HOW CAN WE CREATE EMPOWERED EARLY CHILDHOOD CLASSROOMS?

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Abstract

The world has changed a great deal over the past one hundred years. Our classrooms for the most part however have remained relatively the same. The movement to engaged students was a step in the right direction when looking at modernizing the way we teach but it wasn't a big enough step. When we talk about engagement we really are still talking about compliance. In this project I explore six guiding principles that will allow kindergarten classrooms to become places of empowered learning. The six guiding principles are grounded in the work of Bailin and Battersby (2016), Bransford et al. (2000), Burke (2019), and Resnick (2018). They have a foundation in student-centred teaching practices as presented by Martin (2018) and Weimer (2013).These principles are purpose, peers, passions, projects, portfolios, and play. By using these 6 Ps as a guide when planning kindergarten programs we can create classrooms of critical, creative, and collaborative thinkers.

Dedication

I dedicate this project to

all of my students, past and present,

you have taught me so much

about courage, passion, resiliency, and

most importantly love.

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How Can We Create Empowered Early Childhood Classrooms?

Throughout my teaching career I have watched the educational pendulum swing from one initiative to another and back again, jumped on several educational band wagons, and sought out the one program that would teach every child in my classroom how to be an excellent reader, writer, and an outstanding mathematician. The longer I taught, the more grades and students I gained experience with, the more I realized there was no such program. I started to reflect on my own teaching and my personal teaching philosophy. It became abundantly clear that my teaching practices and my classroom environment were not accurate reflections of what my personal creed was around education and the purpose of schools. I realized that how I was teaching was not encouraging students to think or teaching them how to be life-long learners. I was not addressing competencies that students need in order to be successful in this century. My teaching practices, while focused on engagement, were really all about compliance and traditions and not about fostering deep understanding.

I began to investigate innovative teaching practices. What I discovered was that most of the new and improved approaches to learning had roots in the theory of constructivism which has been around since the end of World War One. Schools and teachers celebrated in works such as *Creative Schools* by Robinson (2015) or *Life Long Kindergarten* by Resnick (2018) were using teaching techniques that have developed from the work of educational researchers such as Dewey (1859-1952), Montessori (1870-1952), Malaguzzi (1920-1994), Vygotsky (1896-1934), and Bruner (1915-2016). Today this learning theory is often referred to as student-centered teaching. It is teaching that engages students in the learning process by encouraging collaboration between peers and with the teacher, and by providing time for students to self-reflect and self-assess on the material being explored. Student-centered teaching involves

motivating and empowering students by allowing them to have a voice in what and how they learn. In a student-centered classroom, students do not learn by sitting passively while information is given to them. Martin (2018) states, "student-centered learning is a paradigm shift from teacher centered to learner centered. Shifting how we see learners and their critical role in their own learning now and throughout their lives" (p. 106). It is less about memorization and more about connecting learning to applications outside of the classroom and learning how to learn. The mandated curriculum is still taught in the student-centered classroom. The difference is that teachers use the content as a tool to help students learn important competencies needed in today's society. Teaching is about actively engaging students with the content as opposed to dropping information on students like rain drops, or torrential down pours in some subject areas, and hoping the students absorb something.

Student-centered learning often gets confused with discovery learning. In discovery learning a common assumption is that students will learn and perform on their own with minimal teacher guidance. Schunk (1996) explains the difference between student-centered learning and discovery learning by stating, ''constructivism does not propound that learning principles exist and are to be discovered and tested, but rather learners create their own learning'' (p. 236). In a student-centered classroom teachers believe that learning should occur with students as opposed to discovery learning that believes learning occurs in students, or the traditional model of learning where information is transmitted to students. Lee and Hannafin (2016) state, "students should be scaffolded through the process" (p. 708). This means that teachers move students' learning forward past current skill and knowledge levels with targeted instruction in the moment as required.

In a traditional classroom, students may learn addition through rote drill and practice. It often sounds like students reciting addition facts; it looks like students completing mad minute tests to see how many facts they can answer correctly in a short period of time. In a discovery classroom, students may be exposed to different concepts through the use of a provocation. A provocation is an object or book that students are exposed to in the hopes that it stimulates thinking in students (Wurm, 2005). For example, addition may be taught through the use of an addition provocation. This could look like a table with rocks, leaves, and dice along with a book about addition and students engage with the materials in whatever manner they choose while the teacher observes and makes notes on student exploration. Through repeated visits to the center students may eventually start to roll the dice and count out the corresponding number, and then roll the dice again and once again count out the corresponding number. The student may then choose to count how many rocks they have in total. The theory being that when the child is ready to learn the concept it will come from within themselves.

In contrast, in the student-centered classroom a teacher engages with students at a table with an addition game set up and actively participates in the learning process with the children. The teacher asks questions to make the students' thinking visible, models while providing just in time instructions. Students may learn addition through a purposeful project such as hosting a bake sale where students are learning how to add doubles to increase the size of a recipe or students are adding customer totals and making change. The students may participate in targeted practice prior to the execution of the bake sale at a dramatic play center of a grocery store where the teacher takes part in the play as a customer and helps students develop strategies for adding totals. Using dramatic or fantasy play is an important tool in the student-centred classroom as it is a natural way for students to make sense of the world around them. Paley (2004) states "there

is no activity for which children are better prepared than fantasy play" (p. 8). Dramatic play allows students to learn new concepts and skills in a minimal risk scenario. Teaching students concepts through dramatic play is a powerful way to meet them where they are at in their learning and help them to advance their understandings in meaningful ways.

Despite all the information and professional learning opportunities kindergarten teachers have had in my school district around play-based programming and the importance of project-based learning in the classroom, for many years I found myself resorting to more traditional methods of teaching. The reason for my hesitancy to change was a lack of understanding on how to plan for student-centered learning activities, and concern on how my students would perform on year end standardized assessments.When I started to make changes to my program teachers from higher grades questioned me about whether my students would still be prepared for grade one. I had a lot of fear and was not completely prepared to defend my program choices. I was in what Knight (2018) refers to as the Zero Learning Zone. I was hearing and agreeing with the information I was receiving about play- and project-based learning, but I was not internalizing the information or changing my practice. Knight says that teachers find themselves in this zone when they do not see that they are not doing what was learned, or because they do not see the need to learn. This was the case for me with regards play-based learning. I was using play-based learning techniques but for the most part play occurred as a reward for the completion of other learning tasks such as worksheets or class crafts and fell into the free play category. I was not planning for learning to occur through play.

A second reason teachers end up in the Zero Learning Zone according to Knight (2018) is that they cannot see themselves being successful in implementing the strategy. I can relate to this a lot as when I started this journey I was looking for plans or for other teachers who were trying

inquiry-based learning in their classrooms. I felt I needed to see someone succeeding before I could give it try. This barrier was very closely tied to fear, another factor that leaves teachers in the Zero Learning Zone. I was afraid that I might fail at implementing these practices or that students would fall behind in learning.

Eventually I decided to take one small step and try one new thing in my class. I took out the whole group literacy and numeracy lessons that happened during calendar or carpet time and replaced them with purposeful teacher planned learning centres where I worked with the students in small groups on the same skills, targeting lagging skills and address individual needs of all the students. The amount of growth in student learning that I observed from this one change led me to start trying out other ideas such as thinking circles. It was scary and I had to defend my choices to other teachers in the school and to my administrator, but when they saw the evidence of student growth through looking at the students' portfolios and my assessment documents all those who were pushing back stopped and accepted what I was doing as best practices for my students at that time.

That small success encouraged me to address other challenges I faced in my classroom. I continued to notice an increase or escalation in difficult to manage student behaviour. I saw the same issues arising and noticed that no matter what I tried a quarter of my class consistently were not meeting the academic expectations for kindergarten. Even though I tried every scripted program, and attended several workshops on literacy devepment, implemented several suggested strategies, a quarter of my students were not experiencing academic success. I knew it had to be something I was doing or not doing. There must be a reason why behaviours were escalating and academic achievement was staying stagnant. I could no longer blame the students' home environment, the amount of time students were spending in front of screens, or students' lack of

exposure. While all of these could definitely be contributing factors, I had no control over them. What I did have control over was what happened in my classroom. Tired of constantly managing behaviours and feeling more like a jail warden than a teacher, I decided I had to change. I had to trust my instincts, do some research and follow what my heart knew I needed to do. I needed to find the courage to teach.

Changing my program was a slow and lonely experience. It involved a lot of trial and error and time spent figuring out things on my own. It eventually led me to go back to University and focus on teaching and assessment practices and what was considered best practices in education. Through my studies and research I found answers that worked for me and my students. I decided to create the Empowered Kindergarten Classroom website (http://empoweredkclassrooms.weebly.com) for my collegues to share what I learned and what I am continuing to learn. I wanted to create something they could use parts of, or all of, to help them transform their programs. My hope is that through the website I can help teachers avoid some of the pitfalls that I fell into and give them sound arguments based on research to use when explaining the changes to their administrators, parents, and colleagues.

Using Knight's (2018) research as well as adult learning theory I created the Empowered Kindergarten website. On the website teachers are encouraged to participate in reflection activities to activate prior knowledge and experiences so as to find connections between this method of teaching and their current practices. Estes (2004) states, "our socialization causes us to see ourselves as more student-centred than we actually are" (p. 143). Often teachers think they are doing something but due to unclear definitions or examples they actually are not.Through examples and reflections teachers will be able to see where areas for growth are and help to eliminate blind spots. Goal setting both long term and short term are included on the website to

provide teachers with the feeling of autonomy and to feel successful when small goals are achieved. Teachers are also encouraged to keep documentation of their journey so that they can see personal growth as well as the growth of their students. Teachers are also encouraged to find a colleague, or to reach out to me to be a support person. Working together with a peer is a valuable resource for accountability and motivation.

The 6 Ps

The website I created and the critical inquiry approach it advocates are grounded in the work of Bailin and Battersby (2016), Bransford et al. (2000), Burke (2019), and Resnick (2018). It has a foundation in student-centred teaching practices as presented by Martin (2018) and Weimer (2013). Resnick (2018) talks about the four main ingredients to successful learning. He refers to them as the four "Ps": peers, passions, play, and projects. I have added a fifth 'P' to his ideas that addresses assessment. The fifth 'P' is portfolios. In a student-centered classroom students are active participants in their learning by engaging in purposeful peer interactions, actively constructing knowledge through purposeful play and purposeful projects. They learn through the use of critical inquiry projects based on personal interests or passions. Projects have a purpose whether it be to answer questions that students have or to address an issue or need in their learning community. Students are engaged in critical thinking activities, reflection, and self-assess through the use of purposefully designed portfolios. This brings us to a sixth 'P': purpose. Students do not play for the sake of playing. The play needs to serve a purpose. Projects are not glorified worksheets, rather they focus on a real problem or opportunity; they serve a purpose beyond the learning process. Portfolios are not filled with random works of art and assignments but are set up with a clear purpose in mind and the contents submitted are purposefully selected by teacher and student. Encircling all of the other Ps is purpose. I believe the 6 Ps are principles

that should be used to guide what learning opportunites are provided to students in kindergarten classrooms.

Rationale for the 6 Ps

The 6 Ps—purpose, projects, passions, play, peers, and portofolios—of kindergarten help students gain skills in critical and creative thinking, problem-solving, and communication and provide opportunities for adults to assess where students are at within those competencies. They also provide opportunities for students to self-assess. The 6 Ps are supported by learning theory and they also provide opportunities for students to develop self-regulation skills and develop executive functioning skills. They are also developmentally appropriate and are based within the natural dispositions of children.

