Bloomers to Body Mass Index

Greg Reid

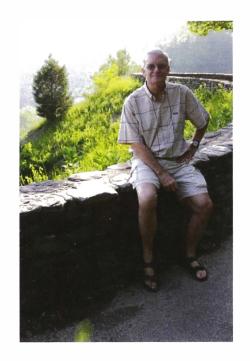
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2012

Years of Kinesiology Cal Education at McGill

Bloomers to Mass Index



Greg Reid graduated with the stellar class of McGill physical education 1970! A former elementary school physical education teacher, his graduate studies were in motor learning and special education. He thoroughly enjoyed a 39-year career at McGill teaching primarily in motor development, adapted physical activity, and more recently history of sport. The canoe trips and swimming classes were great fun as well. His research dealt with developmental disabilities and ways to encourage all people to enjoy physical activity. When he realized that his tenure at McGill, from undergraduate student to retired professor, constituted a big chunk of the second half of the 100 years of physical education and kinesiology, he decided to write this book. His physical activity world includes cycling, hiking, kayaking, and skiing; his hockey skills having gone offside a decade ago.

Bloomers to Mass Index

100 Years of Kinesiology and Physical Education at McGill

Greg Reid Best unders Ang Reis

FL: 2012



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Dedication

Dr. David L. Montgomery (1948-2004)



Dr. A. E. (Ted) Wall

the Physical Education class of 1970

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Acknowledgements

e have all heard the parable that is takes a community to raise a child. Judging from the list which follows, the same can be said for writing a book. So many people made a contribution and I hope none are excluded below. A sincere thank you is extended to folks at McGill University Archives, Theresa Rowat, Mary-Ellen Houde, Gordon Burr, and Bruce Dolphin, who assisted in locating historical documents. Undergraduate students Ashley-Lynne Quaglia and Nicholas Stratigopoulos produced helpful term papers trying to make sense of specific course changes over 100 years. Nada Abu-Merhy, Eileen Leduc, and Maricruz Garcia-Rejon accessed Department materials, always with good humour. Dr. Cathy MacDonald carefully developed the first draft of Chapter 11 from my handwritten scribbles. For conversations about dates, people, and actions, I am indebted to former colleagues Margaret Walker, Jennifer Wall, Graham Neil, and Ted Wall who promptly responded to my queries. Tom Thompson has assisted in so many ways, not the least of which was reminding me often about the importance of our predecessors, and interpreting the 1950s for me. Faculty of Education Dean Hélène Perrault is sincerely recognized for the financial support afforded this project and her personal interest in seeing it's completion for Homecoming 2012. (Deans always want a date specified for deliverables.) Particularly special acknowledgement is afforded to editor Peggy Downey, and pinch-hitter Jill Barker, for their most helpful, timely, and supportive comments. Simply put, the chapters are more readable after their input. Editing the work of others is not a simple task. You both did good—though of course neither of you would have permitted that phrasing!

On the technical side of things, research assistant Lyndsey Pearsall was very diligent and organized while handling over 156 photos, complete with permission and credits for each picture. Steven McClenaghan was the graphic artist who designed our Department logo and Jack Goldsmith deserves recognition for his photographic skills. Sean Huxley was a very able proofreader and on more than one occasion reconstructed a sentence or two! The book was "built" by graphic artist Deborah Metchette. Now I know what building a book really means. She kept my nose to the grindstone and genuinely cared about the quality of the end product. Thanks to Jim Harris for keeping us all on track and on time—no small feat for a project of this magnitude.

When the outline of the book was first presented, I was warned that timely responses from my colleagues in Kinesiology and Physical Education for Chapter 12 would be difficult to obtain. Happily, that was not the case as all responded in a timely manner (okay, some were quicker than others, but...). Thank you for your thoughtful input. Despite the community of assistance, I remain responsible for any errors.

Finally I extend appreciation to my wife, Carol, and friends Michelle and Brian Potter, who lost a cycling partner over the spring and summer of 2012.

GR

Preface—That is another story

he mission of the Department of Kinesiology and Physical Education in 2012 is to generate, advance, and disseminate knowledge about human health and physical activity, and to prepare professionals to engage in related employment. This book recounts how a one-month program in 1912 to prepare physical education teachers for public schools evolved 100 years later into a dynamic Department with that mission.

My journey at McGill began in 1966 as a student in the B.Ed. (P.E.) program, never knowing that the structure of the program had been greatly influenced by a report from a committee chaired by a professor F. MacIntosh, more than 10 years earlier. That story is included here. My group, the class of 1970, followed our undergraduate degree on the campuses of Macdonald College and McGill. Why two venues? That is another story. Our undergraduate days occurred during a period of fundamental questioning of societal values, the nature of knowledge, and how best to learn. We were encouraged to think critically, although those words were not used. We came to realize the existence of social inequities that were not apparent to most of us in high school; related to gender, social class, skin color, or disability. We realized that knowledge was tentative and that our professors might have a bias or two, which would taint their presentation of knowledge. Oh, my goodness! That is another story. In our senior year, we were asked for input in creating a new 3-year physical education program that would follow something called a CEGEP. That is another story. Our class was a small group of about 30 who had great fun during the four years, with many friendships lasting to this day and regular

reunions occurring every five years. We partied, experienced, played Alesmen hockey, experimented, and grew. That is not a story for these pages.

Following public school teaching with some supervision of McGill physical education students I returned to the University as a lecturer in 1973, and have remained at the grand old institution ever since. Students who took Doug Riley's history class learned that the Department of Physical Education began in 1912. In Cyclical Review reports of the 1980s, more of our department history was written. About four years ago, as the centennial year 2012 loomed in the very near future, it was apparent that some celebration for our first hundred years would be in order. We were not always a department, but at various times an almost private enterprise, school, or department, associated with three different faculties. That is another story. Belonging somewhere at McGill is a theme in our story. In any case, as 2012 approached, I realized I had been associated with the unit, whatever it was called, for much of the past 50 years. A long essay or short book was needed, and I began to wander into McGill Archives and bother those kind folks. In the end, *From Bloomers to Body Mass Index* emerged.

Several years ago, a female student asked me why our Department had not encouraged women to become physical education teachers to the same extent as men. I explained that it was just the opposite. In contrast to early university education, and Canadian society in general, women became certified physical education teachers in greater numbers and earlier than did men, by a considerable margin. There were even times when men were not permitted into the program. That is another story.

It seemed the bloomer might be a useful metaphor for the women students 100 years ago. In addition, the bloomer was a garment that permitted physical activity for females, despite its less than flattering appearance. In addition, physical activity, in terms of hours practiced in gymnastics and dance courses, was a larger segment of the overall program in 1912 than 2012. As the Department evolved over 100 years, it instituted graduate programs and all Faculty members were expected to nurture research programs. That is another story, which culminates in Chapter 12 with current Faculty members sketching their research and thoughts about the future of physical education and kinesiology. Body Mass Index, an estimate of body composition, is widely known and is a variable in many investigations of physical activity and exercise. It was deemed serviceable as a metaphor for our research contributions that began modestly in the late 1960s. It is also a metaphor for today's scientifically documented knowledge about the positive relationships among physical activity, health, and wellbeing. Some of this research has come from the keyboards of our current professors.

From Bloomers to Body Mass Index

History is largely about context, and one of the crucial contexts for the Department has been McGill itself: its leaders, its actions, its hopes, its values. Thus, I have attempted, primarily in each chapter's introductory remarks, to say something useful about McGill prior to delving into stories about the Department. The excellent treatise by Frost (1980 and 1984) served me well. Other forces, which sculpted the Department, were Montreal, Quebec, and Canada, not to mention physical education programs in other countries and south of our border. Prevailing ideas are also an important context. Is regular physical activity a legitimate concern for a university? Oh, to have been at the meeting of the McGill Board of Governors in 1861 when it decided to build the first gymnasium!

I hope the Alumni of the Department enjoy the read. I kept you in mind when struggling to express an idea, deciding whether or not to include a table, or how far to delve into a topic. Was I on a misguided personal tangent or was I saying something worthwhile? Finally, I hope this book is helpful to readers 25 or 50 years in the future (assuming the content is available). I also had you in mind when I decided to explain "the obvious," at least the obvious in 2012.

In physical activity and health,

Greg Reid

September 2012

Early Physical Activity at McGill

ames McGill was a Scottish-born fur trader, merchant, public servant, elected official, military officer, and family man. He lived on Notre Dame Street in Montreal and enjoyed summers at his Burnside Estate, a farm of 46 acres on the slopes of Mont Royal. He died on December 19, 1813; his will provided for £10,000 and the Burnside land to establish a university in which one college was to bear his name. Established by Royal Charter in 1821, the university's early history was uneven, slowed by legal battles, variable administrative leadership, political tensions, and a lack of vision of what the institution might become (Frost, 1980). The Board of Governors attempted to define the university in the 1840s and 1850s with input from the community and concluded that it should be Anglophone and broadly Protestant, that is, embracing all versions of Protestant sects. In contrast to Catholic education at that time, McGill was decidedly secular in nature. It also aspired to be relevant to the needs of Canada, including professional studies rather than being restricted to medieval traditions of higher education in classical languages and literature (Frost, 1980). The professional focus of the Faculty of Medicine was congruent with this modern vision and the Faculty of Arts had opened in September 1843. A Faculty of Law and Normal School for the education of teachers were soon to follow.

Dawson, Ryerson, and Cricket

John William Dawson, the fifth Principal of McGill, took office in September 1855. As he recalled ten years later...

Materially it was represented by two blocks of unfurnished and partly ruinous buildings, standing amidst a wilderness of excavators' and masons' rubbish, overgrown with seeds and bushes. The grounds were unfenced, and pastured at will by herds of cattle, which not only cropped the grass, but browsed on the shrubs, leaving unhurt only one great elm, which still stands as "the founder's tree...The only access from town was by a circuitous and ungraded cart-track, almost impassable at night. (Frost, 1980 p. 198) (Figure 1-1)

In 1855 there were 57 Medical students, 15 Law students, and 38 Arts students which grew to 177, 48, and 68, respectively in 10 years (Frost 1980, p. 202). Also, 10 years into Dawson's administration, the east and west extensions to the Arts Building were realized through a generous donation from William Molson. The grounds were appropriately fenced with neatly placed shrubs and trees. By 1865, when the population of Montreal was approximately 90,000, "the college possessed a harmonious suite of arts buildings on its own campus of which it could be modestly proud." (Frost p. 200) (Figure 1-2).



Figure 1-1: McGill Campus 1860

Born in Pictou, Nova Scotia in October 1820, Dawson studied geology, natural sciences, and philosophy at university. His papers led to his election as Fellow of the Geological Society of London in 1854. While he might have been destined for an academic career in geology, he was offered the appointment as superintendent of education for Nova Scotia in 1850. Public education was in its infancy and Dawson was excited about the opportunity to improve the education system for the "public mind" (Frost 1980 p. 181). Part of his grand educational scheme in Nova Scotia was a school for the education of

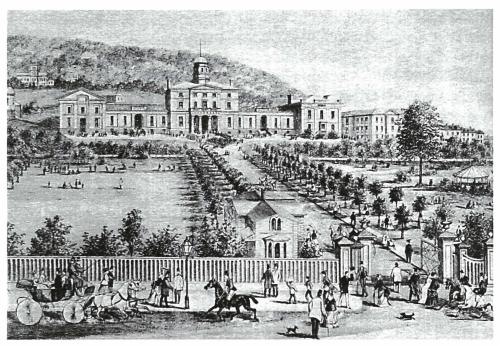


Figure 1-2: McGill Campus 1875

teachers, called a Normal School at that time. New subjects were introduced that he believed should be taught in public schools, including history, music, chemistry, natural sciences, and human physiology for health. During this time he worked with Egerton Ryerson, his counterpart from Ontario.

Ryerson had visited several countries in Europe in 1844-1845 to study their educational systems. Quite unexpectedly he became an enthusiastic supporter of school physical education after observing various "systems" of instruction (Morrow & Wamsley, 2010). In particular, Sweden, Denmark, Germany, and England were home to some early leaders of physical education who proposed different activities and emphases. Ling from Sweden advocated a strict system of exercise dictated by the commanding orders of the leader with swinging ladders, stall bars, vaulting, and rings. The Swedish system was proposed as scientifically derived exercises which had therapeutic value. GutsMuths and Jahn of Germany incorporated a freer use of activities including rings, balance beams, and balls, often incorporating exercise outdoors. The British, led by MacLaren, claimed exercise benefits with vertical ropes, horizontal ladders, vaulting, and dumbbells and placed more emphasis on the benefits of sport. Believing that physical education had much to offer Upper Canada,

Ryerson appointed Henry Goodwin as "gymnastics master" at the Ontario Normal School (Morrow & Wamsley, 2010). At that time, gymnastics was a broad term for many forms of movement and should not be interpreted in the restricted and current sense of the Olympic sport. Rather, gymnastics was more a synonym for physical education with the breadth of activities implied with this latter term. There is no direct evidence that Ryerson shared his views about physical education with Dawson, but they worked closely together and the older Ryerson was a mentor to Dawson. We can assume that the two had some conversation about public school physical education.

In his inaugural address as Principal of McGill, Dawson stated that "we should be content with nothing less than the best possible education of the greatest possible number" (Frost, 1980, p. 184). Thus, he immediately set a high standard for the university enterprise known as McGill and underscored that its education would be open to all, rather than follow the English tradition to restrict access to university for the assumed elite of society. He also called for a modern university curriculum, ranging from classics and modern languages to professions. As a geologist and educator, Dawson was an ideal person to lead the University for much of the remainder of the 19th century.

A fledging university in the middle of the 1800s might have been forgiven for placing emphasis on matters of the mind and soul. The values of regular physical activity were unknown in any scientifically documented sense and there were few leaders to trumpet its potential. Some critics argued that such behavior was an expression of an idle mind, possessed little worth, and was likely harmful when conducted at a vigorous competitive level. One can imagine a Board of Governors that would scoff at any promotion of physical activity, certainly if it required financial expenditure. And in 1860 the college¹ only had about 300 students. But private schools in England had an established tradition of sport for their young men and this would have been apparent to McGill leaders, many of whom had ties to the "mother country." Sport was argued by those educators to contribute to perseverance, physical courage, team work, leadership, sportsmanship, self-reliance and overall individual "character." Also, the YMCA, an organization that espoused a holistic view of mind, body, and spirit, opened in Montreal in 1851. The "physical" was beginning to garner some credibility.

While the elitism of private schools in England was inconsistent with Dawson's view of education for many, he was likely aware of the modern mid-19th century discourse regarding physical activity and its potential educational values. One of the earliest accounts of physical activity at McGill was reported in the minutes of the Board of Governors, February 25, 1860.

The secretary read a letter from a Mr. Perkins who requested the use of the grounds in front of McGill College for the next summer, on behalf of the McGill Cricket club. The request was granted, as long as "the security of the premises and the preservation of proper order" was maintained. Similar permission was granted in 1872 (Board of Governors' minutes, April 27).

As the university grew it did not have many buildings on the main campus and therefore used space at the corner of Dorchester (now René-Lévesque) and University streets. This building was Burnside Hall, so named to illustrate the link with McGill College on the Burnside Estates. In addition, from 1853-1870 McGill included a high school department to provide education for those boys lacking in background knowledge required for university studies (Cooper, 1943). Located on the first floor of Burnside Hall the High School Department of McGill College was listed in the university calendars of those years. It was a "feeder" school (Cooper, 1943, p. 11) for the university and its curriculum, no doubt influenced by Dawson, was modernized to include instruction in French and natural sciences. In fact, boys in the upper levels of the high school could attend university lectures in geography, geology, zoology, and botany. In 1855 there were more students registered with the high school than the college (215 versus 110) but these numbers were reversed by 1863 (249 versus 307). (Board of Governors' minutes, Dec. 10, 1864). Financial instability and a deficit at McGill during the 1860s necessitated drastic actions which included eliminating the salaries of the high school teachers. Thus, the school was administratively transferred to the public Montreal Protestant School Commission in 1870 and was renamed the High School of Montreal.

19 University Street

At the March 14, 1861 meeting of the Board of Governors, one of its members, Mr. Davidson, reported that he had received a proposal from a "certain gentleman" who was willing to pay an annual rental fee for evening use of a gymnasium if the Board erected one in the playground of Burnside Hall for the high school and university. It is unclear if this request was initiated by the gentleman who was not named, or if he had already broached the subject of a gymnasium informally with members of the board. It is noted in the March 14 minutes that a gymnasium was considered desirable by McGill and the matter was sent to the Committee of Estate. This committee dealt with matters such as construction on the grounds belonging to the college. Mr. Davidson reported at the August 1 meeting that the committee believed it was desirable to build a gymnasium in the playground of the high school at a cost not to exceed \$4,000. The rental of £80 per year for five years was

guaranteed by the Montreal Gymnastics Club. Thus McGill College had a proposal for a gymnasium with some secured rental income. For mutual benefit, the gymnastic club had convinced the college to build its first gymnasium.

