> <p>Students identify responsible behaviour in others.</p> <p>Students and teachers are friendly and courteous to one another as well as to others in the school and the greater community.</p>
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BELIEFS and SUPPORTING RESEARCH	PRACTICES that SUPPORT the BELIEFS	EVIDENCE of PRACTICE
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2. Regular, consistent routines and clear learning intentions help students to become independent, self-regulated learners.		
<p><i>“Learning targets provide students with tangible goals that they can understand and work toward. Rather than the teacher taking on all of the responsibility for meeting the lesson’s objectives, learning targets, written in student-friendly language and frequently reflected on, transfer ownership for meeting objectives from the teacher to the student” (Berger, Rugen & Woodfin, 2014, p. 21).</i></p> <p><i>“One of the hallmarks of student motivation is a sense of purpose. Motivated students know how the task at hand fits into the larger scheme of things. Reaching or not quite reaching, a learning target represents critical information for students about what they know and can do , and what they still need to</i></p>	<p>Teachers ensure that learning intentions/goals are clear and written in student-friendly language so that students are able to make sense of them.</p> <p>Opportunities are provided for students to unpack, discuss and analyse the learning intentions. Teachers may involve students in modifying or creating learning targets, so that students have a clear vision of where they need to go.</p> <p>Teachers present learning intentions related to the learning as opposed to the task.</p> <p>Teachers establish clear routines that can later allow for successful spontaneous learning.</p>	<p>Students can identify and explain the learning intentions of the lesson, and understand the purpose of their work.</p> <p>Students are motivated to accomplish tasks because they know where they are going and that the tasks are within their reach.</p> <p>Students are actively involved in their learning and they take responsibility and ownership of their learning.</p> <p>Students persevere and are on-task for longer periods of time.</p> <p>Student achievement and work quality and improves.</p> <p>Students are assertive about what they need in order to learn.</p>

<p><i>learn” (Berger, Rugen & Woodfin, 2014, p. 4).</i></p> <p><i>“Two powerful ways of increasing impact is to know and share both the learning intentions and success criteria of the lesson with the students. When students know both, they are more likely to work towards mastering the criteria of success, more likely to know where they are on the trajectory towards this success, and more likely to have a good chance of learning how to monitor and self-regulate their progress” (Hattie, 2010, p.67).</i></p> <p><i>“When students have a clearer understanding of what achievement looks like, they have a greater chance of achieving, and they do” (Absolum, 2010, p.15).</i></p> <p><i>“Children need a predictable structure and routine they can learn so they can become more independent learners. When a class has a predictable structure and can do routines with confidence, it can have more flexibility.....as students transfer familiar skills to novel situations” (Cowhey, 2006, p. 38-39).</i></p>	<p>Teachers encourage students to view themselves as problem solvers, by coaching them to develop the skills of negotiation and collaboration.</p> <p>Students participate in establishing clear guidelines and expectations through essential agreements within their classrooms.</p> <p>Teachers encourage students to care for materials and learning spaces responsibly.</p> <p>Respect for the natural world is modelled by teachers and is focused on explicitly.</p>	<p>Students are comfortable, engaged and know how to work independently and cooperatively.</p> <p>Essential agreements are visible and students observe them actively and responsibly.</p> <p>Students demonstrate respect in caring for materials, classroom equipment as well as their own belongings.</p>
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<p><i>“Students need both structure and nurture, and the ways in which the teacher responds to these needs in the classroom are crucial. Caring teachers succeed in managing their classrooms effectively, including maintaining discipline, solving problems, and setting expectations, limits and rewards” (Mendes, 2003, p. 57).</i></p> <p><i>“Children benefit greatly from routines that help them to work through conflicts in ways that reinforce values of mutual respect, empathy, and generosity.”(Curtis &Carter 2008, p. 47)</i></p>		
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BELIEFS and SUPPORTING RESEARCH	PRACTICES that SUPPORT the BELIEFS	EVIDENCE of PRACTICE
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3. Students are competent, curious and creative constructors and co-constructors of knowledge and understanding.		
<p><i>“Every child is considered competent, resourceful, full of potential, in search of relationship with others and ideas, and an active agent in his or her own learning from birth.” (Oken-Wright, 2009, p.125).</i></p>	<p>Teachers value the different experiences and ideas that students bring to school.</p> <p>Teachers work to create a culture that is respectful of the contributions of everyone.</p>	<p>Students are viewed and view themselves as capable, creative thinkers who have ideas and can contribute.</p> <p>Students display self-confidence when participating in discussions and debates.</p>

<p><i>... “children are born eager to learn. Traditional approaches to education have viewed children as empty vessels to be filled instead of recognising the existent knowledge they bring to learning opportunities” (Curtis & Carter 2008, p. 5)</i></p> <p><i>“Learning does not take place by means of transmission or reproduction. It is a process of construction, in which each individual constructs for himself the reason, the ‘whys’, the meanings of things, others, nature, events, reality and life. The learning process is certainly individual, but because the reasons, explanations, interpretations and meanings of others are indispensable for our knowledge building, it is also a process of relations- a process of social construction” (Rinaldi, 2006, p.125).</i></p> <p><i>“It is acknowledged that learners have beliefs about how the world works based on their experiences and prior learning. Those beliefs, models or constructs are revisited and revised in the light of new experiences and further learning. As we strive to make meaning of our lives and the world around us</i></p>	<p>Teachers model open-mindedness. They help students to see that there are multiple points of view possible, and that in considering the different perspectives we are more able to work towards a common goal.</p> <p>Teachers welcome different opinions and use them as opportunities for learners to consider and perhaps revise ideas and interpretations.</p> <p>Teachers provide opportunities for students to present their ideas and hear and reflect on the ideas of others.</p> <p>Teachers demonstrate attentive listening and help students build on their ideas.</p> <p>The pursuit of student questions is highly valued in the classroom.</p> <p>Teachers see themselves as lifelong learners and model inquiry and curiosity.</p> <p>Teachers use cognitive terminology such as classify, analyse, predict and create, when framing tasks.</p> <p>Teachers allow student responses to drive lessons.</p>	<p>Students express their opinions comfortably and respectfully.</p> <p>Students show respect of the opinions of others.</p> <p>Students listen to one another, and realise that they can learn from each other.</p> <p>Student questions are visible in the classroom</p> <p>Students use cognitive terminology themselves</p> <p>Teachers and students see themselves as members of a collaborative community of inquirers.</p> <p>Students often have time to reflect on their learning both formally and informally, individually, with partners and in groups.</p> <p>Students have many opportunities to share their prior knowledge.</p> <p>Students are interested and eager to learn. They share their understandings with one another, challenge each other’s ideas and reflect on and revise their old ideas.</p>
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<p><i>we travel continually on a cyclical path of constructing, testing, and confirming or revising our personal models of how the world works” (IBO, 2009, p. 6).</i></p> <p><i>“Each of us makes sense of the our world by synthesising new experiences into what we have previously come to understand.....we either interpret what we see to conform to pour present set of rules for explaining and ordering our world, or we generate a new set of rules that better accounts for what we perceive to be occurring. Either way, our perceptions and rules are constantly engaged in a grand dance that shapes our understandings”(Brooks & Brooks, 1999, p.4.).</i></p> <p><i>“....Inquiry is natural to how children and adults learn outside of school contexts. (In children) curiosity creates a need to know that they explore through play and observation and through pestering adults with questions. They move from curiosity to knowledge that leads to more in-depth investigations. These explorations and investigations, in turn, support them in</i></p>	<p>Teachers use a variety of strategies and provocations to activate students’ prior knowledge.</p>	
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<p><i>constructing their understandings of the world and in asking new, more complex questions” (Short, 2009, p. 13).</i></p>		
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<p>BELIEFS and SUPPORTING RESEARCH</p>	<p>PRACTICES that SUPPORT the BELIEFS</p>	<p>EVIDENCE of PRACTICE</p>
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<p>4. Student progress is understood to be a learning continuum; students are unique, they learn in multiple ways and at different rates.</p>		
<p><i>“It is important to identify the needs of each student and to view learning as a continuum, with each student achieving milestones in different but relevant ways” (IBO, 2009, p.47).</i></p> <p><i>“Continua are visual representations of developmental stages of learning. They show a progression of achievement or identify where a student is in a process.” (IBO, 2009, p.49)</i></p> <p><i>“...any rich, nourishing topic- any concept worth teaching – can be approached in at least five different ways that, roughly speaking, map into the multiple intelligences. We might think of the topic as a room with</i></p>	<p>Teachers recognise that there are key stages/milestones in the student’s intellectual, linguistic, physical, social and behavioural development.</p> <p>Teachers recognise that students move through similar developmental stages, but are unique and learn in multiple ways and at different rates.</p> <p>Teachers understand, appreciate and are aware of the cognitive developmental stages of their students, and they interpret student responses in developmental terms - not by measuring how far they are away from other conceptions, but by helping them to construct individual understandings that are important</p>	<p>Learning experiences, classroom organisation and resources reflect children’s different developmental needs and levels of independence.</p> <p>Students work independently through centres that incorporate play and or exploration.</p> <p>There are opportunities for students to explore and express themselves through different media.</p> <p>Students are able to approach concepts and topics through the different disciplines, making connections in their learning.</p> <p>There are a variety of structures to support</p>