Purpose

Using topics and activities that have a purpose beyond simply learning facts is supported by learning theory. Bransford et al. (2000) point out that "often there is only superficial coverage of facts before moving on to the next topic; there is little time to develop important organizing ideas" (p. 42). It is important that students understand the meaning behind what they are learning and how that learning relates to the world they live in. A common issue that I have seen with students in kindergarten is that as they begin to learn letters and numbers and they come across one they do not know students will often guess a number for a letter or a letter for a number. This shows that while they are memorizing the symbols they do not understand what those symbols mean or how they are used. The same thing happens when the students start exploring math facts. Many students are so excited to share with me that they know that five plus five is ten. When I give them a set of counters or manipulatives to show me what five plus five looks like or means they cannot. If I tell the students that I brought five Halloween candies in my lunch kit

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and then I found five more candies on my desk and then I ask how many candies do I have? That same student has no idea. "Memorizing facts and formulas does not provide context or reasons for learning. When students solve a set of disconnected problems, they often end up with disconnected knowledge, without an understanding of why they were learning it or how to apply it to new situations" (Resnick, 2018, p. 53). Providing context and purpose to the learning students are engaged in solidifies the learning and leads to more transfer of learning. Bransford et al. (2000) state, "transfer is affected by the degree to which people learn with understanding, rather than merely memorizing sets of facts or following a fixed set of procedures" (p. 55). Learning that is tied to a purpose, to a reason is conditionalized which prevents it from becoming inert.

Projects

Students in primary grades need to be exposed to critical inquiry practices in order to develop the skill sets required in many fields of research. Many researchers have demonstrated the value of a critical inquiry approach in a range of teaching contexts (Bailin & Battersby 2016; Calder, 2015; Daniels, 2017). While young children may be a way from demonstrating sophisticated understandings in various academic disciplines, structuring learning around teacher-supported critical inquiry at this level builds a foundation of critical thinking and empowers students to see themselves as capable thinkers. Bransford et al. (2000) state, "although students scored very well on facts about history, they were largely unacquainted with models of inquiry, with real historical thinking. They had no way of making sense of the contradictory claims" (p. 42). Through the use of critical inquiry projects, students gain experience in skills such as historical thinking and develop a stronger understanding of foundational principles. Bransford et al. (2000) also found that "younger students, taught by the inquiry-based approach,

had a better grasp of the fundamental principles of physics" (p. 12). Through carefully designed purposeful projects young children can begin to understand complex concepts and principles as well as gain experience in research methods in the humanities as well as in science. Critical inquiry projects are an essential component in the empowered early childhood classroom. Through inquiry-based learning students apply all the thinking routines and skills they have been practicing during classroom meeting times. Johnson et al. (2016) state, "inquiry-based learning is established through student questioning and exploration of new knowledge for the purpose of integration with prior knowledge and skills" (p. 607). Calder (2015) builds on this description stating, "within inquiry learning an intention is for teachers to empower students to transition towards independently using their own strategies in authentic activity" (p. 1123). Authentic, real world problems or wonderings are the focus of critical inquiry projects.

The type of projects that are explored in the project section of the empowered kindergarten classrooms website are critical inquiry projects. These projects are based on the work done by Bailin and Battersby (2016). Critical inquiry projects have three main components: focus on an issue; careful examination of the issue from all sides; and, coming to a reasoned judgement. "The issue might involve some political controversy, an ethical decision, a scientific debate, or a decision or problem to be resolved" (Bailin & Battersby, 2016, p. 6). Some of the issues we have addressed in my own classroom include: the best pet for our classroom; whether we should wear our masks at school; what our school playground should include; and, how we can best help the homeless population of Lethbridge. In order to examine the issue from all sides, students are exposed to creating pro con lists, and creating context maps which help students learn to look beyond the surface of an issue to find more information about some of the complex

topics they hear or see in the news or in family conversations. These tools help students learn to look at issues from all sides.

After investigating the issue, students are invited to make their reasoned judgment. This requires students to understand and practice critical thinking skills and attitudes. Thinking routines often employed during critical inquiry projects help student develop lifelong learning skills. By activating prior knowledge and acknowledging wonderings teachers are able to more effectively help students grow in understanding. "A critical feature of effective teaching is that it elicits from students their pre-existing understandings of the subject matter to be taught and provides opportunities to build-on challenge their initials wonderings" (Bransford et al., 2000, p. 15). A key component of critical inquiry projects is the need to support a claim with evidence. Requiring students to provide evidence helps students come to understand where holes in their argument and understanding lie. Critical inquiry projects provide students with a framework to use as they try to better understand the complex world we live in.

Passions

Bransford et al. (2000) speak about the concept of an accomplished novice and the role it plays in learning. They state, "a model that assumes that experts have all the answers is very different from the model of accomplished novice, who is proud of his or her achievements and yet also realizes there is more to learn" (p. 50). The ability to see the limits in one's current understanding and knowledge and being able to then find ways to remedy the situation is key in the world of research. Thinking routines such as, "I used to think but now I think" (Ritchart & Church, 2020), are one way to develop this flexible thinking and deep understanding in students. In order to talk about what students used to think, they must be learning about an area where they

already know some information but have a desire to learn more, an area they are passionate about.

The use of student passions and interests to teach curricular content and skills not only develops flexible thinking but also improves motivation: "Students are motivated to spend the time needed to learn complex subjects and to solve problems they find interesting. Opportunities to use knowledge to create products and benefits for others are particularly motivating for students" (Bransford et al., 2000, p. 77). Motivation affects the amount of time students are willing to spend learning about something and it also affects the way students approach challenges they face while learning. Resnick (2018) states, "The only way they can persist and persevere through all the challenges is if they work on topics that they're truly passionate about" (p. 72). When learning tasks become challenging, interests and passions motivate students to keep going, to keep trying, to persevere. Completing this project is a perfect example of this concept in action. There is no way I would be motivated to put in the time, effort, and persistence needed to complete a project at this level if it was not in an area that I felt passionate about.

The use of passions in the classroom also affects transfer of learning. "When people work on projects that they are interested in, it seems pretty obvious that they'll be more motivated and willing to work longer and harder. Their passion and motivation make them more likely to connect with new ideas and develop new ways of thinking" (Resnick, 2018, p. 68). This idea is supported in the work of Bransford et al. (2000). They speak about the way in which experts are able to make connections between different problems and events that novices do not, and the importance this skill plays in the speed and effectiveness of approaching related problems and situations. The use of passions in the classroom allows students the opportunity to build on knowledge that they already have and to deepen their understanding on a topic.

Two approaches to using passions in the classroom are explored on the Empowered Kindergarten Classroom Website. The first looks at how play-based learning can use student passions to teach students literacy and numeracy skills. The second approach looks at the use of passion projects, what is often referred to in higher grades as genius hour, in the early childhood classroom. These passion projects are created using inquiry-based learning practices.

In inquiry-based learning students are engaged, empowered, and motivated in their learning through the use of their own passions and personal wonderings. Alberta Learning (2004) describes inquiry learning as, "a process where students are involved in their learning, formulate questions, investigate widely, and then build new understandings, meaning and knowledge" (p. 1). A key attribute from this description that separates inquiry-based learning from the traditional use of themes in early childhood practice is that students identify questions to guide their learning. In traditional teaching methods, the teacher often starts the class with a question that the students will be trying to answer and an exit slip is provided for students to share their answer on the way out of class. Helm and Katz (2016) state, "in these methods (units and themes) the focus is not on helping children pose questions to be answered or take initiative for investigations" (p. 2). In the empowered classroom the teacher frames the area of inquiry and the students generate the questions they wish to answer.

Inquiry-based learning nurtures and develops children's natural curiosity. This is a key attribute needed for creative and critical thinking (Daniels, 2017; Helm & Katz, 2016; Resnick, 2018). Curiosity is also a characteristic required to be a lifelong learner. Anderson, Comay and Chiarotto (2017) state, "inquiry stimulates and focuses students' curiosity leading to progressively deep questions and a habit of critical thinking. Inquiry builds life-long learning, skills that go beyond content mastery" (p. 14). By putting students' questions and wonderings at

the center of our teaching and empowering them with the skills necessary to form their own investigations and find answers to their questions, we are able to foster those attitudes and turn them into habits of mind for future use.

Passion projects are similar to critical inquiry projects in that they start off with an inquiry question. The difference is that they are not focused on an issue that students come to a reasoned judgement on. Rather passion projects are focused on asking a question and increasing one's knowledge about a topic and sharing what was learned with others.

Play

We know that young children come to school with many experiences and understandings of the world around them. We know that they are not blank slates on which a story begins to be written when they enter the classroom or a "tabula rasa" as presented by John Locke. Through play, students explore their understandings and test theories that they have. Carefully observing and planning play activities helps us better understand where students are in their understanding and what next steps need to be taken. Keung and Cheung (2019) state, "play-based learning has been identified as a developmentally appropriate practice incorporating, elements of child-centred learning, open-ended inquiry and hands on experiences" (p. 627). Play helps to level the field of experience and exposure as well. It provides opportunities for students to engage with the world and materials in ways that help make sense of the information teachers share in more formal ways.

Play provides a non-threatening way for students to share their understandings as well. Taylor and Marienau (2016) speak about how when presented with a threat such as a test the human brain goes into a primal state of fight or flight in which learning does not occur and the ability to show what is understood is hindered. They state, "People in a state of heightened

anxiety, such as during tests or performance appraisals, are on brain overload" (p. 7). Play provides an opportunity for students to demonstrate their understandings in a minimal stressed environment. Under the 6 P framework play is seen as the learning opportunity as opposed to being a reward for completing work. Play is purposeful, scaffolded, and integrated.

Assessments are completed through play activities as well. When doing assessments on foundational knowledge of students in the fall traditionally I sat with students and went through a stack of alphabet cards and I recorded how many students knew. Typically the students may have known five letters. A couple of students would know all of the letters and of course several students knew no letters or the first letter of their names and the letter X. A couple of years ago when I started to change my practice I decided to reassess students. This time we played a game that the kids called witches' brew. I put a bunch of random "Halloween" objects into a cauldron (plastic eye balls, spiders, bats, fall leaves, snakes etc) as well as some magnetic letters. Students would stir the brew and then ladle out some into their bowl. Students would then sort what was in their bowl. Once it was all sorted we would try to name the letters that they had scooped out. I was amazed to find that students were more successful identifying the letters through this game than they had been the previous day when I assessed them using flash cards and a checklist. Intrigued by this finding I started adding note pads into dramatic play centers to see what would happen. The first day I joined the students at the house center and I pretended to be making a grocery list. The next day I begged to be a kid instead of a grown up because I always have to be the grown up. The students agreed. In their play this time, however, they did not create a grocery list. A student pretending to be a police officer showed up at the house center and used the notepad to record information about a theft that had occurred. What made this interesting was that the student who was playing the role of police officer had earlier in the day refused to

practice printing letters with his peers. Yet here he was practicing his letters willingly and engaging in meaningful, purposeful writing. Play within the 6 P framework is the students' work. It is part of their learning experiences. It is carefully planned, scaffolded, and assessed.

Peers

Learning with peers is motivating and a good reflection of how learning occurs outside of a classroom setting. Bransford et al. (2000) state, "teachers must attend to designing classroom activities and helping students organize their work in ways that promote the kind of intellectual camaraderie and the attitudes toward learning that build a sense of community" (p. 25). This camaraderie mirrors what thinking looks like outside of the classroom and how we as humans naturally tackle problems as we encounter them. Resnick (2018) states, "most thinking is done in connection with other people: we share ideas, get reactions from other people, build upon one another's ideas" (p. 91). Feeling like you are a part of something and belong is a basic human need. Providing learning opportunities for students to engage in learning from and with one another increases accountability for students and provides students with purpose.

It can be difficult to develop collaborative learning skills in young students. At this age children are typically quite egocentric and are still learning how to share, listen, and be a good member of a community. Students need to learn how to invite others to play, how to appropriately protest when things are not going the way they think they should, and how to combine ideas together to create a shared experience. An example of the need for this and how teaching peer interactions can be incorporated into curricular objectives and guided by other 6 P principles occurred this fall in my kindergarten classroom.

Outside on the playground students were engaging in parallel play around superhero play stories. There were several heroes and several villains in their play and they were all chasing and

catching each other. At first glance it looked they were working together and engaged in a mutual play story but upon careful observation it became clear that each child was engaged in their own story and they were literally stumbling on others that they could include in their story. To help students learn to play together and to communicate with one another, we started talking about superheroes in class. We look at creating criteria for heroes versus villains (part of critical inquiry projects) and students began to create lists of things superheroes did and that villains did. They turned to comic books, television shows, and YouTube videos to learn more about superheros (part of passion projects). Students looked at comics together and through adult modelling learned how to talk about what they saw together and to build on what the previous person had talked about (peer interactions). Students came to realize there was a third party who was essential to superhero stories and that was the victim.

