



Message from the Business Director

Recently, Dr. Carl Wieman, recipient of the Nobel Prize in Physics in 2001, presented a lecture at UBC on “Science Education in the 21st Century: Using the Tools of Science to Teach Science”. Several members of the teaching team attended the lecture with the hopes of broadening their repertoire in teaching scientific concepts. The focus of Dr. Wieman’s lecture was on the failures of traditional educational practices and new practices and technology that he has developed for the more effective teaching of physics. The unexpected result of our field trip was the discovery that many of the “new” findings presented by Dr. Wieman were developed and practiced by Maria Montessori over 90 years ago. In the end, we found scientific evidence of the effectiveness of the Montessori method and affirmation of our current practices at BBMH.

Dr. Wieman explained that winning a Nobel Prize in physics did not make him an expert on pedagogy, however, over the last few years, he has become increasingly involved with trying to improve undergraduate physics education through evaluating which teaching styles are

most effective. To make these assessments, Dr. Wieman evaluated various teaching methodologies utilized in physics courses on wave mechanics. Students were either exposed to lectures and demonstrations (on motion, position, velocity and acceleration of waves), or allowed to work with wave simulation software that allowed them to adjust various input parameters and examine the resulting waves. Through his studies, Dr. Wieman found that when students receive information through traditional lecture style presentations, two results repeatedly occurred regardless of the specific teacher. First, the rate of retention of critical concepts was less than 30%. Second, the students memorized facts needed to pass exams but did not understand how or why things worked. As a result, although students may have enjoyed science when they were young, by the end of grade school and/or university, many
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Volume 2, Issue 4

January 2006

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SPECIAL POINTS OF INTEREST

16 Jan
 Martin Luther King Jr, Day
16 Jan 7:30 pm
 Board Meeting
19 Jan 7:00 pm
 Montessori Education Evening
14 Feb
 Project Love

Gymnastics
Primary/EDK Mondays Pick up at SDRC
Intermediate Thursdays 10:30
CARPOOL DRIVERS REQUIRED

BLUEPRINT EXCERPT

- 2.1. We carefully identify the duties and responsibilities of each position in the school.
- 2.2. We carefully identify the skills and knowledge, experience, educational philosophy, core values, and interpersonal skills needed to be successful in each position at our school.
- 2.3. We take great care in our hiring process to find new members of our faculty and staff who bring the right mix of skills, knowledge, experience, values, and personality to succeed at our school.
- 2.4. We will clearly communicate to all members of the faculty and staff our expectations regarding planning and preparation, classroom environment, instruction, professional responsibilities, benefits and professional development opportunities.
- 2.5. In evaluating the school's programs and performance of each member of the faculty we will be as objective and positive as possible, encouraging individual initiative, self-evaluation, and continuous professional growth.
- 2.6. We consciously follow fair and equal employment practices in hiring, assigning, promoting and compensating both teaching and non-teaching staff members. We endeavor to employ persons solely on the basis of the factors necessary in the performance of the job and the operation of our school without discrimination on the basis of religious affiliation, race, national origin, gender, sexual orientation, or any other factor on which discrimination is prohibited by the laws of the jurisdiction within which our school is located.
- 2.7. No official of our school will seek to induce a teacher who is under contract at another school to break that contract. [There is nothing deemed improper if a member of the teaching or administrative staff of one school independently approaches another school about possible employment.]
- 2.8. Our school will take all reasonable and lawful precautions to maintain the confidentiality of records and information concerning prospective and departing teachers and other staff members, in accordance with the rights of the individual.
- 2.9. Any materials brought to school by a member of our faculty and staff, purchased with his or her own funds, shall remain his or her own property.
- 2.10. It is mutually understood that any teacher-made educational materials produced by a member of the faculty and staff during the term of this Agreement using school materials and supplies shall be considered the property of the school. However, faculty and staff members may use school materials to make a duplicate set of these materials for his or her own professional library.
- 2.11. Should a faculty member develop any new curricula, teaching techniques, teaching aids, or any other educational materials during the course of his or her employment with the school, he or she grants to the school a perpetual license to utilize said materials or ideas in its educational programs with both children and teacher training.
- 2.12. Any teaching aids, materials or curricula developed by the school, as well as any mailing lists of the school's students and families, represent the proprietary property of the school. No member of the faculty will be authorized to sell, transfer, assign, or disseminate said materials to a third person or a competitor of the school without first obtaining written approval from the Academic Director.



felt that science was dry and boring. Conversely, students who undertook hands-on work with a wave simulator, learned the concepts readily, understood the mechanics behind wave motion and had fun in doing so.