<p><i>five entry points into it. Students vary as to which entry point is most appropriate for them and which routines are most comfortable to follow once they have gained initial access to the room.” (Gardner, 1991, p. 245).</i></p> <p><i>“Seeking to understand children’s points of view is essential to constructivist education. The more we study the learning process, the more we understand how fundamental this principle is. Students’ points of view are windows to their reasoning. Awareness of students’ points of view helps teachers challenge students making school experiences both contextual and meaningful. Each student’s point of view is an instructional entry that sits at the gateway of personalised education.” (Brooks & Brooks, 2001, p. 60)</i></p> <p><i>“We are all so different largely because we have different combinations of intelligences. If we recognise this, I think we will have at least a better chance of dealing appropriately with the many problems we face in the world. If we can mobilise the spectrum of human</i></p>	<p>to them and their developmental progress.</p> <p>Curriculum and practice reflect three milestone stages of development:</p> <ul style="list-style-type: none"> • Pre K - exploring • K-3 – independence and challenge • 4-6 - expanding <p>Teachers support the progression of these stages by planning experiences to extend and challenge children’s interests.</p> <p>Teachers are aware of multiple intelligences and create learning environments that foster and celebrate a variety of learning styles.</p> <p>Learning intentions take into account the varying needs of individual students.</p> <p>Teachers provide learning experiences that are developmentally appropriate for individual students.</p> <p>Teachers provide differentiated learning opportunities and use a variety of strategies to meet the different needs and abilities of students.</p>	<p>learning in the classrooms. There are learning activities that involve the whole group, small groups, partners, independent work, and one-on-one sessions with a teacher. Grouping and re-grouping is evident throughout the day.</p> <p>Teachers use DRA and other diagnostic tools to group students of similar ability in guided mathematics and reading activities.</p> <p>Student questions show more depth of thought.</p> <p>Students demonstrate a deeper understanding of concepts.</p> <p>Students have choice in selecting topics and resources that satisfy their interests and levels of ability.</p> <p>Students show increased passion for learning and are able to analyse and articulate their individual learning styles through metacognition.</p> <p>Student initiated action is evident and ingrained in the culture of the school.</p> <p>Students begin to take charge of their</p>
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<p><i>abilities, not only will people feel better about themselves and more competent; it is even possible that they will feel more engaged and better able to join the rest of the world community in working for the broader good” (Gardner, 2006, p.53).</i></p> <p><i>“If people are allowed to learn and work through their own styles and find suitable environments for their activities, there is no limit to what human beings can achieve, and they can actually do it with much less stress and much more joy” (Barbara Prashnig, as cited in Andain & Murphy 2008,p.40)</i></p>	<p>Teachers provide open-ended activities which include opportunities for extension, and scaffolding and support for those who require extra help.</p> <p>Teachers recognise that learning is recurrent and related. They provide opportunities for students to revisit concepts, to revise thinking and to make connections in their learning.</p> <p>Teachers observe students and listen closely to the dialogue between students to learn about their knowledge base, level of involvement and social skills.</p> <p>Teachers extend activities to help students develop an understanding of the learning process.</p> <p>They:</p> <ul style="list-style-type: none"> • Invite students to be part of the reflection process in identifying what is worth learning and how best to go about it. • Involve students in reflecting about the learning taking place. • Guide students through the inquiry cycle (making connections, collecting ideas, 	<p>learning and develop into self-regulated learners.</p> <p>Students are involved in establishing criteria and building rubrics for assessment.</p> <p>Documentation of student learning includes conversations and discussions between students.</p> <p>Students can use the language of the continuums and achievement indicators to reflect on their own progress.</p> <p>Students reflect on the learning process in terms of their own understanding and begin to determine and formulate plans for their next course of action.</p> <p>Students engage constructively in self-assessment and peer assessment.</p>
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	<p>exploring, investigating, demonstrating, revisiting, practising, reflecting, sharing new/changed views and understandings, action).</p> <p>Teachers help students to develop the ability to use the tools, strategies and reference materials to support their learning, and invite students to assess their own learning.</p> <p>Class teachers work collaboratively with specialist subject teachers to integrate the disciplines in their unit of inquiry planners and other areas of study.</p> <p>Teachers use a variety of relevant, meaningful teaching, learning and assessment strategies to build up a clear picture of the students and their interests.</p> <p>Teachers make use of collaboratively developed continua as assessment tools to gauge student growth in specific areas.</p> <p>Continua, checklists, student profiles and student portfolios are made available for the next teacher so that there is a continuous record of each child's growth.</p>	
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BELIEFS and SUPPORTING RESEARCH	PRACTICES that SUPPORT the BELIEFS	EVIDENCE of PRACTICE
5. Students do their best when the learning is personalised and provides appropriate challenge.		
<p><i>“Students’ points of view are windows into their reasoning. Awareness of students’ points of view help teachers challenge students, making school experiences both contextual and meaningful. Each student’s point of view is an instructional entry point that sits at the gateway personalised education” (Brooks & Brooks, 1999, p.60).</i></p> <p><i>“Teachers need to know how students process self-information so that the teachers can develop and enhance the students’ confidence in tackling challenging tasks, resilience in the face of error and failure, openness and willingness to share when interacting with peers, and pride in investing energy in actions that will lead to successful, outcomes” (Hattie, 2012, p.40).</i></p> <p><i>“The challenge should not be so difficult that the goal is unattainable, given the student’s</i></p>	<p>Teachers facilitate personalised learning by:</p> <ul style="list-style-type: none"> • providing individualised learning opportunities and assessments • offering opportunities for independent student inquiries that satisfy personal interests • involving students in the assessment process <p>Teachers understand the attitudes, abilities and dispositions of all students and aim to enhance these so that they are a positive part of the learning.</p> <p>Teachers offer learning engagements that:</p> <ul style="list-style-type: none"> • are of interest to the students • involve students actively • are linked to the students’ prior knowledge and experience and current circumstances, that place learning in a 	<p>Students are self-motivated and respond to intrinsic stimuli.</p> <p>Students show increased enthusiasm and rise to the challenges put forward by their teachers.</p> <p>Students use their understanding to solve problems creatively.</p> <p>Students demonstrate their ability to think reflectively.</p> <p>Students demonstrate effective communication skills.</p> <p>Students demonstrate increased ability to analyse, evaluate, and synthesise information.</p> <p>Learning engagements permit student choice.</p> <p>Students are engaged in independent and group student-directed inquiries.</p>

<p><i>level of prior achievement, self-efficacy, or confidence; rather, teachers and students must be able to see a pathway to attaining the goal or intention, implementation plans to attain it, and (preferably) a commitment to attaining the goal”(Hattie, 2012, p.51).</i></p> <p><i>“We need to be careful that, in making activities interesting, relevant, authentic, and engaging, this does not lead to busy work rather than learning and challenge. Engagement is higher in classrooms in which students perceive instruction as challenging and in which there are peers who are also similarly challenged”(Hattie, 2012, p.40).</i></p> <p><i>“Complex, thoughtful questions challenge students to look beyond the apparent, to delve into issues deeply and broadly, and to form their own understandings of events and phenomena” (Brooks & Brooks, 2001p. 110).</i></p> <p><i>“Every day, millions of students enter school wanting to learn, hoping to be stimulated, engaged, and treated well, and hoping to find meaning in what they do. And every day that we, as educators, stimulate and challenge our students to focus their minds on meaningful</i></p>	<p>context connected their lives</p> <ul style="list-style-type: none"> • extend the prior knowledge and experience of the students and increase their competencies and understandings <p>Teachers challenge student thinking with different perspectives and open-ended questions.</p> <p>Teachers engage students in experiences that provoke contradictions to their initial theories and then encourage discussion.</p> <p>Teachers nurture student curiosity through frequent use of the inquiry cycle model.</p> <p>A variety of exemplars are made available to students.</p> <p>Teachers model inquiry.</p> <p>Teachers develop units of inquiry that:</p> <ul style="list-style-type: none"> • are of interest to the students • involve them actively in their own learning • are connected to the lives of the student • extend the prior knowledge and experience of the students 	
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<p><i>tasks, to think about important issues, and to construct new understandings of their worlds, we – and they- achieve a meaningful victory” (Brooks & Brooks, 2001, p.120).</i></p>	<ul style="list-style-type: none"> • increase their competence and understanding • contribute to an understanding of commonality of human experience 	
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<p>BELIEFS and SUPPORTING RESEARCH</p>	<p>PRACTICES that SUPPORT the BELIEFS</p>	<p>EVIDENCE of PRACTICE</p>
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<p>6. Students are natural inquirers who construct and communicate their knowledge and understanding through active engagement, dialogue and interaction with others.</p>		
<p><i>“Learning is a social endeavour, positive relationships facilitate learning, and so learning environments should be community-orientated. The brain is primed to relate to others and to learn from them” (Hinton & Fischer, 2010, p.129).</i></p> <p><i>“Children learn not only from their teachers’ demonstrations and coaching, but also from their peers. In fact Vygotsky’s theory of scaffolding makes note that children often learn more working side by side with friends who are operating at the top end of a similar zone of proximal development” (Curtis and Carter, 2008,p. 134).</i></p>	<p>Teachers provide a variety of authentic provocations and opportunities for discussion in different groupings, encouraging collaboration as well as individual effort.</p> <p>Teachers allow time for in-depth exploration of areas of interest.</p> <p>Teachers model and support students in building constructively and critically on each other’s ideas in dialogue.</p> <p>Teachers support students in learning from one another by planning specific opportunities for students to help one</p>	<p>Students work together collaboratively and share their ideas confidently.</p> <p>Students work in their groups independently through centres that incorporate exploration.</p> <p>Students reflect on their thinking and challenge each other’s thinking.</p> <p>Students experience different roles throughout their learning.</p> <p>Students enjoy hands-on explorations of different materials and environments.</p> <p>Students communicate ideas and</p>