As we were learning about all of this in class the free play that occurred on the playground began to change. Small groups were starting to form and teams of villains and heroes started to ermerge. Students began purposefully finding one another and asking "are you good or evil?" In class, students began to create comic books about superheroes (literacy). Then not too long ago the most amazing thing happened on the playground. The whole class was engaged in a play story together and before I knew it there was a group of students pretending to be dead in a large group. When I asked one student who remained alive what had happened, she informed me she was a super villain and she had used her venom and poisoned all the people in the city. Her venom was very powerful but it took sixty four days before it killed someone so the police would never catch her. She paused for a moment and said "I have to go. Lava boy is coming. He is the only one that can stop me." Sure enough one of the young gentlemen in the class was running

towards her and she fled. I stopped and asked the young man what was happening and amazingly his story matched up completely with the story the young villain had just shared.

The learning transfered from the classroom to the playground but it came back into the classroom as well. Student were now working together at the building center to create one large structure instead of several small ones. Students were looking at books and talking about them together while at the classroom library as opposed to looking at books independently of one another (or building towers out of the books). Students at this age can learn to work together, play together and learn together if taught these skills and given the chance to practice them both with guidance and on their own.

Portfolios

When assessing students our methods frequently measure their knowledge of facts but fail to measure the depth of understanding that students have or their ability to transfer knowledge and understandings to new situations. Bransford et al. (2000) state "feedback that signals progress in memorizing facts and formulas is different from feedback that signals the state of students' understanding" (p. 59). Our traditional methods of assessing do not accurately demonstrate students' learning and growth in the 21st century competencies as laid out by Alberta Education (2013). The use of digital portfolios as an assessment tool allows parents, students, and school staff to reflect on student thinking and skill development in the area of competencies beyond a final project or test: "Rather than trying to assess what children have learned by giving them an exam with right/wrong answers, we should work with children to document their projects, illustrating what they created, how they created it, and why" (Resnick, 2018, p. 152). The process of student learning can be documented and shared through the use of portfolios. The use of self-reflection tools, such as portfolios, better prepares students to transfer

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learning: "Through reflection, people make connections among ideas, develop a deeper understanding of which strategies are the most productive, and become better prepared to transfer what they've learned to new situations in the future" (Resnick, 2018, p. 71).

Discussions around the contents of a portfolio can lead to transfer of learning as well as students playing an active role in deciding next steps for their learning. Portfolios provide an opportunity for students to develop metacognitive skills: "Teaching practices congruent with a metacognitive approach to learning include those that focus on sense making, self-assessment, and reflection on what worked and what needs improving" (Bransford et al., 2000, p.12). Portfolios provide an opportunity for students to look at submissions and reflect on what improvements they see from previous artefacts. Portfolio use also provides opportunities for students to express why they want a specific learning artefact included and what that artefact demonstrates. This provides more ownership of learning and allows students to practice metacognitive skills and develop an internal locus of control.

21st Century Competencies

In 2013 the Minister of Education for Alberta, Jeff Johnson, signed a Ministerial Order on Student Learning for Alberta schools. The document defined the goals of education as creating engaged thinkers and ethical citizens who possess an entrepreneurial spirit. It also identified eight competencies that should be integrated into curriculum and fostered throughout students' schooling experiences. These competencies are: creativity and innovation, critical thinking, communication, managing information, collaboration, personal health and wellbeing, cultural and global citizenship, and problem solving, (Alberta Education, 2013). At the time there was not a lot of direction on how to teach or assess students' achievement of the competencies and there were few resources available for early childhood educators. At one point

I was even told by an administrator not to worry about it, as competencies were something for older students. This of course is not the case. Children in the early years of education can handle and should be given the opportunity to grow in all of the competencies. The 6 Ps of the empowered early childhood classroom as guiding principles for instructional design directly address these competencies.

Play-based Learning and the Competencies

Play is a natural way for students to express creativity and demonstrate their innovative thinking practices. Feesha and Pyle (2016) state, "play-based approaches improve creativity and adaptability that leads to the type of innovative thinking needed in professions such as engineering, architecture, and mathematics" (p. 364). Play by its very nature calls for free thinking and creativity. Gini- Newman and Case (2015) state, "we belive creativity involves purposeful creation of ideas or products that are novel or unique, and have value or significance" (p. 5). When students engage in building activities at the block center they are involved in innovative and creative thinking. Activities such as building ski ramps out of blocks, paper towel rolls, and cardboard and then testing to see whose self constructed sled can go the farthest, provide students fun and low stress ways to make predictions, test their predictions, revise their thinking, and try again. Another great block activity that helps students develop innovative and creative thinking is having students build a bridge that crosses the block area and can hold up three toy billy goats. At the art center students exercise creativity and innovation by turning a pile of random supplies into a mask or a puppet for a retelling of Goldilocks and the Three Bears. At the loose parts center students use their innovative and creative thinking skills to create pictures out of random supplies such as buttons, screws, and bottle caps.

Play is a great way to develop critical thinking in students as well. Burke (2019) states, "Play is an inquiry process that consists of four ways of knowing: Exploration, testing, imitation, and construction" (p. 17). Students often engage in sorting activities during play. This is an ideal time to develop critical thinking skills, especially the ability to support a claim. A few days ago students in my class were busy sorting animals at the small world center based on their habitat. Students were arguing about where some animals should go (whales and seals are particularly great for causing disagreements). Students had to defend why they thought the animal belonged in a certain habitat and why it didn't belong in another one. The first student in this observation believed that the seal should be in the arctic habitat based on an image of a seal she had seen sitting on an iceberg and because polar bears eat seals and they live in the arctic. Another student engaged at the center aregued that the seal should be in the ocean habitat because it swam in the ocean and she had seen a picture of a seal on a rock and there was no snow around. At this point I intervened and suggested that we take a research break. The two students went to the technology corner and we started a search on seals to find out as much as we possibly could about them. In the end the students were able to come to a reasoned judgement and decided that the seal should go in the the arctic habitat because when looking at what criteria described an arctic animal versus an ocean animal they felt the seal belonged to the arctic. A large factor in this descision was that the seal spends some of its time on land and some of its time in the ocean.

Communication skills also develop through play as students interact with one another. Language around specific topics grows, and vocabulary is built within a context which leads to a better understanding of the words and transfer to novel situations: "children achieve language and literacy skills at higher levels when they experience play scenerios and creativity in

nurturing environments." (Burke, 2019, p. 10). Play-based environments offer students a chance to take risks with language in a low-stakes setting.

Play also provides opportunities for students to engage in personal health and wellbeing activities. Play provides opportunities for students to engage in physical activity throughout the day and limits the amount of time students are confined to a chair or desk. It provides opportunities for students to connect with peers and develop positive social interaction skills. Play also provides opportunities for students to explore big issues or concerns that they have in nonthreatening ways. This past year my students struggled to understand COVID-19 and its impact on the world. In response to this my kindergarten students created a tag game outside. The premise of the game was that once you were tagged you became it and were always it. The game was over when everyone was it and the students called their game, "Corona tag." Play provides an opportunity for students to make sense of what was happening in the world around them.

Projects and the Competencies

Critical inquiry projects and passion projects provide opportunities for students to develop skills in all of the 21st century competencies such as managing information, problem solving, critical thinking, and collaboration. Stacey (2019) states, "just about any skill can arise and be developed within inquiry. There is opportunity for problem solving, collaboration, literacy, math, science, artistic expression, and so on, all at the child's own level" (p. 8). Critical inquiry projects can be used to meet curricular goals in all subject areas as well.

The use of critical inquiry projects provides students with experiences in critical and creative thinking. Resnick (2018) states, "if we want children to grow up as creative thinkers, we need to provide them with more opportunities to create their own projects and express their own

ideas" (p. 44). Through the use of thinking routines such as see-think-wonder, and I use to think but now I think (Ritchhart, 2015) and critical inquiry projects (Bailin & Battersby, 2016), students are given the opportunity to see the world around them in a new way. Students learn to notice and question what they see and hear. Calder (2015) states, "by using questions to trigger thinking, ignite inquiry, and establish dialogic relationships teachers can facilitate students' development of a range of thinking skills and enable them to become more independent learners" (p. 1123). Through noticing the world around them and asking questions, students are provided the opportunity to engage in creative problem-solving activities that have purpose and meaning.

Critical inquiry projects also provide students with the opportunity to develop a deeper understanding of what a democratic society is about. These projects provide an opportunity for students to engage in conversations and to experience strong feelings that arise when people have different points of view. Anderson, Comay, and Chiarotto state, "to sustain democratic and egalitarian discussions, especially among children just learning how to engage in this kind of talk, there is value in a format that reinforces their ongoing awareness of one another" (p. 14). To be active citizens who understand democratic society students need to be able to engage with and understand others who have opposing views and opinions, and to respect pluralism.

Critical inquiry projects help students develop flexible thinking as well as the ability to see problems and situations from a variety of viewpoints. Goodvid et al. (2019) state, "when kids think critically, they are analytical and reflective, and they entertain a variety of different perspectives" (p. 22). This skill is very important in the information age that we live in. It is very easy to find people who believe and agree with your ideas. Being able to listen to a variety of viewpoints and finding reliable sources that inform those viewpoints is essential to developing an understanding of the world in which we live. Students learn how to manage new information and

to evaluate that information in relation to current beliefs and understandings. They learn to evaluate the validity and merit of different sources of information.

Kindergarten students are not too young to begin developing skills related to the competency of global citizenship. Johnson et al. (2016) states, "developing a global mindset can begin in the early grades when young scholars are most curious and open to the world around them" (p. 608). Real world issues can be presented to students in kindergarten. The issues need to be presented at the students' level and in developmentally appropriate ways. One of the most successful inquiry projects I competed with my students was focused on the homeless population in our community. This project was a result of students seeing people digging in the school dumpsters and asking questions about what they saw. Through the use of a critical inquiry project that focused on how we can help the homeless population of Lethbridge, students were able to develop and demonstrate compassion for others in the community. They also demonstrated an understanding of what it means to be homeless in Canada as well as some reasons why there is homelessness in Canada and other countries around the world.

Critical inquiry projects and passion projects by nature help students build problem solving skills in a very natural and purposeful environment: "As students work together on projects, they learn not only webs of concepts, but also sets of strategies - strategies for making things, for solving problems, for communicating ideas" (Resnick, 2018, p. 54). Whether students are designing the world's greatest playground, exploring how dinosaurs became extinct, or finding a way to help the hungry in the community, they are engaged in purposeful problem solving.

Projects also provide students with the opportunity to develop their collaboration and communication skills. Anderson et al. (2017) state, "working with others to build understanding,

they learn the need to articulate ideas clearly, pose a focused question to clarify a point of view, and respect the diverse contributions of individuals within a collaborative community" (p. 14). Often critical inquiry projects do not start or end with a consensus on the answer to the inquiry question. Students learn to accept differing viewpoints and to question why people hold those views without judging the person. Bailin and Battersby (2016) speak of the importance of the spirit of inquiry. A spirit of inquiry requires "open-mindedness which involves being open to challenges to our arguments, counter evidence, and views which oppose our own" (p. 265). Through critical inquiry projects students learn how to respectfully explain their stance on an issue and respectfully question others.

Motivation and Achievement Through the 6 Ps

The 6 Ps of the empowered kindergarten classroom also have foundations in motivational theories. Resnick (2018) states, "If your goal is to help people develop as creative thinkers and lifelong learners, then different strategies are needed. Rather than offering extrinsic rewards it's better to draw upon people's intrinsic motivation" (p. 75). When students are intrinsically motivated to learn they often outperform students who are encouraged to learn through the use of rewards and punishments. Montessori (1976) stated, "Rewards and punishments are the desk of the soul, that is, a means of enslaving a child's spirit, and better suited to provoke than to prevent deformities" (p. 13). Shalaby (2017) paints a picture of how the rewards and punishments often used in early childhood classrooms don't improve student motivation or achievement; rather they serve to further exclude and demotivate students.

Play is a low stress, high interest method of providing instruction: "When children are playing, they are intrinsically motivated, pleasurably involved and actively engaged; and these elements provide desirable optimal conditions for learning" (Pui-Wah & Stimpson, 2004,

p. 340). Introducing new concepts and skills in a playful, natural way throughout that day as need arises taps into students intrinsic motivation to learn and is thus more effective. Projects are also highly motivating learning activities, especially when student interests, passions, and a real purpose is used as the basis for the activity: "Honouring interests and questions related to a common focus or big idea leads to higher levels of engagement, improved understanding, and a love of learning" (Anderson et al., 2017, p. 14).

