“Yes,” we said. “The hundred is there!”

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No Way. The hundred is there.

The child has
a hundred languages
(and a hundred hundred hundred more)
but they steal ninety-nine...
—Loris Malaguzzi
(Edwards, Gandini & Forman, 1998: 3)

Children enter school as proven learners who are intensely curious about the world around them. They have developed learning strategies which have allowed them to acquire, and, in some cases, master, complex bodies of knowledge and activities such as speech and language, social structures and behaviours, right and wrong. This knowledge has mostly been acquired by informal experimentation and discussion; hypothesis making and testing; questioning which arises naturally in the play; and meaning-making of their home and surrounding environment. Very little if any of this knowledge is acquired in settings, or via processes which bear a resemblance to what we see in typical school classrooms.

It seems to us, three primary teachers with varying years of experience about to embark upon our research of Exploratory Time, that as young learners move through the school system, their curiosity wanes and their freedom to learn in the style which they have innately developed becomes more restricted. We believe that teachers in general fail to trust children’s instincts to learn things, and how and when they need to learn them. They are then measured on their ability to retain what we think they should know and graded like commodities in the market place.

“What would it look like if we gave one hour of every school day to students to let them learn what they want to learn?”

Steven Wolk asked this simple question in an article entitled “The Benefits of Exploratory Time” from Educational Leadership Vol. 59, No. 2, Oct, 2001 and it has become our question too. Encompassed in it are many questions of curriculum delivery. Who makes the decisions in the classroom about what is learned or not learned? What is the actual role of the teacher and how do we carry that out? What is the actual role of the student and how does he carry that out? How do different teaching styles (i.e. direct instruction, cooperative learning) affect learning? What does time on task and engaged learning look like? If children are learning what they really want to learn, is discipline an issue? What matters more, product or process? What is considered successful learning? How can we be accountable for students learning what they need to learn?

Giving students Exploratory Time each day to learn about what they want to learn may strike some educators as a waste of valuable school time. On one hand, it may seem to be setting up an unstructured free-for-all approach with little actual learning going on and with the implication of
little responsibility on the part of the teacher. On the other hand, maybe an undertaking like this actually requires even more planning, preparation and structure on the teacher’s part.

All three of us work with young learners between the ages of five to eight years of age. At these early ages, children do not have much choice or control in their daily school lives. They rely on parents, babysitters or older siblings to get to school. Most of what they do in a day is directed by someone else, either their parents at home, or their teachers at school. Yet the driving force for us to try Exploratory Time with our young students is their unending curiosity about the world they live in, a curiosity that has manifested itself daily in our classrooms since the beginning of the school year. Their interests are myriad. But would they be able to sustain a self-directed study of one of these interests?

How much will we need to direct? How many will be able to formulate questions that they can seek the answers to? Will we, as teachers and as classes, be able to survive the anticipated chaos of so many people doing so many individual activities at once? How will our special-needs students fare? How will an autistic child, or the children who are at earlier stages of English language development cope? What kinds of questions will come up? How will we set up the project? How will other teachers view what we are doing? Will our administrators see the value in our research? What will the reaction of parents be?

What would a classroom look like if we gave one hour of every school day to students to let them learn what they want to learn? Would this way of teaching address some of the questions we have carried with us since the start of our teaching careers? Where might this research lead to? Will our teaching be changed as a result? We looked forward to exploring the possibilities.

The Write Stuff

Steven Wolk’s challenge “Let’s give one hour of every school day to students to let them learn what they want to learn.” (Wolk, 2001: 56) became the catalyst for our research question. Many educators, such philosopher and educator such as John Dewey in the early 1900s, Loris Malaguzzi, founder of the Reggio-Emilia Approach in Italy in the 1940s, and free school thinkers such as John Holt of the 1960s, plus Steven Wolk, Lilian Katz and Sylvia Chard today, have grappled with the quest to find the individual in the learning process and how education occurs in an institutional setting.

Our question is clearly situated in the debate concerning the basics in education, as curriculum theorist Madeleine Grumet discusses it. She says, “...education is about a human being making sense of her life in the world, and when we confuse her movement with the stops on her itinerary, or worse with someone else’s travel memoirs, we obstruct it” (Grumet, 1996: 17). Our question, seen in this light, is an attempt to allow our students to move on their own journey, without predetermined stops imposed by curriculum or us.

Philip Jackson’s “The Daily Grind” (1997) is a haunting document which forces us to stop and think about what our students are really learning when we think we are teaching them something else.
As he learns to live in school our student learns to subjugate his own desires to the will of the teacher and to subdue his own actions in the interest of the common good. He learns to be passive and to acquiesce to the network of rules, regulations, and routines in which he is embedded. He learns to tolerate petty frustrations and accept the plans and policies of higher authorities, even when their rationale is unexplained and their meaning unclear. (Jackson, 1997: 99)

Jackson goes on to say, “Curiosity, as an instance, that most fundamental of all scholarly traits, is of little value in responding to the demands of conformity” (Jackson, 1997: 99-100). No teacher would come right out and say that we teach conformity over curiosity but just what are we teaching when we redirect a student who has strayed from a lesson, or is not doing what we want them to do? Yet the nature of the educational institution dictates that we must teach conformity in order to survive in that very institution!

Faced with a return to an increasingly conservative approach in education, it does not completely surprise us then that to date we have been unable to find any recent research addressing the issue of student choice and freedom, specifically in the Kindergarten to Grade Two classrooms. We did find educators whose work inspired and encouraged us to forge forward in our research. Perhaps our findings will begin to fill in the huge gaping hole of research around this issue. We do believe it will mark the beginning of life-long personal action-research and the continual quest to see what it looks like when we give children time each day to learn about what they want to learn.

Valuable historical views and insights have been gained from reading John Dewey. He believed that learning was fundamentally a social process and that in order for students to attain their natural potential they needed to interact with a rich environment rather than endure a process akin to filling empty minds in static bodies with information. In summing up his pedagogic creed regarding education Dewey wrote:

…I believe that the individual who is to be educated is a social individual, and that society is an organic union of individuals. If we eliminate the social factor from the child we are left only with an abstraction; if we eliminate the individual factor from society, we are left only with an inert and lifeless mass. Education, therefore, must begin with a psychological insight into the child’s capacities, interests, and habits.

It naturally follows that he would see the school in a similar light. He states:

…the school is primarily a social institution. Education being a social process, the school is simply that form of community life in which all those agencies are concentrated that will be most effective in bringing the child to share in the inherited resources of the race, and to use his own powers for social ends. (Dewey, 1940: 6).