<p><i>“Children often use similar language and understand things in the same way, so coaching them to learn from each other is a useful approach” (Curtis and Carter, 2008, p.134)</i></p> <p><i>“Children are the most extraordinary listeners of all; they encode and decode, interpreting data with incredible creativity: children ‘listen’ to life in all its facets, listen to others with generosity, quickly perceive how the act of listening is an essential act of communication. Children are biologically predisposed to communicate and establish relationships: this is why we must always give them plentiful opportunities to represent their mental images and to be able to represent them to others” (Rinaldi, 2006, p.116).</i></p> <p><i>“Inquiry is collaborative. Since inquiry involves reaching beyond ourselves and our current understandings, we need collaborators with whom we can think to challenge us to outgrow ourselves” (Short, 2009, p. 17)</i></p>	<p>another, work together and share their knowledge and understanding.</p> <p>Teachers encourage student inquiry by asking thoughtful, open ended questions and encouraging students to question each other.</p> <p>Teachers challenge students’ present conceptions by engaging them in activities that prompt contradictions and diverse points of view, and then encouraging discussion.</p> <p>Teachers provide opportunities for students to work in small groups in order to develop respectful listening and openness to others’ opinions, and to learn the balance between exercising their personal independence and understanding their role as a member of the community.</p> <p>Teachers organise field trips that allow for hand-on, interactive experiences.</p> <p>Teachers revisit students’ questions and paraphrase students’ understandings without praise or criticism.</p> <p>Opportunities are provided for students to develop and practise the communicational</p>	<p>understandings confidently and clearly. Students listen to one another respectfully and wait their turn.</p> <p>Posted teacher questions are open-ended.</p> <p>Students reflect on their learning and ask questions that require a higher level of thought.</p> <p>Students ask questions and look for reasons from each other.</p> <p>Students actively seek answers to their own questions.</p>
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<p><i>“The most effective learning occurs within communities of practice where people work together toward understanding. These communities of practice involve participating in activity, not listening to someone, so that members can learn in experience, not just from experience. Inquiry takes place in participation, not in individual minds. It is a way of being in the social world, not just coming to know about that world” (Short, 2009, p.18).</i></p> <p><i>“Constructivist teachers encourage students to engage in dialogue, both with the teacher and with one another. One very powerful way students come to change or reinforce conceptions is through social discourse. Having an opportunity to present one’s own ideas, as well as being permitted to hear and reflect on the ideas of others is an empowering experience. The benefit of discourse with others, particularly with peers, facilitates the meaning-making process” (Brooks & Brooks, 2001, p. 108)</i></p> <p><i>“Student to student dialogue is the foundation upon which co-operative learning</i></p>	<p>skills and social skills of the PYP.</p> <p>Teachers cultivate a supportive classroom culture of trust and collaboration in which genuine dialogue can take place.</p> <p>Teachers encourage students to understand that responding need not simply mean providing the “right” answer.</p> <p>Teachers use questioning to help students see relationships, expand on their ideas and extend their thinking.</p> <p>Teachers design learning engagements that encourage debate and joint reasoning.</p> <p>Teachers allow time for students to think about the questions posed. They ask for elaboration of students’ initial responses.</p>	
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<p><i>is structured.” (Brooks & Brooks, 2001, p. 109).</i></p> <p><i>“Constructivist teachers seek elaboration of students’ initial responses..... Students’ first thoughts about issues are not necessarily their final thoughts nor their best thoughts. Through elaboration, students often reconceptualise and assess their own errorsStudent elaboration enables adults to understand more clearly how students do and do not think about a concept.” (Brooks & Brooks, 2001, p. 111).</i></p> <p><i>“Learning is a social activity. Enhanced understanding comes through dialogue-listening to and understanding others” (Andain & Murphy, 2008, p.55).</i></p>		
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BELIEFS and SUPPORTING RESEARCH	PRACTICES that SUPPORT the BELIEFS	EVIDENCE of PRACTICE
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7. Students communicate and represent their understanding in a variety of forms.

<p><i>“If we are advocates of ‘child-centred learning’, then we will recognise that affording students opportunities to make choices about content, approaches, and assessments is a key element of this approach. If you are a believer in the efficacy of tapping into students’ varied ‘learning styles’ then you will see the efficacy of affording students choices in how they learn and share their knowledge” (Barell, 2008, p. 108).</i></p> <p><i>“Using a variety of assessment experiences is very important because not all students think and behave alike. Not all of us are good writers, speakers, and artists. We tap into different strengths when we use a variety of experiences. We stretch students’ thinking by engaging them in varied forms of self-expression, for example, language, music, pictures, and gestures. Students ‘construct’ their reality (and knowledge) through these different modes of representation” (Barell, 2008, p.104).</i></p> <p><i>“When we challenge them (students), over time, to express their own internal meanings</i></p>	<p>Teachers consider the education of the “whole child”.</p> <p>Teachers offer students multiple forms of representation across all areas of the curriculum which gives them a broader range of opportunities through which they may develop and share their new understandings.</p> <p>Teachers use technology to provide students with numerous possibilities to represent their understanding, acquire information, and share meaning.</p> <p>Teachers guide student in becoming critical viewers and interpreters of mass media.</p> <p>Teachers vary their learning and assessment strategies in order to stimulate the senses across a range of learning preferences.</p> <p>Teachers use multiple means of assessment that use as many senses as students use to acquire information and assess for depth and quality of student understanding.</p> <p>Teachers provide students with choices within the assessment experiences, and</p>	<p>Students represent their understanding in many different formats including writing, speaking, drawing, painting, participating in class discussions, through drama, writing essays, doing projects, using technology, developing presentations.</p> <p>Students demonstrate that they can use their new information productively.</p> <p>Students have a clear idea of their direction and the purpose, and are better prepared for learning to take place.</p> <p>Students have opportunities to express their understanding through drawing, painting, sculpting and other art techniques and media.</p> <p>Students and teachers have opportunities to work with specialist teachers and librarians to pursue inquiry through the modes of different disciplines.</p> <p>Students recognise connections in their learning across the curriculum.</p> <p>Students are comfortable in using the different technological media. They are</p>
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<p><i>in in a variety of external forms, we are challenging them to share their understandings and, thereby, make their knowledge more meaningful” (Barell , 2008, p.105).</i></p> <p><i>“The arts play a critical role in the human need for self-expression, for sharing thoughts and ideas, and for challenging old ways of thinking” (Matlock & Hornstein, 2004, p.3).</i></p> <p><i>“Learning environments should be flexible and capable of meeting a wide range of individual differences. The brain is dynamic and academic abilities can be built through many different pathways. This suggests that learning environments should incorporate multiple means of representation, assessment, and engagement to meet the various learning needs and interests of children and adolescents” (Hinton & Fischer, 2010, p.128).</i></p>	<p>involve students in giving input into how they will be assessed.</p> <p>Teachers challenge students to think about what they have learned and to translate their knowledge and understanding into action.</p> <p>Teachers use a full array of intellectual tasks to construct summative assessments. (e.g. define, explain, exemplify, compare and contrast elements, draw reasonable conclusions, analyse and apply, hypothesise)</p> <p>Teachers foster and support the development of the IB PYP transdisciplinary skills by providing authentic learning experiences that explicitly teach these skills and help students to apply them.</p> <p>Teachers design assessments that involve real world application and invoke multiple perspectives /answers, and that encourage students to solve problems, make decisions, hypothesise, experiment and create.</p> <p>Teachers integrate the visual arts in learning in order to provide students with visual and graphic tools through which to express their</p>	<p>beginning to consider how media messages may be manipulated. They are beginning to examine accuracy and bias in television, film and the internet.</p> <p>Students have a range of means by which they can explore, interpret, demonstrate and represent their learning.</p>
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	<p>ideas and understanding.</p> <p>Teachers integrate music, drama, dance and movement in students' learning.</p> <p>Teachers consider multiple forms of representation in collaborative planning with specialist teachers, and librarians.</p> <p>Specialist teachers integrate their subjects with the units of inquiry and with other topics of study.</p> <p>Teachers integrate information literacy in the learning experiences. They focus on helping students to understand how to communicate their own ideas through different media, and how to critically evaluate the messages they receive.</p>	
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BELIEFS and SUPPORTING RESEARCH	PRACTICES that SUPPORT the BELIEFS	EVIDENCE of PRACTICE
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8. Collaboration fosters a culture of innovation, collegiality, consistency, and support.