Closely related to motivation, engagement and achievement, the 6 Ps of the empowered early childhood classroom have a positive effect on students' ability to self-regulate. The 6 Ps help to develop executive functioning skills and important social skills required in school as well as life outside of school. Weisberg et al. (2013) state, "there is some evidence that children in programs using a playful pedagogical approach show better executive functioning skills, such as inhibitory control, working memory, and cognitive flexibility" (p. 106). Through the use of play, projects, and peers, students learn self-regulation and social skills out of a purposeful need: "Games and other forms of collaborative play are crucial for self-regulation: important concepts such as sharing, waiting one's turn. following directions, not being too rough, and controlling frustration" (Burke, 2019, p. 27). Through natural consequences and low stress mistakes, students learn valuable lessons on how not only to survive in a group setting, but learn to flourish.

When concepts and skills are taught purposefully using active learning methods with just in time instruction, students demonstrate higher achievement levels. Diamond, Grab, Reitze (2015) state, "when kindergarteners spend much time in drill-oriented instruction, they display stress behaviours, express less confidence in their abilities, and are less advanced in motor, academic, language, and social skills at the end of the year" (p. 22). This statement is supported

by the research of Burke (2019), Eronen and Kärnä (2017), and Helm and Katz (2016). Since designing my programming around the principles of the 6 Ps of empowerment I have noticed improvement in student scores on standardized tests. I have also noticed an improvement in students' ability to apply their understanding of letters and sounds to the reading and writing process. While this evidence is purely anecdotal in nature it affirms that the approach I have been developing using the 6 Ps as guiding principles is making a difference for students in my classroom. My hope is that the 6 Ps of the empowered early childhood classroom has lasting effects on students throughout their school years. Weisberg et al. (2013) contend, "Children participating in curricula that are based on principles of direct instruction show more inattention and stress behaviours, less self-confidence in their own abilities, and less end of the year progress in motor, language, and social skills when compared with peers in playful learning classrooms (p. 108). In my experience, students' academic, social, and personal skills are all positively affected by experiencing the 6 Ps of the empowered early childhood classroom.

There are gaps in the research around the efficacy of my 6 P approach to teaching in the early childhood classroom. While most of the research cited has focused on somewhat older children, I believe that the success of my students and the learning they are exhibiting as I have implemented and revised my approach affirms what I see as its value for early childhood education. This 6 P framework is unique in that it takes these guiding principles and applies it to the early childhood setting, and it combines all of these principles in a holistic approach to design for learning. The growth I have seen in my students' academic, social, and behavioural skills serves as testament to me that this framework has been successful in my context.

The 6 Ps of Empowerment Website

To address the barriers teachers experience when trying to implement play and critical inquiry-based early childhood programs, I created a website for kindergarten teachers to use as a resource for their personal learning journey. Hargreaves and Goodson (2006) state some of the barriers to chande in education include leadership changes in schools, teachers becoming wary after experiencing too many reforms or band wagons. To address these barriers the website that I created provides research behind the guiding principles and instructional approaches that teachers can use to explain what they are doing and why to school leaders who may not be overly familiar with early childhood settings. Where possible, I have also used common practices as the starting point to several learning opportunities shared on the website so that teachers see this is not something completely new and untested, but rather an extension of what they are already doing. It acknowledges that they have good programs already and these are small changes that they can make to their existing programs.

Cuban (1988) points to change in education being halted by teachers who do not always see the flaws in the system because the traditional form of school worked for them. They experienced success in it so others should too. One page of the website is dedicated to why I changed my progamming and it focuses on how students have changed over the years, how we are seeing more students requiring behavioural supports as well as academic supports. It also addresses how the world these children are growing up in is very different than the world that many seasoned teachers grew up in.

Kelchtermans (2009) speaks about teacher vulnerability and the feeling of always being watched and judged or compared to other teachers as a reason why teachers may be reluctant to change their teaching methods. On the website, documents and successful learning opportunities

and projects are shared so teachers can feel less vulnerable and have ideas they can build upon. Planning documents and templates are shared as a framework for teachers to use to get the started. On the website I provide ideas, direction, and resources for teachers that are easily accessible and can support them as they take on the challenge of moving towards new ideas and teaching practices. The journey for me was hard and lonely and there was a lot of push back from administrators and other teachers along the way. Having someone to go to for advice and understanding would have helped me reach my goal of an empowered kindergarten classroom faster. When I found an ally in a leader at the divison board office who supported what I was doing, the journey became easier. I hope that by creating and sharing a website about empowered kindergartens, I can be that ally for others.

On the website I address issues connected with the Zero Learning Zone as described by Knight (2018). These issues include blindspots, or not knowing what we need to learn, not seeing the value in what is being learned or lacking hope that the changes will make a difference, and fear of faiure and embarrassment. It is also built based on key attributes of adult learners and self-directed learning as described by Merriam and Biereman (2014). I acknowledge the self-directedness of adult learners by encouraging teachers to explore whichever P interests them the most or addresses a need that they are most interested in. Autonomy and relatedness play an important role in teacher motivation to learn (in de Wal et al., 2014). I organized the sections of the website so that if I teacher chooses to engage with the whole site, each section builds upon the information in the previous section, however, the Empowered Early Childhood Classrooom website is designed so that teachers can explore any one of the 6 Ps that they are currently interested in or that relates most to where they are on their personal learning journey. Peer

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interactions are the first principle on the website because positive peer interactions play a critical role in facilitating all of the other principles outlined in the 6 Ps.

On the website I include a theoretical component in the "why empowered learning" section. This section explains what empowered learning is and explains its historical and theoretical background. It then looks at why this is such a valuable approach to instruction design and how this approach develops 21st century competencies in students. Knight (2018) states, "we need to believe that what we are considering is worth the effort" (p. 22). This section of the website devoted to the "why" of empowered learning demonstrates the difference this approach has had in creating a more inclusive environment for my students, how it has decreased the frequency of tricky behaviors, and how it has made a positive impact on my students' academic achievement. An image is also provided to help educators visualize why the 6 Ps of empowerement are important and how they bridge the gap between curriculum and competencies.

The sections of the website that explain the six Ps and how they can guide instructional design are set up using the same organizational structure. The sections begin with a personal reflection for teachers to think about and record in their learning journal. The purpose behind the reflection is to activate previous knowledge and to tie future learning to previous experience. Kennedy (2016) states, "for teachers, enacting a new idea is not a matter of simple adoption but rather a matter of figuring out whether, when, and how to incorporate the new idea into an ongoing system of practice which is already satisfactory, and may be largely habitual" (p. 955). This opening reflection will help teachers connect the new learning to current practices and this will help teachers see that a few changes and modifications are all that is needed to implement the principles more effectively. Resnick (2018) states, "through reflection people make

connections among ideas, develop a deeper understanding of which strategies are most productive, and become better prepared to transfer what they've learned to new situations in the future"(p. 71). Through engaging teachers in reflective practices they experience what this will be like for students and discover its important role in creating life long learners.

The next component of each section involves looking at the physical set up of the classroom and ways the environment can be modified to accommodate the use of whichever P is being explored. The reason I chose to start the learning sections by looking at the physical environment is because changing the physical environment is often the easiest and least personally critical place to start. Hargreaves (1998) recommends, "keeping the level of distress within a tolerable range when you are adapting to the demands of a difficult problem" (p. 325). Throughout all the sections of the 6 Ps of Empowerment website, changes and strategies are introduced in small steps to gently push teachers out of their comfort zones and to encourage long term sustainable change. Changing the classroom environment is often the easiest place to start. I know from my own experience I often reorganize my classroom's physical environment prior to that start of each school year to accommodate different number of students and different physical and equipment needs of students (walkers, wheelchairs, etc). I change the bulletin board displays when I grow tired of looking at the same thing. I incorporate something exciting I have found on Pinterest, or a new piece of equipment purchased by central office (e.g., a new light table). Changing the classroom environment is as common as changing one's shoes for an early childhood educator.

After looking at physical environment considerations each section of the website addresses a common barrier teachers often have when implementing a new instructional approach. That barrier is being unfamiliar with terms or definitions, or misunderstanding what

the approach involves. Knight (2018) states that, "we often miss chances to learn because we do not see that we need to learn" (p. 22). Without a clear definition and understanding of what the approach involves teachers may not realize that they have gaps in their understandings. In play-based learning this often looks like teachers considering their practice as play-based because they use free play as a reward for completing worksheets or because they include flash card games as part of their programming. This is not what is meant by play in the 6 P framework.

Teachers often think they are engaging students in project-based learning but this often looks like students completing a project with the end result being that everyone's project turns out pretty much the same, or resulting in what I like to call a glorified worksheet. A great example of this is the culminating project at the end of a common All About Me unit of study. In the Alberta kindergarten program statement (2008) a key component in the social studies curriculum is looking at what makes us special and unique. It states, "The child demonstrates an understanding and appreciation of the multiple social, physical, cultural and linguistic factors that contribute to an individual's unique identity" (p. 19). This is a great topic to explore student interest and passions but it often results in an end of unit cookie cutter project where student create a Pinterest-inspired picture or model where deviations are minimal. I used to end this unit by having all of the students create a lovely plastercine picture of themselves using Barbara Reid's work as a model. While this is a great activity it also prevents students from expressing who they are in a truly individualized and unique way. Now students in my class are given the opportunity to share what they have learned about themselves through a variety of activities. They can now create a plasticine picture, a model, a poster, a collage, a book, or a video to share who they are with their peers, parents, and school community.

Critical inquiry projects are often misunderstood as well. Teachers engage their students in a project on a theme, but it often results in students doing a research project that misses key components such as weighing both sides of the argument, and understanding the role context plays when looking at an issue. Inquiry projects can be valuable learning activities but they do not address the same competencies as a critical inquiry project. Inquiry projects, or passion projects, and critical inquiry projects both play an important role in the 6 P framework and address different goals and needs of students. Critical inquiry projects focus on an issue, weighing facts and evidence, looking at all sides of an argument and coming to a reasoned decision. Inquiry, or passion projects, focus on research skills, finding answers to questions of personal importance, and developing a disposition towards life long learning. It's important for teachers to understand the appreciate the varying goals and approaches to these projects if they are going to make appropriate use of projects as a guiding principle in their planning.

To address the barrier of teacher misunderstanding, each principle is presented using the SEE-I tool for concept clarification: state, explain, example, image (Nosich, 2011). The section begins with a definition of what the principle is. I provide a clear definition from researchers in the respective fields. Following the definitions, I then give a deeper explanation of what the principle is and is not. Pictures and video samples are provided to help deepen the understanding of the terms as well. An image (metaphor or analogy) is then provided for teachers.

Following the SEE-I explanations of the principle, I address the planning barrier that teachers often face. When I started on this journey I wasn't sure how to put my plans and ideas onto paper. The traditional lesson and unit plan formats simply did not work. After presenting at Alberta Teachers' Conventions the most common request I received was "can I see your plans." To address this barrier I have created sample planning documents for teachers to use. These

documents include a blank version for teachers to use as well as a completed planning document for teachers to look at as a model.

Following the planning documents a warning section is then presented to share some common mistakes or traps that happened when I first attempted to implement the principle in my practice. This is included to help teachers avoid some of the mistakes I made on the journey and to let them know it is okay if things don't go well the first or second time you attempt something. There is value in learning from our mistakes. Kelchtermans (1996) states, "acknowledging and understanding one's own career story, especially in the company of others, is one step toward effective coping with uncertainties. It provides a perspective from which to move beyond the stressful threat of vulnerability" (p. 321). By acknowledging and sharing my own experiences, struggles and vulnerabilities I hope to help other teachers move beyond fear of failure.