The plans for the gymnasium were presented to the Board of Governors (September 21) and on January 21, 1862 the gymnasium was opened (McKenzie, 1893). It was first listed as one of the university's buildings in the 1862-1863 McGill calendar and was located at 19 University Street at Burnside Hall (Figure 1-3). Beyond the main door of this red brick building was a corridor that passed a closed office and open dressing room, the later with wooden benches and an upright coal stove (McGill, 1980, p. 11). The gymnasium was equipped with dumbbells, Indian clubs, barbells, horizontal and parallel bars, vaulting bar, tumbling mats, and rings. Visiting the gymnasium for the first time in 1885, a new McGill student, Robert Tait McKenzie, recalled his envy of the experienced "old-timers" who moved about these "strange appliances" with assuredness.

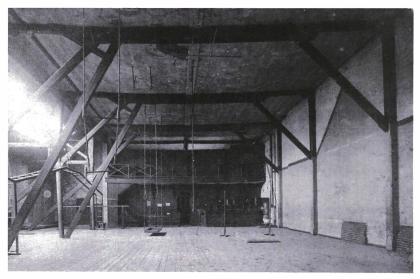


Figure 1-3: Interior of McGill's (Barnjum's) Gymnasium

Only in the Board of Governors' minutes of May 30, 1862 was there a specific reference to the "gentleman" mentioned 15 months earlier, Captain Frederick S. Barnjum, occupant of the only office in the gymnasium and president of the Montreal Gymnastics Club. At that meeting, a letter from Barnjum was presented in which he requested an appointment as gymnastics master. Ultimately, Mr. Davidson recommended that Barnjum be appointed as Drilling and Gymnastics Master for the high school and college at a

salary of \$600 annually, the monies being raised by extra fees charged to the students at the high school (\$400) and college (\$200). On a part-time basis, McGill had hired its first physical activity instructor in 1862.

Frederick S. Barnjum

Born in England, Barnjum immigrated to Canada in 1859 and settled in Montreal (Figure 1-4). Like Ryerson, Barnjum had travelled in Europe and studied the various systems of physical

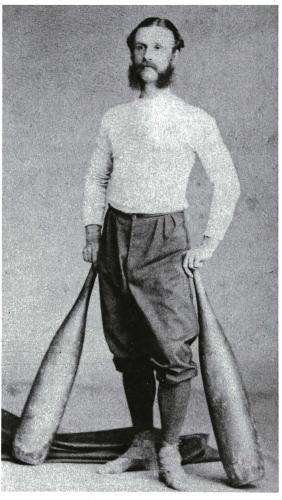


Figure 1-4: Frederick S. Barnjum with Indian Clubs

education as well as visited universities in the eastern USA. Fred Barnjum was also a soldier, canvas artist, educator, public speaker, and entrepreneur. He came to Canada primarily as an artist and his work can still be purchased on-line. He was described as "...an alert little man about five feet six inches...with moustache and side-whiskers, well set up, compactly built. He was dressed in brown velveteen jacket and breeches, black stockings and low shoes" (McKenzie, 1885, as cited by McGill, 1980, p.11).

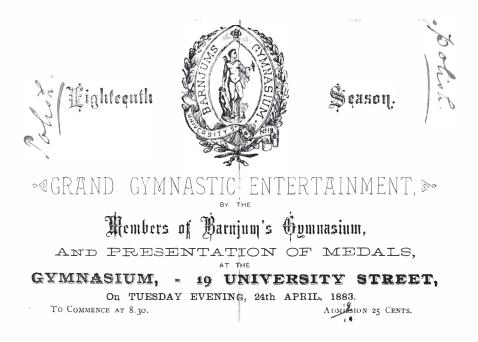


Figure 1-5: Presentation Announcement at Barnjum's Gymnasium

As per the arrangement with McGill, Barnjum was free to use the gymnasium for private instruction as long as those hours did not conflict with high school or university student instruction. He advertised his programs regularly in newspapers of the city, almost always referring to Barnjum's Gymnasium rather than McGill's Gymnasium (Figure 1-5). Men's classes (over 15 years of age) were usually on Tuesday, Thursday, and Saturday evenings, while younger boys (under 15, but some were 4-6 years old) were scheduled on Saturday mornings and one afternoon per week. He offered instruction to females as well, assisted in those classes beginning in 1878 by his sister, Helen O. Barnjum. Promoting physical activity of women was very rare in the 1860s.

The gymnastics classes, often referred to as physical education by Barnjum in his speeches, began with exercises using barbells, dumbbells, wands, and Indian clubs, usually performed with music (Figure 1-6). He believed that music reduced the strain on the nervous system (Montreal Evening Herald, January 12, 1867). While we have no evidence today of

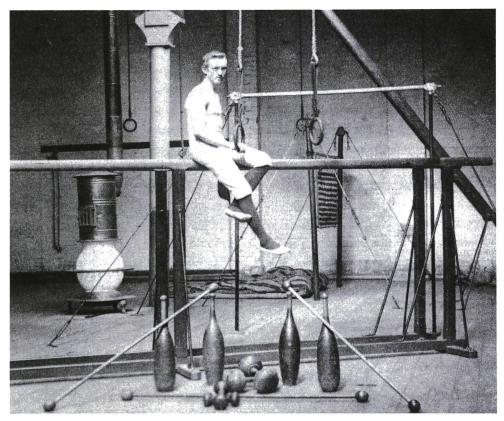


Figure 1-6: Barnjum's Gymnasium

that relationship, Barnjum was more accurate when asserting that the music made the exercise pleasant! After the introduction, the class would divide into groups or squads, each with a leader, for ten minute sessions of activities such as somersaults, human pyramids, trapeze, rings, and parallel bars. High jump and archery were also included. Barnjum was described as an inspiring teacher who believed in promotion for merit (McKenzie, 1933). Until recently it was established practice in physical education to organize students by rows. Those students who performed the exercises with great precision were promoted to the front row. Barnjum also included games such as cricket and football, as well as high jump,

standing jump, and hurding, which were thought to be more enjoyable than the formal gymnastics (McGill, 1980). Games and military drills were also staples of the high school program (Cooper, 1943). It was a reasonably broad based program of physical education promoted by Barnjum rather than limited to a 21st century view of competitive Olympic gymnastics, which have largely been eliminated from public schools today due to concerns about safety and questionable long-term benefits of the events. When was the last time you and some friends gathered at a gymnasium to spend an hour vaulting?

A Barnjum program lasted several weeks. A public demonstration often ended these gymnastic sessions for both university and high school students, adding to the entertainment of Montreal's citizens. As early as 1865 one of Barnjum's exhibitions was held in the Victoria Skating Rink. The Montreal Gazette (November 21) described the rink as "prettily decorated" and "brilliantly lighted." The members of the gymnastic club wore "loose grey uniforms with red facings, which had a very neat appearance." The various routines "elicited warm and frequent applause." While perhaps not Cirque du Solell in creativity or skill, the exhibits were often recounted in the next day's newspapers as stunning, precise, and colorful. Public officials such as mayors or governors-general would frequently be in attendance. Of course, beyond musical shows, live theatre, readings, or gambling (!), there was not a great deal of entertainment available to Montrealers. These public presentations were often preceded by a lecture in which Barnjum put forth new ideas, advocating that exercise was a means to develop the mind as well as the body, stating that regular exercise was a vehicle for physical health, and suggesting that exercise should occur for an hour at least three times per week. The need to exercise three times a week became a recommendation documented by research 100 years later, but the contribution of exercise to health and wellbeing was new thinking in Barnjum's era. His shows and lectures were news-worthy beyond Montreal. On June 12, 1869 The New York Clipper reported,

The pupils of Prof. Barnjum's gymnasium, Montreal, ... gave an exhibition at the Crystal Palace on Wednesday evening...before a large assemblage. The entertainment commenced with free gymnastics by the boys from seven to eleven years of age, who also went through the dumb bell exercise. Messrs. Mills and Henry Becket...gave a very fine performance in the double trapeze, after which a number of the gymnasts took part in a variety of feats, such as somersaulting, pyramids, tumbling, Mr. Mills coming in for the lion's share of the applause so freely bestowed. Hugh Becker, M. Jones, John Ray, and Charles Thompson, went through a graceful and daring performance on the quadruple trapeze. This is a perfect novelty, having been introduced by Mr. Barnjum, and the effect of four persons working together in perfect harmony is very beautiful. Some seven or eight athletes now appeared at the

starting post for a hurdle race round the building. This was well contested, the whole bounding over the hurdles with the greatest of agility.

Barnjum seemed capable of fine timing and a sense of entertainment, although he was not related to P. T. Barnum of circus fame in the USA.

The public demonstrations provided the participants with a goal for practice as well as a means for Barnjum to advertise subsequent sessions in the gymnasium. Barnjum's personal notoriety and the skillfulness of his students had grown to such an extent that in 1883 an audience of 1,500 was in the Victoria Skating Rink for one of his evenings of entertainment. As reported in the *Montreal Star* (April 28), "The wonderful feats, performed by Mr. Barnjum's class scarcely need praise, as the athletic abilities of its members are already well known." He was an entrepreneur but also civic minded. The large 1883 presentation was performed to aid women and orphans of firemen while earlier ones raised money for the YMCA (*The Montreal Gazette*, November 21, 1865) and Montreal General Hospital (*The Montreal Gazette*, May 26, 1869).

Barnjum was a frequent public speaker in Montreal, extolling the virtues of healthy physical activity that should occur alongside the development of the mind. He promoted strength development of all muscles but especially those of the chest, trunk, and back to counteract stooping postures and to promote full breathing. He suggested that a strong frame may "confer a certain ease and eloquence of motion" (Montreal Witness, March 30, 1870). However, Barnjum was against the excessive physical strains of competitive athletics, and long races on snowshoes or while rowing, which he believed were dangerous. Health concerns about lengthy cardiovascular exercise were commonly expressed until the aerobics movement of the late 1960s.

Barnjum also proposed that educational institutes must promote physical education, which at that time was barely recognized as a potential school subject. He was an early advocate of proper nutrition for children and his physical courses for those 4-7 years of age suggest he did not adhere to the common belief that children naturally received enough physical activity. The Canada Medical Records reinforced Barnjum's exercise program for children by stating "...we know of several instances where weak and ailing children placed under Mr. Barnjum's care became strong and healthful. Montreal is exceptionally fortunate in possessing a first-class institution for physical education, conducted by an educated gentleman, and we sincerely hope that his opportunities for usefulness may be largely increased, as the public become more awake to the value of bodily training." These were important testimonials for the advancement of physical education. With regard to formal

preparation of instructors such as himself, Barnjum did not call for university education, not surprising perhaps since there is no record that he spent any time studying at university. But he certainly argued that classes must be based on anatomy and physiology and be conducted by leaders with experience and possessing the appropriate knowledge (*Montreal Witness*, November 11, 1878).

Contrary to the popular "wisdom" of his day, Barnjum did not support the exclusion of girls and women from participating in physical pursuits and he offered classes for females as early as 1866. On January 12, 1867 (Montreal Evening Telegraph), he spoke at the McGill Normal School at a meeting chaired by Principal Dawson. Barnjum referred to physical education as a necessary subject within educational settings and went on to discuss its values. Lamenting the effect on boys who neglect their health by studying too much, he went on to say, tongue in cheek,

But what shall we say of the girls, who, by the conventional rules of society, are debarred from taking more than the semblance of exercise. They have not the same opportunity for romping as boys. Poor little missie must walk home in the most genteel manner possible indulging in a softened laugh with some companion, her arms carefully hugged to her sides, motion of the lower extremities only being permitted, added to which her poor little body is in all probability forced in by one of those instruments of death called corsets, binding up the naughty muscles that are begging and praying to be let loose and have an opportunity of strengthening themselves, and the young lady is considered to be in a highly satisfactory condition if she is pale and weak; but, no matter, it is the natural thing for girls to be weak.

The *Montreal Daily News* (May 23, 1870) reported on one demonstration by females (as cited in Slack, 1934, p. 3).

Before commencing the exercises, Mr. Barnjum addressed the audience, enlarging on the great importance of Physical Education. On conclusion of his remarks a signal bell was struck and on the instant bounded in some twenty ladies—sight of whom alone should receive the countenance and support of every parent in our city, thoughtful of the physical welfare of his children. With mathematical precision they fell into position for the "Bar bell exercises" which they performed so gracefully as to elicit the hearty admiration of all present. A description of the combined grace and force of the movement would be utterly impossible. Then succeeded the Dumb-bell, Ring, and other exercises, all of which were models of exact execution, the precision with which the ladies entered the Hall, took their position and retired, being a frequent theme of admiration and surprise. Perhaps the most extraordinary performance of the evening was the "Indian Club" exercise...At the closing exercise the young ladies showed no symptom of fatigue, though the actual work of the evening might have

tired many a seemingly tougher frame. They retired slowly after singing "God Save the Queen" a signal which the audience regretfully accepted as the close of a most attractive programme.

Such a positive account contributed to changing perceptions about physical activity for females which were, at that time, more commonly denounced or permitted with considerable caution. With such public presentations by men and women, lectures, and civic involvement, "Barnjum's Gymnasium and Academy of Physical Training" became very well known in Montreal.

Gymnastics at McGill

Participation in gymnastic activities by McGill students was optional and only students in the Faculty of Arts were assessed the participation fee of \$2.00 (McGill University calendar, 1862-1863). There is no mention of such a fee for the Faculties of Medicine and Law, likely because those two professional faculties had classes during the 5-6:00 p.m. hour designated for physical education (McKenzie, 1893). In 1877 the Faculty of Arts expressed disagreement with the compulsory fee, as it had just been increased from \$2.00-\$2.50 (Board of Governors' minutes, February 10, 1877). Also, 40% of the students did not use the facilities but the fee was obligatory. Despite some protest the university remained firm and Arts students continued to pay the gymnasium fee.

Times for the classes were announced at the beginning of the semesters. Invariably, this was 5-6:00 p.m. three days per week for the men, or suiting "...as far as possible, the convenience of Students" (1887-1888 calendar). It is not clear from the university calendars if "convenience of students" simply meant the end of the day before supper or whether classes might have been offered earlier in the day. It is unlikely that there was very much flexibility because students were scheduled quite rigidly throughout the day. That is, a student in the Faculty of Arts program had courses at 9:00 am, 10:00 am, and 11:00 am. This was followed by lunch with instruction resuming in the afternoon. Personal schedules resembled those at the high school level— the day was quite full.

Women were admitted to McGill in 1884 and by 1889 were enrolled in physical education classes organized and led by Helen O. Barnjum (Figure 1-7). Physical education instruction for women was placed in the early morning hours because the men were scheduled later in the afternoon. The location of the gym at 19 University was considered an inconvenient distance from the main campus. Despite the early time and the location of



MISS BARNJUM'S CLASSES-SENIOR AT HOOPS.

Figure 1-7: Helen Barnjum's Exercise Class for Women

the gym, about one-third of the female students attended the classes in the early 1890s (McKenzie, 1893). Society and the University were many decades removed from the notion that facilities and prime hours should be shared equally by men and women. While McGill students were not required to take classes in physical education in the late 19th century, many followed the programs of Frederick Barnjum and his sister voluntarily. Required physical education for all McGill students would emerge in the early 20th century.

Deteriorating Gymnasium

Fourteen years after it opened the gymnasium showed signs of age. Repairs to the roof were needed because the pillar supports had shifted (Board of Governors' minutes, May 2, 1874). Barnjum requested that the college make these repairs and actually expand the size of the gymnasium. There is no evidence that the expansion occurred at that time. Another Barnjum request for expansion came in 1878 (Board of Governors' minutes November 23) with Principal Dawson remarking that attendance of students at the gymnasium was very satisfactory and the training they received under Barnjum was "exceedingly thorough." Within a month the cost of the work was deemed reasonable and a tender from a company had been accepted (Board of Governors' minutes December 21, 1878). On December 20, 1879,

the *Montreal Star*² reported that "The appearance of the gymnasium is wonderfully improved by many attractions and additions and the lighting and ventilation are most excellent." However, additional repairs of \$500 were required once again in two years, at a time when the college found itself in another financial crisis, and the Board of Governors concluded that "...the gymnasium does not appear to be an essential adjunct to the University, especially under the present circumstances" (Board of Governors' minutes, July 13, 1881). It was also decided that Barnjum's services under the "present system" would cease on August 1, 1881, despite the "high opinion" of the Board for his university work, for the youth of the city, and "to the cause of Physical Education." While this is the first reference to the term physical education in the Board's minutes, it disappointingly was accompanied by a decision to sell the gymnasium.