As our students engage in the process of investigation of their own interests during this project, we hope we will witness their enthusiasm and imagination. Dewey felt imagination had a fundamental role in education.
The imagination is the medium in which the child lives. To him there is everywhere and in everything which occupies his mind and activity at all a surplusage of value and significance. The question of the relation of the school to the child’s life is at bottom simply this: Shall we ignore this native setting and tendency, dealing, not with the living child at all, but with the dead image we have erected, or shall we give it play and satisfaction? (Dewey, 1990: 61).

It could be argued that Dewey’s views of education were developed in an unrealistic setting, which makes his theories difficult if not impossible to implement in regular public school systems. If Dewey is an ideal, what sort of guidance do we take from him? We certainly feel a closeness to his pedagogy and feel we are striving to move in a similar direction to him in many ways. Yet we must not feel discouraged by his advantages nor bound by his direction. If we are to benefit from him, we must find ways to use his ideals in whatever way we can in our own crowded and challenging situations. Fundamentally, we feel his beliefs and comments about education apply as much today as they did when they were written. It is perhaps a sad reflection on the progress of education during the past century, that debate still rages over his progressive views, and that we have not been able to move more quickly to embrace his pedagogy.

That ideals similar to Dewey’s can indeed be the inspiration behind progressive, project oriented education in a practical setting is nowhere more evident than it is in the northern Italian town of Reggio-Emilia. Not unlike many places in Europe, the immediacy of rebuilding the town after the devastation it incurred during the Second World War included the rebuilding of schools. That a radical vision of a different approach to education would be born in this small town is no real accident. In an interview with Loris Malaguzzi, the founder of the Reggio-Emilia Approach schools, he said of the parents "They asked for nothing less than this school, which they had built with their own hands, be a different kind of school, a school that could educate their children in a different way than before" (Edwards, Gandini & Forman, 1998: 58).

This is a region of Italy which is known as the “red belt” and where the Communist Party has been very strong. With the establishment of fascism in 1922 when Mussolini came to power, these parents knew what it was like to grow up in an educational system with repressive, fascist, authoritarian values. Participation in the resistance to fascism had been strong here. These parents were determined their children would not live in the same oppressive, authoritarian world that they had grown up in. They had a radical vision of a different world for their children and a different way of learning.

Thus a project-based approach to teaching was established in 1946 and has had a significant impact on education in many places around the world since. From the start, the integration of the entire community was first and foremost a priority. And in a small Italian city with a central square onto which the school was built, this is immensely easier to achieve than in a sprawling North American urban centre. But it is here, in this small northern Italian town that people from all over the world come to see and learn about project-based learning. The implications of this approach are serious ones for our research topic. These educators believe that:

when the topic of a project is very familiar to the children, they can contribute to the project from their own knowledge, and suggest questions to ask and lines of investigations to pursue; the children themselves can take leadership in planning,
and can assume responsibilities for specific observations and information and artifacts to be collected and closely examined. Such projects that involve young children in investigating real phenomena offer them an opportunity to be the natural scientists or anthropologists they seem born to be. (Edwards, Gandini & Forman, 1998: 33).

The entire approach to education seems to be one of continuous research and reflection and a belief that if we stand back and study children seriously we will end up "discovering not so much the limits and weaknesses of children but rather their surprising and extraordinary strengths and capabilities linked with an inexhaustible need for expression and realization" (Edwards, Gandini & Forman, 1998: 78). They are firmly committed to a teacher always being a researcher.

What encouraged us as we prepared to embark on Exploratory Time in our classes was the uncertainty the Reggio-Emilia approach acknowledges.

It is true that we do not have planning and curricula. It is not true that we rely on improvisation, which is an enviable skill. We do not rely on chance either, because we are convinced that what we do not yet know can to some extent be anticipated. What we do know is that to be with children is to work one third with certainty and two thirds with uncertainty and the new. The one third that is certain makes us understand and try to understand. We want to study whether learning has its own flux, time and place; how learning can be organized and encouraged; how situations favourable to learning can be prepared; which skills and cognitive schemes are worth bolstering; how to advance words, graphics, logical thought, body language; symbolic languages, fantasy, narrative, and argumentation; how to play; how to pretend; how friendships form and dissipate; how individual and group identities develop; and how differences and similarities emerge. (Edwards, Gandini & Forman, 1998: 89).

What we set out to do over a two-week time-period is something they have been working on for nearly fifty years! Yet something in the three of us made us willing to take the risk of the uncertainty in exchange for the possible. And it is the work of places such as the Reggio-Emilia schools which encourages us even in the difficult times in which we teach.

There are those who wish that the Reggio-Emilia approach could simply be packed into a manual and sent off to set up in schools all over North America but it is not merely an educational philosophy, it is integrally tied to a culture and way of life unique to Italy.

But there is much that can transferred from one culture to another. The impact of those who have gone to observe in Italy is significant. Lilian Katz and Sylvia Chard are two such influential people who have spent a lot of time learning from their Reggio-Emilia colleagues. In their work, Engaging Children’s Minds: The Project Approach, they acknowledge what they learned there and explore what this means to learning and teaching in a North American context.

Katz and Chard see the teacher’s role as an advisor more than instructor. Project work begins with discussion and then moves from fieldwork or finding information sources to a clarification of what the child wants to find out. This is followed by the actual investigation or research.
component and concludes with the display or sharing of what has been learned (Katz & Chard, 2000: 73). Most importantly they remind us that a commitment to project work means a teacher’s willingness to accept all the children in a class, at whatever level they may be. They believe that project work:

- takes into account all four kinds of learning goals: the acquisition and construction of knowledge, the mastery of social and basic skills, and the strengthening of important intellectual and social dispositions, as well as the development of desirable feelings...Project work can provide activities in which children of different ability levels can contribute to the ongoing life and work of the group. (Katz & Chard, 2000: 97).

Steven Wolk’s vision of the ideal classroom is one that would be seen as celebrating the ninety-nine or hundred more languages of children by nurturing meaningful literacy and democracy. Like John Dewey, Wolk believes that democracy is a way of life that embraces the ideals of community, empathy, the common good, responsibility, freedom, equality, thoughtfulness, and critical consciousness. However, Wolk has taken Dewey’s ideals and transformed them into a workable reality in today’s classroom.

Wolk reflects on memories of his own schooling and details how he strives to empower the children in his classroom to think for themselves. “I was determined to make my students’ experiences in school purposeful and meaningful, because I realized how meaningless and purposeless—how regressive—my own had been” (Wolk, 1998: viii). Wolk has been able to step beyond what he was taught in his teacher education and engage in a process that would, on one hand, benefit the students in his classroom and, on the other, be viewed by many as controversial especially with the current push for schools to teach children the basics.