Finally each section ends with a goal setting activity. This activity will engage teachers in setting a mini-goal to accomplish. Knight (2017) states, "well-crafted goals can provide guideposts that nudge you out of your comfort zone" (p. 24). This activity engages teachers in planning how they will achieve their goal and explaining why the goal is important for student learning. Designing and explaining the plan is crucial to successful implementation. Knight (2017) states, "design thinking reduces the stress and anxiety of attempting change without a framework" (p. 24). The website is set up to lead teachers through small incremental changes instead of large, overwhelming, and often unsustainable change. The goal setting section provides teachers with valuable experience in goal setting which in turn will help them be better prepared to lead students through this process in the classroom.

Peers

       This section of the website explores different ways teachers can encourage peer collaboration. The goal of this section is to provide strategies and practices to encourage peer collaboration, that over time require less teacher intervention in order to free the teacher to work with students on passion projects, and scaffolded play opportunities. The Peer webpage on the 6 Ps of Empowerment website addresses four ways to include peer learning in the classroom. It looks at how the classroom environment is set up, strategies to foster communication between peers, communication restoration, and peer assessment. Weitzman and Greenberg (2002) state, "as adults, when we engage in social interactions, we constantly analyze the situation, decide what kind of behaviour is appropriate to that situation, and make necessary adjustments as the conversation continues" (p. 192). These skills take time to develop and require practice. In order to learn with peers, students at the early childhood level need to first learn how to use language to communicate effectively.

       In this section I share several strategies from the Hanen speech language training that most kindergarten teachers in Lethbridge School Division 51 participate in (Weitzman & Greenberg, 2002). I chose to include these strategies to reinforce and acknowledge learning that has already occurred. Merriam and Bierema (2014) state, "a facilitator can begin with an adult's experiences and then assist the learner to connect those experiences with new concepts" (p. 51). Including this information will help activate teachers' prior knowledge and connect it to the ideas presented in this section of the website.

       Weitzman and Greenberg (2002) state, "through peer interactions students learn to make compromises, to resolve conflicts, and to share, collaborate, and cooperate with others. They also learn how to negotiate and assert themselves" (p. 185). In order to engage in critical inquiry

projects and meaningful classroom discussions around world issues, students first need to develop interpersonal skills and communication skills.

Learning how to have effective peer interactions is also fundamental to play-based learning strategies. To communicate effectively with peers Weitzman and Greenberg (2002) state, "children have to be able to initiate interactions, respond when others initiate interaction, send clear messages, continue a conversation, clear up misunderstandings, and stick to the subject" (p. 185). Through play many of these communication skills can be practiced and developed. Play-based learning also provides opportunities to notice learning gaps in these skills. A student who is unsure of how to initiate conversation often struggles to initiate play as well. This student is often the one who tries to engage in play at the sand table by dumping a bucket of sand on another student's head, or who joins in at the block center by kicking over someone else's tower. Students who struggle to initiate conversation or play may not always be that noticeable. Sometimes these are the students who always choose to explore independently at the Lego table or art table where engaging in parallel play is more acceptable. Students who struggle with peer interactions often seek out adults to engage with and often prefer to explore at an adult directed learning center. On the Peer webpage, ways to empower students to communicate independently with peers are explored.

The physical layout of a classroom plays a key role in fostering peer interactions. The Peer webpage on the website presents several things that should be considered when setting up an early childhood classroom in order to foster purposeful peer interactions. These environmental considerations were based on the research conducted by Shipley (2013) and Weitzman and Greenberg (2002).

The Peer webpage also addresses teacher interventions that can help support students who are struggling with positive peer interactions. Wurm (2005) states, "the environment should support the work and interests of children without constant adult guidance and intervention" (p. 40). Classroom components such as language support visuals and a peace table for conflict resolution help students navigate peer interactions without constant adult intervention.

Language delays often prevent students from being able to have positive peer interactions. Children with language delays spend far more time interacting with adults, particularly the paraprofessional assigned to the student than in peer interactions (Chung, Carter & Sisco, 2012). When developing accommodations and interventions to be used in the classroom setting it is important to consider the other students in the classroom and ways that the adaptation enhances or hinders interactions with typically developing peers. Chung, Carter, and Sisco (2012) state, "research suggests that students' peer interaction experiences are strongly associated with positive academic, behavioral, emotional, and social outcomes" (p. 349). If students with communication delays are not engaged in activities with their peers and the majority of interactions occur only with adults, students are less likely to achieve communication goals.

The communication devices designed for the different learning centers are shared on the website. These devices take into account students who struggle with language either because of a developmental delay or limited exposure to the English language. For example, the visual for the art center assists the students in requesting different materials that might be needed without grabbing objects out of a peer's hand and it also allows students to offer different materials to peers. The visual for the block centre provides vocabulary about what students may want to build together. This visual communication device helps to remove language as a barrier to cooperative

play and promotes positive peer interactions. The goal of these tools is to increase the amount of time students engage with each other in activities without adult intervention thus increasing independence within the classroom.

The use of a peace table is one way to help students learn what to do when communication breaks down. Weitzman and Greenberg (2002) state, when interaction with a peer goes wrong as a result of a conflict, a lack of interest, or a misunderstanding, children have to know how to get things back on track. This is called repairing a breakdown in communication" (p. 184). The peace table not only fosters the development of peer communication skills it also allows students to practice problem solving skills in a purposeful manner. Going to the peace table to resolve a conflict should not be seen as punitive but rather celebrated. At the peace table I like to include a visual of the steps that students can take to resolve the conflict. This reinforces an essential component of critical inquiry learning and provides an opportunity for students to demonstrate learning transfer. Through the use of a peace table students are able to demonstrate skill levels related to Alberta Kindergarten Program Statement (2008) outcomes such as this outcome from the Social Studies curriculum; "demonstrates the skills of cooperation, conflict resolution and consensus building" (p. 24). The use of a peace table allows students to achieve success in outcomes from the personal and social responsibility curriculum such as: "begins to develop respectful communication skills appropriate to context, identifies causes of conflict in school or in play, and suggests simple ways to resolve conflict" (p. 30).

The final portion of the Peer webpage on the 6 Ps of Empowerment website looks at using peer assessment as another means of encouraging purposeful peer interactions. Topping (2013) states, "there are immediate benefits of peer assessment for learning and achievement but

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also longer-term benefits with respect to transferable skills in communication and collaboration"
(p. 395). Peer assessment also helps students develop a stronger understanding of learning
outcomes and classroom expectations. In order for peer assessments to be a successful tool in
learning a few factors need to be addressed. Berger, Rugen, and Woodfin (2014) state, "Peer to
peer feedback can be effective when the conditions are right, when students are practiced in
giving targeted feedback, and they have clarity on the specific dimension of the work they are
analyzing" (p. 166). First students need to understand how to give effective feedback and how to
receive feedback. Then they need to have a firm understanding of the criteria on which they are
giving feedback.

The Peer webpage addresses the first component by encouraging teachers to use
modelling techniques both for how to provide feedback and to receive feedback. Topping (2013)
states, "it is important that the recipient of feedback is ready to respond to it thoughtfully,
deciding what points to accept and what not to accept" (p. 395). Puppet shows and role plays of
different ways to give and receive feedback prior to using peer assessment are methods to
demonstrate this to young students in a fun and developmentally appropriate manner.

The second factor required for peer assessment to be effective is that students need to
have a strong understanding of the criteria being assessed. Bourke (2015) noted, "it is important
to include the involvement of students in identifying standards and/or criteria to apply to their
work and making judgements about the extent to which they have met these criteria and
standards" (p. 107). For young children I have found that to be effective evaluators of their own
and others work, students need to have examples of good, better, and best to compare work to.
Providing samples for students to compare to and refer back to helps them assess their own work
and their peers' more effectively. Topping (2013) states, "reliability is increased by making

model student work available to the assessors" (p. 396). Having clear criteria that is understood by the students is essential to the students being able to use the assessment tool effectively.

To address these ideas I explain two methods of peer assessment that I have successfully implemented in my own classroom. The first is co-created rubrics. Creating rubrics with the students helps develop a deeper understanding of the criteria and standards with the students. Four samples of co-created rubrics are shared on the website to illustrate that at this level peer assessment does not need to be an elaborate or difficult process. The second example of modeling for peer and self-assessment is the use of a writing continuum for students to compare writing samples to.

The warning portion of the peer section on the website focuses on common pitfalls of peer assessment. It specifically addresses the fact that at first students are not effective peer assessors and they require time and practice to become proficient at it. Topping (2013) states "students feel uncomfortable criticizing one another's work initially" (p. 407). This section warns teachers that the first few times they attempt this with students will likely be unsuccessful. Perseverance will pay off in the end. The first time I tried to co-create a rubric with students was a complete disaster. I had read the research and several papers on how to do this. However, I did not take into consideration the skill level of the students and their ability to understand what good, better, and best even meant. I waited for the students to describe for me what a good picture included and when I was greeted by the sounds of crickets, a first ever occurrence for me in a kindergarten classroom, I knew I missed a step. I gave them the rubric to assess their own drawings. It included the use of emotional faces (happy, neutral, and sad). I am sure you have guessed how this turned out. All the students choose the happy face. When I asked why the happy face, they responded with a version of because "happy is right." Instead of giving up and

believing this was something kindergarten students just weren't capable of, I paused, reflected, and thought about first steps and tried again.

I discovered that by providing students with visual examples of what a good drawing looked liked, what a better drawing looked like, and finally what my best drawing looked like students began to understand the concept. Together we chose images that made sense to them for good, better, and best on our rubric as that had more meaning to them than the numbers 1, 2, 3. I then talked with them about what made each drawing better and we created the criteria and standards based on what they noticed with me adding in key elements that may have been missed. After tackling something concrete like drawing a picture I then moved to creating a speaking rubric with the students for sharing time activities. For this one, I provided the descriptors for each level of achievement and the students chose animals that they thought matched. The moose was chosen as the "just right" animal in the rubric because at the time we had a giant 6 foot tall stuffed moose in our class, named Bruce, who the students adored.

This warning will hopefully keep teachers going and prevent them from throwing the strategy away if it does not work at first. It also explains how important it is to start small. At the start of the year all I have students do when co-creating the rubrics is brainstorm images that could be used for each level of achievement. Eventually through time and practice students become able to describe verbally and provide examples of the levels for the rubrics. This warning section along with the goal setting activity that follows are part of the agenda to move teachers out of the Zero Learning Zone by having teachers engage in design thinking (Knight, 2018, p. 24). Teachers are encouraged to base success on small steps rather than the larger end goal.

Projects

The goal for this section of the website is to introduce teachers to critical inquiry projects. This is an instructional tool that many teachers are unfamiliar with. By providing step by step instructions, visuals from previous projects, and planning documents I hope teachers will find this strategy less intimidating and accessible to children at the kindergarten level. I hope that the materials shared will demonstrate that critical thinking is not out of reach for children at this young age.

The classroom environment portion of the Project webpage looks at a few minor physical elements that should be considered when planning to include critical inquiry projects in an early childhood classroom. Small changes such as providing wall space to display research and records of class discussions is advantageous but not essential. A gathering space where students can sit in a circle and face one another is advantageous as well.

The emotional and intellectual environment are very important when engaging in a critical inquiry project. It is important the classroom environment is one that fosters the spirit of inquiry. The spirit of inquiry can be described as "open-mindedness, fair-mindedness, curiosity, concern for the truth and accuracy, admiration for human intellectual achievements, willingness to follow arguments and reasoned judgments wherever they lead, desire to act on the basis of reason, and acceptance of uncertainty" (Bailin & Battersby, 2016, p. 21). To foster this spirit of inquiry in the classroom prior to engaging in a critical inquiry project I use several of the thinking routines as laid out in the work of Ritchhart and Church (2020). These routines are shared with teachers through a chart describing several routines and how they can be modified to meet the developmental skills of kindergarten students as well as suit potential activities is

included on the website. A video is also shared of students engaging in a See-Think-Wonder and What Makes You Say That activity,

Critical inquiry is defined by Bailin and Battersby (2016) as "the process of carefully examining an issue in order to come to a reasoned judgment" (p. 6). A critical inquiry project differs from a more traditional classroom project in that it includes five key guiding questions. These guiding questions according to Bailin and Battersby (2016) are "What is the issue? What kinds of claims or judgments are at the issue? What are the reasons and arguments on various sides of the issue? What is the context of the issue? How do we comparatively evaluate the various reasons and arguments to reach a reasoned judgment?" (p. 26). All of these questions are very important to the process and in the warning section of the website teachers are cautioned about skipping any one of these questions. I recently had the experience of talking with a teacher who used my critical inquiry unit, "What is the best classroom pet for us." Without reading the whole plan prior to starting the unit, she jumped in at the research section and had students research an animal they would like as a pet. Unfortunately, by skipping over several pieces the project became an animal research project and while students gained skills in research and literacy, they did not gain experience in the process of critical inquiry. In the end the students voted on a classroom pet based on favourite animals and consensus was not reached. The decision was not based on a reasoned judgment but rather based on students' personal preference regardless of the context.