The "present system" must have been referring to Barnjum's rental of the gym for his private business and perhaps his salary as Instructor of Gymnastics at the University. The Board decided that until the gym was sold, Barnjum would not pay rent to the university, as in the original agreement of 1862. But since fees had already been collected, he should make repairs in the gym at his expense. In a letter to the Board (September 24, 1881), Barnjum accepted this arrangement. He continued to be listed as Instructor of Gymnastics in the university calendars and to use the gym for his Montreal Gymnastics Club, making small repairs as needed. In March 1884 he wrote to the Board to request financial assistance once again, which he argued, exceeded the rent he would have paid under the previous system. He also shared his belief that the building was unsafe due to faulty original construction rather than wear and tear from use. A contractor offered to make the necessary repairs for \$256, but the Board responded that nothing could be done at the moment (Board of Governors' minutes, April 26, 1884). Monies were not available. The apparent stalemate was resolved by June 28 when W. Ferrier and William Molson reported that they had visited the gymnasium and agreed to build up the brick wall.

The gymnasium "crisis" of 1884 was an example of the Board of Governors expressing verbal support for the physical needs of McGill students but limited in the money they could expend to that end. This theme would re-emerge frequently in the future. In fact, a few years later the Principal reported on the poor condition of the gymnasium and asked that the Estates Committee consider the feasibility of building a new gymnasium on the college grounds (Board of Governors' minutes, March 24, 1888, May 29, 1889). Perhaps realizing that members of the Board might be unaware of activities at the gym, Dawson encouraged those who felt so disposed to visit the gymnasium to see the students in the gymnastic classes (Board of Governors' Minutes, November 21, 1890). Dawson was also aware of the

inconvenience of the gym at 19 University. These actions suggest that the Principal valued physical education and considered a gymnasium important for McGill. But a new gymnasium for men on the main campus would not be built for 50 years.

One of Dawson's greatest contributions was encouraging and promoting gifts to the university from people such as Molson, Macdonald, and Redpath. It may seem odd that a university with a tradition of benefaction since the 1850s would stumble forward from one financial crisis/challenge to the next. However, rather than use newly donated money for professorial salaries, improving working conditions, or maintenance of buildings such as repairing and upgrading gymnasiums, McGill's practice has been to use new money for new ventures, a practice not always well received (Frost, 1980). Toward the end of Dawson's principalship another benefactor emerged, who would have a major impact on McGill and on the future School of Physical Education, Donald A. Smith (Figure 1-8).

Donald A. Smith—Lord Strathcona and Mount Royal

Smith had immigrated to Canada from Scotland and was hired by the Hudson Bay Company in 1838 as an 18 year-old teenager. Receiving a salary of £20 a year, he remarked to a friend many years later that "I didn't believe that any man could be worth so much money" (Howell, 1932, p. 21). Smith would work for the company for 75 years. Initially assigned to secluded outposts surrounding Hudson's Bay, he demonstrated tenacity and resolve in dealing with the physical and business demands of the company (Howell, 1932). Distant journeys, frequently on snowshoes, resulted in Smith suffering from snow blindness, frost-bite, and hunger. He persevered and moved through the company ranks, eventually becoming the Resident Governor, the highest position possible in Canada (MacDiarmid, 1970). From his post in Winnipeg he exerted enormous political influence over land from Manitoba to the foothills of the Rocky Mountains, thus contributing significantly to the development of Canada. He became a major shareholder of the company and as a "genius in business enterprise" (MacDiarmid, 1970, p. 398) he acquired enormous personal wealth. In 1887 he was also appointed President of the Bank of Montreal.

Smith became a staunch supporter of the national railway promised by Conservative Prime Minister John A. Macdonald in 1871, if British Columbia joined the eastern provinces of Canada. Smith's work with the Hudson's Bay Company had convinced him of the need for a trans-Canada railroad to unite the new Canada and to settle the central prairies. He was an investor in the Canadian Pacific Rairoad (CPR) and was the man with the vast beard and formal stovepipe hat driving the last ceremonial spike into the railroad line at Craigellachie, British Columbia,

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November 7, 1885 (Burton, 1971; Howell, 1932). This is a famous picture in Canadian history. He was knighted in 1886 for his managerial leadership on the CPR, becoming Lord Strathcona and Mount Royal. He was named McGill's Chancellor in 1889 and remained in that post until his death, despite spending much time during his last 18 years in England, as Canada's High Commissioner.

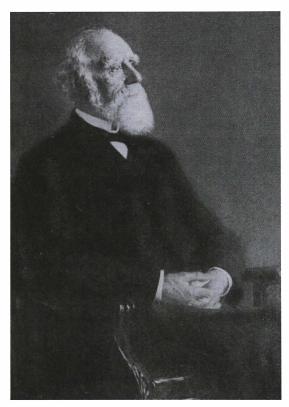


Figure 1-8: Donald A. Smith

Smith had a very bright sister with a great eagerness for education (Gillett, 1981). But most universities, including McGill, did not admit women when she was young. She died at 27 years of age and never realized her dream of attending university. It was widely held, even among some women, that they were not strong enough to manage the study rigors of university and perhaps were not capable of dealing with conceptual notions. University education was considered time wasted for someone who would find a suitable husband to care for her as she raised children and managed the family home. Smith's openness to higher education for women was likely influenced by his sister.

McGill was rather conservative with regard to education of women despite the opening of Vassar College for women in 1865 with an enrolment of 350 students. Canadian universities that followed Vassar and preceded McGill in admitting women were Mount Alison in 1862, Queen's in 1872, Victoria College in 1877, Acadia in 1880, and Dalhousie in 1881 (Frost, 1980 p. 252). With influence from Principal Dawson, a Ladies Educational Association had been formed in 1870 offering lectures for women in Montreal, presented largely by McGill professors (Slack, 1934). Dawson's early work in public education and normal schools had resulted in respect for the intellectual abilities of women and their contribution to education. This experience and his realization that education did not detract from womanliness (Frost, 1980) probably led to his openness to a letter received by the Board of Governors on September 13, 1884. Donald Smith offered \$50,000 to initiate and sustain a college for women at McGill. While his motivation for such philanthropy was not completely transparent, the offer was accompanied with strict restrictions that the money could be used only to support separate education for women (Frost, 1980). The offer agreed with Dawson's predisposition to the educational capabilities of women, his belief that women should be educated separately from men, and was another case of new money for new ventures (Frost, 1980). The endowment was designed to teach subjects from the Faculty of Arts, with 30 female students enrolling in 1884 (Slack, 1934). By 1887 women were permitted to follow B.A., M.A., or doctoral degrees. The McGill calendar of 1888 refers to the Donalda special course; named after Donald Smith. The Donalda designation remained in McGill documents for almost 20 years to denote women students. In 1888, eight women received the first degrees by females at McGill. In 1899 women entered the Royal Victoria College, a residence for women financed by Smith, which included a gymnasium.

Smith was very well known and respected in the early 1900s and was widely admired as a hospitably individual with simple dignity and benevolence (Howell, 1932). Still working at 93 years of age as Canada's High Commissioner to England, Smith died in 1914, several weeks after the passing of his wife.

Athletics

Permission to use the university grounds for sport could be argued as McGill's first involvement in athletics. It was tacit recognition of value in such participation. As noted, the cricket club sought this right in 1860. The baseball and football clubs were granted access to the college grounds during the summer months of 1872, under the following conditions:

- 1. A signed application was required.
- 2. Days and hours of use were specified.
- 3. Public matches were not permitted, nor could refreshments be served.
- Members of the club had to purchase a ticket from the college secretary for \$1.00 per season.
- 5. Students who paid fees received a ticket without charge (Board of Governors' minutes, April 27, 1872).

These athletic clubs were usually formed by McGill students but were open to others in the McGill community. The growth of these teams was quite apart from Barnjum's classes in physical education and represented the desire of the students to specialize in particular sports and to practice and compete with others as could be arranged. At a general meeting of the students of McGill on October 8th, 1884, the McGill University Athletic Association (MUAA) was formed. The students selected Principal William Dawson as President of the MUAA. This "appointment" may sound surprising but the Principal was usually the head or chair of every committee or association in the university. Athletic clubs recognized by the MUAA soon after its formation included football, tennis, cricket, and ice hockey.

The need for the MUAA was precipitated by the increasing number of requests for use of the grounds and increased student participation in athletic competition. The latter was influenced by the railroad system that now permitted travel in a reasonable and fairly predictable time to towns such as Sherbrooke (QC), Kingston (ON), and Toronto (ON), for contests that could begin at designated times. The responsibilities of the MUAA included supervision and control of all college grounds not used for educational purposes; allotment of portions of the grounds to the various clubs with the power to revoke such privileges; exclusion of persons who were not members of the university if it was appropriate; and supervision of all athletic contests. In the early years, the MUAA organized field days, in addition to intercollegiate teams. The field days had a variety of events; races, throws, and jumps that resembled modern track and field events. But those early competitions also included three-legged races and tug-of-war. The latter was very popular and rules stipulated that cleats were not permitted! In time, the tug-of-war became an Olympic sport.

In the 1880s the university grounds adjacent to Sherbrooke Street had four tennis courts surrounded by a wire fence, a 40 x 80 feet cricket pitch, and a 1/5th of a mile running track around the rugby/football field. The changing facility was a wooden shack of 12x18 feet built by the cricket club. At the June 26, 1891 meeting, the Board of Governors established the following rules (Grounds and Facilities notes n.d.).

- The membership of all clubs using the grounds must consist exclusively of members of the University.
- 2. No damage must be done to fences, trees, grass, etc.
- 3. All clubs desiring the use of the grounds in the time of the statutory college session, i.e. from Sept. 1 to May 1, must register its officers, object, rules and time desired, in the Principal's office on or before September 20 in each year, when rights and privileges will be assigned to them.
- 4. Clubs desiring to use any portion of the grounds in the summer vacation, that is, from May 1 to September 15, shall register as above on or before April 1.
- No club not so registered can be recognized, nor any right of students not organized in regular clubs.
- No club has any right to invite strangers, expect by special permission of the Board of Governors.
- 7. The University Athletic Association may use the grounds for the training of its members from September 1 to date of the College sports, at such times as may be necessary. Tickets shall be furnished to students so in training
- 8. All the above privileges are subject to be revoked at any time by resolution of the Governors.

McGill students are associated with at least two historically important sporting events. The first was two football games in Cambridge Massachusetts, May 14 and 15, 1874 against Harvard; considered to be the first American-style football games. The first game was played with Harvard rules, which included a round ball that was kicked, much like soccer today, but with some limited running with the ball in the hands and passing if pursued by an opponent. The second game used McGill rules, which had an oval ball and permitted unlimited picking up and running with the ball, similar to English rugby. This latter game is considered to be the first intercollegiate football game and an important step in the evolution of North American football. McGill students were also part of an ice hockey game on March 3, 1875, which some consider to be the first organized ice hockey game (Zukerman, 2012). The first game of hockey played by the McGill Redmen occurred on January 31, 1877, making it the oldest organized hockey club in the world, now in its 137th season.

Wicksteed Medals

Dr. R. Wicksteed, a graduate of McGill, wrote to the Board of Governors in 1882 reflecting upon the health benefits of physical exercise and its contribution to intellectual development. He donated \$100 for the encouragement of "physical culture" and suggested that medals be created for "proficiency in the exercises followed at the Gymnasium under the charge of Mr. Barnjum" (Figure 1-9). Wicksteed also recommended that the medals recognize leading

gymnasts in the graduating class. This was accepted by the Board (Minutes, September 23, 1882) and the funding was renewed in 1887 by Wicksteed. Initially, three medals were awarded, Gold, Silver, and Bronze, on the basis of a competition that was open only to those students who had attended instruction in the gymnasium for at least two sessions. Judges for the competition were appointed by the University. The Gold medal was reserved for a graduating student while Silver and Bronze were designated for others, as long as they met the criteria of having participated in two sessions of gymnastic instruction. Competitors had to provide the judges with a letter of good standing from their respective Dean prior to the date of competition (Calendar, 1887-1888. p. 224).



Figure 1-9: Wicksteed Medal Competitors 1886 (from left to right: Tait McKenzie, G. A. Brown, Major Fred S. Barnjum (instructor), W. A. Cameron, reclining: James Naismith

In 1889 Wicksteed announced that he would not offer the Gold medal, but that the Silver and Bronze would continue (Board of Governors' minutes, May 29, 1889). There was no explanation for this change, but subsequent University Calendars indicated that a Silver medal would be awarded to a graduating student while the Bronze was designated for others with the same restriction that competitors had completed at least two sessions

in the gym. Wicksteed's donation was the first from a McGill alumnus to support the physical aspect of university life. Medals for performance were very much in vogue in the late 19th century and early 20th century. Photos from that era often captured athletes with carefully adorned medals, displayed with considerable pride. The competitions for the Wicksteed medals were listed in the annual calendars of McGill for many years, contributing to the legitimacy of practice and competition in physical skill within a university context.

Helen and Frederick Barnjum Revisited

In May 1888 Fred Barnjum returned home from the gymnasium, chatted with members of his family, and went into the garden of his home on Durocher Street. There he had an attack of apoplexy (stroke or heart attack) and died very quickly. His obituary stated...

The deceased was universally respected and esteemed. He was a native of England but had resided in Montreal for the past thirty years. He took an active interest in the early movements for making athletics popular in Montreal and was one of the founders of the Gymnastic Club... Mr. Barnjum had also been actively connected with the militia of this city being a retired officer of the Prince of Wales Rifles. During the Trent difficulty he organized a company which was enrolled in the above mentioned regiment, and from that time he was a conspicuous figure in volunteer circles. He served in both the Fenian affairs of '66 and '70. In the latter affair he was adjutant of the battalion, and as such marched out to St. Johns, and served at Pigeon Hill and other places. When he retired he was senior major of the battalion, and held that rank on the retired list at the time of his death. Mr. Barnjum was professor of physical education at McGill University. He was 49 years of age and he leaves a wife and three young children.

Condolences from the Board of Governors were sent to Barnjum's wife, noting his many years as a "zealous and efficient instructor of the students in gymnastics and physical training, and who had endeared himself to so many of his pupils by his earnestness and enthusiasm" (Board of Governors' Minutes, May 26, 1888). Mrs. Barnjum proposed that McGill purchase the apparatus belonging to her late husband for \$617 (Board of Governors' Minutes, October 27, 1888), but the University offered to rent the apparatus for \$60 per year (Board of Governors' Minutes, December 1, 1888) which was accepted.

Following her brother's death, Helen Barnjum requested permission to offer classes from October to May in the gymnasium to children and young ladies. She had assisted

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her brother for many years with these groups, but indicated in an autumn letter (Board of Governors' minutes, October 27, 1888) that she would be unable to pay more than \$12 rent for the children's and ladies' classes. This was accepted and negotiations turned to instruction for the women students at McGill. Women students were assessed the same fee (\$2.50) as males in the Faculty of Arts, and \$50 would be added to the fees from the Donalda fund to create a university salary (Board of Governors' minutes, January 25, 1889 and February 22, 1889). Thus, 1889 marked the official beginning of physical education for women at McGill with Helen Barnjum as their first Physical Director (Slack, 1934).

Summary

By 1889, physical activity traditions were successfully planted at McGill. Both men and women could participate in voluntary physical education classes, formal awards and competition existed for student achievement in those classes, a gymnasium had been built (albeit quickly deteriorating), an instructor of gymnastics was an established part of McGill's university education, and a student driven athletic program of numerous clubs had 15 or more years of tradition. These were fine beginnings to be nurtured in the years ahead.

Notes

- James McGill provided money for a college in his name. He envisioned a college as part of a larger university. Thus, in the 1800s, the institution was usually referred to as McGill College. But as the 20th century approached and a large university did not materialize, McGill University became the more common title.
- 2. The newspaper reports are primary sources but often do not include page numbers. The articles were found in a McGill scrapbook. Someone had been assigned to cut newspaper articles about McGill, but the page of the newspaper was usually not included. The scrapbook is located at McGill Archives.



cGill has been a national and international leader in undergraduate and graduate education, higher education innovation, and research for almost 200 years. Much of this leadership is due to exemplary principals, professors, and students on the university campus. However, examples abound where graduates or former professors move to new locations where they realize their most significant achievements and fame. Two individuals the university has always been pleased to recognize as "its own" are James Naismith and Robert Tait McKenzie.

Following Barnjum's death in May, 1888, the Board of Governors responded quickly by advertising for his successor. This suggests the University was now committed to the physical side of student health. There was no recorded discussion by the Board to discontinue the position of *gymnastics instructor*, as the appointment continued to be labeled. In September of 1888, Principal Dawson reported that no candidate had applied for the men's position, but that Mr. James Naismith had agreed to be in charge of the male gymnastic classes at the university.