Although teaching the basics provides a delivery system that seems to fit the need of today’s school system, Wolk reminds us that most adults, including teachers, passed through just such a system and he asks us to

- Think about all those years and all of that stuff you were made to study and read about and write about and take tests on. Now ask yourself this: How much of all that content is an important part of who you are today? Let’s make the question even easier: How much of all of that stuff, the lectures and textbooks and worksheets and essays full of the history, the science, the math, the reading and writing, do you know right now? (Wolk, 1998: 35).

A question like this begs us to examine why we continue to teach the way that we were taught and gives us the inspiration to try something that seems so radical yet simple at the same time. In giving children time each day to learn about what matters to them we must open our own minds as well as the minds of the children in our classes to learning in a new way. We will become facilitators in their learning process, suggesting new directions as needed and guiding them in their search for, and understanding of, information. Just as Wolk did, we will step back from our role as teachers and join our students as learners.
Steven Wolk believes that children from Kindergarten to Grade Twelve would benefit from learning through Exploratory Time even though all his experiences have been with students from Grade Four through Eight. When we contacted him, he was unaware of other teachers engaging in Exploratory Time with students as young as ours. This seemed to be confirmed by our inability to find supporting research through libraries and online databases. Why is there such a gap in the research?

In summing up this review, it is important to note that, what is, simply is. In terms of our project, we are faced with the ‘what is’ of twenty-first century education in British Columbia. We are teaching in a system which in many respects, bears little resemblance to Dewey’s ideals, and which is loath to give the time to independent investigations as proposed by Wolk. We were however, intrigued by the concepts evolving from our research and eager to test them out in a field setting and evaluate the results.

Where Did We Do It and Who Did We Do It With?

We all teach in a large metropolitan area in British Columbia. The schools we work in are quite different.

Deanne’s Kindergarten Class

Deanne teaches Kindergarten at Hillside School, a dual track, hearing and deaf facility with approximately 275 hearing and 35 deaf students from Kindergarten to Grade Seven. Situated in an upper middle class neighbourhood, Hillside is surrounded by single-family houses of varying ages, but has seen a great deal of new home construction in recent years. There are no apartments in the school’s catchment area, save for the northeast corner where relatively expensive high-rise buildings are the dominant structure. The area has proven to be popular with immigrants, which is reflected in the school’s large ESL and new Canadian population. While some families from lower socio-economic strata live in the area, they are in the minority. A fairly new school, it was designed to provide equal access to both populations and as a result has a unique sense of openness and warmth. In order to provide equal access to both groups of learners, there are, in each classroom and throughout the hallways, TV monitors for video distribution of school news and notices. Deanne’s class is on the first floor and is situated a short distance away from other classrooms which provides her with an area outside her room which can be used for active learning without disrupting other students.

One wall of Deanne’s room is a bank of south facing windows. A built-in window seat (bench) is a favourite reading area. There is a large wooden house in one corner of the room, a sand table, water table, puzzles and almost every type of manipulative toy imaginable. There are three computers of various ages and temperaments. The children work at round tables that seat between three and five students. They share materials that are located in tubs at the centre of each table. Her room is filled with children’s work, lots of colour and there are words everywhere—the room is often referred to as a ‘giant dictionary’!

Deanne’s entire morning Kindergarten class of fourteen students all participated in the research. There were six boys and eight girls all of whom had been together since September. Of these,
nine were English as a Second Language (ESL) students. One child required constant
behavioural monitoring by the teacher. They were a friendly and lively bunch of students who
enjoyed school and preferred routine to change.

Her afternoon Kindergarten class of sixteen students, seven boys and nine girls, also participated
in the Exploratory Time research. There had been one new student since September and during
the study one student moved. There were five ESL students in this class, however, three of these
students are able to communicate and understand directions with very little assistance. This class
had one child with Down’s Syndrome who received full-time support from an Education
Assistant (EA). The class functions at a very high social and academic level. One of the
contributing factors to the advanced social state of this group could be that nine of the children
attend the same daycare. Their understanding of the world is beyond that of any class Deanne
has had in her five years at Hillside.

**Gary’s Grade One/Two Class**

Gary also teaches at Hillside. His classroom is situated as one of four around a central work area.
These pods are the most common type of class arrangement in the school. Physically, his room is
a crowded area with five round tables for students to work at, three large sets of wooden shelves
on wheels for their individual bins, centre materials, a large class library area, two teacher desks,
(the other belonging to the EA), a bank of five computers with a printer, three filing cabinets, and
various other bits of furniture necessary for the running of a classroom.

Gary had a split Grade One and Two class of twenty-three students, with fourteen Grade Ones
and nine Grade Twos. There were thirteen boys and nine girls. It was a stable group with few
transfers either in or out. The students were naturally a loud and fractious group who, as a class,
had difficulty doing many simple class routines. Typically, any interruption or unexpected
occurrence caused at the very least, a loud verbal reaction among many of them, often
accompanied by other disruptive reactions such as movement around the room, departure from
the classroom, rolling on the floor etc. Individually they were friendly and enjoyable children,
who treated each other well.

The class was a diverse ethnic mix. Twelve students received ESL support. Four others received
Learning Assistance (LA) and one student was on a behaviour modification program. There was
also a child with Down’s Syndrome who had a full time EA.

**Valdine’s Grade Two Class**

Valdine teaches Grade Two at Riverside School. Constructed in the early 1900s, it is a big, old,
brick building with a large (600+) student population from Kindergarten to Grade Seven. It is
situated in a socio-economically, ethnically and culturally diverse area with students coming
from a myriad of backgrounds from single family dwellings, apartments, rentals suites and large,
extended family housing situations. The school is not identified as an inner city school yet has
many characteristics of one.

Valdine’s classroom is an average-sized, drab coloured room. The furniture is old. The desks are a mix of mostly old-fashioned tubular ones with a half dozen new ones (separate desks and chairs). Student desks were rearranged into groupings based either on topics students had chosen or careful teacher consideration of personalities and anticipation of the best working situation. There are only two large tables where children could work collectively, a round one at the front of the room and an oblong one at the back. There is a large carpeted area at the front of the room with shelves of reference books and hundreds of picture books and early chapter books. A display table at the front of the room changes frequently at the whim of both the teacher and the students.

Participating in Valdine’s research were nineteen students, eleven boys and eight girls. More than eight different ethnicities and first languages were represented in this class. Of these nineteen students, there were four learners with Ministry-designated special needs: one hearing impaired, one diagnosed with Fetal Alcohol Syndrome (FAS), a child with autism, and a child diagnosed with severe learning disabilities. There were at least five other students waiting for testing to determine other special learning needs. Two of these were likely to fall in the range of giftedness and three were likely to be found to have language processing problems. An additional child was also in the process of going through testing and interventions for Attention Deficit Hyperactivity Disorder (ADHD). There was an EA assigned to the child with autism. It was a class full of personalities and delightful peculiarities.