<p><i>“When teachers within a school collaborate, they begin to think not just about “my classroom”, but also about “our school” (Fullan, 2011, p.49).</i></p> <p><i>“Teacher collaboration may benefit teachers’ practice in many ways, which in turn will affect student achievement (Moolenaar, Slegers, & Daly, 2012, p. 251).</i></p> <p><i>“Emerging studies on teacher social networks indicate that strong ties among educators are important to the implementation of reform and school elements such as trust and innovative climates” (Moolenaar, Slegers, & Daly, 2012, p. 258).</i></p> <p><i>“Schools are rife with team activity. A classroom is a team of people who need one another to accomplish their mutual purpose: to develop competence together” (Senge, 200, p. 145).</i></p> <p><i>“To learn, to really learn, students must be engaged in productive group tasks that require interaction” (Frey & Fisher, 2009, p.20)</i></p>	<p>Teachers model collaboration.</p> <p>Collaborative planning time is built into the school schedule for teachers to develop their programmes and lessons.</p> <p>Teachers work together to develop teaching and assessment strategies, analyse student performance data, develop learning continua and solve problems.</p> <p>Teachers regularly share their ideas and practices, successes and learning within the school community.</p> <p>Teachers set up routines that encourage students actively to work together to contribute to each other’s knowledge, and look for ways to help scaffold the children’s ability to focus and collaborate.</p> <p>Opportunities are provided for students to develop and practise the social skills of the PYP.</p>	<p>There is a positive energy, a welcoming atmosphere and a strong sense of community within the school and in individual classrooms.</p> <p>Teachers participate actively in whole school decision making and policy building.</p> <p>Students participate actively in decision making within the classroom</p> <p>There is a genuine commitment towards working collaboratively within the school.</p> <p>Teachers, student and parents have respect for one another.</p> <p>Teachers are flexible and supportive of one another.</p> <p>Students work together collaboratively and are supportive of one another.</p> <p>Teachers value the unique qualities, skills and input of their colleagues, and feel valued and respected by others.</p> <p>Teachers share their knowledge, ideas, strengths and resources willingly.</p>
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<p><i>“Learning is collaborative and requires dialogue, and this requires teachers to be attentive to all aspects of peer-to-peer construction and mediation (particularly in whole class discussion by encouraging and creating spaces for all views, comments, and critique)” (Hattie, 2012, p.39).</i></p> <p><i>Inquiry is a collaborative process of connecting to and reaching beyond current understandings to explore tensions significant to learners. Inquiry is a stance that combines uncertainty and invitation. A feeling of uncertainty encourages us to wonder and question, to move beyond current understandings to pursue new possibilities. Without invitation, however, we may not feel the courage to pursue those uncertainties or tensions; invitations beckon us to feel some safety in taking the risk to pursue those possibilities by thinking with others. Inquiry invites us as educators to base instruction on the processes that are natural to learning” (Short,2009 , p.12-13)</i></p> <p><i>“Through such techniques as dialogue and skillful discussion, small groups of people</i></p>		<p>Teachers actively learn together and from one another.</p> <p>The programme of inquiry and all corresponding unit planners are the product of sustained collaborative work involving all the appropriate teachers (IBO, 2014).</p>
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<p><i>transform their collective thinking, learning to mobilize their energies and actions to achieve common goals and drawing forth and intelligence and ability greater than the sum of individual members' talents" (Senge, 200, p. 26).</i></p> <p><i>"As students' learning and their attempts to understand the world around them are essentially social acts of communication and collaboration, inquiry may take many forms, with students working sometimes on their own, with partners, or in larger groups" (IBO, 2009, p.6).</i></p>		
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<p>BELIEFS and SUPPORTING RESEARCH</p>	<p>PRACTICES that SUPPORT the BELIEFS</p>	<p>EVIDENCE of PRACTICE</p>
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<p>9. The learning environment should inform, intrigue and inspire; it should provoke inquiry and support active learning.</p>		
<p><i>"In the PYP, it is believed that learning takes place best when it is connected to what is genuinely a component of the world around the student, not merely what is all too often</i></p>	<p>Teachers design learning experiences that are engaging, relevant, and challenging</p> <p>Teachers encourage student to be curious, be inquisitive, ask questions, explore and</p>	<p>There are learning centres, reading areas and desks are grouped together so that students are able to research and explore alone or with others.</p>

<p><i>contrived and then imposed upon the student in school; that the acquisition of knowledge and skills and the search for meaning and understanding are best done in the context of exploration of relevant content” (IBO, 2009, p.7.)</i></p> <p><i>“Children’s competence and motivation can either be enhanced or inhibited depending on the awareness and motivational force of the surrounding context. Numerous studies have brought to light the adult’s role in young children’s development not only by means of direct and targeted actions but also indirectly, when the adults create educational contexts that enable children to utilise their own skills and competence” (Rinaldi, 2006, p.84)</i></p> <p><i>“Designing ‘rich tasks’ – purposeful activities that connect the world beyond the classroom- offers one way to reconceptualise the curriculum and teach more effectively. By linking real tasks with traditional curriculum topics, teachers can approach topics in context, build understanding and make connections within and across topics and</i></p>	<p>interact with the environment physically, socially and intellectually.</p> <p>Teachers enhance the curriculum by providing and presenting materials and open-ended learning engagements that entice/provoke students’ explorations and extend their interests.</p> <p>Teachers use displays as “invitations for learning”. Books and other visuals are displayed with the materials to give students another resource for investigation and allow them to make connections between the real objects, photographs, pictures or stories about them.</p> <p>The environment offers many choices and provokes students to engage in many different activities and explore a variety of materials.</p> <p>Curricular activities make use of a variety of primary resources of data and manipulative materials.</p> <p>Teachers value student work.</p> <p>Teachers are interactive; they seek student</p>	<p>Students are excited, enthusiastic, interested and eager to explore independently.</p> <p>Displays are interesting, relevant and thought provoking.</p> <p>There is a wide range of good quality materials available to the students.</p> <p>There is an abundance of resources available to the students; books and other reading materials, artefacts and other primary sources, as well as variety of other manipulative materials.</p> <p>Student work and artwork is evident throughout the school and mounted for display with care.</p> <p>Student learning is documented and thoughtfully displayed through photographs and captions.</p> <p>Students are proud of their work spaces, and demonstrate respect and care for their surroundings and materials.</p> <p>Students understand what is expected and have a clear idea of the journey they are</p>
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<p><i>disciplines” (Moulds, 2004, p.75)</i></p> <p><i>“It is not what students learn, but how they learn it, that matters.The focus in the 21st century has shifted from simply knowing and repeating information, (i.e. knowledge passed by transmission processes) to understanding how to learn and how to find out relevant information and developing the skills of using that information appropriately. Our young people face a life of continued learning during which they will be required to exhibit the skills of creative thinking, developing ideas, engaging in reasoned argument and solving problems-individually and as part of a team- and continuing to develop as thinkers, workers, citizens and people through the skill of reflection. (Andain & Murphy, 2008, p.50-51)</i></p> <p><i>“Motivation and emotion are essential to education because – together – they ensure that students acquire new knowledge and skills in a meaningful way. If all classroom activities were interesting and fun, students would engage in them naturally. But students face many tasks that they do not like or in</i></p>	<p>points of view and use students’ ideas and questions to structure the curriculum and to pursue investigations.</p> <p>Teachers encourage and respect students’ emerging interests and inquiries and develop them into topics for discussion and exploration and group projects.</p> <p>Teachers present the curriculum in a way that challenges some suppositions of the students in order to invite dialogue and allow different perspectives to be shared.</p> <p>Assessment is interwoven with teaching.</p> <p>The curriculum is presented as a whole with emphasis on big ideas and concepts that revolve around real world issues.</p> <p>Teachers help students to understand the learning process, and what it entails – that it is a process with distinct components that they can practice.</p> <p>Teachers let students see what is behind what they do, why they do what they do, and invite students to be a part of the reflection process.</p>	<p>taking as they encounter new knowledge.</p> <p>There is evidence of recycling and other student-led environmental initiatives in the classrooms and school.</p>
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<p><i>which they are not interested or do not feel competent. Teachers thus need to be aware of how to adapt the curriculum and their teaching so that students find the classroom activities more interesting, purposeful and enjoyable and feel more competent to do them” (Boekaerts, 2010, p. 92).</i></p> <p><i>“Thoughtfully planned or not, each environment influences the people who use it in subtle or dramatic ways. An environment may temporarily overstimulate or bore, calm or agitate those in it. Spending an extended period of one’s life in an environment deemed unpleasant will eventually exact a toll”(Curtis & Carter, 2003, p.13)</i></p> <p><i>When learning is authentic and a part of the world around the student, it becomes more meaningful and therefore “enhances the engagement of the learner” (Furco, 2010, p.231)</i></p>	<p>Classroom space is flexible and organised to encourage communication and collaborative exploration, as well as to provide opportunities to work independently.</p> <p>Teachers engage students in helping to design the learning space.</p> <p>Teachers provide students with opportunities to engage in purposeful service learning and action.</p> <p>Teachers provide students with opportunities and the power to choose to act on their learning; to decide on their actions, and to reflect on these actions in order to make a difference in and to the world (IBO, 2009, p. 25).</p> <p>Teachers draw from experts in the community, and invite them in to share their expertise with the students in order to enrich and deepen the learning experiences in the classroom.</p> <p>Teachers make use of learning experiences outside of the classroom and in the community to enhance learning and to make</p>	
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	connections between school and the community.	
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BELIEFS and SUPPORTING RESEARCH	PRACTICES that SUPPORT the BELIEFS	EVIDENCE of PRACTICE
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10. Feedback is an integral part of formative assessment that guides teaching and learning