James Naismith

Naismith was appointed as Instructor of Gymnastics at a salary of \$250, derived from the student gymnasium fees. James Naismith (November 6, 1861 – November 28, 1939) was

born in Almonte, Ontario, near the city of Ottawa (Figure 2-1). By the age of 9 he had lost both parents to typhoid fever and was taken in by Peter Young, an uncle. The local "country boys" would gather in a small nearby hamlet called Bennie's Corners after school or chores to spend their leisure time (Naismith, 1941). One of their games was called "duck on the rock" in which players threw small rocks at the "duck" (a rock), attempting to dislodge it from the larger rock beneath, which was guarded by opposing players. The players soon realized that a softer shot lobbed higher in the air was more effective than a straight throw. This childhood game would influence Naismith years later when he invented basketball.



Figure 2-1: A Young James Naismith

Naismith was regarded as the most skilled and strongest athlete amongst his friends in Almonte. He excelled at spearing fish, hunting, riding, and felling a tree with precision, all with the love of competition (McKenzie, 1933). His strength and skill is described by McKenzie in the following story. "A powerful youth bestrides an unbound sheaf of wheat, and in one hand holds a sheaf he has just bound. He throws his second sheaf up in the air, stoops and binds the other before the first one comes back to earth, and challenges anyone in the harvest field to do the same thing." (McKenzie, 1933, p.1). A hero to his peers for his physical prowess, he was a rather average academic student who dropped out of high school. He soon developed aspirations to become a Presbyterian minister like his father and returned to pursue high school classes required for university. In 1883 he enrolled in the B.A. program of philosophy and Hebrew at McGill, beginning a formal education that would last 15 years.

Realizing that he would have to attend to his studies with considerable diligence, he did not try out for football when he arrived at McGill in the fall. Serendipitously, he passed the football field after the centre had just broken his nose. The captain called for someone to fill in and James obliged; in fact, he played against Queen's University the following Saturday and

for seven subsequent years (Naismith, 1941). He played with the strength, determination, and skill that typified his childhood, despite his weight of only 160 pounds (Zukerman, 2011). Although his participation in athletics was accidental, he attended the gymnastic classes of Barnjum with dedication and enthusiasm, winning the Silver Wicksteed medal in his junior year and the Gold in his senior year. Determined and serious as a student and athlete, he possessed a lighter side evidenced by raids he led to the west wing of the dormitory; often resulting in required explanations to the "powers" (McKenzie, 1933).

Naismith graduated in 1887 as one of the top ten in his class (Dewar, 1970) and enrolled the next year in the Presbyterian College to advance his ministerial goals. Being a football player and theologian was considered improper because football was often described "to be a tool of the devil" (Naismith, 1941, p. 22). This contradiction led at one point to his theological student colleagues praying for his soul. Still participating as a football player, he began to re-evaluate his future following an incident on the playing field. A frustrated teammate cursed at one point, then turned to James and apologized, knowing his religious beliefs. Experiencing an epiphany of sorts, Naismith began to wonder if sport might be an ideal vehicle to promote the Christian values he held so closely, rather than a contradiction to them. Might participants be capable of playing with total commitment and passion while maintaining self-control? It must have been a difficult decision, but to explore these ideas he would eventually give up the pulpit for physical education (McKenzie, 1933).

Following Barnjum's death, Naismith accepted McGill's offer to become its second instructor of gymnastics. Despite being an accomplished athlete, and student of Barnjum, he gave considerable thought to the position because he was not certain of his preparedness. Childhood friend, Tait McKenzie, agreed to assist him, which must have reduced Naismith's misgivings. For two academic years (1888-1890) Naismith taught physical education classes to McGill students under the same schedule and format established by Barnjum, while finishing his training for the ministry and playing football.

The Board of Governors in the 19th century was the supreme decision-making body of the University on almost all financial matters¹. Today, decisions are certainly less hierarchical; reflecting both the size of the university and changing perceptions of the competence and efficiencies of distributed levels of administration. But in the 1880s the Board decided upon salaries for professors, and the purchase and selling of land and buildings, as one might expect. However, its minutes also reflect the hiring of gardeners, blacksmiths, and purchasing of minor equipment. The November 22, 1889 minutes

report permission for James Naismith to purchase two dozen barbells, no doubt a weighty decision on the part of the Board!

Naismith enjoyed his teaching duties, but he was an individual who craved more knowledge and was eager for new academic challenges following his graduation from the Presbyterian College. His desire to study physical education meant resigning his McGill position and finding a suitable university in the USA that offered advanced training in physical education. There were no bachelor degree programs in Canada at that time, nor would there be for 50 years. He wrote to Principal Dawson the following letter on July 2, 1890 (Board of Governors' minutes, Sept. 26, 1890).

Dear Sir,

I here with beg to resign my position as Gymnastics Instructor for McGill University. My reason for doing so is that I wish to pursue a course of studies at Springfield during the coming session. I feel that you will be at no inconvenience to secure a suitable man, Mr. McKenzie who assisted me last session, is thoroughly acquainted with the course prescribed for the competitions, besides being a good gymnast. He is at present attending Dr. Sargent's class in Harvard University and will there have obtained much that will be of real benefit. Hoping that my resignation will be the cause of no trouble,

1 remain Yours respectfully, James Naismith

The desire to pursue physical education at Springfield College, Massachusetts, in particular, was a rather logical decision because it was a YMCA training school. The program was designed for young men who valued an integrated mind, body, and soul, and aspired to be directors of physical activity while advancing the mission of the association. Naismith was searching for ways in which athletic competition would lead to good rather than evil and to develop the whole person (Naismith, 1941). He believed that if the devil could make young men evil through sport, there must to be a way to promote their salvation through sport. Naismith's goal of promoting Christian-based physical activity was consistent with the YMCA.

Leaving Montreal for Springfield College, Naismith began a tradition of McGill personnel pursuing advanced degrees at the college, and graduates from Springfield taking a position at McGill. Whilst at Springfield, Naismith was assigned to teach a group of undergraduate men during the winter semester (Naismith, 1941). The undergraduates enjoyed outdoor activities such as track and field and baseball in the spring, and football, lacrosse, and rugby in the fall. But during the early winter, one class was particularly rowdy, not really enjoying the structure and formality of gymnastics practiced indoors. Luther Gulick, himself a historical figure in the USA and Director of the YMCA Training School, challenged Naismith to invent an indoor game that rivaled the fun of other sports but could be played safely indoors.

Naismith task-analyzed existing sports and concluded that a fast moving game with a ball would be fun for young men. He noted that most body contact occurred around goals, when players were allowed to carry a ball, and when using a small ball that could be concealed. He wanted to minimize body contact, which he argued would lead to scuffles and potential injury on hardwood floors. Moreover, he wanted the game to be easy to learn and promote cooperation. Raising the net or goal was designed to reduce body contact and was inspired by the successful lobbing of the rock in his childhood game of "duck on the rock."

He selected a soccer ball, which could not be easily hidden. The ball was supposed to be thrown to teammates rather than carried; hence one of the original 13 rules stated that players could not run with the ball. In addition, holding, pushing, striking or tripping an opponent were illegal. He posted the typed rules for Basket-Ball outside the gym at Springfield College on December 21, 1891. He thought he had created an excellent game, and that was quickly confirmed by the troublesome class who played it with much energy and enjoyment. The peach baskets that were utilized were raised, but in short order their bottoms were cut to allow the ball to fall back to the ground. Basket-Ball was an immediate success. The modest Naismith rejected suggestions of his colleagues to call the game Naismith-Ball.

Prior to other scholars, Naismith saw the potential in properly supervised sport and physical education to promote social values and moral attributes that would assist in life. "Let us be able to lose gracefully and to win courteously," he stated (Naismith, 1941, p. 189). In the last chapter of in his 1941 book, published posthumously, the list of attributes that he believed were derived from basketball were initiative, agility, accuracy, alertness, cooperation, skill, reflex judgment, speed, self-confidence, self-sacrifice, self-control, and sportsmanship.

After graduating with his physical education degree at Springfield, Naismith accepted an appointment at the YMCA in Denver, where he also continued his studies, this time

obtaining a medical degree from the University of Colorado in 1898 (Naismith, 1941). Upon graduation, he moved to the University of Kansas for the remainder of his professional career, functioning at various times as athletic director, physical education instructor, basketball coach, and chaplain (Figure 2-2). Basketball expanded around the world at a meteoric pace on the heels of that first game in 1891, and one of the highlights of his life was to witness the first Olympic basketball tournament in Berlin, 1936. Naismith received an honorary degree from McGill in 1938 but died the next year on November 28. He was an inaugural inductee to the McGill Athletics Hall of Fame in 1996.



Figure 2-2: James Naismith, Inventor of Basket-Ball

Robert Tait McKenzie

Robert Tait McKenzie (May 26, 1867 – April 28, 1938) (Figure 2-3) arrived as a one year-old infant to Almonte, Ontario, the same town where Naismith grew up. His father, William McKenzie, like Naismith's father, was a Presbyterian minister from Scotland. Young Robbie, as he was known in his youth, was only 9 years old when his father died at the age of 52. His mother was pregnant at the time of her husband's death, so young McKenzie experienced birth and death early in his life (McGill, 1980).

One of Robbie's elementary school teachers, Miss Neilson, noticed his talent for drawing and encouraged his parents to seek professional instruction from a visiting artist. Thus, at an early age Robbie acquired the habit and skill in watercolour sketching (McGill, 1980), but it would be many years before his full artistic talents would be apparent.

McKenzie as Athlete

Embarrassed about his delicate physique, Robbie was inspired by the talented acrobats of a travelling circus that visited Almonte (McGill, 1980). These were lean men of short stature who managed remarkable physical achievements, not huge strong men whose feats of strength were publicly celebrated at that time. As a young boy, he found joy in physical effort.

At school we ran, jumped, and played tag and prisoner's base. Once two of us ran continuously from the school to our home at the other end of the village, but that was just to see if we could do it. (McGill, 1980, p. 5)

We formed a lacrosse club and practiced on the common which formed the grazing ground of the village cows, a perilous playing field as may be readily believed, and in winter we found that by mounting a high fence and jumping off with our heads tucked in, we could land in a sitting position without any apparent injury, the discovery of the principle of the front somersault. (McGill, 1980, p. 5)

When winter came we skated over the frozen stretches of river, creeks and ponds, screwing the wooden skates to the heels of our boots and binding them with straps that made our feet ache with cold, or clamping on the "Acme" skates that were supposed to stay on without straps and represented the last word in mechanical perfection. (McGill, 1980, p. 4)



Figure 2-3: A young McKenzie (left) and Naismith (right)

McKenzie enrolled at McGill in 1885 with the Faculty of Arts and initially was a rather unremarkable academic student. However, his physical involvement occurred without reserve. He had a passion for acrobatics and recalled how his mattress was hauled out on the floor to deaden the shock of imperfect tricks that were repeatedly practiced (McGill 1980). He attended the vaudeville shows at the Theatre Royal and marveled at the juggling, trapeze, and pyramid acts (Figure 2-4). At a Christmas concert in Almonte, he and Naismith performed a *Catherine Wheel*—a maneuver in which each person holds the other's ankles, and together they roll like a large wheel across a stage—only to roll off the stage and into the women's dressing room, much to the chagrin of the women. So talented were McKenzie and Naismith that Barnjum gave them their own "brother act" in the annual gymnastic show at McGill.



Figure 2-4: Pyramid Act

McKenzie played football and was a member of the tug-of-war team, but he excelled in sports that required much coordination and diligent practice. As a result, he became the intercollegiate high jump champion by clearing 5'9". Linked to his desire to strengthen his physique, Tait participated in Barnjum's classes with enthusiasm.

An evening class would begin with half a dozen exercises by the whole group on bridge ladders to strengthen the arms and upper part of the trunk. Then the class would divide into smaller groups called "squads" each with a leader. Each group proceeded from ten minutes at the vaulting bar to the barbell exercises which brought almost every muscle of the body into play, yet by working antagonistic muscles against each other, never overstrained any. The Indian clubs came last—a marvelous combination of grace and powerful workout for the muscles. (McGill, 1980, p. 12)

The classes with Barnjum throughout McKenzie's undergraduate program included equipment and organization that were contemporary, but all new to Tait. His dedication to the classes and desire to practice culminated in the Wicksteed medal championship, at which McKenzie claimed gold in 1889. McKenzie received his B.A. that spring and began medical school in the fall.

McKenzie as Physical Education Instructor and Physician

Despite his athletic prowess, McKenzie realized he lacked fundamental scientific knowledge about exercise, and therefore attended a summer course in 1890 under Dr. Dudley Allan Sargent, Director of the gymnasium at Harvard. McKenzie learned about anthropometry, a new science of measuring the human body from head circumference, to limb length, to strength, and relating those measurements to physical ability. He participated in an exercise program during which Sargent explained the anatomy involved; something that was not included in Barnjum's classes. He also studied the physical examinations of the Harvard students taken at the beginning of each academic year that led to recommended exercises to maintain or remediate the physical condition of each student. This theme of individualization was also apparent in Sargent's exercise system in which students were encouraged to assess improvement and success relative to personal baseline measures, rather than in relationship to others. McKenzie returned to Harvard in future summers as an instructor, and he developed a professional relationship with Sargent.

Following Naismith's resignation, the McGill Board of Governors followed his suggestion and hired Tait McKenzie as its third gymnastic instructor in 1890, beginning a 14-year working association with McGill. He accepted the position with many new ideas for the physical well-being of the McGill students and continued as instructor while studying medicine. He maintained this teaching, essentially functioning as a physical educator, following graduation in 1892 and while interning at the Montreal General Hospital (1892-1893) (Figure 2-5). His salary as gymnastics instructor in 1892-1893 was \$500 (Board of Governors' minutes, September 23, 1892). McKenzie requested that his title be changed from Instructor of Gymnastics to reflect his increasingly demanding medical duties (Board of Governors' minutes, January 28, 1895). The Board agreed and named him Medical Examiner and Instructor of Physical Culture (March 23, 1895), and later Medical Director of Physical Training (November 15, 1901).

His dedication to physical education, despite his medical training, would result in an important twist in his life that would significantly affect McGill. Throughout the 1890s and early years of the new century, McKenzie's private medical practice grew, and he advanced academically in the anatomy department from assistant demonstrator, to full demonstrator, to lecturer.

In gymnastic classes, McKenzie divided students into three groups: bookworm, sedentary, and athletic, believing each group required a different emphasis in physical



Figure 2-5: McKenzie as Physician at Montreal General Hospital

activity (McKenzie, 1893). This continued the theme of individualized exercise programs initially conceptualized by Barnjum, Sargent, and MacLaren from England (Mason, 2008), but which was certainly not commonplace in practice. The bookworm group would be motivated to begin physical activity because of their standing relative to others, he argued, even if their improvement was interpreted as relative to themselves. Most students were sedentary and needed light exercises to "keep the body in the best working condition" rather than abnormal muscular development (McGill, 1980, p. 23). He felt that athletic students required vigorous exercise and challenges inherent in difficult gymnastic stunts.

Although the physicality of students through exercise was now a generally accepted part of the McGill landscape, there must have been professors and members of the Board of Governors who were skeptical and wary of athletic participation, particularly from the viewpoint of taking time from study. McKenzie used empirical evidence to refute those arguments. He pointed out that the 105 members of the football teams from 1880-1886 included 21 who were medalists at McGill, 20 who had first-class standing and 16 achieved second-class standing (McKenzie, 1893). In the Wicksteed medal group since 1883, seven were academic medalists, six had first class honours, and three managed a second class standing. The value and ability to combine athletic and

academic success is recognized today by Canadian Intercollegiate Sports, the organization that oversees university athletics. Varsity athletes with a grade point average of at least 3.5 are honoured as Academic All-Canadians.

McKenzie's dedication to the physical well being of McGill students and his vision for the future were highlighted in a document he prepared for the university in 1893, *Report on physical education in McGill University.* He used physical education rather than gymnastics likely because he was trying to use a broader and more contemporary term that conceptually included instruction in gymnastics and games, athletic competition, and health. As he indicated in the opening paragraphs, "No educational institution or system can lay clear to completeness that ignores the physical side of human nature and confines itself entirely to mental training" (McKenzie, 1893, p. 1). He outlined findings and assertions of physical education being related to less absenteeism from illness, higher academic performance for men and women, increased strength and physical skills, and enhanced moral functioning. He also briefly reviewed the history and traditions of the McGill gymnasium since 1862. Defects in the system of physical education at McGill were also noted.

- 1. The instructor has to work in the dark as to the physical condition of the individual student.
- 2. In the limited time and with the large number of students, anything like graded work is next to impossible.
- 3. Lectures, especially in the professional faculties and the Donalda department, clash with the gymnasium hour!—unlike Harvard where no lectures are given after 4 o'clock.

In other words, physical education was important for all students, should be individually prescribed on the basis of assessment, and should be scheduled at a time that did not conflict with other courses.