The first step for engaging in a critical inquiry project is choosing the topic or issue. Choosing a focus is very important. Bailin and Battersby (2016) state, "it is important to limit the scope of the issue by focusing on a specific aspect or aspects which are of particular relevance to the task and are of particular interest to the person conducting the inquiry" (p. 164). If the topic

or issue is too broad or the question is too vague the critical inquiry runs the risk of being too superficial. If the students are not interested in or do not see the relevance or purpose behind the inquiry question students will not be as engaged or invested in the problem. Alberta Learning (2004) warns that "they may think that inquiry is finding the answer to other people's questions for the satisfaction of their teacher, rather than understanding inquiry as a process of being puzzled about something, generating their own questions and using information to satisfy their own interests and to develop their own knowledge" (p. 8). By choosing a question that is important to students we help them transfer the critical inquiry process to activities and learning outside of the classroom. The topic or issue also needs to have an element of controversy, where the final reasoned judgment is not known prior to starting the critical inquiry process.

The second step of a critical inquiry project is to carefully examine the issue from all sides. This involves mapping the context and developing an understanding of all sides of the argument. Context mapping is a very important step. It is how students come to understand the issue more deeply. Bailin and Battersby (2016) explain, "It enables us to get the big picture of the issue and the factors and forces surrounding it" (p. 189). Through mapping the context students learn about the history of the debate, what current popular opinion is, and how society plays a role in those opinions. During this phase of a critical inquiry project students develop a deeper understanding of the perspectives others have held. Bailin and Battersby (2016) state "students need to know what the arguments are on the various sides of the issue, what are the objections to, and criticisms of the various arguments, what responses have been put forth to these objections and criticisms, and which views are currently dominant" (p. 193). Before forming our own arguments and positions on an issue it is important to explore arguments on all sides fully.

The third step to a critical inquiry project is reaching a reasoned judgment. After exploring historical and current factors surrounding the issues, students engage in creating their own pro/con lists about the issue based on their own contexts and lived experiences as well as what was learned during the context mapping phase. Bailin and Battersby (2016) state, "we need to perform a comparative evaluation of the arguments in order to determine their weight in terms of the overall case and then combine the various evaluations in order to make a final judgment" (p. 236). Students look at their own arguments and discuss and debate the merits of those arguments and come to a reasoned judgment of their own about the issue. It is important to note that all the students may not come to the same conclusion at the end of the project. If the critical inquiry process was honoured then students will respect each other's opposing views. One of my favourite thinking routines to do at the end of a critical inquiry project is a video reflection with the students using the sentence starter "I used to think… now I think…" (Ritchhart, Church, Morrison, 2011, p. 154).

I have added a fourth step to the critical inquiry project process and that is a call to action. To add more purpose into critical inquiry projects it is important for students to do something with the information that they have learned. In the past students have created public service announcements to share with the school during morning announcements, created posters to hang up at the school and around the community to increase awareness about an issue, or in the case of my favourite project "what is the best pet for our class," developed a financial plan and raised the money to purchase the pet of their choice. Sharing what was learned with an authentic audience is an important piece in providing purpose to the project. It is also a great way to engage the community in the learning happening within the classroom.

In the warning section for critical inquiry projects I focus on the importance of choosing a topic that the students are interested in. Finding the right topic involves listening and observing carefully while students are engaged in play and conversations with each other. More than once I have chosen I topic that I thought the students would like but in the end it fizzled out after a week. Paley (2004) states, "I rarely paused to listen to the narratives blooming everywhere in the garden of children in which I spent my days. I saw myself as the bestower of place and belonging, of custom and curriculum, too often ignoring the delicate web being constructed by the children in their constant exchange of ideas the moment I stopped talking and they resumed playing" (p. 19). It was not until I listened carefully to the students and began asking them question about what was going on in their lives that I was able to successfully implement critical inquiry projects in my own classroom.

Play

This section of the website focuses on purposeful play activities and on ways to use play as a learning tool as opposed to a reward for completing learning tasks. Research shows that it is not uncommon for teachers today to believe in play but to not incorporate it into their early childhood programs. Resnick (2018) states, "in many kindergartens today there is more focus on delivering early-literacy instruction and less time for playful exploration. Some people have referred to today's kindergartens as literacy bootcamps (p. 9). The research suggests three main reasons why this is occurring. The first is academic pressure and the need to be successful on standardized tests. Pyle et al. (2018) state, "movements toward prescribed academic standards and accountability in education have resulted in an increase in formal literacy expectations at the kindergarten level" (p. 220). Going along with the move to more standardized assessment is the move to use more scripted and prescribed programs in early childhood classrooms. Barblett et al.

(2016) found that, "teachers have identified the tensions between play- based learning and the move towards published programs and scripted teaching" (p. 37). There is a growing body of evidence however that shows students engaged in play-based learning score higher on standardized tests than those who learned in traditional classrooms where the majority of learning took place through direct instruction (Burke, 2019; Kemple, 2017; Pyle et al., 2018; Resnick, 2017).

To address the concern over academic growth in play based programming, the Play webpage on the 6 Ps of Empowerment website provides teachers with examples of how literacy and numeracy skills can be developed through play. Examples are provided of students engaged in literacy activities at the sensory centers, building centers, dramatic play centers, and the small world center. The pictures shared were carefully selected to demonstrate that literacy and numeracy skills can be built in ways beyond worksheets and flash cards.

In addition to helping teachers understand how they can help students develop important academic skills through play, one important goal of this section of the website is to help teachers understand how the different types of play can be used most appropriately for the early childhood classroom within the context of the 6 P framework. To achieve this goal clear definitions of the five different types of play are explored along with ways to incorporate these types of play purposefully in the kindergarten classroom.

A barrier teachers are faced with when trying to implement play-based learning is an unclear definition of what play is and confusion around free play versus guided or scaffolded play. Feesha and Pyle (2016) state, "the current lack of consistency in definitions of play-based learning is a major concern given that the implementation of play-based learning is dependent on the knowledge and understanding of the teachers" (p. 372). If teachers are unclear about what

play-based learning looks like and what their role is within it, they will not incorporate play-based learning into their programs. This lack of understanding and unclear definition is a problem that reaches beyond the classroom teachers. Teachers experience pressure from administrators, other teachers, and parents who have an unclear or even an incorrect understanding of what play-based learning means. Barblett et al. (2016) state, "participants spoke of being directed by principals to teach in ways that clashed with their philosophical beliefs and did not allow for play-based learning" (p. 40). If teachers are going to implement play-based learning, they need to be able to define and defend it clearly and accurately. To address this barrier the 6 Ps of empowerment website explains the five types of play: functional play, constructive play, symbolic or dramatic play, rough and tumble play, and games with rules (Burke, 2019). There are grey areas within these play categories and play can cross over between two categories for example, a game of cops and robbers on the playground may include predetermined rules, dramatic play as well as some rough and tumble play.

It is important that all types of play are addressed in the kindergarten classroom in a purposeful and intentional manner. If teachers use only free play or games with rules, they are missing out on several learning opportunities for their students and on opportunities to assess where students' strengths and gaps in learning may occur. If I had not permitted the students to engage in the rough and tumble superhero play discussed earlier, I may not have noticed that they were engaging in parallel play or that they were missing an understanding of how characters interacted in stories. I would have missed an opportunity to teach them about story elements in a manner that was meaningful and pertinent to their current interrerests.

Another barrier to play identified in the research is that many teachers are confused about what their role is within play and that play and teaching are two separate often dichotomous

constructs. Resnick (2018) states, "good teaching involves playing a variety of roles, all in the service of helping others learn. Good teachers and good mentors move fluidly among the roles of catalyst, consultant, connectors, and collaborators" (p. 112). The problem is many teachers do not know what these different roles are, or when to step into the different roles, or when to step out and be an observer. This often results in a common play phenomenon that Edwards (2017) refers to as "teacher missing in action" (p. 4). If the teacher is not actively engaging in play with the students it is very difficult to scaffold the learning within the play or to provide just in time instruction or opportunites.

On the Play webpage, I address the barrier of insufficient training in how to plan for play and what the teacher's role is during play activities. Pyle and Danniels (2017) found that "the perceived inability to plan led teachers to question the integration of play-based pedagogy, not because they didn't value play but because they struggled to negotiate a balance between the child-directed play they felt was essential and the mandated academic standards" (p. 280). Teachers are unsure of what their role is during play and how to use play as a learning tool. They do not know how to find the middle ground of learning with students in naturally occurring play, and how to plan play centres with an academic focus that continues to feel like play. Pyle and Danniels (2017) define five different roles that teachers can have in play-based programing. These five levels of teacher involvement are free play, inquiry play, collaborative play, playful learning, and learning through play.

In free play children direct their own play narratives and determine the resources used. In inquiry play the locus of control is still mainly with the child. The child initiates play and the teacher extends the play to incorporate academic standards. An example of this was a time when students in my classroom were creating and throwing paper airplanes at the art center. In

response to this observation I chose to bring in books about airplanes and on how to build paper airplanes. After a few days of students attempting to build different types of airplanes I introduced students to measurement by setting up a runway in the hall with a measuring tape and some nonstandard units of measurement such as snap cubes, chain links, and shoes so students could see whose plane has flown the farthest. Free play serves a purpose within the 6 P framework. It provides an engaging activity for teachers to introduce new concepts and skills to students. It is the first step in instructional strategies based on student passions and meeting children where there at and building on from there.

In collaborative play the teacher has a larger role in the planning of the play activity. This planning comes from watching student play and noticing student interest. An example of collaborative play would be the teacher setting up a pet store or a vet clinic after observing students pretending to be animals during free play activities. The teacher and students brainstorm what items should be included in the play centre and co-create the space.

Playful learning is more teacher-directed than student-directed. It is a way to engage students in activities to build skills that students need to learn but do not always present themselves through student-directed play. In this form of play the teacher creates materials and assigns roles or purpose. An example would be the use of a flower shop at the dramatic play centre. The teacher creates order forms, sets up a cash register, provides money, provides different types of flowers and decorations for arrangements. Students choose from prescribed roles (shop keeper, floral arranger, customer). Learning through play is the most prescriptive type of play. It often involves flash card games for letter and number recognition or file folder games (Pyle & Danniels, 2017).

To help teachers address the barrier of how to plan for play, a planning for play guide is shared on the Play webpage. The planning guide includes the five levels of teacher involvement (Pyle & Danniels, 2017) as well as the five types of play (Burke, 2019). On the website I encourage teachers to fill in the planning for play document with activities they are currently using in their own classroom. This is an opportunity for teachers to reflect on practices already happening in thier classrooms and by placing those activities into the planning document, teachers will see that they are already incorporating several typs of play. Knight (2018) states "we are resistant to any experience that causes us to re-evaluate what we think to be true about ourselves" (p. 23). On the webpage I have attempted to take a supportive approach by affirming what teachers are already doing and then showing what the next steps are for teachers are.

In the warning portion of the Play webpage on the Empowered Early Childhood Classroom website teachers are reminded to ensure that curricular goals are included in their planning. In the classroom students are engaged in play for the purpose of learning. Including the curricular outcomes in the planning for play document will help teachers remain focused on purposeful play. Including curricular objectives in planning documents also provides a means for teachers to demonstrate to administrators and parents how students are meeting curricular expectations and not just engaged in play for the sake of playing.

Passions

The purpose for this section of the website is to provide two simple ways student passions can be used as a guiding principle in planning for instruction in a kindergarten classroom. I also show teachers that in spite of common beliefs around the capabilities of students this age, they are able to participate in personal inquiry projects. On the Passions page of the 6 Ps of Empowerment website I explore two ways of using student passions to foster

learning. The first method I present is the use of passion projects, sometimes these projects are referred to as personal inquiry projects or genius hour. This is followed by a section that reinforces how play-based learning centres can incorporate passions to help students develop knowledge and skills. Student passions, much like purpose and peers, filters into all areas of the empowered classroom. It is an important piece of critical inquiry projects for without passion about the topic the students will disengage from the project. Without passion student portfolios become a teacher driven document as opposed to a student empowered demonstration of learning.