What Did We Do?

Our methodology of choice was participant/observer. From our readings, and our interpretation of what Exploratory Time might be, we felt that a methodology that recognised we would be active players in the research and not merely observers would be crucial. And while we set out with the same approach to the research, we each agreed that we would make modifications to suit our own situations and teaching styles as we found it necessary.

Exploratory Time was introduced through discussions with all our students. Students were asked to think of a topic they would like to learn more about. They were told they would have an opportunity to research the topic of their choice and present their learning to the class in any manner they chose. In Deanne’s and Gary’s class, a set of easy to read picture books covering various topics was used to stimulate interest and ideas. Valdine enlisted the assistance of the librarian and did a similar book walk with the students to help in their topic selection. We each sent a letter home prior to the actual start of Exploratory Time informing families of the topics and suggesting possible ways they might aid in their children’s learning.

Our classroom expectations for Exploratory Time were established with the children right at the start. These rules included: 1) Serious work time; 2) 8cm voices; 3) Ask a friend for help; 4) Wait patiently to talk to your teacher if someone else is talking to her/him; 5) Share things; and 6) Tidy up neatly and carefully.

We had talked about using some sort of dress code to signal when Exploratory Time was underway. Deanne and Gary chose a clipboard as their signal. Valdine donned a white lab coat to inform her class that they were involved in an experiment for the University. We all told the children when Exploratory Time was commencing. We each had specific notebooks to record
observations and notes as well as a checklist we had designed. However, from the start of Exploratory Time, it became obvious that it was going to be heavy on the participatory end and very difficult on the observer end. Most of our recording of notes and observations happened at the end of the day.

Deanne and Gary both visited the school’s library and took out books on each of the children’s selected topics. Gary supplemented this with a visit to the public library. They also enlisted the help of older students in the school. Deanne’s students’ “big buddies” came on the first two days to act as readers and scribes, assisting only when a Kindergarten specifically asked for help. Gary’s buddy class found information related to their little buddies’ topics and then they spent an hour with their little buddies, sharing what they had found. The week preceding Exploratory Time, all of Valdine’s students went in small groups for forty-minute sessions with the librarian to learn how to research and gather material on their topics. As the week progressed we found ourselves bringing in other items related to the children’s topics—rocks, fossils, information from the internet, books from our own homes. Each of us used a system of plastic tubs labelled with each student’s name and topic title to store and organise research materials. The children quickly learned to find their own research tub and set to work. Any additional material they brought was added to their tub.

Time was set aside in the teaching schedule so that the students could engage in their Exploratory Time for up to an hour per day. Deanne’s morning and afternoon Kindergarten students, who attend school for two and a half hours daily, worked for thirty-five to forty-five minutes each session. Gary and Valdine’s students worked at least one hour per day. These sessions were scheduled at various times each day, depending on other time commitments in their daily schedule. Gary chose the first part of each day for Exploratory Time, as it seemed to have the fewest interruptions associated with it. Valdine had to schedule the one-hour blocks at various times throughout the week with sessions in the morning the first two days and afternoons for the rest of the week.

Deanne asked her students to find one fact per day and used a small booklet for them to record their observations. This took the form of a picture. The Kindergarten students would then ask Deanne to help them write words to describe their learning and copy the words into their booklet. Students often chose to complete more than one page each day. Gary asked his students to find one thing that they wondered about their topic and one thing they had learned. They wrote these, and other bits of information they discovered, on a large 11 x 17 paper. Gary encouraged his students to report in a variety of ways such as making a poster, a play or a picture. Valdine started off by giving her students an 11 x 17 paper folded into four pages labelled My Question, I Know, I Wonder and I Need. She purposely kept the directions vague and open-ended and did not specify in what way learning needed to be shared.

As Exploratory Time progressed, Deanne and Valdine both enriched the process by bringing in videos on various topics where they were available. Deanne invited a Grade Seven student to bring her dwarf hamster to visit a group of four girls who had selected hamsters as their topic. This same group visited a classroom of deaf students who had a Teddy Bear hamster as a class pet. This was a wonderful learning experience for both groups of students. (Deaf students as teachers and Kindergartens learning in a new way!) She also provided a real world focus for the gardeners by bringing in seeds and inviting the gardening group to bring a pot of dirt to plant
them in. Gary was able to locate a collection of rock samples which supported two of the projects in his room. Valdine brought her fossils from the Tyrrell Museum in Alberta.

Deanne’s students engaged in their first Exploratory Time topics for five days and then immediately embarked on a second topic using the same methodology. Exploratory Time, including the reporting process, lasted for six school days in Gary’s room. While the actual identified Exploratory Time lasted for only five days, including research time in the library and sharing what they learned the following week, it took a total of fourteen days in Valdine’s class.

*If You Build It They Will Come.*

What did we actually see in our classrooms during the course of Exploratory Time? In reporting our results, we again take our lead from Steven Wolk by organizing what we saw according to the principles which he believes underlie the exploratory process.

*It nurtures a love for learning.*

Wolk says “Our schools don’t really value living a curious life and pursuing their own learning: if they did, there would be nothing controversial about Exploratory Time” (Wolk, 2001: 57). Even before embarking on Exploratory Time, all three of us have been committed to encouraging “living a curious life.” Throughout the year we continued to bring in things and put them out to explore. Some were related to what we were studying, others are just neat things we stumbled upon and thought the children would like to see and feel. Primary students are curious, and with good reason. There really is so much that is new. Our students were enthusiastic to partake in our research with us. From the very point of introducing the idea and just looking at books to see what they might choose to learn about, there was a palpable buzz in each room. All of our students were able to identify something they wished to learn about. And, while several students changed topics a few times before we officially began, once Exploratory Time was underway everyone stayed focussed on the same topic for the week. One interesting observation was that in the Grade Two class, it was the children who usually do the best in daily work who had the most difficult time settling into the week. Yet they all remained committed to, and excited about, the idea of Exploratory Time. All the students wanted to do it again and identified what they would like to learn about next. In fact, Steven, a Kindergarten student exclaimed, “I want to keep doing this until I’m an old man and even then I still want to keep doing it!!” Steven got his wish, and the Kindergarten students continued with Exploratory Time for the rest of the year!