The old gymnasium reserved special mention as it was described as both inconvenient and insufficient. A cold shower in a dark corner was inadequate for proper hygiene and the lockers were antiquated and without protection from theft. Lighting used large quantities of gas, which escaped, the two coal stoves for heating were inadequate, and there was little ventilation. The ceiling was poor with pieces of plaster falling frequently, and the roof was leaky which resulted in water on the floor on rainy days creating an unsafe and unhealthy playing surface.

McKenzie argued that physical education would give "...a sound and healthy body to be the support of a vigorous intellect and the instrument of resolute will" (McKenzie, 1893, p. 8). He specifically recommended that a Physical Education Department be created and led

by a medical specialist. It should be organized like other departments of the university, with an enthusiastic leader receiving similar remuneration. A new gymnasium should be built and physical work be as "systematic and dignified" as in other departments. For McKenzie, this would include a physical exam by a physician and individually prescribed exercises based on those results, even for the professional students in Medicine and Law who were in classes during the physical education hour. The report also included the first mention of an assistant being necessary for the physical program. The Board of Governors accepted his proposals in principle (McGill, 1980) but financial limitations prevented allocation of money toward a new gymnasium or department. The Board did agree to the physical examinations of incoming students and named McKenzie Medical Examiner in 1895, the first appointment of its kind in Canada. This was the beginning of today's Health Services at McGill. As Medical Examiner McKenzie initiated physical exams of all incoming students followed by recommended exercises to maintain or remediate the physical condition of each student. The 1894-1895 Calendar of McGill is the first one to state "The recent addition of some special apparatus enables the instructor to devote some attention to the application of exercise in treating special cases of weakness or deformity, which it is requested shall be reported to him before the regular class work is undertaken" (p. 260).

McKenzie was naturally interested in people, enjoyed intellectual conversations, and was alert to opportunities (McGill, 1980). The confluence of these characteristics and his medical/physical education background resulted in a revealing story. The Governor General of Canada, Lord Aberdeen, came to Montreal in 1894 for a short social session and was looking for a swimming instructor for his boys. He was referred to McKenzie who decided to teach them himself. This led to new social contacts and friendships for McKenzie. He sailed to England with the eldest boy in the spring of 1895 and visited the Aberdeen estates. When the Governor General needed a house physician for the following winter, the job was offered to, and accepted by, young Tait. From swimming instructor to Rideau Hall! In Ottawa, McKenzie interacted with literary figures and artists, whilst Aberdeen became a wise mentor to him.

Prepared as an orthopedic specialist, McKenzie became a demonstrator of anatomy at McGill and in 1904 was appointed a lecturer in anatomy. While a demonstrator, he exploited his artistic abilities by using sculptures to show the relationship between physical exertion and muscular action. Among his earliest and best known work was that of four human masks (Figure 2-6) depicting effort, breathlessness, fatigue, and exhaustion (Davidson, 1988). This work was originally published in the

Journal of Anatomy and Physiology. The success of being published encouraged him to continue his sculpting and to write scholarly articles, much before such publications become an expectation in academia.

McKenzie as Artist

McKenzie had used watercolour since his youth and had developed the habit of sketching interesting scenes. He was a member of the Pen and Pencil Club in Montreal and even taught at the Montreal Art Association (Kozar, 1992). By 1900, his paintings and sculptures were exhibited at a variety of artistic shows. Tait McKenzie, athlete, physical education instructor, and physician, was adding a fourth realm of achievement, that of celebrated artist (McKenzie, 1932; Riley, 1976). In his later years, sculpting would consume greater portions of his time.

At a meeting of the Society of College Gymnasium Directors in 1902, an anthropometric paper was presented that included measurements of the 74 fastest sprinters in the USA. McKenzie questioned, "Why not model a sprinter that would represent the type as determined by those measurements?" (McGill, 1980, p. 39). Thus he used the average size of those runners to create *The Sprinter*. This piece was praised by most in the athletic and artistic communities and had the additional outcome of highlighting athletics to the public (McGill, 1980). These were early days in the development of sport, and the idea that athletes might represent a physically distinct group of individuals was not widely considered. Furthermore, instead of the standing start that had been used since the ancient Olympics, *The Sprinter* depicted a crouched runner, which was first used by a Yale athlete in 1888 (McGill, 1980). McKenzie followed with *The Athlete* (1903), again



Figure 2-6: McKenzie's "Masks of Facial Expressions." L-R: Effort, Breathlessness, Exhaustion, and Fatigue

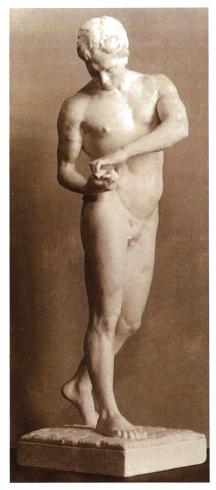


Figure 2-7: McKenzie's The Athlete

based on anthropometric measures (Figure 2-7). As an observer of athletes and as a physician, his early art reflected ideal or average bodies of those who had attained high levels of athletic achievement. As he matured and became more confident as a sculptor, his pieces following *The Athlete* were based more on intuition than precise measurement. A much celebrated medallion (Figure 2-8), *The Joy of Effort* (1912) became the emblem of Physical and Health Education Canada (PHE Canada). This medallion depicts three hurdlers and was inspired by a school of dolphins leaping through the water. It had been commissioned by the American Olympic Committee to reflect the amateur spirit of the Stockholm Olympic games of 1912.

Joy of Effort was exhibited at the 1912 Stockholm Olympic Games and was later placed in the wall of that Olympic Stadium, where it remains today. Art has occupied a quiet but regular space at the Olympic Games and McKenzie often displayed his work and attended meetings at the games. For example, he received third prize for *Shield of Athletes* at the art exhibition of the 1932 Los Angeles Olympics (Reid & Jobling, 2012).

McKenzie's volume of artistic work was remarkable, particularly in the context of his medical practice and university duties. McGill (1980; pages 205-212) lists 258 pieces in major collections. Although some are counted two or more times if produced in both bronze and plaster or in different sizes, it remains prodigious output. Not surprisingly, athletic



Figure 2-8: The author shown in front of McKenzie's The Joy of Effort in Stockholm

themes were common, but facial medallions of friends and those he admired were frequent, such as one he did of McGill friend Sir William Osler, completed in 1923. Less known were historical and war memorials such as *Benjamin Franklin* (1914), *General James Wolfe* (1921) and *The Call* (1927), the latter residing in Edinburgh, Scotland.

On the present-day McGill campus, *The Falcon (1931)* is outside the entrance of the McLennan Library, and a plaster copy of *Brothers of the Wind (1925)* is in the foyer of the Sir Arthur Currie Memorial Gymnasium. The bronze frieze of the *Brothers of the Wind* is at the Olympic Oval of the University of Calgary. When it was first exhibited in London, England, an admiring actor wrote to McKenzie and said, "Amazing! You are a genius, damn you. You are not a Scot, you are a Greek" (McGill, 1980, p. 138). A football piece, *The Onslaught (1911)*, is found in Tomlinson Hall of the McGill Sport Complex. His artistic accomplishments are particularly impressive because they came from an individual with no formal training.

McKenzie as Leader in Administration and Scholarship

As Medical Director and Instructor of Gymnastics, McKenzie interacted with directors of gymnasiums at several eastern USA universities as part of the Society of College Gymnasium Directors. These men viewed gymnasiums as places for research as well as physical activity and sport participation. Extolling the virtues of physical activity required strong personalities and considerable determination. McKenzie must have viewed these new challenges as professionally exciting when he remarked in 1899 "In such a group I felt the spirit of life strong. Here was a field worth tilling. I made the decision to devote myself to Physical Education rather than anatomy" (McGill, 1980, p. 39). It was not unusual in the later part of the 19th century for men of ambition to secure an MD degree as a means toward leadership positions in university physical education. McKenzie kept his private practice in medicine but devoted much of his energies to physical education, reminiscent of Naismith's decision to focus on physical education rather than the ministry. Physical education was a new field in the early 20th century, and its leaders had to convince educational authorities to include it in school curricula, relate exercise to positive changes in health, and to encourage physical participation for the population at large. This was no easy task. McKenzie would explain the need to master activities such as running, jumping, and swimming before tackling the classic sports during his many speaking engagements. He would remind listeners that during emergencies such as fire and drowning, one only had trained muscles to depend upon (McGill, 1980). In 1915 he was described as "...professor in a university subject that has yet obtained but slight recognition, he has, single-handed, put through a new departure in education and made it accepted not merely by university students (but) the public schools

also with their twenty million of coming American citizens are following his lead" (Adler, as cited by McGill, 1980, p. 157).

The university gymnasium of the late 19th and early 20th centuries was associated with great opportunity, not only as a place of exercise, but as a laboratory in which one conducted and evaluated new physical practices. Without a gymnasium, the forward thinking scholar would have been seriously limited. McKenzie had made the case for a new gymnasium at McGill since 1893, but eventually gave up hope. "My practice in Montreal was good. I had been appointed lecturer in anatomy. The work in physical education at the moment was interesting but hopelessly handicapped. At McGill there seemed to be no prospect of change. The old gym got older. Plans were made for a new one but nothing was done..." (McGill, 1980, p. 44). In 1904 Tait McKenzie accepted a position at the University of Philadelphia as full professor in Medicine and Director of Physical Education, attracted by a new gymnasium in which he would develop physical education programs and continue his research. Medical colleague and friend, Sir William Osler, had departed McGill to pursue greater opportunities at Pennsylvania ten years earlier.

The University of Pennsylvania also offered him a stable salary from the university rather than through athletics and permission to continue his private practice (McGill, 1980). At Penn he quickly instituted the student health evaluations and exercise prescriptions that he had started at McGill, established a policy and program of required physical education, began intramural sports, and helped create a playground movement within Philadelphia. His interests and energies were vast. McKenzie was a constant presence at Penn football games for many years, ready to assist injured athletes. In 1907 he was appointed Professor of Physical Therapy, the first such appointment in the USA (Kozar, 1992).

The Department of Physical Education created by McKenzie at the University of Pennsylvania had theoretical and practical divisions. The theoretical side provided lectures to third and fourth year medical students about the application of anatomy and physiology to exercise, blood pressure, exhaustion, and the growth of children (McGill, 1980). He believed that medical graduates should be prepared to supervise exercise programs in schools and universities. The practical division was designed for all other students and included the initial medical exam and prescription of exercise and sports based on that assessment. This was reminiscent of his work at McGill and with Sargent at Harvard.

The program of required physical education in the practical division meant that all undergraduate students had to gain credits in physical education in order to receive their

degrees. Sports such as baseball, wrestling, and swimming were offered, as well as remedial exercises. The ability to swim independently, in particular, was necessary prior to graduation at Penn. No swimming—no degree! The students obtained credit for course completion, but the same penalties existed as in academic courses. Lack of effort or improvement resulted in failure. At one point some disgruntled students burned McKenzie in effigy, but the Pennsylvania provost remained firm in support of required physical education.

At the end of McKenzie's first year at Penn, 1000 students had been evaluated and 594 were found wanting in some aspect of health. Difficulties related to heart and lung functioning, posture, knock-knees, and strength. It may seem surprising that more than half of the students were evaluated negatively. But correct posture was considered important to breathing and other health functions, and thus received far more attention in health circles 100 years ago than it does today. The health values of physical activity were not well known, and many students would have begun university without experiencing any of the "joy of effort" that McKenzie so firmly developed as a youth. It was unlikely they would have sought out physical activity on their own and therefore health deficits related to inactivity could have been present. There was also little knowledge about infectious diseases and the need for hygiene, not to mention the lack of clean water and proper sanitation facilities in many cities in North America, which were growing so rapidly in the early 20th century.

McKenzie was an early physician to view exercise as preventive medicine. As noted by one of his biographers, "He visualized a sound program of physical exercise playing a large part in preventing disease, physical breakdowns, and accidents" (McGill, 1980, p. 22). This was pioneering thinking that is accepted today, conceived over 110 years ago by a man whose lens of physical activity came from the unusual vantage point of athlete, instructor. physician, researcher, and artist. Moreover, he held firm to the corrective and rehabilitative power of exercise for those who were defective in some aspect of health. In physical therapy, he included exercise in rehabilitation, as well as massage, heat, and hydro-therapy (McKenzie, 1923). Like many others, he believed that "athletics" was contraindicated in rehabilitation because the competitive element would lead to much strain and overexertion. Even in the athletic realm, he once ordered a middle distance runner to rest for three weeks, much to the consternation of the coach (McGill, 1980). McKenzie also thought high levels of training might strain the heart. Aerobics guru, Dr. Kenneth Cooper, would successfully challenge such notions about the heart, but not until the late 1960s. In a similar vein, McKenzie was concerned with women overexerting themselves through physical activity, tacitly accepting some aspects of the Victorian image of the fragile female.

These views were consistent with McKenzie's belief in the well rounded athlete and person, not one who over-trained and produced an uneven bodily form. McKenzie valued the university student who would participate in two or three sporting activities, not the athletic specialist. He was a staunch supporter of amateurism, in part because it was associated with the notion of a person talented in many physical skills. However, his interest in science and elite athletic performance also continued through his life. For example, in 1904 he attended the Olympic Games in St. Louis and was part of a team administering physiological tests including lung and kidney functioning to athletes before and after the marathon. He attended as many Olympic Games as possible, often displaying his sculptures in associated exhibitions.

McKenzie had a habit of regularly writing a paper on some aspect of his work. Fortuitously these were accumulating when a publishing company proposed that he write a textbook on physical education (McGill, 1980). The resulting volume, *Exercise in Education and Medicine*, was released by W. B. Saunders in 1909, with subsequent editions in 1917 and 1923. As Arthur Steinhaus recalled, it was a landmark book in which "Dr. McKenzie the teacher brought exercise into education. Dr. McKenzie the physician brought exercise into medicine" (Day, 1967). It was a text designed to cover the whole field (Mason, 2008) and some referred to it as the "physical education bible" (McGill, 1980, p. 68). The first part, Exercise and Education, included several chapters on exercise physiology, as well as single chapters on Swedish and German exercise systems, playgrounds, physical education, athletics, YMCA, schools and universities, and physical education for girls and women. In the schools, he argued that "not less than one hour in five should be devoted to training the motor area of the brain, in addition to time allotted to free play. This should take the form of both gymnastics and athletics" (McKenzie, 1923, p. 232). This surely resonates with daily physical education initiatives today.

McKenzie had worked within the Philadelphia playground movement, which recognized that children needed space to grow in rapidly expanding cities. "Watch how a child plays and you will know how he will work later on. That is why supervision by a director who will cultivate all that is fair and honest and courageous in children is imperative for every playground" (McKenzie, 1923, p. 216). The final two chapters focused on physical education for the "blind and deaf mute," and for "mental and moral defectives." Mason (2008) has suggested that these were the first examples of adapted physical education in a major text.

The second part of the book, Exercise in Medicine, covered a number of treatment techniques for conditions such as club feet, round shoulders, scoliosis, weak abdomen,

respiratory diseases, obesity, nerve pain and exhaustion, ataxia, and poliomyelitis. Treatment included massage, water therapy, and exercise. In each section he outlined specific exercises for each condition. Poor posture was considered a physical and moral problem and correcting faulty posture was a key component in physical education from the 1880s to the mid-20th century (Mason, 2008 and see Rathbone, 1934 for an example of a corrective therapy text). In the medical world, McKenzie was one of the first to prescribe exercise as a form of treatment for these "physical disabilities" (McKenzie, 1894). Many of his early career publications represented his own research and observations of such physical problems and the value of exercise in addressing them (e.g. McKenzie, 1898, 1901). It is not surprising that such publications formed the basis of the exercise and medicine section. Exercise in Education and Medicine was considered an excellent book by the Lancet journal, and his old friend Sir William Osler. then at Oxford, said it was "full of good stuff and should become an important manual on the subject" (McGill, 1980, p. 70). In a letter using the salutation "Dear Rob," childhood idol James Naismith congratulated him on the work. In addition, his early mentor Dudley Sargent commented in a book review that McKenzie had done great service for the field and the public by pointing out that "properly applied physical exercise can do much for the handicapped — whether blind, deaf, or possessing other physical abnormalities normally excluded from physical education programs" (Kozar, 1992, p. 5).

Despite having accepted a position at the University of Pennsylvania, McKenzie never became an American citizen. When war began in 1914, he took a leave of absence from his academic duties and sailed to England to enlist. He had intended to join the Canadian forces. However, one story explains that to obtain a Canadian commission would have required him to return to Canada, which he was unwilling to do. Another story says that his country of birth refused him a commission, believing that at age 47, he was too old to serve. In either case, McKenzie joined the British Royal Army Medical Corps (McGill, 1980).