<p><i>“Within the assessment framework, the practise of formative assessment or assessment for learning now becomes pivotal within a PYP context. When students are acquiring new knowledge, skills and concepts and even attitudes, they need opportunities to practise these without the consequences in terms of their grades. While they practise, they need descriptive feedback to help them to make improvements and adjustments as they learn. This is the process of learning, and the primary objective of assessment in a PYP classroom is to provide feedback on the learning process” (O’Connor, Evans & Craig, 2009, p.52).</i></p> <p><i>“Feedback is an integral part of assessment</i></p>	<p>Teachers employ a variety of formative assessment strategies and use the assessment information to modify teaching and learning activities. They:</p> <ul style="list-style-type: none"> • pretest before a unit of study and adjust instruction for individuals or the entire group • analyse which students need more practice • continually revise instruction on the basis of results • reflect on the effectiveness of their own teaching practices 	<p>Teachers actively seek and use feedback from students, colleagues and parents.</p> <p>Critique sessions are a key part of daily lessons which engage students in thinking critically about their progress towards quality work.</p> <p>Students take ownership of their learning and actively seek and use feedback to improve – How can I improve?</p> <p>Feedback yields the following results:</p> <ul style="list-style-type: none"> • student performance improves • students are more motivated and engaged • students take more control over their learning • students are evaluating their own learning
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<p><i>for learning and is one of the central strands of formative assessment” (Swaffield, 2008, p.58)</i></p> <p><i>“A strong and consistent school wide practice of critique and descriptive feedback is an essential component of a student-engaged assessment system....The culture of positive, constructive critique must permeate the building, modeled by adults and students” (Berger, Rugen & Woodfin, 2014, p. 169)</i></p> <p><i>“Student-engaged assessment involves students in understanding and investing in their own growth. It changes the primary role of assessment from of evaluating and ranking students to motivating them to learn. It empowers students with the understanding of where they need to go as learners and how to get there” (Berger, Rugen & Woodfin, 2014, p. 4).</i></p> <p><i>“For all the correcting we do. Directions we give, and rubrics we create about what good work looks like, students are often unclear about what they are aiming for until they actually see and analyse strong</i></p>	<ul style="list-style-type: none"> • confer with students regarding their strengths and the areas that need improvement • facilitate peer tutoring, matching students who demonstrate understanding with those who do not <p>Teachers nurture a growth mindset and develop a classroom culture of trust where feedback is welcomed and valued.</p> <p>Classroom guidelines for feedback are clear:</p> <ul style="list-style-type: none"> • <i>be kind</i> • <i>be specific</i> • <i>be helpful</i> <p>Teachers provide feedback that shows that the students’ learning is valued.</p> <p>Teachers provide students with feedback that is descriptive rather than evaluative or judgemental.</p> <p>Teachers provide feedback that is specific, clear and focused on the learning goals.</p> <p>Teachers provide feedback that inspires</p>	<p>effectively</p> <ul style="list-style-type: none"> • feedback, including constructive criticism, is valued and viewed as productive <p>Students use assessment information to:</p> <ul style="list-style-type: none"> • set realistic goals • make learning decisions related to their own improvement • manage their own learning <p>Students understand and can articulate how they learn best and how they have applied feedback, they can communicate their status and progress toward established learning goals, and they plan and take the next steps in their learning.</p> <p>Students no longer need prompting as they have internalized the habit of monitoring their understanding and adjusting it accordingly.</p> <p>Students are confident and accept and give constructive feedback to their peers without prompting from the teacher.</p> <p>Students use their own prompts to evaluate</p>
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<p><i>models”(Berger, Rugen & Woodfin, 2014, p.113).</i></p> <p><i>“Self- and peer assessment skills are best taught in context, in lessons that use a self-or peer assessment strategy to provide students with information about their own work that they can see is useful and helps them improve. This approach teaches them where feedback comes from. They will learn the strategy at the same time as they learn how to improve whatever they are working on” (Brookhart, 2008, p.60).</i></p> <p><i>Useful feedback is occurs when students are clear on specific skills and can apply that clarity to a specific focus for the feedback” (Berger, Rugen & Woodfin, 2014, p.175)</i></p> <p><i>“Learning, to be effective, must enable the learner to “own” the learning process: owning a new skill, concept, or understanding can only be achieved through a process of deep engagement with the skill, concept or understanding – practising it, trying it out, using it” (M. Absolum, 2010, p.17).</i></p>	<p>thinking ad encourages action.</p> <p>Teachers ensure that feedback is given while students are still mindful of the learning target, and while there is still time to act on it.</p> <p>Teachers provide time for students to reflect on their learning.</p> <p>Teachers ensure that feedback is communicated in a way that is appropriate to the type of assignment, that it is clear to students and that they understand what needs to be done to improve.</p> <p>Teachers regularly and collaboratively look at student work against learning targets to ensure that critique and descriptive feedback are effectively improving student performance.</p> <p>Teachers use a variety of anonymous samples of strong student performances or work models to help students determine the attributes of good performance. Students list the qualities that make them strong, learning the language of quality and the concepts behind strong performance.</p>	<p>their learning.</p> <p>Students and teachers feel successful, optimistic and empowered to take productive action.</p>
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<p><i>“...Feedback should cause thinking. It should be focused; it should relate to the learning goals that have been shared with the students; and it should be more work for the recipient than the donor” (D. Wiliam, 2011, p. 132).</i></p>	<p>Teachers provide explicit opportunities for students to learn about effective feedback, how to thoughtfully give feedback and how to use feedback by:</p> <ul style="list-style-type: none"> • modeling the giving and using of feedback • ensuring that learning targets are clear to all students from the onset • working together with students to define the qualities of “good work”, and helping them to generate criteria for quality work • providing opportunities for students to participate in group critiques using the criteria so that they are able to know what they are aiming for • having students develop their own rubrics or modify existing rubrics • designing future lessons in which students can use the feedback from previous assignments • providing opportunities for students to redo or rework assignments 	
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	<p>Teachers teach students to self-assess by providing evaluative prompts such as:</p> <ul style="list-style-type: none">• How much effort did you put into this?• What do you think were your strengths in this assignment?• Where did you need support?• How could you improve your assignment?• What are the most valuable things you learned from this assignment? <p>Teachers provide students with opportunities to set goals about their learning.</p> <p>Teachers provide opportunities for students to practice the skill of giving constructive feedback.</p>	
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Self-Reflection Checklist and Continuum

The Guiding Principles

At an IB PYP school, we support the views and principles of the inquiry-based model of learning, which provides the framework for teaching and learning. However, in order for genuine inquiry to really take hold, I believe that certain fundamental understandings need to be inherent in classrooms. A set of guiding principles governs the school's purpose and articulates what is believed about teaching and learning. They offer a standard to which teachers can return when they want to question their practices.

- 1. In order to learn effectively, students need to feel safe, valued and supported.**
- 2. Regular, consistent routines and clear learning intentions help students to become independent, self-regulated learners.**
- 3. Students are competent, curious and creative constructors and co-constructors of knowledge and understanding.**
- 4. Student progress is understood to be a learning continuum; students are unique, they learn in multiple ways and at different rates.**
- 5. Students do their best when the learning is personalised and provides appropriate challenge.**
- 6. Students are natural inquirers who construct and communicate their knowledge and understanding through active engagement, dialogue and interaction with others.**
- 7. Students communicate and represent their understanding in a variety of forms.**
- 8. Collaboration fosters a culture of innovation, collegiality, consistency, and support.**
- 9. The learning environment should inform, intrigue and inspire; it should provoke inquiry and support active learning.**
- 10. Feedback is an integral part of formative assessment that guides teaching and learning.**

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With the emphasis on building relationships and an understanding of how children learn, we work to develop an environment that supports communication and collaboration, offers opportunities for exploration, experience and expanding possibilities, and creates communities of critical inquirers who reflect on and take action in the world, as a result of their learning. The following continuum allows teachers to reflect upon and evaluate their practices in the classroom; it is intended to help guide teachers in setting future goals for effective practice, and indicate a direction for future professional learning.