*It encourages meaningful learning through intrinsic motivation.*

Wolk argues that if the learning comes from within us, it is deeply purposeful. We witnessed this in our classrooms. In Kindergarten, Jason researched Volcanoes on the Internet and made a poster with his Mom. Pierre researched his family and did a report on his grandfather who was a policeman in his native country. Kris went home and built seven different kinds of boat models the weekend before we were to begin because, once he had chosen his topic, he just couldn’t wait to start! Jasmina, who changed her original topic the Friday before we were to begin, went to the public library that weekend and made pages of notes about bugs since she wanted to assure
her teacher she was serious about her topic and not just changing to work with her friends. Later in the week she also stayed up till eleven-thirty one night thinking and planning her group’s presentation. Arlan became completely fascinated by the names of the places fossils come from and the whole notion that humans evolved! Manji, a Grade Two student who on a daily basis is scattered and very disorganized, revealed an entirely different side during Exploratory Time. Midway through the week her teacher discovered Manji’s notebook from home. In it was a list of all the things her group still needed to do, carefully and methodically thought out. This side of Manji had not appeared in daily classroom activities, either before or after Exploratory Time yet here was proof that when something truly mattered to her, she could be quite focussed on a task!

During Exploratory Time most children did not come up with the usual “I don’t get it!” or “Do we have to do this?” Instead they came up to say things like “Is there a video on my topic?” “Can we please have more red paint?” More importantly, we were not having to redirect children to their work and not one of us heard the dreaded words “I’m finished!” Some students even traded choosing time or asked for additional time to continue working on their Exploratory Time topics.

It creates true communities of learners.

Wolk talks about “a social classroom environment that helps them become active and responsible community members. Exploratory Time reflects learning as a social act.” We each liked the way our classrooms looked and felt during Exploratory Time. They were very busy places but interestingly enough the noise level was not nearly as loud as we had expected. We think this was because everyone was so committed to their tasks that the talk was indeed purposeful. A typical scenario of that hour-long time would look a little like this. Depending on the classroom, children would group themselves around tables, on the floor or at other centres where space permitted. Some worked at their own desks. A particular topic on video could garner anywhere from one to six keen observers. A real-live scientist working with two students could become the focus of a whole class for that day.

While a video was playing there might also be another student sprawled out on the floor in front of the video reading facts from a book or working on a picture or poster. Some students even spilled out into the hallway, using cardboard and paint to construct a doghouse. There was cross-pollination from topic to topic. Velma took a break from studying penguins for an afternoon to help Frida with a tricky aspect on the bird feeder she was constructing. Harold would let people know that the next movie up was about their topic. Students would see something that caught their interest in a video that was playing and leave their work to watch for a while. We did not once hear “STOP IT! You are bothering us.” or “Go away.” People were mostly mindful of other’s things and, with so many things spread out around the room and particularly on the floor, there were no disasters. When someone spilled something they quickly began to clean up and, on many occasions, others came to help.

While many students were doing independent topics, those working in groups worked extremely well together. They helped one another and shared ideas and tasks. Ours were very social rooms, in a very pleasant and friendly way. People were genuinely curious about what one another were doing and helpful if someone needed assistance. In the week before Spring Break, while other
students and teachers anxiously awaited their week off, we were all happily and enthusiastically engaged in our explorations.

*It develops self-esteem and celebrates uniqueness.*

Because the only real expectation we set for the students was to pick a topic they wanted to learn about, and decide how to share what they learned with the rest of the class, the possibilities were endless. Although we each had different expectations for the children in our classes, we were all less concerned with product and much more concerned with process. It mattered that they learned, not if they had a book made or a poster completed, or a play to present. Kris, a Grade Two student, struggled with reading and writing. Yet he set the bar high for his class in terms of sharing what he had learned when he brought in his boat models. Did he learn something? You bet! Did the other students appreciate what he shared? Absolutely.

In each of our classes there were examples of children with special needs actively engaging in their topics and with their peers. Cynthia, an ESL Kindergarten student with Down’s Syndrome, thoroughly enjoyed each session. The improvement in her drawing and social interactions exceeded what had been seen prior to Exploratory Time. The other students were thrilled when she would approach them and show what she had learned about cats or bears. Veronica, a Grade Two student with Down’s Syndrome produced a video on her topic of dogs with the help of her EA. The other children all gathered around to watch the video and to celebrate Veronica’s achievement. Bob, a Grade Two child with autism, who is also learning English as a Second Language, did his first oral class presentation on birds during Exploratory Time, which was exciting for everyone in the class.

Once the students began sharing what they learned, the questions and comments reflected a genuine interest in individual topics. What is also interesting is that when asked about what they would study next if they had another Exploratory Time, many chose topics others had presented.

*It uses real-world resources.*

We used both school and public library books as the primary source of information. In addition some children used the Internet, and we tried to get in as many videos on topics for students as we could find in our school libraries. Jasmina visited a museum where her father had to make a video to bring and share with the class! Many more real things began to appear in our classrooms—fossils, rock samples, and seeds. A Grade Seven student brought her pet hamster to the Kindergarten class, which provided a very live, hands-on experience for their hamster study. Barry and Steven, who were studying scientists, were thrilled to have a visit from a real live biologist, who also happens to be the father of a student in the class. That day every Kindergartener wanted to be a scientist! (See Appendix A)

*It brings more content into the classroom.*

Over that week, Deanne’s two Kindergarten classes were studying fifteen topics, Gary’s Grade Ones and Twos, seventeen topics. Even if we filled our rooms with lots of interesting items to stimulate the students’ curiosity, we could not have covered such a myriad of topics. What’s interesting about the actual topic
selections is that they fit within the primary curriculum but, as teachers, we would never think to expose our learners to them all at once. It makes us ponder this in relationship to a word wall. A noted Californian literacy consultant, Donna Gordon, points out that you should put your entire word wall up all at one time since you never know which words a child will be seeking at a particular moment. Maybe this holds true for possible learning topics too?

*It teaches skills.*

First the students had to decide on a topic to learn about. They had the opportunity to look through many books to encourage a broader view of what was possible but in the end the selection was theirs alone. Some may have caved in to peer pressure but those that did stayed true to the eventual topic and did great work.

In the first session of Exploratory Time, the Kindergarteners needed a lot of support to learn how to use books as research tools, however as the week progressed their newly learned strategies allowed them to become much more independent. Gary and Valdine were purposely vague in their directions and instructions. They wanted to see what it would look like without telling their students what they should do and how to do it.

Valdine enlisted the aid of the librarian who agreed to take small groups to go over research techniques and find topic-related books in the library. A sneak peak during one of these sessions was a delight. Jemma and Teri, two tiny Grade Two girls, were almost buried behind the butterfly books they had spread out before them. Head to head, they were reading facts and pouring through the material.

The five students exploring bugs were having a hard time coming to any decisions about what bug or bugs to study, but then this is a group for which the social aspect was as important as the chosen topic! This group, the only mixed gender group, included Darren, the student who had been identified with FAS. Throughout Exploratory Time he bothered no one. His final comment stated how much he liked cooperating with his group. That in the end they worked together and created a puppet show is testimony to how they coalesced as a group.