McKenzie's duties were physical training of soldiers and medical treatment of the wounded. When he was introduced to those preparing the British soldiers for the physical demands of war, they wondered if he knew the McKenzie who wrote the book they were using to design the physical training, *Exercise in Education and Medicine*. "Rather well!" he responded. He had published this hugely successful book in 1909. In England, McKenzie recommended a special exercise program for those declared unfit to serve and another program for all enlisted men. He suggested purchase of electrical and hydrotherapeutic equipment, use of masseurs, and provision of a special course for those who would lead the exercise for injured soldiers. Exercise to enhance fitness and to assist in recovery and

rehabilitation had played a significant part of his professional life, and he used all of his resources. Following the war he wrote a text, *Reclaiming the Maimed* (1918), essentially a text on physical therapy to restore and rehabilitate injured soldiers, but it was used more widely after the war for other injuries. In rehabilitation hospitals, he also used his sculpting ability to create masks for those whose faces were so severely injured that returning to society would have been difficult (Davidson, 1988).

As the 1920s unfolded, McKenzie became increasingly uncomfortable with American university athletic programs. "In athletic sports, as in life, severe competition finds following it as a shadow, the danger of cheating, dishonesty, and commercialization" (McGill, 1890, p. 159). He was particularly concerned with football and the use of the money generated from its popularity, believing the true values of sport in education had been lost. He argued for careful administration of the money rather than elimination of football from the university campus. With dissatisfaction of the athletic situation that he was unable to change, increasing speaking engagements, and commissioned art to finish, McKenzie stepped down as Director of Physical Education at the University of Pennsylvania in 1930 (Kozar, 1992) and took a year's leave of absence. He purchased an old mill in the Almonte area with 50 acres of land for a summer home. By this time, Almonte was only an hour's automobile drive from Ottawa. He renovated it as a studio, and he and his wife Ethel, who he had married in 1907, would spend subsequent summers at the home he called The Mill of Kintail, sometimes visited by his friend James Naismith (Figure 2-9).

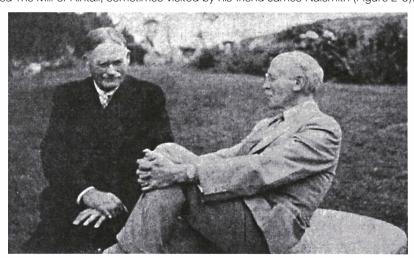


Figure 2-9: McKenzie and Naismith in Later Years

The Mill of Kintail was purchased by the Mississippi Valley Conservation Authority in Ontario and is now a museum filled with McKenzie memorabilia and art. For several years the

graduating students of the McGill physical education program students made a pilgrimage to the Mill before receiving their degrees.

McKenzie summarized his life message at his 70th birthday celebration.

The man who is well educated physically is not the football hero or the tennis star. He is the one who has practiced many forms of sport and who retains the memory of many of its great sensations. One who can recall the explosive effort of the sprint or the leap...the calculated timing of the pole vault or the shot put...one who has disciplined himself to physical pain to hang on in the mile race when his leaden feet seem impossible to lift, who has felt the ecstasy of placing a right-hand cross-counter to the chin without a return, or scoring a clean hit on the mark of a foil. One who has faced and conquered the fear of a giant circle on the bar or a back somersault from the shoulders of a acrobatic partner...he relives these experiences with an intelligence, knowledge and intensity of emotion that is quite unknown to the physical ignoramus. (McGill, 1980, p. 182)

McKenzie, the accomplished physical educator, physician, artist, and administrator, was one of the five founding members of the American Academy of Physical Education in 1926. Now called the National Academy of Kinesiology, it elects fellows who have made long standing contributions to research and creative work in physical education or kinesiology. Enormously accomplished and a friend of so many other talented individuals, McKenzie remained "self-disciplined, thrifty, warm-hearted, and without class consciousness" (McGill 1980, p. 113). He received honorary degrees from McGill in 1921 and the University of Pennsylvania in 1928. He was an inaugural member in the McGill Sports Hall of Fame, 1996.

Robert Tait McKenzie died swiftly from a heart attack during a typically busy day on April 28, 1938. At the time of his death, he was engaged in three of his professions (Kozar, 1992). As physician, he was president of the American Academy of Physical Medicine. As physical educator, he had been reelected a week earlier as president of the American Academy of Physical Education. As sculptor, he had just completed a sketch statuette of the great Hawaiian swimmer, Duke Kahanamoku.

Summary

Arguably, the greatest contributions of Naismith and McKenzie to physical education and sport came after they departed McGill. However, the university was pleased to recognize their achievements elsewhere in many articles in *The McGill News*, and conferring honorary

degrees to both of them. Physical education replaced gymnastics as the term for student exercise and physical activity, and Helen Barnjum, James Naismith, and Tait McKenzie continued the tradition of Frederick Barnjum. McKenzie introduced physical examinations for incoming students and exercise programs based on those results. Individualization was emerging as an exercise programming concept. Without a gymnasium at McGill, the university lost one of the giants in physical education and medicine in 1904. However, McKenzie's vision of a Department of Physical Education would be realized at McGill in major ways 25 years later when many of his ideas would impact McGill through the voices of Ethel Mary Cartwright and Arthur Stanley Lamb.

Notes

1. The Board of Governors has final authority over all affairs of the University. Major financial decisions regarding the budget fall under their jurisdiction. Academic matters such as program development and course offerings are assigned to the Senate, but subject to the over-arching control of the Board.



The Lord...and the Lady from Chelsea

he last decade of the 19th century and first twenty years of the 20th century were characterized by departures and arrivals of key people, and specific happenings that would shape the McGill School of Physical Education. Wiliam Dawson retired in 1893 after 38 years as Principal. McGill had been transformed from a small struggling college to one firmly grounded, handsomely supported by generous Montreal benefactors, with an attractive campus. When Principal William Peterson began his 24-year appointment in 1895, the university had five faculties: medicine, arts, law, applied science, and comparative medicine and veterinary science (Frost, 1984). There were over 1,000 students registered, taught by about 100 professors and their assistants. Peterson was educated in the classics at Edinburgh and Oxford and was found to be a gifted administrator with the diplomatic skills necessary for academic management (Frost, 1984). The task of finding and choosing the new principal had been relegated to the Chancellor, Donald A. Smith. It was Smith, Lord Strathcona, who had provided the financial gift to initiate the Donalda program.

McKenzie's report of 1893 had been accepted in principle by McGill's Board of Governors. His vision of a Department of Physical Education that would oversee the medical/health needs of the students and provide physical activity programs was deemed sensible. Building a new gymnasium was considered beyond the university's financial capabilities, but at least McKenzie had outlined the deplorable state of the gym at 19 University Street. In his last years at McGill, Tait McKenzie was assisted by Dr. Fred W. Harvey, who replaced him in

1904 as Medical Director and remained in that capacity until 1938. Instruction in gymnastics was assigned to Mr. W. Jacomb following McKenzie's departure for Pennsylvania. In 1906, a young lady from the Chelsea School of Human Movement in England arrived on the McGill campus as the sixth Physical Director for Women. Ethel Mary Cartwright would initiate changes that are still felt by McGill and Quebec education today. Before we begin the story of Cartwright, we must finish the one of Donald Smith and his impact on the McGill School of Physical Education.

Donald Smith and RVC.

In addition to the Donalda program, Smith's generosity to McGill included monies for the Royal Victoria Hospital, which opened in 1893, a \$1 million endowment for Royal Victoria College (RVC), and almost \$500,000 for a new medical building in 1910 (Frost, 1984; Howell, 1932). Smith's benefaction was not restricted to McGill or the city of Montreal, as Yale also benefited from his philanthropy. Royal Victoria College (Figure 3-1), located at the northeast corner of Sherbrooke and University, admitted women in 1899 and was ceremonially opened in 1900. It was primarily a residence for women students, but was also the place where they received some lectures, assistance from Resident Tutors,

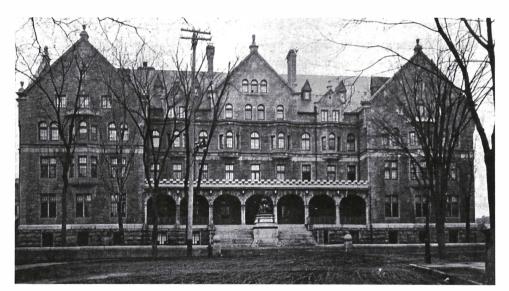


Figure 3-1 Exterior View of Royal Victoria College 1901

and instruction in music, the latter quite apart from regular courses (University Calendar, 1900-1901). At the beginning of the 20th century, higher education for women may have become an accepted possibility, but such education usually included efforts to ensure the women became "true gentlewomen" (Frost, 1984, p. 10). Fostering proper dress for formal and informal occasions, social etiquette, piano, singing, and physical activity became centered at RVC. All female McGill students were considered members of RVC, not only those who lived in the residence itself (University Calendar, 1900-1901). Formally, the Donalda Department ended and the women became part of RVC, the college for women.

Residences for women also offered protection of their reputations as ladies; a female who lived off campus by herself would have been considered a woman of questionable character and values in 1900. This protective attitude toward women existed even into the late 1960s. Just prior to the feminist movement, female students had to formally "sign-out" of McGill residences before attending a social evening in town. They were limited to a given number of evenings per week when they could leave the residence, and the time at which they were required to return and "sign-in" was also dictated. Not surprisingly perhaps, men had no such restrictions. The unfortunate name for the female who supervised the residence was *Warden*. Notwithstanding these limitations, RVC became the center for women's education for the next 40 years and many alumni recall RVC in very fond terms. Today the RVC building is home to the Faculty of Music.

Legitimacy of Physical Activity for Women

The new RVC included a gymnasium (Figure 3-2). The terms of endowment stated that no men were to use RVC, a restriction that included the gym. While a third of the McGill women had availed themselves of physical education prior to the opening of RVC (McKenzie, 1893), they had to struggle down to 19 University early in the morning to do so. In a switch of typical gender inequities, McGill's women now enjoyed a significant advantage over their male counterparts with regard to gymnasium facilities and did so for the next 40 years. Connected to the gym were modern bathrooms and dressing rooms. The Physical Director for Women from 1899-1904 was Miss Vendla Holmstrom (Slack, 1934; University Calendar, 1900-1901). Holmstrom was a graduate of the Posse Gymnasium of Boston and the Harvard summer school. The latter was the same program attended by McKenzie in 1890. Holmstrom taught from the Swedish tradition and the new RVC gym had the latest of Swedish gymnastics

equipment such as wall bars, ropes, benches, horizontal ladders, and flying rings. Under the supervision of Dr. McKenzie, the women underwent a physical examination prior to beginning gymnastics, as was the case with the men. Also included in the physical education program for women were basketball, lawn tennis, and ice skating, which occurred in the lawn at the back of the building.



Figure 3-2 Interior View of Gymnasium, Royal Victoria College 1901

The student annual, *Old McGill 1901*, printed an article titled "Gymnasium" which suggested that the RVC gym had become "a centre of attraction about which the majority of students gravitate, most of them as participants, the rest as spectators, and this bond of common interest between the girls will doubtless do its share toward the promotion of that healthy esprit de corps, which has had, hitherto, so little chance to develop"(p.143). It seems the gym quickly became part of the culture of women at McGill, a centre of physical activity and camaraderie. It was described as "the spot most loved by every Royal Victorian" (p.139). Money for physical competition (\$20 and \$10 prizes) was allocated to the Donaldas in 1892 (Board of Governors' minutes, March 25). Thus, the men could compete for the Wicksteed medals and women could compete for the Strathcona prizes.

The article goes on to state, "The gymnastics game of basketball has been enthusiastically taken up by the girls and bids fair to occupy as high a place in their conversation and affections as football does in those of their brothers" (p. 143). It is evident that the game of basketball was embraced by the women only 10 years after its invention by Naismith. Referring to the *gymnastics game* of basketball underscores an earlier point that gymnastics was a much broader term in the 1800s and early 1900s than the events in the present Olympic program. As the title of the physical activity programs at McGill since 1862, the term gymnastics was not used in the McGill calendars from the 1880s onward, even though the Board continued to hire "Gymnastic Instructors" such as Naismith and McKenzie. The leaders of the gymnasium were simply referred to as instructors, or directors of physical training, and the Wicksteed medals were awarded for physical culture. In 1909-1910, the term physical education was first used in the calendars for the overall physical activity program in RVC.

The Strathcona Trust Program

McGill's chancellor, Donald A. Smith, continued his philanthropy in 1909 by giving the Government of Canada \$200,000 followed by \$300,000 a year later. The money created the Strathcona Trust for the Encouragement of Physical and Military Training in the Public Schools of Canada (MacDiarmid, 1970; Morrow & Wamsley, 2010). The amount in the endowment was created to yield \$20,000 per year (at 4% per annum), which would be divided among the participating provinces. The trust supported a physical and military training certificate and had a huge impact on Canadian school physical education, some positive and some negative. Physical training has been affected by militaristic interests since the days of the Greeks and Romans. Quite simply, it has long been realized that the physical fitness of soldiers contributes to military success; therefore the history of physical education has strong military themes within it. We will see later how the Sir Arthur Currie Memorial Gymnasium at McGill was built essentially because of World War II.

British immigrants to Canada felt strong ties to the "mother country," as was the case with McKenzie. It is not surprising that Canada's Federal Minister of the Militia, Sir Frederick Borden, persuaded Smith to fund a 500-man unit for the Boer War from 1899-1902 (Morrow & Wamsley, 2010). In 1909, Borden went to Smith again to request monies to advance the physical and military training of Canadian youth. The idea of an active cadet program in the schools with public marching and displays of rifle expertise was attractive in Canada in the early 1900s and would have appealed to Smith, in part as a sign of patriotism (Morrow & Wamsley, 2010).

Beyond patriotism, others believed that cadet programs promoted physical, mental and moral development, kept boys "off the streets," and were preferable to sport participation (see Neil, 1963 for a discussion of this issue). The wording in the Trust spoke about

...the object being not only to improve the physical and intellectual capabilities of the children, by inculcating habits of alertness, orderliness and prompt obedience, but also to bring up the boys to patriotism and to a realization that the first duty of a free citizen is to be prepared to defend his country, the intention of the Founder (Donald Smith) is that, while physical training and elementary drill should be encouraged for all children of both sexes attending public schools, especial importance is to be attached to the teaching of military drill generally to all boys, including rifle shooting for boys capable of using rifles (Constitution of The Strathcona Trust, 1908, italics added).

Thus, the objective of the Strathcona Trust program was to provide systematic physical training to school children of both sexes and military training to boys by forming cadet corps. It was a partnership of Militia and Education leaders but the fund was administered by the Minister of Militia. To benefit from the trust money, provincial education ministries had to ensure the following:

- 1. Physical training was an integral part of the curriculum in every school.
- Teaching certificates issued by the provinces had a portion that included a certificate to instruct in physical training.
- Education departments were encouraged to form cadet corps with rifle shooting for the older boys.
- The system of physical training was based on the British system adapted to local conditions.
- Teachers who had an existing teaching certificate were required to obtain the physical training certificate within a specific period so that at least one teacher in every school had the ability to impart the necessary instruction (Cartwright, 1916; MacDiarmid, 1970).

The Militia in each province assisted in the training of the teachers at workshops or in university teacher education programs. On occasion, military men became instructors themselves in the schools until such time as the province created a mechanism so that every school had a qualified instructor of physical training. The militia conducted the necessary exams of the teachers and paid a bonus to qualified teachers who instructed the cadet corps (Constitution of The Strathcona Trust, 1908).

As physical education was not highly regarded across Canada as a necessary school subject at that time (Cartwright, 1916), the Trust program stimulated public interest in school

physical training (Cockhill, 1938). In addition, it provided some limited education to those who would deliver the program. Specifically, the certificate involved 45 hours of instruction from a non-commissioned officer who had been trained by the militia. A syllabus/curriculum of physical training was created as the basis for instruction (produced in 1911 and updated in 1919 and 1933). The examinations of the teachers demonstrating their ability to perform and instruct by command were conducted by officers of the particular military district (MacDiarmid, 1970). Successful candidates received the Strathcona "B" certificate in physical training and elementary military drill. An "A" certificate was restricted to those with additional training in both physical training and advanced military drill with rifle shooting (Constitution of The Strathcona Trust, 1908).