Levels of Performance – a guideline:

Beginning	The teacher is becoming aware of particular strategies that support the principle, but is not yet experimenting with ways to implement them in the classroom.
Developing	The teacher's repertoire of strategies that support the principle is developing, and there is evidence of implementation of these strategies in some areas.
Practising	The implementation of different strategies that support the principle is beginning to yield positive returns in student learning. The teacher regularly monitors the class to ensure that the strategy is having the desired effect.
Expanding	The implementation of different strategies that support the principle yields positive returns in the majority of student learning. The teacher consistently monitors the class to ensure that the strategy is having the desired effect, and makes the necessary adaptations to ensure that there is a positive impact for all learners. The teachers continually seek new ways to adapt and modify strategies to better support student learning.

Self- Reflection Checklist and Continuum

1. In order to learn effectively, students need to feel safe, valued and supported. (Guiding Principles Page 70)				
Related IB Standard: C3 TEACHING AND LEARNING				
C3.14 – Teaching and learning fosters a stimulating learning environment based on understanding and respect.				
C3.16 – Teaching and learning develops the IB learner profile attributes.				
Have I constructed a successful learning community in my classroom? Are the relationships that I have with my students helping or hindering their ability to learn? Are my demeanour and attitude towards individuals and my class in general effective for student learning?	beginning	developing	practising	expanding/ innovating
1. Learners are happy, feel safe and able to work independently. They work and interact collaboratively and confidently.				
2. Each learner feels valued and respected for who they are.				
3. There is a good team spirit and sense of cheer. Students are excited to come to class.				
4. Learners play an active role in decision making.				
5. Learners understand, value and demonstrate the PYP attitudes and the attributes of the IB learner profile.				
2. Regular, consistent routines and clear learning intentions help students to become independent, self-regulated learners. (Guiding Principles Page 72)				
Related IB Standard: C3 TEACHING AND LEARNING				
C3.4 – Teaching and learning promotes the understanding and practice of academic honesty.				
C3.5 – Teaching and learning supports students to become actively responsible for their own learning.				
Have I established a predictable structure and a consistent routine that students are learning to follow? Do all students understand the learning intentions and the criteria for success in all lessons and assignments? Do I allow time for the discussion and unpacking of learning intentions? In what other ways do I make	beginning	developing	practising	expanding/ innovating

sure that my students are clear about the purpose of the lesson?				
1. Learning intentions are clear to students.				
2. Students know what they are aiming for, how to get there and are able to monitor their progress towards their goals.				
3. There are clear goals, processes, expectations, rules, routines and a discipline plan that enables learners to take more responsibility for learning.				
4. Learners are comfortable, engaged and know how to work independently and cooperatively.				
5. Essential agreements are visible and students observe them actively and responsibly.				
6. Learners demonstrate respect in caring for materials, classroom equipment as well as their own work and belongings.				
7. There is evidence of recycling and other student-led environmental initiatives in the classrooms and school.				

3. Students are competent, curious and creative constructors and co-constructors of knowledge and understanding. (Guiding Principles Page 74)				
Related IB Standard: C3 TEACHING AND LEARNING				
C3.13 – Teaching and learning engages students in reflecting on how, what and why they are learning				
Do my students view themselves as competent or capable of becoming competent? In what ways do I use student past experiences to lead directly into my lessons? How do I adapt my lessons when student prior knowledge is at a considerably higher or lower level than anticipated?	beginning	developing	practising	expanding/ innovating
1. Learners are happy to share and confident to contribute their ideas.				
2. Student questions are valued and explored.				
3. Learners’ prior knowledge is activated through a variety of strategies and provocations.				
4. There are many opportunities for independent student inquiry.				
5. Reflection and meta-cognition are an integral part of the teaching and learning taking place in the classroom.				

6. Learners often have time to reflect on their learning both formally and informally, individually, with partners and in groups.				
7. Learning is further personalised through a significant level of choice over inquiry content and method that satisfies personal interests and allows them to make connections between their personal values and experiences and the environment.				
8. Learners are involved in the assessment process.				

4. Student progress is understood to be a learning continuum; students are unique, they learn in multiple ways and at different rates. (Guiding Principles Page 77)				
<p>Related IB Standards: C3 TEACHING AND LEARNING, C2 WRITTEN CURRICULUM, C3 TEACHING AND LEARNING, C4 ASSESSMENT</p> <p>C2.3 – The written curriculum builds on students’ previous learning experiences. C3.3 – Teaching and learning builds on what students know and can do. C3.7 – Teaching and learning addresses the diversity of student language needs. C3.10 – Teaching and learning differentiates instruction to meet students’ learning needs and styles. Requirement a. The school provides for grouping and regrouping of students for a variety of learning purposes. C4.3 – The school uses a range of strategies and tolls to assess student learning. C4.4 – The school provides students with feedback to inform and improve their learning.</p>				
How well do I know my students? Can I explain at least SOMETHING about each of my student’s personal lives? Do I have a sound knowledge of the different needs, abilities and interests of my students, and a broad repertoire of strategies and ideas to cater to and challenge their individual differences? What choices have I given my students lately? What new strategies have I tried lately that might benefit a student I am struggling with? In what ways am I challenging students who are clearly being successful in my classroom? What do I do when students are not learning in my classroom?	beginning	developing	practising	expanding/ innovating
1. Learning engagements cater to a variety of interests, needs, learning styles and backgrounds.				
2. Classroom organisation and resources reflect children’s different				

developmental needs and levels of independence.				
3. Learners are challenged at their own individual levels of skill and understanding.				
4. There is a high degree of student engagement				
5. There are sustained periods of time to maximise learning.				
6. There are opportunities for students to develop their understanding of themselves as learners and make choices based on their own learning preferences.				
Is there a clear link between learning and assessment?				
1. Learners are involved in the assessment process.				
2. Assessment is woven into everyday classroom activities.				
3. Learners are given constructive and ongoing feedback on their learning processes and success.				
4. Documentation of student learning includes conversations and discussions between students.				
5. Learners use the language of the continuums and achievement indicators to reflect their own progress.				
6. Students reflect on the learning process in terms of their own understanding and begin to determine and formulate plans for their next course of action.				
7. Students engage constructively in self- assessment and peer assessment.				

5. Students do their best when the learning is personalised and provides appropriate challenge. (Guiding Principles Page 81)				
Related IB Standard: C2 WRITTEN CURRICULUM				
C2.6 – The written curriculum incorporates relevant experiences for students				
Requirement a. The written curriculum provides opportunities for student learning that is significant, relevant, engaging and challenging.				
Are my expectations of individual students realistic? Am I challenging them appropriately? To what extent do the learning engagement I offer involve student interests, choice or real life scenarios?	beginning	developing	practising	expanding/ innovating

1. There are a variety of tasks and questions that are open-ended and challenging, and that include relevant, contemporary and controversial local and global issues that connect with student emotions.				
2. There are many opportunities for extension, creativity, critical thinking and problem solving.				
3. Time is allowed for in-depth exploration of areas of interest.				
4. Learners show increased enthusiasm and rise to the challenges put forward by their teachers.				
5. Learners use their understanding to solve problems creatively.				
6. Learners demonstrate their ability to think reflectively.				
7. Learners demonstrate increased ability to analyse, evaluate, and synthesise information.				

6. Students are natural inquirers who construct and communicate their knowledge and understanding through active engagement, dialogue and interaction with others. (Guiding Principles Page 83)				
Related IB Standard: C3 TEACHING AND LEARNING C3.12 – Teaching and learning develops student attitudes and skills that allow for meaningful student action in response to student’s own needs and the needs of others. C3.14 – Teaching and learning fosters a stimulating learning environment based on understanding and respect. Requirement a. The school provides environments in which students work both independently and collaboratively. b. Teaching and learning empowers students to take self- initiated action as a result of the learning.				
To what extent is my teaching style interactive? Have I provided opportunities for active engagement and interaction? Are students able to work together to find answers to problems? Have I established an ethos of cooperation and teamwork that encourages collaboration?	beginning	developing	practising	expanding/ innovating
1. Learners see themselves as members of a collaborative community of inquirers.				
2. Learning engagements incorporate a wide range of appropriate grouping arrangements depending on the task, classroom dynamics, and				

relationships.				
3. Learners work in their groups independently through centres that incorporate exploration.				
4. Modeling and support is given to students in building constructively and critically on each other’s ideas in dialogue.				
5. Students experience different roles throughout their learning.				
6. Students enjoy hands-on explorations of different materials and environments.				
7. Opportunities are provided for students to develop and practise the communicational skills and social skills of the PYP.				
8. Learners work together collaboratively and share their ideas confidently.				
9. Students communicate ideas and understandings confidently and clearly.				
10. Students listen to one another respectfully and wait their turn.				
11. Students reflect on their thinking and challenge each other’s thinking.				