Mervin was carefully flipping through spider books at his table. The librarian noticed something unusual. After finding the non-fiction section on spiders, Mervin chose very few from the shelf. A closer look revealed that he had picked only books with photographs. She asked why he had so few and he responded that he wanted “real” information. He thought drawings meant they were fiction. She cleared this up for him and he chose many more books. If his mother asked him “What did you learn today?” he would likely have said “Nothing” or perhaps shared some fact about a spider he liked, but he would not have said “I learned non-fiction books can have drawings just like made-up stories.” But this is knowledge he will have for life!

Our students didn’t just rely on paper and pencil but instead learned how to use a variety of mediums to represent their learning. These ranged from building models to surveying class members’ opinions.

*It nurtures creativity and imagination.*
Our learners have not been in school long enough to know what a project really is and we didn’t want to influence the students with our thoughts of what a project should be. Our emphasis was on the learning process more than a finished product. Whether we gave them a book to record their learning in or asked them to give us a list of materials they thought they would need, their creativity and critical thinking was evident every day in their exploratory work.

While some students in the end chose to just tell what they learned, we also had models, painted posters (Maria’s humorous slogan on her gardening poster read “Peas rule the Earth”), craft items, games, books with illustrations, a large mural painting, a puppet show complete with both puppets and stage created for the production, a cardboard doghouse, and a video. Not bad for a week’s worth of Exploratory Time and open-ended expectations of product on our part.

“Yes,” we said. “The hundred is there!”

The declaration of the parents in Reggio-Emilia in the 1940s “against the betrayal of children’s potential, and a warning that children first of all had to be taken seriously and believed in,” (Edwards, Gandini & Forman, 1998: 58) rings so true. How many times leading up to the actual project did we each doubt our students’ abilities to rise up to the challenge? Along with this, how many times did we doubt ourselves?

Yet in the end we were rewarded with “discovering not so much the limits and weaknesses of children but their surprising and extraordinary strengths and capabilities linked with an inexhaustible need for expression and realisation” (Edwards, Gandini & Forman, 1998: 78). Our willingness to risk the uncertainty was well worth the experience and has changed how we look at what we can do in our classrooms. Just like Steven in Deanne’s class said, we too want to keep doing this until we are old and even then we want to keep learning and teaching like this!

Our students were eager and well behaved. And we, as instructors, in spite of the pressures of doing this for research, enjoyed a certain freedom as well to be encouraging, enthusiastic, supportive and, yes, even finding we had a little bit more time with individuals than we often have. Our worries about the parents’ reactions actually turned into an increase in parental interest and involvement both at home and at school. Our classrooms were filled with students and teachers who were happy and productive.

Wolk argues that school should be a place where children and adults work together as a community of learners (Wolk, 1998: 35) and perhaps this is why our roles as observers became so impossible to maintain. We were too busy being part of that community of learners to remain unconnected. And it was a very exciting place to be!

Chard and Katz had reminded us that project work meant a willingness to accept all the children in a class (Katz & Chard, 1998: 97) and what we witnessed during Exploratory Time reinforced this. Troubled children worked happily alongside others with no words of reprimand from the teacher; unfocused children stayed on task for the whole period of Exploratory Time; children who could not read or write were not denied the chance to learn something new and share what they learned in whatever fashion they determined, not a prescribed assignment by the teacher. And there was respect and an acceptance of these different learning and sharing styles among the students themselves.
Was Exploratory Time a resounding success for all the students who participated? We can answer yes, but it comes with a qualifier. While all of our students enjoyed Exploratory Time, not all of them were so able to embrace the openness and freedom awarded them. It seems that even as early as Grade Two, some of the students who traditionally do well in our classes are already entrenched in checking to be sure that what they are learning is what the teacher thinks is important. They seemed to have not fully allowed themselves to step outside of the box and break from the need of teacher approval. Happily, this did not seem to be the case in the Kindergarten classes. Yet in the end, it was a resounding “yes!” from all of our students when asked if they would like to learn this way again.

“Yes,” we said. “The hundred is there!” We watched, we listened and we heard them. Some of their voices are deafening in their strength. Some of their voices are subdued, hidden a little from us so we can’t steal them away, but growing stronger as they see no resistance. Sadly, a few could barely whisper, having already lost most of the hundred other ways to look and see and speak. They have learned too well “to think without hands, to do without head and to listen and not to speak, to understand without joy and to love and to marvel only at Easter and Christmas” (Edwards, Gandini & Forman 1998: 3). They think that they do not know and it is their teachers and adults who are the ones that know. But they are young enough to try again and maybe, just maybe, the hundred are still there after all.

Reflections one year later...

Gary

My eyes were opened through my participation in this study. I always believed in children as independent and motivated learners. This project further reinforced these beliefs and helped me to continue to define my role as a facilitator of learning. I was pleased also to be working with two highly skilled and motivated teachers who taught me much about what it means to be a teacher of young children.

Deanne

Exploratory Time was an amazing learning opportunity for me and for the children in my Kindergarten classes. For many reasons, it was impossible for me to engage in Exploratory Time this year, however, I am still committed to the process and am looking forward to next year. Although this form of learning presents challenges for young children who are primarily non-readers, my past experience has proven that the incentive of engaging in a topic of study that is close to a child’s heart can prove to be magical. I’m thrilled to be ‘graduating’ to Grade One next year and to work with students who have progressed just a bit further in their reading and writing …oh the roads that we will travel and the topics we will explore!!

Valdine

I loved doing Exploratory Time and certainly thought I would do it again. But the year seemed to fly by and I never tried it. Instead, what started as a behaviour reward for filling a coin jar
turned into an impromptu research all of its own. I called it Play Day. (We had three throughout the year.) It was an entire day of unstructured and unplanned play; their day to do as they chose. We had board games, craft materials, fancy materials for dress up, building materials, a puppet theatre, and all the regular flotsam and jetsam you can find in a typical Grade Two classroom. The only rule was “no Gameboys.” Some children had no trouble filling their time, some wandered about with friends at a loss of what to do, some flitted from activity to activity like little butterflies, and some came to me almost every ten minutes asking what they should do next. In the end, the excitement of the idea of a whole day of play turned out to be more exciting than the actual entire day. And interestingly enough, they did not change drastically from the first to the last. Perhaps because so many people confused the idea of Exploratory Time with play time when we embarked upon our research, I was drawn to try a variation on what we had done. Who knows, perhaps next year I will do both!