This webpage begins by looking at classroom environment and set up. It recommends including student passions in the classroom library. Including books about a variety of student interests helps engage students in interacting with books as opposed to more traditional methods where books were selected for the classroom library based on a teacher driven theme. Including a variety of informational books related to science and social studies is also crucial to building students' literacy skills. Samarapungavan et al. (2011) state, "use of shared reading activities in the course of children's investigations provides opportunities for children to engage with the language of science as they ask questions and explore" (p. 421). There are very few barriers for teachers to implement this strategy as books can be borrowed from the school library or the city public library making it a cost-effective strategy to include.

Finding students' passions can be quite easy and it doesn't take a lot of time or effort. On the Passions webpage I share some quick and easy ways to figure out what students are interested in and passionate about. One of the easiest ways to discover students' passions is by listening and documentating during play-based learning and morning conversations. Often times during morning meetings, sharing circles, or informal conversations through out the day students

share their passions with their teachers. I like to keep an observation sheet with me at all times and when I finish having a conversation with a student I quickly jot down what we talked about. For example, one year I had a student who every day when he got to school told me about something his dog had done the night before. Clearly this young man was very fond of his dog. For his first passion project of the year he created a slide show presentation all about his dog.

Another tool I like to use to discover students' interests and passions is to go on I wonder walks. I wonder walks are a great way to incorporate the outside environment into learning. In a wonder walk students go for a walk through the community, around the school, or even on a field trip. As they walk around, students stop and share what is it that they are seeing and what they are wondering. Not too long ago I took my students to a nature reserve close to our school. As they were walking around students stopped and pointed out nests that they saw and then began to wonder what nests were made of, if different birds build nests differently or were all nests built the same, and how the birds know how to build nests. These questions led to several students completing an inquiry project about bird habitats.

A third method I use to help students choose topics for their passion projects is to create an I wonder wall (Daniels, 2017, p. 44) or an idea board. Samarapungavan et al. (2011) state "idea boards were used by teachers to record ideas that children generate in class discussions and to help children revisit their ideas over the course of an inquiry" (p. 420). For both the I wonder wall and the idea board I simple ask the students what they saw or did the night before or over the weekend. Then I ask what wonderings or questions they have about what happened. This, of course, takes practice and no question or wondering is ever negated. All ideas are added to the wall. Some wonderings from the start of the year often include questions about how to get to the next level in a video game or why something is the colour that it is. By the end of the year with

repeated practice and exposure, students' questions become bigger and more profound such as how do engines work, how was the first person made, or how can you tell how old a lady bug is. I keep an I wonder wall up in my room for the whole year and any time a student has a wondering we add it to the wall. If a student is struggling to think of an idea to explore we often visit the I wonder wall to see if there is a question there of interest. Often by reading some of the questions on the board students find a new or related question. Sometimes a student will even choose to research a question that someone else asked.

On the Passions webpage, I share pictures of two different ways that I have set up a classroom I wonder board to provide a model and to show how simple this is. One image is of student silhouettes with pictures that students cut out of magazine to show topics they were interested in or images that caught their attention. The second image is of a very simple I wonder board where on sentence strips student questions are written and posted. As answers are discovered to the questions the information is included beneath the orginal question along with new and emerging questions.

The use of an I wonder wall is important because personal inquiry projects are based on student questions and wonderings. Students require practice in understanding what a question or wondering is and how it differs from a statement. The use of an I wonder wall throughout the year allows students to develop this skill together before attempting it independently. Calder (2015) states, "within inquiry learning an intention is for teachers to empower students to transition towards independently using their own strategies in authentic activity" (p. 1123). Through the use of wonder walls students practice literacy skills and communication skills they have been developing while learning how to question what they see, hear, and read.

The Passions webpage also explains how to implement personal inquiry projects. While many early childhood teachers state that they see the value of inquiry–based learning and the potential benefits of incorporating this in their programs, very few are actually using inquiry methods. Anderson, Comay, and Chiarotto (2017) state, "though curiosity may be natural inquiry in a school setting is neither natural nor easy; it must be learned and worked at" (p. 13). Prior to starting my learning journey into empowered classrooms I had not experienced inquiry-based learning nor did I have the opportunity to see it in action. Many new teachers, who may have been exposed to inquiry projects during their training, do not experience or observe inquiry during their practicums. Helm and Katz (2016) state, "teachers of young children who have not had the opportunity to observe others guide project work are often at a loss as to how to get started and then follow through" (p. 10). I often wanted to try doing inquiry projects in my classroom but I had no idea how or where to start. Planning is a barrier that teachers face when trying to implement inquiry–based learning. Smarapungavan, Patrick, and Mantzicopoulous (2011) found, "a key challenge in designing guided inquiry for young children is finding investigative frameworks that allow them to generate meaningful knowledge" (p. 419).

In order to help address the barrier around planning and implementing inquiry projects in the classroom the webpage demonstrates how to use the inquiry workshop model as developed by Goudvis, Harvey, and Buhrow (2019). I chose to use this model for two reasons. The first is that it follows the same methodology as used for writers workshop which is a teaching method many teachers have experience with. By using a model that is familiar to teachers it helps to alleviate some of the fear associated with trying something new. Knight (2018) states, "we might be afraid that we are going to embarrass ourselves or fail" (p. 23). If a teacher has had success

implementing readers and writers workshop, applying the same model to inquiry learning should alleviate some fear associated with trying something different.

Using the inquiry workshop as part of the writer's workshop helps address the time barrier that teachers experience. Instead, passion projects become part of reading and writing workshop lessons which are already scheduled in our early childhood classrooms. Alberta Learning (2004), states "inquiry–based learning is not an add-on, but rather a way to achieve the goals of the Alberta Program of Study since inquiry-based learning is a component of the Alberta curricula" (p. ix). Passion projects should not be seen as a big project that needs to be completed on top of all the other learning in the classroom. These projects are a replacement for some of the less active learning methods often used in the classroom. Demonstrating how to use this model in connection to student passions helps teachers see these activities as a natural progression to what is already happening in the classroom and not as another add on.

The webpage goes through the four phases of a passion project and describes different activities that can be a part of those four phases. According to Goudvis et al. (2019) these are immersion, investigation, coalesce, and taking it public. The final stage is an important stage of passion projects that can be easy to neglect due to time and planning constraints. It is however, a great way to meet several kindergarten learner outcomes from the English language arts curriculum that focuses on oral language skills and celebrating student achievement. This stage also adds purpose to the projects and creates incredible empowering moments where students can be experts and teach others. A great example of this happened when a young man from my class who had a lot of challenging emotions he was dealing with completed a passion project on how a car engine works. For the first time in the school year this young man's peers were completely engaged in what he was telling them and they were able to see him in a positive light.

Several of the boys wanted to spend time at the small world center with him that afternoon and he continued to teach them all he knew about cars. It was a turning point for this young man as he and his peers were able to see what an amazing individual he was. He, like the young boy with challenging behaviours described in Shalaby (2017) "wanted to be authentically heard, to be known, and to be celebrated" (p. 145). His voice was heard and his passions were shared.

The warning component for the Passion page of the Empowered Early Childhood Classroom website focuses on the importance of creating a climate of inquiry in the classroom. There are several different ways to prepare students to participate in passion projects. Some of these include but are not limited to: taking I wonder walks or participating in see, think, wonder routines (Ritchhart, Church, & Morrison, 2011); question sorts (Ritchhar & Church, 2020); or using and I wonder wall to display student questions. Teachers are encouraged to explore the thinking routines found in the project section of the website for more information on developing a climate of inquiry in the classroom. In my own experience, trying to start passion projects without first focusing on how to ask questions, how to observe the world, how to find information resulted in lessons that were frustrating not only for the students but for myself as well.

Portfolios

The goal I have for this section of the 6 Ps of empowerment website is to move teachers away from portfolios being a collection of seasonal based worksheets and crafts or scrapbooks of student activities, such as field trips and special occasions, towards the portfolio becoming a tool for documenting students' learning during play- and inquiry-based learning. On the website teachers are asked to reflect on how they are currently assessing students. They are then led through a process to plan for the purposeful use of portfolios and are provided planning

documents to help them think through what should be included in student portfolios. Finally the website looks at how students will have access to and share portfolios with others.

A portfolio is a collection of artefacts that showcases student thinking, skills, understandings, and accomplishments over time. A portfolio can include artefacts created at school or artefacts from home and school. Farrell and Seery (2018) describe a portfolio as "a vehicle for bringing together judiciously selected samples of students' work and achievements inside and outside the classroom for authentic assessment over time" (p. 76). There are several benefits to using a portfolio to document student learning and progress. Some agreed upon advantages of portfolios are that they permit a more authentic assessment of student learning, they help to make student thinking visible, they promote self-reflection and self-evaluation, facilitate communication between all stakeholders about a student's learning, and encourage students to play a more active role in their learning (Barrett, 2007; Farrell & Seery, 2018; Hall & Hewitt-Gervais, 2000; Knauf, 2016).

It is important to make the learning portfolio a key ingredient in day-to-day activities. Tolisano and Hale (2018) state, "the heart of documenting is capturing the learning and thinking while it is happening, not simply capturing what has happened" (p. 15). Being prepared to capture the moment when it happens becomes a key skill for teachers to learn. The classroom environment/set up section of the Portfolios webpage includes ideas for ways the classroom can be set up so that portfolio use is part of daily routines and activities. It suggests simple changes such as having cameras or iPads readily available for students to document accomplishments independently. Allowing students to choose artefacts to include in the portfolio increases student ownership of the portfolio and empowers them in the assessment and documentation of learning process. On the website I also recommend thinking through how and where the portfolios will be

stored so that students can have access to their portfolios when they want to look at them, review them, or check them to remember what their learning goals are.

Prior to starting the use of learning portfolios in the classroom there are some essential questions that need to be asked, explored, and answered in order to prevent the portfolio from becoming a random selection of artefacts that is referred to at parent teacher conferences and the end of the year. Goldsmith (2007) states, "implementing portfolios requires planning, new procedures, new ways of thinking, additional resources, and training for both faculty and students" (p. 31). The first question at the fundamental core of portfolio use is: what is the purpose of the portfolio? What are you hoping to achieve through the use of the portfolio. Do you want it to be a showcase of the student's finest work? Do you want the portfolio to demonstrate student learning over time? Do you want the portfolio to help make student thinking visible? The purpose behind the portfolio guides the answers to all other questions requiring answers when setting up a portfolio.

Once the purpose of the portfolio is set, teachers are guided to determine how the portfolio will be organized. This includes examining different headings or categories that could be used. There are a variety of ways to organize a portfolio. It can be organized by subjects or domains (science, literacy, math); by competencies (information management, wellness, communication); by student roles (I am a writer, I am a creator, I am a critical thinker); or by student learner outcomes (Berger, Rugen, Woodfin, & Johnston, 2014). The categories that are chosen will directly impact the type of artefacts that are chosen and how reflection and review of the artefacts is approached. Learning in the realm of 21st century competencies can be difficult to document. Habeeb and Ebrahim (2019) found, "e-portfolios are a particularly effective tool for assessing the acquisition of students skills, specifically the skills of criticism, creativity, and

innovation" (p. 1665). Connecting portfolio artefacts under headings such as evidence that I am a writer or evidence that I am an innovative thinker as opposed to Language Arts or Science helps students and stake holders see the connections between student learning, the curriculum, and the competencies. It also helps students connect learning from different subject areas and can help with the learning transfer between subject areas.