7. Students communicate and represent their understanding in a variety of forms.				
Related IB Standard: C3 TEACHING AND LEARNING				
C3.6 – Teaching and learning addresses human commonality, diversity and multiple perspectives.				
C3.15 – Teaching and learning encourages students to demonstrate their learning in a variety of ways.				
Am I providing a variety of options for students to express their understanding?	beginning	developing	practising	expanding/ innovating
1. Learning and assessment strategies are varied and stimulate the senses across a range of learning preferences.				
2. Learners are challenged to think about what they have learned and to translate their knowledge and understanding into action.				
3. A full array of intellectual tasks is used to construct summative assessments.				
4. Choices are provided within the assessment experiences, and involve learners in giving input into how they will be				

assessed.				
5. Students represent their understanding in many different formats including writing, speaking, drawing, painting, participating in class discussions, through drama, writing essays, doing projects, creating PowerPoint presentations.				
6. Students demonstrate that they can use their new information productively.				
7. Students recognise connections in their learning across the curriculum.				
8. Students have a range of means by which they can explore, interpret, demonstrate and represent their learning.				

8. Collaboration fosters a culture of innovation, collegiality, consistency, and support. (Guiding Principles Page 80)				
Related IB Standard: C1 COLLABORATIVE PLANNING				
C1. 1-9				
Collaborative planning and reflection: C1.1 – addresses the requirements of the programme C1.2 – takes place regularly and systematically C1.3 – address vertical and horizontal articulation C1.4 – ensures that all that all teachers have an overview of students’ learning experiences. C1.5 – is based on agreed expectations for student learning C1.6 – incorporates differentiation for students’ learning needs C1.7 – is informed by assessment of student work and learning C1.8 – recognises that all teachers are responsible for language development of students C1.9 – addresses the IB learner profile attributes				
How successful am I in working with other teachers in developing teaching and assessment for learning strategies? How open am I to learning from others and sharing my own ideas? Do I seek opportunities for team teaching and moderating of student learning? Do others feel comfortable working with me? How much support do I provide my colleagues with? What is my role within the team? What opportunities for collaboration do I provide for my students? How do I include parents in the learning taking place in my classroom?	beginning	developing	practising	expanding/innovating
1. There are many opportunities for students to collaborate.				
2. Students are comfortable in working collaboratively and choose to do so automatically and effectively.				

3. Communication within the teaching team is ongoing and positive.				
4. Within the team, collaboration is foundational to planning, assessment and teaching.				
5. Parent/community input into the learning is actively and regularly sought.				
6. Ideas and resources are shared willingly and openly within the teaching team and beyond.				

9. The learning environment should inform, intrigue and inspire; it should provoke inquiry and support active learning. (Guiding Principles Page 93)				
Related IB Standard: C3 TEACHING AND LEARNING				
C3.2 – Teaching and learning engages students as inquirers and thinkers.				
C3.9 – Teaching and learning uses a range and variety of strategies.				
C3.11- Teaching and learning incorporates a range of resources, including information technologies.				
Have I constructed a successful learning environment in my classroom and engaged the attention of my students? What evidence do I have that my students are learning? How do I ask questions in class? Is my classroom flexible enough to meet the needs of different learning strategies and individual learning preferences? To what extent am I using available technologies to motivate students? What role do the students play in designing the learning engagements and the learning space?	beginning	developing	practising	expanding/ innovating
1. Learning engagements involve authentic, real-life situations.				
2. Learners benefit from interacting with a range of people as they learn. Families and communities are valued sources of knowledge and skills that enrich learning in the classroom.				
3. Learners are excited, motivated, enthusiastic, interested and eager to explore independently.				
4. There are learning centres, reading areas and desks are grouped together so that students are able to research and explore alone or with others.				
5. Displays are interesting, relevant and thought provoking. There is a wide range of good quality materials and tools, and an abundance of resources				

available to the students; books and other reading materials, artefacts and other primary sources, as well as variety of other manipulative materials.				
6. Inquiry is modelled through sharing of own fascinations with the world.				
7. Student work and artwork is evident and mounted for display with care. Student learning is documented and thoughtfully displayed through photographs and captions.				
8. The classroom space is flexible and constantly evolving to facilitate diverse needs.				
9. Opportunities for action as a result of the learning				

10. Feedback is an integral part of formative assessment that guides teaching and learning. (Guiding Principles Page 96)				
<p>Related IB Standard: C4 ASSESSMENT</p> <p>C4.1 – Assessment at the school aligns with the requirements of the programme(s)</p> <p style="padding-left: 20px;">Requirement a. Assessment at the school is integral with planning, teaching and learning.</p> <p>C4.3 – The school uses a range of strategies and tools to assess student learning.</p> <p>C4.4 – The school provides students with feedback to inform and improve their learning.</p> <p>C4.7 – The school analyses assessment data to inform teaching and learning.</p> <p style="padding-left: 20px;">Requirement a. The school ensures that students’ knowledge and understanding are assessed prior to new learning.</p> <p>C4.8 – The school provides opportunities for students to participate in, and reflect on, the assessment of their work.</p>				
Do I pay the right amount of attention to differentiation when giving feedback to my students? How do I make use of student performance data to and results to inform teaching and learning in my classroom? What role does student self-assessment play in my classroom? What opportunities do I give my students to provide feedback to one another about their learning? How comfortable am I in having others observe my lessons? How open am I to receiving feedback about my teaching? Am I able to observe other teachers and give feedback about their lessons? Do I seek feedback from parents and students about my teaching?	beginning	developing	practising	expanding/ innovating
1. A wide variety of formative assessment strategies are used to assess student learning.				
2. Feedback is descriptive, consistent, timely and ongoing.				

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3. Feedback is tailored to meet the needs of the individual.				
4. There is a positive culture for critique and descriptive feedback with in the classroom.				
5. Students are involved in developing the rubrics and generating the criteria for success.				
6. There are opportunities for students to develop the skills of providing effective feedback.				
7. Regular opportunities are provided for students to critique one another.				
8. Students understand and act upon teacher feedback.				
9. Teachers make use of feedback to improve teaching and learning.				

Teacher's Name:

Personal goals for developing and improving teaching practice:

- 1.
- 2.
- 3.

Action Plan (To be filled in by the teacher)

Chapter 5

Discussion

DELIVERY

Innovating and sustaining – Where to next?

Educational leaders undoubtedly face the challenge of creating conditions in which the relational trust needed for effective collaboration is built. It is clear that the principal has a crucial role to play in helping to set the tone for the collaboration and trust that will help teachers to move forward in improving their practice. When principals, vice principals and teachers learn together they build a culture of relational trust, and teachers develop the confidence to share their new understandings and influence the practices of others.

Developing the effectiveness of our practices as teachers is essential to student learning. Without relevance and coherence in the experiences students encounter at school, it is almost certain that they will be unable to make connections to the world outside or relate their learning to other areas of the curriculum. We interact daily with our students and therefore, as teachers, it is our responsibility to know our students, their hopes and their fears, their strengths and their challenges. It is with these understandings that we need to consider the practices within our classrooms and make the necessary changes to enhance learning for our students. We need to look at our learning engagements not as a means to *cover* the curriculum, but as a means to *uncover* the curriculum in authentic real life contexts, and ensure that they result in learning that is valuable and not just an interesting way to occupy students in the classroom. Learning becomes purposeful when the learner is engaged in the active construction of meaning.

Upon reflection, I realise that the value of this project is in the process of defining the school's purpose and developing the core beliefs, rather than the final product itself. The process of digging deeper into current research and the qualities of effective teaching is key to helping teachers develop the philosophical foundations necessary to become effective practitioners. The learning that occurred as we worked through the appreciative inquiry process in my own particular school setting has been exponential, although I do admit that a couple of recent exceptional professional development workshops inspired a more receptive attitude towards undergoing this appreciative inquiry process. Nevertheless, my observations have shown that inquiry learning is more apparent in classrooms, formative assessment practices are being refined and students are taking a more active role in both the assessment process and in the organisation of their learning environment. The discussions and collaborative sessions gave teachers a sense of ownership which made the learning more purposeful. Classroom visits and opportunities for sharing practice have highlighted a number of practices that have emerged as a direct result of the process.