Resources


About the Authors

Valdine Ciwko has organised the Royal Winnipeg Ballet’s summer school tour, managed forty-two musicians through 21 towns in 31 days, coordinated thousands of volunteers for numerous
folk festivals in many cities across Canada, studied folklore in Newfoundland, programmed a pavilion for a world’s fair, ran a music store, and publicised hundreds of musical events, all of which prepared her to become a teacher at the age of 40. She taught adult refugees English as a Second Language which led first to her BEd and ESL specialisation from the University of Ottawa, and then to teaching elementary aged children. For the past two years, she has happily had her own Grade 2 classroom. She is proud to have completed her Masters programme and is honoured to have worked on Exploratory Time with Gary, Deanne and Division 19!

**Deanne Lawder** was born and raised in Vancouver, British Columbia. For ten years, she was employed as a Special Education assistant in several Vancouver elementary and high schools. She learned a great deal in this field and was motivated to take an educational leave in order to complete her Teaching Certification as well as a Bachelor of General Studies with a Minor in Early Childhood Education (Simon Fraser University). Since then, she has taught Kindergarten for seven years and is excited about the prospect of teaching K/1 in 2005/2006. In the fall of 2004, Deanne graduated with her Master of Education in Curriculum and Instruction. She was honoured to be a part of the magic that the Urban Learner 3 cohort created and enjoyed researching Exploratory Time and learning from her colleagues: Valdine and Gary.

**Gary Thompson** is a 53 year old teacher who just received his 25 year pin from his district. He has taught in primary classrooms for all but 5 years of his career. He is married with two grown children.
Appendix A

HOME-SCHOOL CONNECTIONS

Exploratory Time in the Kindergarten to Grade Two Classrooms
Number And Types Of Home–School Connections

The first home-school connection is each of our correspondence home to the parents. These take different formats but each lets the families know we are beginning Exploratory Time and hope for their interest and support of the students’ interests.

In Deanne’s AM Kindergarten class there were 11 students (out of 14) who engaged in research outside of the classroom with their parents. These children brought in Public Library books, Internet research, sculptures and drawings. Her PM Kindergarten class had less home based support, seven out of 17 students were able to bring materials from home (The reason for this may be that many of these parents work full time and their children attend daycare). However this class did benefit from the involvement of two parents who volunteered their time to help with the children’s projects.

In Gary’s class there were 14 examples of home-school interaction directly related to this project. Some of the students were responsible for more than one report of home-school interaction. Eleven different students showed evidence of interaction with home. The work done with big buddies suggests home-school interaction as well but it is not directly related to the findings.

In Valdine’s class there were 8 students out of 19 who continued in one way or another a connection with their research topic from school to home but there are 15 incidents of extended activities beyond the classroom.

<table>
<thead>
<tr>
<th>Type of connection</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher written newsletter or some sort of information</td>
<td>Deanne and Gary sent home a newsletter giving their child’s topic, the starting date and time, and asking parents to help their children find information from a variety of sources including books, internet, expert visitors, etc. Parents were also invited to come in to assist. Valdine sent home a 4 page letter modelling the sheet she will use with students (My question/What I know/What I wonder/ What I need)</td>
</tr>
<tr>
<td>about Exploratory Time asking for family support</td>
<td></td>
</tr>
<tr>
<td>and interest</td>
<td></td>
</tr>
<tr>
<td>Student takes books from school home to work on topic</td>
<td>Kris (2) is so enthusiastic about his topic and the 3 books he found in the library he has to take them home for the weekend</td>
</tr>
</tbody>
</table>
Public library books

AM Kindergarten—over half the class brought books from the Library.
PM Kindergarten—Jeremy brought books from the Library.
Craig (1) took books on his topic from the library while on a project related visit.
Jasmina (2) reports that she got books but did not bring them in.
Ty (2) showed books he borrowed on rocks and minerals.
Asmeeta (2) took books on her topic while on a class visit to the library.

Books from home

AM Kindergarten—Robert and Amundeep brought books from home.
PM Kindergarten—Janice, Ellen, Nate and Issac brought books from home.
Grayson (1) brought several books from home on crystals.
Sophia (2) brought a book on minerals from home.
Jensen (2) desk is full of additional space books he has brought from home.

Bring supplies from home

Maria (K) brought a collection of rocks from her home to study during her rock Exploratory Time.
Kris (2) brings pictures he has cut out to make poster at school.
Jasmina (2) brings socks from puppets.
Frida (2) bird seed for feeder she has built.
Pierre (2) brings in badge, uniform hat and picture of grandfather who was a policeman in his previous country.

Students do extra work at home

Jason (K) made a mini poster with his Mom using information that he found on the Internet.
Clark (K) made a 3D sculpture of a volcano labelled and coloured (with parental help).
Jessica (1) brought in a poster done at home but obviously greatly influenced by parent.
Salina (2) brought in three separate reports on her topic which she had put together mainly from internet resources at home.
Amina (2) made her own report at home and brought it in.
Kris (2) brought in seven different kinds of boats he made out of different materials (Mom said at first she tried to stop him but realised that was a mistake and let him do what he needed to do).
Mandeepa (2) made list of notes of things still to do.
Jasmina (2) wrote notes from library books on weekend before actual Exploratory Time begins “to get a head start and be prepared.” She stayed up late one night thinking and planning project presentation (so is tired and upsets easily that day!).
AM Kindergarten—Anika, Jessamyn, Jas and Brent bring information their parents helped them find on the Internet.
PM Kindergarten—Jemma & Maria bring information their parents helped them find on the Internet.
Roland & Navid (1) bring in internet info from home as the week progresses.
David (2) downloaded info on topic with mom’s help and brought it in ready for the start of the explorations.
Velma (2) downloaded info on topic with dad’s help.
Arlan (2) revisits a fossil website he found in computer time at school.

Barry’s (K) mother, who was very interested in observing what would happen during Exploratory Time, spent the afternoon helping Kindergarten students research their individual topics using an encyclopedia on our classroom computer.
Steven’s (K) father, who is a biologist, spent the afternoon working with his son and another student who had chosen to learn about Scientists. He brought in a microscope and many scientific samples from his lab at a local College. The children were thrilled with this real world example of scientists in action. It was difficult to contain the rest of the class who suddenly wanted to become scientists!
Sophia’s (1) mother took morning off work and came in to assist us. She then spent a half hour discussing the project with me and sharing her thoughts and opinions.
Cam’s (2) mother spent 5 mornings with us to assist the children with their projects.
Pierre’s (2) mother helped organize items to be brought from home for presentation.
Velma’s (2) dad helps find penguin websites.
Jasmina’s (2) dad making a bug video at museum on a family trip.