The syllabus of the Strathcona exercise program (Lewis, 1911) recommended that a certain number of vigorous exercises known to the children should be repeated every day. New exercises were to be carefully introduced so that exercise time was not lost. The teacher was required to select exercises from a table in the syllabus, review them, and move through the movements without hurry when teaching the children. The table included the exercises and the specific commands. Exercises included such movements as arm circles, lunging, and trunk twists, which today would be referred to as calisthenics. Commands issued by the teachers were to be loud enough for all to hear but not to be shouted. Every command had explanation (e.g., "head backward") and executive words (e.g., "bend") that informed the student when the movement was to begin. The exams demanded precise recall of the commands (Table 3.1). There was considerable discussion in the syllabus of the necessity to correct children if the exercise was executed incorrectly, because there was a high premium on performing all exercises with precision. Teachers were reminded to encourage rather than to scold as they corrected faulty movements. Games would also be selected: running and chasing, jumping games, and ball games. Although the individual exercises were the mainstay of the program, the games were considered to have an "educational effect on the mind and character" and to produce "a considerable amount of muscular exercise...because the exercise is spontaneous and thoroughly enjoyed" (Lewis, 1911, p. 107). A Strathcona exam is found in Table 3.1.

As would be expected in a country in which confederation provided sole responsibility for education to the provinces, there was some objection that the Federal Government was treading in provincial matters (MacDiarmid, 1970). In addition, significant complaints of the Trust program came from educational authorities. They argued that:

 Too rigid a military emphasis would result from the officer-instructors who had experience only with adults.

- 2. Men could not judge women's physical capabilities or guide them in matters of hygiene.
- 3. Military instructors lacked knowledge of how to adapt exercise for the developmental change in both boys and girls.
- 4. There would be too much emphasis on discipline, drill, marching, and squads.
- 5. Games, dance, and apparatus work would be largely ignored.
- 6. The notion of the whole child with body and mind would be lost.
- The 45 hours of instruction to receive the certificate was not sufficient to produce a quality physical education teacher (Cartwright, 1916; Cockhill, 1938; Morrow & Wamsley, 2010).

Despite the criticisms, the Strathcona Trust program was widely adopted in public schools in all provinces except Quebec and held sway for many years, perhaps because the Militia was found to be overly represented on the Trust's provincial and national committees (MacDiarmid, 1970; Morrow & Wamsley, 2010). Normal schools for teachers became the typical location for the course. It may have been financially expedient for Ministries of Education to support the program in normal schools and claim that the physical needs of children were considered. It is also true that some changes in the Trust program to reduce the rigid military emphasis were suggested by several provinces and these were reflected in the 1919 and 1933 revisions (MacDiarmid, 1970). Although Quebec Catholic schools did not adopt the program, teachers in Quebec Protestant schools did receive the cadet corps grant from 1910-1911 until 1960-1961. Book prizes for excellence in physical training were received by schools through the Trust (Neil, 1963), and students in the soon to be created McGill School of Physical Education (MSPE) were able to obtain the certificate in an unusual manner described later.

Table 3.1: Strathcona Exam March 24, 1926 McGill University

- 1. Write a table that would be suitable for boys 13 to 14 years of age.
- 2. Describe in detail the position of attention and the outward lunge position.
- 3. State briefly the objectives of physical education.
- 4. Trace the circulation of the blood starting at the left ventricle.
- 5. Name the important bones of the arm and leg.
- 6. What do you understand by the antagonist action of muscles?

It was not until the 1940s when universities developed degree programs in physical education that cogent arguments for comprehensive and developmentally appropriate physical education were heard (Morrow & Wamsley, 2010). These graduates of physical education programs became teachers, assumed leadership positions, and expressed

concerns about education, rather than training. As this occurred, the Strathcona Trust program in public schools became obsolete (Neil, 1963). Quebec book prizes were discontinued in 1960 when Trust money was shifted from local schools to university departments of physical education, with the money eventually redistributed to bursaries for students entering Physical Education at Macdonald College (Neil, 1963). "La Fondation Strathcona" still exists in Quebec, providing medals and sport equipment for cadets programs outside the school system.

An historical link to universities also remains with an award bearing an effigy of Strathcona for programs of physical education. Since the 1960s, the Department of Physical Education at McGill, in concert with the local Militia, have recognized McGill students who receive the highest grades in the physical activity part of the program by awarding them the Strathcona Trust plaque (Figure 3-3).

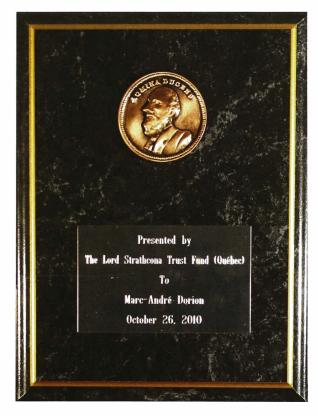


Figure 3-3: Strathcona Plaque 2010

Ethel Mary Cartwright

Ethel Mary Cartwright (Oct. 1, 1880—Sept. 18, 1955) was a pioneer and innovator in physical education, advancing the field as a profession in Canada, particularly at McGill and the University of Saskatchewan. Her biographer, Walton, considered Cartwright to have made four significant contributions: to specialist training in physical education, women's competitive sport, physical therapy, and the growth of professional organizations (Walton, 1976). Raised in Victorian England, she was nonetheless an independent spirit and energetic professional, highly committed to the new profession of physical education, and one who never wavered from having high expectations for her students.

Cartwright (Figure 3-4) graduated from the Chelsea College of Physical Education, one of the earliest programs in England to prepare school physical education teachers. It was a two-year diploma program consisting of anatomy, physiology, hygiene, first aid, voice production, elocution, singing, swimming, dancing, cricket, field hockey, tennis, and three types of gymnastics: German, Swedish, and English. In addition, massage and medical gymnastics, teaching methods, and practice teaching were included. After obtaining her diploma, the talented young lady joined the staff. "Carty," as she was known by the students at McGill, was considered to be a demanding task master but admired for her "personal skill, animated manner and engaging personality" (Walton, 1976, p. 20). With uncommon zeal she was dedicated to specialist education for physical education professionals, once paying a pianist herself to accompany dance and gymnastics classes.

In 1904 Cartwright accepted a position at the Halifax Ladies College in Nova Scotia. Why she immigrated is not completely known. Perhaps she sought new experiences or perhaps it was because her aunt taught at the Halifax College. In any case, she became its first female physical education teacher. Foreshadowing future interactions with the Strathcona Trust military, she replaced an older male sergeant-major as the physical education teacher at this exclusive school for young ladies. The program had consisted largely of calisthenics, marching, fencing, basketball and tennis. In her first year, she added vaulting, rope climbing, and balance beams to the program, as well as sports days and gymnastics displays. If students wanted to be exempt from physical education, they were required to obtain a medical certificate. She was also "daringly progressive" as she dealt with feminine hygiene and sex education (Walton, 1976, p. 29).

In September of 1906, Cartwright joined McGill as Instructor of Gymnastics¹ for Women at RVC at an annual salary of \$750 (Board of Governors' minutes, October 19, 1906). McGill

was the first university in Canada to have such an appointment for women which had begun with Helen Barnjum in 1889 (Munro, 1967; Stark, 1934). Within a year, Cartwright had established a required physical education program for first-year women, which by 1912 had increased to 140 hours over the first three years of undergraduate study. A *required* physical education program for women meant that all female students had to have taken at least 140 hours of physical education prior to graduation. She also supported the need of a physical evaluation by a physician, her ideas closely matching those of McKenzie who had left McGill two years prior to her arrival. The corrective program was expanded and additional financial prizes for women students in all years were secured (Cartwright, 1908). The women's required physical education program could become a reality because the women had a fine gymnasium at RVC. Required physical education for women remained at McGill until 1944.



Figure 3-4: Ethel Mary Cartwright

Cartwright's energy and dedication to physical education was also evident as she organized programs beyond typical job requirements: one for children and another for babies, charging \$10 and \$6 respectively. The money was directed to the coffers of RVC. The Warden of RVC during Cartwright's years at McGill was Ethel Hurlbatt, who respected the hard work and additional programs offered by Cartwright. Later, Hurlbatt would become her staunch supporter in a program to prepare physical education school teachers, which ultimately became the McGill School of Physical Education.

Active Coach and Athletic Leader

Cartwright was a strong advocate of athletics for women with the stipulation that women were the coaches, officials, and administrators. Men should not be coaching women! She would have been pleased that RVC had inter-class competitions (intramurals) beginning in 1902, including those in basketball and ice hockey. She is credited with making athletics for women more popular at McGill, initiating an annual sports meet that included vaulting, high jumping, balance relay, basketball relay, walking race, obstacle course, sprints, and the three-legged race. She also wrote newspaper articles promoting the RVC athletic program (Cartwright, 1909). At Macdonald College, basketball games and figure skating were begun.

A Normal School for Teachers located on Belmont Street had been associated with McGill since 1857. In the early 1900s it was a rather dilapidated and dreary location to educate teachers. An outside evaluator recommended that the Belmont building should be replaced, that teachers needed better training, and that McGill should appoint a professor of education. William Macdonald was developing a proposal for McGill, primarily to advance agricultural studies and rural communities, but was comfortable to add teacher education and home economics. Students began classes in the three areas at Macdonald College in 1907.

As athletic programs grew women's teams representing RVC (Figure 3-5), Macdonald College, and the MSPE (Figure 3-6) were created and nurtured by Cartwright. In the 1922-1923 year, the champion in basketball was RVC while the winner in hockey was the McGill School of Physical Education (MSPE) (Annual Report² of the Governors, Principal, and Fellows of McGill University, 1922-1923). Eventually, in 1927, the sporting activities of the MSPE and the RVC Athletic Association merged to become the McGill Women's Athletic Association.

Cartwright also played a developmental role in sport programs for girls and women in Montreal, helping create teams at the YWCA, Montreal Amateur Athletic Association (MAAA),



Figure 3-5: Women's RVC Basketball Team 1909

and the Teacher's Club (Walton, 1976). In addition, the Canadian Women's Intercollegiate Athletic Union dates back to an invitation issued by Cartwright in 1920 to a former English colleague, Ruth Clark, to bring her basketball team from Queen's to play against RVC (Walton, 1976). The next year RVC returned the favour and travelled to Kingston. As a basketball coach, Cartwright was adamant that the women's rules should be different from the men's which she considered to make excessive physical demands on females. Soon after Naismith invented basketball, women physical education specialists routinely modified the rules so that women were permitted to play in only one of three designated sections on the court. This would eliminate the need for women to run repeatedly up and down the court and would promote passing amongst teammates to get the ball near the basket for a score. From the perspective of 2012, it seems that Cartwright accepted, in part, the fragility of women as depicted in Victorian England. As noted by McKenzie (1923) and others, there was strong sentiment in the early 1900s that excessive physical exertion could be damaging to the health of all people, particularly women. A strong advocate of participation in physical activity by women, but not at high levels of physical exertion, Cartwright argued for equal, but different, physical activity for women and men.

Cartwright coached many of the RVC and MSPE teams, particularly in basketball. University athletic programs for women were still in their infancy with teams functioning only sporadically at McGill, the University of Toronto, and Queen's. With little money for travel, intercollegiate play was restricted to a meet or two over the season, not a schedule of 20 or more games. The 1923 RVC basketball team beat their *ancient rivals*, the University of

Toronto in one such meet. It was declared that "The team play was the result of long and careful coaching by Miss Cartwright. It is impossible to over estimate her share in the victory" (The McGill News, 1923). This would appear to be high praise, even in the generally positive magazine, The McGill News. Her dedication to her coaching duties was exemplary. On one occasion she was in the hospital suffering from a bout of appendicitis but managed to convince an orderly to transport her to the gymnasium where she coached from a wheelchair (Marks, 1957). Cartwright played a pivotal role in developing and encouraging sport for women at McGill, in Montreal, and in Canada.

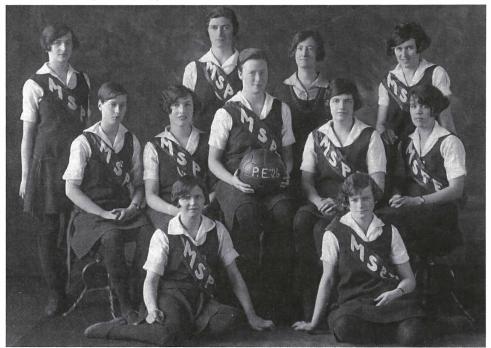


Figure 3-6: Women's MSPE Basket-Ball Team, 1925-1926

The McGill School of Physical Education Begins

Ethel Mary Cartwright was one of the earliest proponents of professional preparation for physical education teachers in Canada. Public education was still young, and it was not yet assumed that all new schools should have a gymnasium or that a specialist should be hired to teach physical education. Early leaders like Cartwright had to proclaim the values of

physical education to ensure it was even included in public school and university curricula, convince authorities that professional preparation and specialist training were necessary for the teacher/leaders, and finally persuade university students that physical education was a viable profession for college graduates (Cartwright, 1921). This was a challenging and daunting road, made all the more difficult in the early 20th century when schools with small numbers of students were more common than today and had difficulty justifying a specialist. Today, physical education specialists are a time-honoured fabric of a high school, but Quebec remains one of only three provinces in Canada that routinely employ specialists to teach physical education in elementary schools. In large part, this is due to the foresight, wisdom, and energy of Cartwright.

After three years of establishing required physical education for women at McGill, and coaching and promoting athletics for women, Cartwright turned her attention to the professional preparation of physical education specialists. In fact, her university salary was increased to \$1,000 for the 1909-1910 year for her to offer physical education content to teachers in training at McGill (Board of Governors' minutes, April 26, 1909). Initially, this was an elective course of two hours per week for senior undergraduates (1909-1910). A similar course followed for those women in education (1910-1911), and finally a summer course for teachers already in schools was offered (1912). She cooperated with Professor G. A. Dale from the McGill Department of Education in developing the content of these courses. Dale had been appointed Macdonald Professor of Education in 1907.

The summer course, which ran from May 27—June 22, 1912, was formally announced by the McGill Registrar, J. A. Nicholson, to Dr. S. W. Parmalee of the Quebec Provincial Department of Education. There were two sections: one for those already teaching physical education and one for those wanting to become specialists in physical education. Taught at RVC, it was a joint venture of Physical Education at RVC and the Teacher Training Committee of the McGill Department of Education. Both men and women teachers were invited to participate. The committee overseeing the course was Professor Dale, Dr. Fred Harvey (Medical Director at McGill), H. J. Silver (Superintendent of the Protestant Board of School Commissioners), C. B. Powter (Supervisor of Physical Education for the Protestant Board of School Commissioners) and Mary Ethel Cartwright (Physical Director for Women at McGill). There were 16 instructors from the Faculty of Medicine, Department of Education, RVC, and the Protestant School Board and the course was described as the first of its kind in Canada (Annual Report, 1911-1912). The cost was \$25 or \$5 for each of the 21 sections.

The content of the course was decidedly broad in scope, embracing the biological sciences of anatomy and physiology, humanities such as history, professionally relevant pedagogy and correctives, and personal improvement in a variety of physical activities (Table 3.2).

Well-supervised student teaching experiences would shortly be added when university students, rather than current teachers, followed the program. This breadth of subject matter would typify the McGill physical education teacher program for the next 100 years. Hygiene was relevant in the early 20th century as the need for clean water, sanitation, and personal cleanliness became known. Today, hygiene might fall under Health Education. In 2002, *Kinesiology* was added to the Department's title (Kinesiology and Physical Education), but in 1912 Kinesiology would have been the title for biomechanics rather than for today's more encompassing *study of human movement*.

Table 3.2: Content in the 1912 McGill Summer Course of Physical Education

Physiology and histology	Class management and teaching
Anatomy	Gymnastics
Applied anatomy	Heavy gymnastics
Personal hygiene	Dancing
Public hygiene	Games and athletics
First aid	Basketball
Physiology of exercise	Gymnastics and playground equipment
Anthropometry and physical examination	Educational handwork
Corrective gymnastics	Kindergarten games
History of P.E.	
Pedagogy	

Induding the Protestant Board of School Commissioners and the Department of Education at McGill in the program was insightful. The physical education teachers from McGill's program who were employed by the Protestant board quickly became highly regarded as well-prepared professionals. Students who completed the course received a specialist certificate from the Board that qualified them to receive a specialist salary. The 1912 summer group did not receive a McGill diploma in physical education because it did not yet exist. However, the first summer course was considered a success and resulted in the McGill School of Physical Education (MSPE) being established on October 12, 1912 under the Teacher Training Committee of McGill's Department of Education (Slack, 1934). In the Annual Report (1912-1913) it is referred to as the School of

Physical Education for the first time. The Executive Committee of the MSPE included Professor Dale (Chairman), Cartwright (Secretary) and Dr. Harvey. Other members were Principal Peterson, Ethel Hurlbatt, one representative each from the Federal Militia and Quebec Department of Education, and two representatives from the Protestant Board of School Commissioners. It was this committee that ran the MSPE.