Dr. Wieman also investigated the use of real wave motion demonstrations versus wave motion computer simulation. In the classroom demonstrations of real wave motion, the students watching the demonstration did not actually have a chance to examine the behaviour of the waves themselves. On the other hand, in working with the wave simulator, students had first hand experience with wave models that had been programmed with realistic properties. Based on these studies, several important steps to creating meaningful learning were identified by Dr. Wiesman. Interestingly, these conclusions are similar to those drawn by Dr. Montessori. They include:

- ♥ Identify learning goals and design activities accordingly
- ♥ Anchor ideas within the real world
- ♥ Active mental construction developed through hands-on learning is required by the students for real learning to take place (constructivism)
- ♥ Build links with prior knowledge
- ♥ Show students how to organize information and identify causal relationships
- ♥ Students should take the lead on experiential learning while the teacher provides the context for learning including overseeing both group work and group discussions so that misconceptions can be corrected if they arise

Maria Montessori understood that children, through sensorial exploration and contextual information, must investigate the natural phenomena of the world around them in order to understand how and why things work as they do. It is through experimentation with, and manipulation of, concrete objects that students discover the properties of materials. This activity then allows them to deduct and identify patterns and relationships. This naturally leads to abstract understanding and later, articulation of their ideas. It is encouraging that university professors are now substantiating the value of constructivism or what Montessori terminology calls "concrete experience". Perhaps one day soon, Montessori students and university professors will meet on a horizon where all education is filled with enjoyable and meaningful experiences.

From the Board

Parent Participation Program

The purpose of the Parent Participation Program is to distribute the multiple tasks associated with the running of our school among the community. The process of contributing our time creates a community where we share in the workload and also get to know the parents of other children with whom our own children share their schooldays. We recognize that some families are unable to manage the time commitment and in these situations, there is an option of financial payment for completion of the Parent Participation Program contract.

Our system is not without its shortcomings and we welcome suggestions as to how to make the process more 'user-friendly'. We are a highly involved community and recognize that there are always ways to improve the structure to make it more desirable. Remembering that all of us are volunteers and lead busy lives, it is important to emphasize that regardless of how long individuals have been members of this community, each member has an equal voice in determining our success. Understanding this, new family members are encouraged to ask questions, make contacts and GET INVOLVED! As BBMH continues to grow we welcome feedback on the tasks completed by our parent volunteers as well as the system by which we organize these tasks. Please know that we have a unique situation at BBMH—that we, as parents, can use our creativity to enrich the environment in which our children are receiving their education. The opportunities are limited only by our own imagination, energy and initiative. Please check the new "job board" for opportunities to contribute your time and particular skills.

As members of the BBMH community, we have committed to complete 60 hours (30 for preschool families) of work. Attendance at BBMH education sessions, the annual general meeting as well as time spent completing requested tasks can be included in the tally to complete the required hours. Please record your family's hours in the red binder, which is located on top of the bookcase in the library on your family's record sheet. Each family is listed alphabetically by child's surname in the binder. It is very helpful to have a compilation of the many tasks that are completed each year in order to review how our volunteer hours are spent. There are many families who far exceed the required number of volunteer hours. Even if you have completed your hours, please continue to record how your time is spent so that we can gauge our volunteer needs.



Preschool/Kindergarten

Welcome back to school! We hope you all had a wonderful and restful holiday. The Preschool and Kindergarten children are all settling back into their routine. We are finishing up our study of Picasso and will be commencing a study of Degas. We are planning a trip to our local art gallery (details will follow). We hope to have some of our local artists come to the classroom to discuss their work.

Goal setting and planning are very important to successful learning. The Kindergarten children use an agenda to plan their work on a weekly basis. This month they will begin to start the process of setting weekly short term goals. The focus of these goals may be academic or behavioural. Our goal is to introduce our children to these work habits at an early age.

We are very happy to be back at school and are looking forward to what this new year will bring. We are also looking forward to celebrating the Year of the Dog as the Chinese New Year begins at the end of January. - Jana and Cathy

Primary Classroom

Random Acts of Kindness are beginning to trickle into the classroom as we read short stories that show the effect of how giving to others is transformative. We have discussed how acting with simple compassion can become a gift to both the receiver and the person who gives. It may be as simple as picking up an eraser that is lying under the table or helping a friend stay focused on their work. Accentuating the value of simple acts of kindness helps both the students and directresses to feel connected, centered and bonded. One of our students shared a story of shopping in Granville Island and noticed a person rummaging through the garbage to retrieve some leftover food that had been thrown away half eaten. Noticing this, the student's mother offered the person an orange from their groceries. We talked about the courage this kind of act required and that not all people are able to do this. However, the Primary children are prepared to make an effort to exhibit acts of kindness towards each other in our classroom and do so without a sense of obligation. We will discuss them each week during our class meetings as each act inspires others.

Academically, work in progress from Term 1 is being completed. The Year Three students are working on their first fact-finding on volcanoes, the Year Two students on Rocks and Minerals and the Year One students on the Solar System. In Math, continued review of facts and work in Geometry has begun. The Monday spelling quizzes for Year Two and Three children are met with enthusiasm.