Our inquiries led us deeper into the area of formative assessment and the nature of effective feedback, which has had a notable impact in the classrooms. The research confirms that, just as much as our learning intentions need to be clear, if feedback is to be effective, it too needs to be clearly understood by the recipient, useful, and applied in order to improve student performance (Tomlinson, 2014; William, 2011; Swaffield, 2008; Nicol & Macfarlane-Dick, 2006; Black, Harrison, Lee, Marshall, & Wiliam, 2004). How often do we assume that our students understand our learning intentions after handing out a rubric that describes quality work? How do we know that every student has

a clear understanding of the criteria set out in the rubric? How often do we assume that the feedback we give our students is understood and then move on to the next stages of the learning without giving students the opportunity to use and apply their feedback? Just as our learning intentions need to be clear, if our feedback is to be effective, it too needs to be clearly understood and timely so that it can be acted upon. In our classrooms, peer and self-assessment are becoming more prevalent in the learning process, as this is an area that teachers have been exploring in more depth. There is a greater understanding that assessment is a collaborative process, and that through peer and self-assessment, as well as teacher assessment, students are able to develop an understanding of what quality work looks like. This is giving the students the opportunity to engage in thinking about their learning and how to improve. The students are also learning to communicate clearly with one another and are developing their critical thinking skills. Students are being asked to identify feedback that helps them to think further about what they might do next time. They are enthusiastic and their ability to give constructive feedback is developing impressively. The teachers are finding that the students are handling the peer feedback very positively and a group of students were excited to show me how they were debating the scoring of written responses to a story that they had read. In their groups, they had to discuss the criteria on the rubric with which they had been working, justify their decisions against the criteria, and then provide some constructive feedback to the writer.

With the use of the self-reflection checklist and continuum, our next steps will be to begin using our ten guiding principles, in conjunction with the IB Standards and Practices related to teaching and learning, to reflect on and self-evaluate our practices in the classroom. This reflection process will help teachers to set professional goals for

themselves and will also be useful in identifying those “pockets” of best practice to serve as beacons for those who are still developing their skills and understanding. In this way we can learn from one another. I think that most teachers genuinely have a good understanding of the practices that best support learning, but I recognise that in practice we generally fall short. Often we find it difficult to “let go” of things with which we are comfortable, and for some it takes a little longer. Our teachers, like our students, need to feel safe, be nurtured and encouraged in order to experiment and take risks. A set of guiding principles and their related practices alone cannot necessarily change the way we teach. It is the process of developing our understanding that allows us to reevaluate our thinking about how children learn, and it is the way in which we continue to reflect on our actions in the classroom that will enable our teaching to evolve. However, I believe that the guiding principles will serve as a benchmark to which teachers can regularly refer as they reflect on their teaching practices and develop their professional goals through the year.

The connections we make are individual and dependent on our own prior understandings. The understandings that we take away from this experience will differ from those of our colleagues, and we will see varying degrees of understanding and implementation of the practices that we feel support and enhance learning. This, I realise, is the true nature of learning.

Final words

Our ultimate goal as educators is to improve student learning through the implementation of effective teaching practices. A solid philosophical foundation, I believe, helps to provide the structure around which to build meaningful and engaging classroom practices that genuinely support student learning. Effective teachers are actively involved in their own professional growth and development on an ongoing basis. They continually question the purpose of their actions in the classroom, the relevance of the curriculum they are teaching and the engagements they are offering, and they constantly seek to enhance the learning experiences for their students. These teachers thrive in an environment where a culture of professional inquiry permeates. School leaders need to play a key role in leading the learning and creating the conditions where teachers are learning, growing and stretching themselves as professionals. This is foundational in developing schools that encourage and permit students to take charge of their learning and become creative, innovative life-long learners (Kaser & Halbert, 2009). As the journey keeps changing, we as educational leaders need always to be open to new learnings and understandings in order to maintain a culture of continually moving forward. Throughout the process of this project it became clear that collaborative time needs to be built into the school schedule in order to become part of “what teachers do.” School leaders need to provide opportunities for reflection and for professional learning that helps to build a common language that filters throughout the school.

This project is not intended to be a “one stop shop”, nor is it intended to be static. Rather, the first steps are in navigating a sea of infinite knowledge and information, and the content will evolve as new understandings develop. It is intended to provide a

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structure for self-assessment and reflection on teaching practices, as well as provide direction for further growth and development. I hope that it will provide the spark to ignite and inspire further inquiry into the nature of learning, so that teachers are compelled to continue developing their understanding of how children learn, and make the necessary changes to their classroom practices to further stimulate student learning and bridge the gap between purpose and practice. I hope that it will give other school leaders a framework around which develop their own shared ideals and inspire them to further investigate ways in to build a healthy learning culture within their schools. As we begin using this resource as a guide to improve teaching and learning in our school, it will certainly be interesting to explore to what extent this project will help change and develop teaching practices so that they further motivate and engage students, and improve and encourage student ownership of learning.

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Appendix A

Appreciative Inquiry-Discovery Phase

Building a learning culture

Part 1 - Positive cultural norms (Stoll and Fink, 1995) - Focus group discussion

What are the characteristics of great teams? Consider the cultural norms suggested by Stoll and Fink (1995) to reflect on the culture within the school.

	Never	Rarely	Sometimes	Often	Always
<ul style="list-style-type: none"> Shared goals <ul style="list-style-type: none"> – “we know where we are going” 	1	2	3	4	5
<ul style="list-style-type: none"> Responsibility for success <ul style="list-style-type: none"> – “we must succeed” 	1	2	3	4	5
<ul style="list-style-type: none"> Collegiality <ul style="list-style-type: none"> – “we’re working on this together” 	1	2	3	4	5
<ul style="list-style-type: none"> Continuous improvement <ul style="list-style-type: none"> – “we can get better” 	1	2	3	4	5
<ul style="list-style-type: none"> Lifelong learning <ul style="list-style-type: none"> – “learning is for everyone” 	1	2	3	4	5
<ul style="list-style-type: none"> Risk-taking <ul style="list-style-type: none"> – “we learn by trying something new” 	1	2	3	4	5
<ul style="list-style-type: none"> Support <ul style="list-style-type: none"> – “there is always someone there to help” 	1	2	3	4	5
<ul style="list-style-type: none"> Mutual respect <ul style="list-style-type: none"> – “everyone has something to offer” 	1	2	3	4	5

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- Openness
– “we can discuss our differences” 1 2 3 4 5

- Celebration and humour
– “we feel good about ourselves” 1 2 3 4 5

What do you value most about working in this school?

What do you value most about working with your team?

Appendix B

Appreciative Inquiry-Discovery Phase

Reconnecting with Mission and Vision

Part 2 – Reconnecting with Mission and Vision - What matters to us? What is our Vision and mission telling us? Reflective discussion groups

1. Why is it important to have a vision? What are the values embedded in our vision? What are the key themes that emerge from our mission?
2. How does the vision relate to your own personal values and philosophical beliefs about teaching and learning? How do you see yourself in the mission, what would your contribution look like?
3. How do the values and themes in the mission relate to the students and parents?
4. How could the vision/mission guide your thinking about what you teach, how you teach and why you teach the way you teach?
5. How does the mission “play out” in individual classrooms? What is the status of the vision/mission in your classroom?

It's a poster on the wall



It lives and breathes as part of our culture and learning. Students are aware of the mission and use it to establish their own goals.

Plan with your grade team and develop some ideas to bring the vision to life in you classrooms. Share your ideas with other grade teams.

Appendix C

Appreciative Inquiry-Discovery Phase

Examining Teaching Practices

Part 3 – Teaching and Learning - Dialogue Matrix

Provocation: Adora Svitak – What adults can learn from kids - Learning should be reciprocal – Teachers should be learning from their students too.

Learning intentions:

Content	Process – skills`
What are the practices that engage students and help in the development of self-regulation in learning?	How can we ensure that our practices serve a common purpose? How can we share our thinking with others?

Question 1 – Engagement

Think back to when you were at school. Talk about a learning engagement that made an impression on your learning. How does learning in your classroom differ from when you were at school? Consider the teaching practices in your classroom that engage students the most and encourage student ownership of learning.

Person 1:

Person 2:
Person 3:

Question 2 - Feedback

Giving and receiving feedback is a process that can either enhance or destroy trust and learning. Think of times when feedback, either in a professional or personal context, has worked well for you. Talk about what makes feedback helpful. (Neil Smith, 2014)

Person 1:

Question 3 – Relationships

Think about a time in your own schooling where you really felt that you had accomplished something and felt good about yourself. What were the circumstances and your perceptions of your peers, teachers. Think of a time where you felt perhaps less than good about your accomplishments. What were the circumstances and how did you perceive the attitude of your peers, teachers? Talk about a teacher with whom you really felt a connection. What made that relationship work?

Person 1:
Person 2:

Person 3:

Question 4 - Environment

Describe the environment that you feel you work best in. Consider the space, the sound and the culture. To what extent does your classroom space reflect your understanding about learning? Talk about your ideal classroom.

Person 1:

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Person 2:
Person 3:

My personal response to this question is:

Appendix D

Appreciative Inquiry-Dream Phase

Developing Understandings and Organising Ideas

Part 1 – Developing our understandings – inquiry groups

Reading Jigsaw

Research Material: _____

<p>Acquisition of Knowledge What are the facts?</p>	
<p>Comprehension What are the big ideas?</p>	

<p>Application</p> <p>How could we apply this understanding in our practices?</p>	
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