Next teachers are guided through how to store artefacts. The traditional method of storing portfolio artefacts has been in a binder using page protectors and papers, or in a large folder (often created by stapling two pieces of poster board together). There has been a move towards the use of electronic portfolios in my school district and to acknowledge this, different online options are presented to teachers on the Portfolios webpabe. Research is showing that e-portfolios provide more frequent opportunities for students to engage in the reflection process (Barrett, 2007; Hooker, 2019). This is largely because they are easy to access. Another benefit of an electronic portfolio is increased opportunities for parents to engage with the documents. Hooker (2019) found that "e-portfolios are an excellent tool to engage parents and families in their children's learning" (p. 378). Electronic portfolios also provide opportunities for different forms of documentation to be collected and require a smaller time commitment from teachers than traditional portfolios. The inclusion of videos is a key difference between electronic portfolios and traditional paper portfolios. A USB stick could be included in a paper portfolio to allow for the sharing of videos. In my own classroom I have moved from a binder portfolio system to a digital portfolio. One of my favourite features of the digital portfolio is that parents have the opportunity to comment on student submissions as well. The students in my class are very excited to share their work with parents as well and this is often very motivating for them. Frequently when a picture is taken students will ask if it is being shared with their parents.

Creating this triangle of learning with the student, the parents, and the teacher has proven to be advantageous not only for assessment but for building relationships and for transferring learning outside of the classroom. This past year students started including submissions from learning that had occurred at home. One example of this is a student who submitted a picture to their portfolio that showed a garden she had helped to plant. Upon careful examination of the picture I could see tiny row markers with carefully written words for the vegetables that had been planted. Including such invented spelling as pes (peas) and carts (carrots). Another example is a student who included a picture of a movie theatre she had created complete with a concession stand where she sold tickets to see the movie as well as candy and popcorn. The caption included stated "I added money."

As we move towards electronic options Barrett (2007) cautions, "we must continue to focus on how the medium supports and influences the purpose of the portfolio" (p. 439). It is essential to remember that the purpose and goal of the portfolio drives the decisions for how the portfolio is set up and what is included. These choices should not be based solely on what an electronic platform can do. If one is choosing an electronic platform for their learning portfolios it is important to research different options and find the one best suited to the goals and purposes of the portfolio. It is for this reason that several online platforms are included as options as well as why format comes after purpose and headings in the provided planning guide. Traditional paper portfolios are also included as an option so that comfort levels with technology do not become a barrier to the use of portfolios.

This then leads to questions about how and what will be documented in the learning portfolio. Knauf (2016) states, "if a portfolio is assembled with a wide range of different documents, it can tell a story that is meaningful for all those involved, especially the child"

(p. 482). Documenting student learning and making thinking visible is time consuming and a skill that requires planning and practice. Documentation in my classroom has included digital or printed photographs, transcripts of student discussions, observations and anecdotal records, learning stories, videos of students, writing samples, and student produced artefacts such as art projects. Careful selection of and planning for documentation is a key component of effective portfolio use.

How you document will depend on what purpose the documentation is serving. Wurm (2005) states, "documentation can serve to illuminate thinking, a change in thinking, what was learned or not learned, the evolution of behaviour, questioning, maturity, responses or opinions" (p. 99). When planning for portfolio use and when selecting artefacts to use in the portfolio, four aspects of documenting learning should be kept in mind. Rosenthal-Talisano and Hale (2018) state that these aspects are "visibility, meaningfulness, shareability, and amplification" (p. 4). We need to remember to ask "what does this artefact mean? What learning skill, attribute, or habit is it making visible? How does this artefact help to further student learning and lead to goal setting?" On the Portfolios webpabe, teachers are asked to reflect on these very questions as they plan and prepare for portfolio use in their classrooms.

Not everything that is shareable is worth sharing. Rosenthal-Talisano and Hale (2018) state, "there is a difference between sharing for sharing's sake versus sharing strategically to gain desired insights and feedback" (p. 20). Not everything that is sharable is a documentation of learning. A collection of pictures and completed projects or a series of writing samples is just that, a collection. Paulson, Paulson, and Meyer (1991) state, "the collection must include student participation in selecting contents, the criteria for selection, the criteria for judging merit, and evidence of student reflection" (p. 60). Documenting learning is more than just collecting student

artefacts. Barrett (2007) states, "evidence in a portfolio is not only measured by the artefacts that a learner places there, but also by the accompanying rationale that the learner provides - their argument as to why these artefacts constitute evidence" (p. 439). To transform a collection of artefacts into a portfolio a description of what the artefact demonstrates and reflection on what that artefacts demonstrates about student thinking or learning needs to be present. It involves reflection on these artefacts and what they illuminate about the student. Teachers are asked on the website to plan time to engage in reviewing artefacts with students and to include the student explanation as part of the portfolio. During this conference time, teachers are encouraged to set goals with students and to discuss next steps can be created with students as well.

To assist teachers in planning for the creation of purposeful portfolios, a planning document is provided. This document guides teachers through all the different planning stages. It also includes a focus on curricular outcomes. As with all other planning documents it is essential that ties to curricular outcomes are included to keep the focus of the portfolio on learning outcomes. An interesting thing happened last year, my second year of using digital portfolios. During parent-teacher interviews I started each meeting by asking the parents if they had a chance to review their child's report card. Only one parent answered affirmatively to this question. After about the eighth parent said no, I started to ask if they needed some support in how to access the report card online or if they would like a printed copy. The parents informed me that they didn't need to see the report card; they knew from the digital portfolio how their child was doing and what they needed to learn next. Parents who had children in my class previously informed me that the portfolio made more sense to them than the report card did. By including curricular outcomes in the student portfolio I had made my report cards irrelevant to parents. The conversations were then able to focus more on what the parents noticed and goals

that they were working on at home with the children as well and how as a team we could all work together to advance the knowledge and skills of the child.

Learning portfolios have been shown to increase student level of performance when reflection and student ownership are present. Barrett (2007) found that portfolios "improve student learning by providing a structure for students to reflect systematically, over time on the learning process and to develop the aptitudes, skills, and habits that come from critical reflection" (p. 438). Knowing that they are responsible for proving they have achieved certain learning goals and for playing a role in setting those learning goals empowers students. It gives students a voice in their learning and thus engages them in the learning cycle. If used effectively the learning portfolio operates like a traffic circle where curriculum, assessment, and instruction continually merge in and out of the learning experience.

This section of the website ends with a warning to teachers about keeping the portfolio student-centred. It is very easy for a portfolio to be a teacher driven practice. Without careful planning and reflection the majority of items included often end up being teacher chosen and teacher created. Knauf warned that often, "the dominance of the teachers' contributions makes it clear that many portfolios are documentation *about* the children, and not so much documentation created with or by the child" (p. 484). To prevent this from occurring teachers are encouraged to think about how students will be given a chance to reflect and evaluate the artefacts included in their student portfolios. Student voice in the descriptors of the artefacts and explanations as to why the artefacts were included is another key component in portfolio use in an empowered classroom. It ensures that the students are active agents in the process. Students need guidelines as to what counts as good artefacts to collect. Setting expectations and comparing current artefacts to previously collected artefacts in the student portfolio helps empower the student and

keep the focus of the portfolio on student growth and achievements thus allowing it to be both assessment as learning and of learning.

As always, the page concludes with an invitation to teachers to set goals related to the creation and use of portfolios in the classroom. Teachers are once again reminded to start small, reflect, and continue to build and grow in their documentation skills.

Purpose

The purpose section of the 6 Ps of Empowerment website has a slightly different format than the other webpages as it is not a principle that stands alone; it is a prinicple that is incorporated into all of the other principles. Purpose is presented as two metaphors. It is first introduced as the engine that drives a train with play, projects, passions, peers, and portfolios being the other cars of the train. Purpose is what pulls all the other Ps foward and keeps it focused on curriculum and 21st century competencies. Without purpose, the classroom may be filled with a lot of fun activities but the learning can easily become directionless. The cars on the track remain motionless and stuck as unintegrated learning often is in student brains. Resnick (2018) states, "when students solve sets of disconnected problems, they often end up with disconnected knowledge, without an understanding of why they were learning or how to apply it in new situations" (p. 53). The lack of purpose often demonstrates itself as teachers finding fun crafts on Pinterest to lead students in and then searching for loose curricular ties for that activity, or worksheet activities where students learn about an individual letter with no context or purpose beyond memorizing the letter. With purpose, students learn about the letter A through purposeful writing activities such as creating a supply list for the dramatic play center or creating a poster to share what was learned during a passion project. When going through steep mountain passes trains often need more than one engine. One to pull and one to push. Purpose is also what nudges

students to continue learning. It is a large factor in developing intrinsic motivation for students. When students know the reasons behind an activity they are more willing to engage with the activity without extrinsic rewards such as stickers and free time.

Purpose looks slightly different when considered in relationship to each of the other principles. In play, purpose is what seperates free play from play for the purpose of learning. Diamond, Grob, and Reitze (2015) state "teachers must ensure that a preference for experiential learning doesn't prevent them from monitoring children's acquistition of skills, and teaching the skills necessary for academic success" (p. 12). Without being purposeful, play will not address curricular outcomes. Without scaffolding of the play, students will not progress beyond current levels of understanding and skills.

In projects and passions purpose is found in choosing an issue or question to focus on. If the issue is not relevant, if the students do not see any purpose in finding an answer to the question, the project will not achieve its ultimate goals. Resnick (2018) states, "the only way they can persist and persevere through all the challenges is if they work on topics that they are truly passionare about" (p. 72). Without purposefully choosing a topic for a critical inquiry or passion project student will not endure to the end without the use of extrinsic rewards. Purpose is found in providing an authentic audience to share student learning with. Students understand that the information they are gathering and learning about is important and they will be sharing that information with others for whom the topic or issue is relevant.

With peers, purpose is found in the careful planning of peer interactions for the purpose of assessment and increased knowledge. Resnick (2018) states, teams ar dynamic and flexible, evolving to meet the needs of the project and the interests of the participants" (p. 93). When grouping peers together for learning activities teachers need to consider what the aim and goal of

the acitivity is. Are students being paired for the purpose of addressing gaps in learning or common learning goals? Are students being group so that one student may take on a mentor role? Are students being grouped because of a common interest or passion? My hope is that the analogies presented on the Purpose webpage will be thought-provoking for teachers and help them understand and appreciate the holistic framework of the 6 Ps.

Conclusion

Engagement is no longer a strong enough goal for students in the classroom. Students need to be empowered in their learning. Our classrooms need to reflect democracy and the society we want to build for the future. Designing our curriculum and instruction within a 6 P framework provides students with the opportunities to build the knowledge and skills they need to become proficient critical thinkers and caring citizens: "This sort of education is a necessary ingredient of a just and democratic society. It nourishes a concerned and active citizenry" (Diamond, Grob, & Reitze, 2015, p. 7). Through the use of critical inquiry projects, peer interactions, passion projects, portfolios, play and purpose students actively participate in a democratic classroom. They learn that their voice matters and that positive relationships are crucial for learning and living. Students gain experience is what it means to be a good citizen,

The future needs us to teach students to think both critically and creatively. Robinson (2015) states, "In the right circumstances we are highly imaginative and creative. In a culture of compliance, these capacities are actively discouraged, even resented" (p. 37). By designing learning opportunities in my kindergarten program around the 6 P principles, I have seen an increase in creative thinking by students as well as students having more courage to try new activities and take risks in their learning. The ceiling is high and the walls are wide (Resnick, 2018).

Incorporating the 6 Ps into my kindergarten classroom has changed the energy in my room. Students are excited to come to class, I spend very little time disciplining students now and more time teaching students. Montessori (1976) noticed this same phenomenon when she wrote, "it would seem to me that children are very well disciplined indeed when they can move around a room in a useful, intelligent, and free fashiom without doing anything rude or unmannerly" (p. 54). Students are intrinsically motivated and I no longer need a drawer full of stickers and rewards to get kids to engage and comply with learning tasks. They know that they are active participants in their learning, and that their learning and growth is their responsibility and I am there to help. Students want to have a say in what they do and what they learn. Shalaby (2017) states, "they urge us toward a conception in which power is shared and in which there are no throw-away lives" (p. 169). I no longer go home from work exhausted and frustrated. I no longer spend my lunch break complaining about how unriuly or difficult the students were. I go home excited about the next day and what I will be discovering with the students.

Far too often we try to change children to fit the mold of school. Shalaby (2017) states, "We rely on changing children rather than changing classroom demands" (p. 681). This is not helping our students, ourselves, nor our future leaders. It is time to change how we teach and how our classrooms function to meet the demands of students today. The 6 Ps of empowerment are principles for instructional design that represent a step towards the classrooms our students need and deserve.

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