We are having a parent conduct 'spot checks' for lice as there has been a report of this over the winter break. We are pleased to report that there has been no 'sight' of infestation.

REMEMBER GYMNASTICS MONDAYS 1:45—2:45 PICK UP AT SOUTH DELTA GYMNASTICS CLUB—**THANK YOU FOR THE PROMPT PICK UP THE FIRST DAY!!!** - Lize and Cathy

BBMH CALENDAR Winter Term

January	3	Back to School
	13	Newsletter
	16	Martin Luther King Jr. Day
	19	Montessori Education Series
February	14	Project Love
	17	Newsletter
		Professional Development
	27	Day
March	10	Newsletter
	11	Spring Break
	20	School re-opens

Intermediate Classroom

The Intermediate students have returned with renewed enthusiasm. We have launched into Novel Studies at all grades. In Math students in Year Four and Five are working on fractions at their various levels. The Year Six and Seven students are exploring rates, ratios and percents. Exciting new lessons have begun in History with the Timeline of Humans: Early Man for Year Four, Mesolithic, Neolithic, and Early Civilizations for Year Five, and for Year Six and Seven, the Medieval and Renaissance Periods. Our classroom is slowly transforming into a freshwater habitat. You will be invited to view the experience once it has been installed. We continue to deepen our understanding of Choice Theory by re-examining the concepts of a Quality Classroom And Quality Work and have introduced a part of the behaviour system called the Behaviour Car. Please ask your child to explain the four wheels and the engine.

*Our P.E. program for the next few months will be **Gymnastics** at Delta Gymnastics in Tsawwassen from 10:30 to 11:30 each Thursday until Spring Break. **Carpool drivers needed.***

The dates for Outdoor Camp will be from April 18th – 21st. We will be holding a parent meeting regarding this event at the beginning of April. This is the time to check to see if that outdoor gear still fits! New parents to Intermediate please check with the teachers if you have questions or concerns you need answered now. Individual cost for the camp will be around three hundred dollars. Students have initiated fundraising activities for both this event and to support an endangered species. Final cost for the camp will be determined at the end of March.— Barb and Eileen



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BBMH Education Series

Thursday, January 19, 2006 Language

Thursday, May 18, 2006 Geometry

These will be material based demonstrations given by our teachers and will allow for interactive practise and experimentation by the participants!

We welcome new and experienced parents and all educators from the private or public system who are interested in learning more about Montessori education and methodology to join us for these evenings!

CHARACTERISTICS OF MONTESSORI EDUCATION

The child's inherent desire to learn and perfect his/her skills is nurtured by the stimulating and dynamic Montessori environment.

- ♥ The child develops a lifetime love of learning
- ♥ Each child works at his or her own pace and receives a high degree of individual attention.

- ♥ Student teacher ratios at BBMH are 10:1 in Preschool and 18:1 in Elementary.
- ♥ A well structured, prepared environment, with learning materials that are self-correcting.
- ♥ Respect for each other, the self and the environment are taught within a peace curriculum that is multi-cultural and non-denominational.

- ♥ With these opportunities, the child is empowered to fulfill his/her own potential thereby fostering:
 - Independence
 - Self-discipline
 - Self-esteem
 - Self-motivation
- ♥ The child is honoured in this caring, community-minded educational environment where parents are invited to participate.

PARENT PARTICIPATION OPPORTUNITIES

- ♥ Material Making Coordinator
- ♥ Attic Sorters and Tidiers
- ♥ Garbage Removal
- ♥ Book coverers
- ♥ Preschool lawn mowing
- ♥ Maintenance- see Barb
- ♥ 'Parent Buddy' coordinator
- ♥ Carpool to Gymnastics Thursday 10:15 am
Pick up 11:30 am
- ♥ Librarian
- ♥ Preschool Gardening
- ♥ Preschool Toy Box and Rabbit Cage maintenance

"Life's most persistent and urgent question is, 'What are you doing for others?' "
Martin Luther King, Jr.

Fundraising

Thrifty Foods Gift Cards Please note the order form for the Thrifty's gift cards with this newsletter. Our school receives 5% of the total amount sold. Ask your friends and neighbours to participate in this fundraiser. Your cheque is not cashed until you receive the card.

Pistol & Burnes Coffee Order forms are in your mail box. There are many different blends of coffee to choose from as well as teas, syrups, chocolate and cocoa. Please complete the form and return to the school by January 19. Orders will be ready to pick up at the school on January 24.

Bottle Depots Both the Ladner and Tsawwassen bottle depots have BBMH accounts. You can direct the proceeds from your empties to our accounts just by mentioning the school name.

Spring Fundraiser –Time to plan our major fundraiser for the spring. A one-hour planning meeting will be held Friday, January 20 at 9:15am at Petra's coffee shop in Tsawwassen. In the past, we have had a silent auction/live auction/social event. *Please come and bring your ideas for this year's event. Call to sign up for the committee if you can't attend!*