Deanne’s grade 6/7 buddies helped the Kindergartens on the first two days of Exploratory Time. They had clear instructions to only answer questions and help the Kindergarten by reading information when the student requested help. This was a great help initially as it ensured that each child would receive the support they needed and learn how to use their books to research their topic.
Gary’s class buddies brought in information which they gathered as a homework assignment. This touched more than just the homes of his students.
Appendix B
TOPICS EXPLORED

Topic Selection for Exploratory Time in the Kindergarten to Grade Two Classrooms

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>MALE / FEMALE</th>
<th>GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LIVING THINGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Astronauts</td>
<td>M</td>
<td>1</td>
</tr>
<tr>
<td>Beluga Whale</td>
<td>F</td>
<td>2</td>
</tr>
<tr>
<td>Birds</td>
<td>M</td>
<td>2</td>
</tr>
<tr>
<td>Bugs</td>
<td>M, F, F, F</td>
<td>2, 2, 2, 2</td>
</tr>
<tr>
<td>Caterpillars &amp; Butterflies</td>
<td>F, F, F</td>
<td>K, 2, 2</td>
</tr>
<tr>
<td>Cats</td>
<td>F, F, M</td>
<td>K, 2, K</td>
</tr>
<tr>
<td>Dogs</td>
<td>F, F, F</td>
<td>K, 2, 2</td>
</tr>
<tr>
<td>Fish</td>
<td>M,F</td>
<td>1, K</td>
</tr>
<tr>
<td>Foals</td>
<td>F, F</td>
<td>K, K</td>
</tr>
<tr>
<td>Great-White Sharks</td>
<td>M</td>
<td>K</td>
</tr>
<tr>
<td>Penguins</td>
<td>F</td>
<td>2</td>
</tr>
<tr>
<td>Police</td>
<td>M, M, F.</td>
<td>2, 2, 1</td>
</tr>
<tr>
<td>Rap Singers</td>
<td>M</td>
<td>2</td>
</tr>
<tr>
<td>Scientists</td>
<td>M, M</td>
<td>K, K</td>
</tr>
<tr>
<td>Seahorses</td>
<td>F</td>
<td>K</td>
</tr>
<tr>
<td>Spiders</td>
<td>M</td>
<td>2</td>
</tr>
<tr>
<td><strong>NON-LIVING THINGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bird Feeders</td>
<td>F</td>
<td>2</td>
</tr>
<tr>
<td>Boats &amp; Planes</td>
<td>M</td>
<td>2</td>
</tr>
<tr>
<td>Broken Bones</td>
<td>F</td>
<td>K</td>
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<tr>
<td>Crystals</td>
<td>M</td>
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</tr>
<tr>
<td>Dinosaurs</td>
<td>M</td>
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</tr>
<tr>
<td>Fire trucks</td>
<td>M</td>
<td>1</td>
</tr>
<tr>
<td>Fossils</td>
<td>M</td>
<td>2</td>
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<tr>
<td>Gameboy</td>
<td>M</td>
<td>2</td>
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<tr>
<td>Hockey</td>
<td>M</td>
<td>2</td>
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<tr>
<td>Holidays Around the World</td>
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<tr>
<td>Math</td>
<td>F, F,</td>
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<tr>
<td>Minerals</td>
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<tr>
<td>Piano</td>
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<td>Skeletons</td>
<td>F</td>
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<td>Snowboards</td>
<td>M</td>
<td>2</td>
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<tr>
<td>Thunder/Lightning</td>
<td>M, M</td>
<td>1, 1</td>
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“Yes,” we said. “The hundred is there!” Educational Insights, 10(1).

<table>
<thead>
<tr>
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<th>Male / Female</th>
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<tbody>
<tr>
<td>Tow trucks</td>
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**Week Two - Kindergarten**

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<td><strong>LIVING THINGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dogs</td>
<td>F</td>
<td>K</td>
</tr>
<tr>
<td>Dolphins</td>
<td>F, F, F</td>
<td>K</td>
</tr>
<tr>
<td>Gardening</td>
<td>F, F, F, F, F</td>
<td>K</td>
</tr>
<tr>
<td>Hamsters</td>
<td>M, M</td>
<td>K</td>
</tr>
<tr>
<td>Rabbits</td>
<td>F</td>
<td>K</td>
</tr>
<tr>
<td><strong>NON-LIVING THINGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity</td>
<td>M</td>
<td>K</td>
</tr>
<tr>
<td>Fire</td>
<td>M, F</td>
<td>K</td>
</tr>
<tr>
<td>Outer space</td>
<td>F, F</td>
<td>K</td>
</tr>
<tr>
<td>Shells</td>
<td>F</td>
<td>K</td>
</tr>
<tr>
<td>Vampires</td>
<td>M</td>
<td>K</td>
</tr>
</tbody>
</table>

**Week Three – Kindergarten**

<table>
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<tr>
<th>Topic</th>
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<tbody>
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<td><strong>LIVING THINGS</strong></td>
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<td></td>
</tr>
<tr>
<td>Bears</td>
<td>F, F, F</td>
<td>K</td>
</tr>
<tr>
<td>Butterflies</td>
<td>F</td>
<td>K</td>
</tr>
<tr>
<td>Cats</td>
<td>F, F</td>
<td>K</td>
</tr>
<tr>
<td>Doctors (Family)</td>
<td>M, M</td>
<td>K</td>
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<tr>
<td>Gardening</td>
<td>F, M</td>
<td>K</td>
</tr>
<tr>
<td>Hockey</td>
<td>M, M, M</td>
<td>K</td>
</tr>
<tr>
<td>Koalas</td>
<td>F, F, F</td>
<td>K</td>
</tr>
<tr>
<td>Mice</td>
<td>M, M</td>
<td>K</td>
</tr>
<tr>
<td>Rabbits</td>
<td>F, F, F</td>
<td>K</td>
</tr>
<tr>
<td><strong>NON-LIVING THINGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airplanes (how they take off)</td>
<td>M, M, M</td>
<td>K</td>
</tr>
<tr>
<td>Space</td>
<td>M, M</td>
<td>K</td>
</tr>
<tr>
<td>Volcanoes</td>
<td>F</td>
<td>K</td>
</tr>
</tbody>
</table>
Dear Parents,

Your child ____________ has chosen __________________ as his/her next topic to investigate during our exploratory research time.

We would appreciate any information that you could help us locate on this topic. For example, books from home or the library, information from the Internet, pictures or videos. We would even enjoy a visit from an expert in the field if you know of one. All materials from home should be labelled with your child’s name so they can be returned to you safely. We are starting new investigations on Monday March 29th.

Thank you for supporting this project!

Yours truly,
Appendix D
Student Report to University

Dear Professor,

Thank you for letting me be a part of Ms. Ciwko’s research.

My topic for Exploratory Time was .

The most interesting thing I learned about my topic was

What I liked best about Exploratory time was

What I didn’t like about Exploratory Time was

I used my time

really well pretty good okay not very good

Yes, I would like to do Exploratory Time again.

No, I would not like to do Exploratory Time again.

If I could do exploratory time again I would like to learn about

Your friend,