In November of 1912, 16 students began a diploma program in physical education which continued until May 31, 1913, with classes from 4:00-6:00 p.m., three days a week (Annual Report 1912-1913; Slack, 1934). It was thought that the time devoted to the diploma in 1912-1913 constituted one-third of a typical one-year diploma. Classes for two more years at the same rate of six hours per week would be equivalent to a one-year diploma, permitting the students to graduate with their specialist diploma in 1915. In essence, the physical education diploma was offered on a part-time basis. A second summer school in physical education was offered in 1913 at Macdonald College and students could finish the second two-thirds of the diploma program during that session. Three students selected this route and thus became the first of many MSPE diploma graduates after completing the final third during the 1913-1914 year.

Table 3.3, from the 1913-1914 McGill University Calendar (p.344-345), provides evidence that the bulk of the teaching load fell to Cartwright and Harvey in the early years of the MSPE. The aim of the MSPE was to "train teachers of Physical Education for private and public school work, and recreational and social work" (Annual Report, 1913-1914, p. 80). In 1913-1914 the MSPE developed a course for playground teachers and social workers that included such topics as folk dancing, games, handicrafts, story-telling, first aid, and management of playgrounds. Today, scholars of recreation and social work would certainly take umbrage with the thought that professional preparation in physical education would prepare one to work within those fields, much like Cartwright was offended that 45 hours of Strathcona instruction was considered by some to produce a contemporary teacher.

Astute and Insightful Maneuvers

Cartwright was critical of the Strathcona Trust program and apprehensive that provinces would accept the plan as cheaper than physical educators trained by educators (Walton, 1976). In April of 1913 she attempted to orchestrate the militia and educators to work in cooperation with the MSPE. In the second summer course, she proposed to include the Trust syllabus, knowing

that she could influence the way it was taught and make it more educationally relevant. A former student, Iveagh Munro, recalls Cartwright explaining later "if you can't beat them, join them and work to improve them from within" (Walton, 1976, p. 54). Munro would join the MSPE staff in 1939. The Strathcona course material was included in the teachers' program at Macdonald College that summer. In February 1914, Professors Dale and Cartwright visited with the Minister of Militia in Ottawa and convinced him to transfer the bonuses for the students taking the course to the university. In other words, if McGill or any other institution offered a course of physical education that led to a Strathcona Certificate B, then the institution could request \$35 per each class of 30 students. In short, the Trust subsidized the MSPE. Cartwright showed great insights into the potential risks of a military-driven physical training program compared to one focused on education. She even suggested that Lord Strathcona had intended to develop physical education rather than physical training. In a 1916 article she pointed out that

An expert in physical education is not one who can perform and teach a few exercises, but one with a good knowledge of anatomy and physiology; with an intimate knowledge of the mechanism and effects of bodily movements; with some training in school and public hygiene, physical diagnosis, and medical gymnastics; with a wide range of folk dancing, games and athletics for all ages. To this should be added a thorough acquaintance with school conditions and needs, some study of educational psychology, and above all, practice in teaching under skilled oversight. (p. 5)

She concluded that a course of 6-8 weeks would not result in an expert of physical education, anymore than such time would create an expert teacher of any other subject. Critical commentary notwithstanding, Cartwright became the first physical educator to be appointed as a Strathcona examiner. One can only chuckle at the thought of this tenacious 5'1" woman convincing the military men about the rigors of the McGill MSPE program, but they quickly recognized it as equivalent to the more advanced Strathcona Certificate A in 1914!

Struggles and Change

The Teacher Training Committee, and thus the MSPE, was a curious administrative unit. It did not have to seek permission from the University to go about its business and functioned much like a semi-private organization. The MSPE did enjoy the good will of professors in the University, who received no adjustment in their workload for teaching in the MSPE. However, those professors and part-time instructors of practical classes received stipends from tuition charged to students or collected in other ways by the MSPE. In simple

terms, the MSPE had to raise money to exist, or in current terminology, it was a self-financing program. It seems that the Teacher Training Committee was as much under the auspices of Quebec educational authorities, as it was part of McGill (Walton, 1976). It was through the support of Ethel Hurlbatt, an admirer of Cartwright, that no fees were levied to use RVC. Odd indeed by today's operational standards! But with the support of a grant from the Teacher Training Committee for needy students, money from the Strathcona Trust Program, and the Protestant Committee of the Council of Public Instruction, the MSPE sputtered forward (Slack, 1934; Walton, 1976). Even without financial assistance from the University, the MSPE survived and expanded, "a credit to the courage of the Committee and to the ingenuity and determination of Miss Cartwright" (Walton, 1976, p. 75).

In the summer of 1914, a new course on playground supervision was initiated by the MSPE in partnership with the Montreal Parks and Playground Association (Slack, 1934). During the 1914-1915 school year, Cartwright organized another program for children and cleverly used students in the MSPE as instructors. She extended student teaching experiences into Montreal public schools. Expansion was evident again during the summer of 1915 when she and Dr. Harvey initiated a special program on Remedial Gymnastics and Massage. This was designed to strengthen the training of the physical education students and to respond to the need for masseurs in light of returning injured soldiers from WWI. This enabled MSPE students to work in clinics and hospitals in the city. The financial state of the school was still precarious as expenditures for two physical therapists that assisted during the summer Remedial Gymnastics and Massage program were provided, but no stipends were possible for Harvey, Cartwright, or Clark (Walton, 1976). While teetering on financial disaster, the program continued to be acknowledged for its first-rate preparation of physical education teachers. Beyond the Strathcona A Certificate which diploma graduates received and the Protestant School system hiring MSPE graduates, the Quebec Central Board of Examiners recognized the MSPE diploma as a specialist certificate throughout the province on June 15, 1915. Very early, McGill physical education was considered to be something special! Special in the quality of the student, but also that physical education should be conducted by university educated specialists.

For efficiency, Cartwright had recommended that the three-year part-time sessions be joined into a one-year full-time program. But WWI pulled Cartwright to England, and she sought a year's leave of absence. After a year serving in an army rehabilitation hospital in Wales, she returned to McGill in 1916 for the beginning of the one-year physical education diploma program. Twenty full-time and 66 part-time students were enrolled in the diploma

Table 3.3: The 1913-1914 Diploma Program

Course	Instructor
Physiology and histology	Prof. J. C. Simpson
Anatomy and applied anatomy	Ethel Mary Cartwright Dr. F. W. Harvey
Personal and school hygiene	Ethel Mary Cartwright Dr. F. W. Harvey Dr. F. B. Jones
Social and public hygiene	Dr. F. B. Jones
First aid for the injured	Dr. F. J. Tees
Physiology of exercise	Dr. F. W. Harvey
Anthropometry	Dr. F. W. Harvey
Physical diagnosis	Dr. F. W. Harvey
Corrective gymnastics	Dr. F. W. Harvey
Orthopædics	Dr. F. W. Harvey Dr. McKenzie Forbes Dr. W. G. Turner
History of physical education	Prof J. A. Dale Ethel Mary Cartwright
Kinesiology	Ethel Mary Cartwright
Class management and teaching	Ethel Mary Cartwright
Pedagogy	Prof J. A. Dale
Gymnastics	Ethel Mary Cartwright C. B. Powter A. S. Lamb
Dancing	Ethel Mary Cartwright
Games and athletics	Sadie Roberts Ethel Mary Cartwright A. S. Lamb
Theory and practice of play	A. S. Lamb
Experimental psychology	Dr. W. D. Tait
Heredity and evolution	Prof. J. C. Simpson
Manual work	
Kindergarten games and songs	

as well as seven in the Remedial Gymnastics and Massage program (Walton, 1976). The fees collected for these two programs were \$110 and \$85 respectively. As noted by Neil (1963), 1916 marked the beginning of a wider geographical influence of the diploma program as students from across Canada were enrolling, not just those from the Montreal area, and one graduate took a job as far away as India. In 1917, at the conclusion of the first one-year diploma program a demonstration was held at the Montreal Amateur Athletic Association (MAAA) showcasing skill in teaching and gymnastics. Such presentations continued the long tradition started by Barnjum and were a regular part of Cartwright's programs.

The 1918-1919 academic year was pivotal due to the financial challenges of the MSPE. Considerable clerical work was necessary, there was an increase in the number of students enrolled in required physical education, and facilities beyond RVC (e.g. MAAA) were being rented. There was no money for an assistant to Cartwright, despite \$500 raised from former graduates and a fee increase from \$110-\$150 (Walton, 1976). A letter was sent in March to the McGill Board of Governors from the executive of the MSPE requesting that the first college of physical education in Canada be established at McGill and that it offer a two-year program in physical education. Cartwright had long asserted that physical education had established itself as an academic subject and that many universities in the USA had such a department. Further, the MSPE executive argued that the MSPE had more than justified its existence at McGill, there was a demand for specialist teachers of physical education, and Montreal was the only city in Canada in which every public school had a physical education specialist. When challenges mounted, it appears that Cartwright was not one to retreat and consolidate, but to push forward and expand. Creating a College and a two-year diploma was forward thinking. The Board of Governors met on October 18, 1919 and did not establish a college of physical education. However, they stated that "The School of Physical Education has, at its own request, been taken over by the University and been made a part of the University Department of Physical Education." What was this new administrative unit and who were the principal players? How can a school of physical education be part of a department of physical education?

Summary

When Principal William Peterson ended his principalship the old Barnjum gym was no longer used, but a modern facility for the women was the envy of many universities in Canada. The MSPE, the first Canadian school of physical education affiliated with a university, had

almost a decade of experience preparing personnel who were considered to be excellent professionals. The MSPE had promoted physical education so effectively that all Protestant schools in Montreal had a physical education specialist, which was unique in Canada. Cartwright, and her colleagues and supporters, had advanced women's sport in Montreal and Quebec, and were on the verge of a Canadian impact. She had deftly stick-handled around the military to use resources endowed by a grand old McGillian, Donald A. Smith. In 1919, a new 2-year university diploma in physical education was about to begin, led by Dr. Arthur Stanley Lamb.

Notes

- The Board of Governors usually hired physical education instructors in this era as "instructors of gymnastics." In less
 formal documents such as the Calendar or Old McGill they are occasionally referred to as "physical directors" or
 assistant physical directors.
- 2. Subsequent use of these reports will be referred to only as Annual Report.

The Umbrella Department and the "Dean" from Down Under

s the roaring 20s began, the MSPE found itself with a new leader and part of a Department of Physical Education, rather than as a College of Physical Education¹. McGill also found itself with a new leader as Sir Arthur Currie assumed the Principalship on May 31, 1920 (Frost, 1984). Currie had returned from World War I as a hero after commanding Canada's troupes in France. Strong sentiment for the idealism of the British Empire existed at McGill, and the invitation for Currie to become Principal reflected such loyalty, even if he did not possess a university degree. He was a leader of men (Frost, 1984).

Currie had been a public school teacher in British Columbia, an insurance agent, and a real estate partner while simultaneously volunteering in the local militia. Service in WWI led to his appointment as commander of the Canadian Corps in France. With a strong personality and able intellect, Principal Currie quickly demonstrated expertise in making academic appointments and planning priorities (Frost, 1984). Currie was a natural fund-raiser, and his years as principal were accompanied by new edifices on campus. It was well known and widely acknowledged that a new gymnasium was needed but it had not been built when Currie died in 1933. Ironically, it was the confluence of his memory as a war hero and principal, and a second world war, that finally realized the gymnasium.

The First Department of Physical Education

In the 1920-1921 academic year, there were about 3,000 students at McGill, including 11 females in each of the two years of the new diploma in physical education (Eaton, 1964). The university had not created a College of Physical Education as Cartwright and her colleagues had hoped, but their outstanding work and accomplishments were acknowledged by the act of McGill assuming financial control of the MSPE. Miss Georgina Wood was appointed as assistant to Cartwright (Slack, 1934), providing Ethel Mary with much needed work relief. In January 1920 a new structure called the Department of Physical Education came into effect with Dr. A. S. Lamb as Director but no influential administrative role for Cartwright. Strange indeed! The new department would have four units under its umbrella: required physical education, athletics, health services, and the MSPE (Figure 4-1). The first Department of Physical Education would last for the next 30 years. To understand its creation and evolution, one must come to know its director, A. S. Lamb.

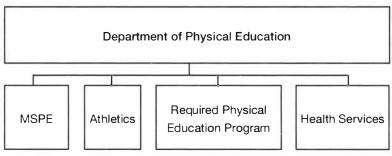


Figure 4-1: Department of Physical Education

A. S. Lamb

Arthur Stanley Lamb (September 16, 1886—September 4, 1958) was a shorter man (5'6") who required only five or six hours of sleep, and he always had a mischievous demeanour and twinkle in his eye (Eaton, 1964). A practical joker, avid fisherman, golfer and curler, he was an engaging story teller who enjoyed a good debate and one who paid unusual attention to proper apparel for the occasion (Eaton, 1964)². Lamb was first appointed as Physical Instructor at McGill in 1912 and retired in 1949.

An Australian by birth, Lamb grew up in Ballarat, near Melbourne, where he was regarded as a fine athlete, particularly as a swimmer who had honed his skills in the local lake. He immigrated to Vancouver with a friend in 1907 following a horrible drought in Australia. Both young men were attracted to the work of the YMCA and sought training that was available in Springfield, Massachusetts. Lamb found work in Vancouver as a carpenter and began swimming at the local YMCA where he joined the Leader's Corps. He impressed the Physical Director, who hired him as Assistant Physical Director a year later. But by August 1909, Lamb departed Vancouver for Springfield to begin studies in physical education.

Lamb enrolled in the International YMCA Training School in 1909 to seek a Bachelor of Physical Education degree. This was the same institution attended by James Naismith almost 20 years earlier. The three-year program included anatomy, histology, physiology, exercise physiology, anthropology, psychology, physical training, history, English, teaching methods, hygiene, playground methods, church history and the old testament (Eaton, 1964). The content was quite broad, like the program that was developing at McGill. Lamb found the physiological studies particularly interesting and made the decision to pursue medicine after graduation. Eaton (1964), his biographer, argued that Lamb was ambitious and knew that a degree in medicine was a common route if one aspired to leadership positions in the emerging field of physical education.

At Springfield, Lamb (Figure 4-2) took advantage of many of the available extracurricular activities. At varying times, he was Vice-President of his freshman class, a gymnastics tutor, a varsity soccer player, a student senator, a member of the literary society



Figure 4-2: A Young A. S. Lamb 1926

and debating team, the manager of both the soccer and gymnastic varsity teams, and a writer contributing to the school paper. Many of these activities would help prepare Lamb for debates later in his professional life, and their sheer number underscore his vast energy. During the summer vacations of 1910 and 1911, he returned to Australia to visit with Viola Bennetts, who returned the favour in 1912, actually travelling to Toronto where they were married. After marriage and graduation, Lamb accepted a position as Physical Instructor at McGill for \$800 and free tuition as he began the study of medicine (Board of Governors' minutes, October 7, 1912).

As Physical Instructor at McGill, Lamb was following the distinguished group of Barnjum, Naismith, McKenzie, and Jacomb, the latter having resigned in 1912. Lamb led the voluntary physical education/training classes for McGill undergraduates while simultaneously attending medical school, just as McKenzie had done from 1889-1892. Unfortunately for Lamb, the university architects condemned the university gymnasium, at that time located on the corner of Burnside and Mansfield, in November of 1912 for fear it would collapse (Eaton, 1964). The new instructor lost his gym within a couple of months after arriving at McGill. The classes were then held in rented gyms of the nearby YMCA and Montreal Amateur Athletic Association (MAAA). During the following year (1913-1914) Lamb instructed on Tuesday, Thursday and Saturday beginning at 5:15 p.m. Numerous articles in *The McGill Daily* made reference to his enthusiasm and the program consisting of mat work, gymnastics, folk dancing, and indoor games (Eaton, 1964). He also coached the McGill basketball team to the Canadian Intercollegiate Championship in 1914. His commitment to student governance was apparent when he was elected President of the Students' Athletic Association for 1914-1915 and the following year became President of the McGill Student Society. He quickly assumed positions at McGill as he had done at Springfield.

Lamb and his wife, Viola, had two children. Roland was born in 1913 and was "elected" class baby for the medical grads of 1917, actually attending the graduation ceremonies. A second child, Arthur, arrived the next year. With two children while still in school himself, Lamb was nicknamed "Dad," which remained throughout his life.

When World War I broke out, one of the many responses by McGill was to accelerate medical school by continuing classes throughout the summer (Frost, 1984). This enabled Lamb to receive his medical degree on February 6, 1917, and depart for England on April 28. On the occasion of his graduation, The McGill Daily wrote,

Only those who have been in close touch with him know the amount of time and energy which he has spent upon student activities, and of the faithful manner

in which he had discharged every duty to which he has been assigned ... McGill Daily takes this opportunity to thanking him, on behalf of the students, for his years of service in the furthering of their interests, and of wishing him the best of luck. (February 25, 1917)

He served in the Canadian forces for two years: as an administrator in the Canadian Medical Corps, in a Canadian hospital in France, in a field ambulance, and from March to September 1919 in a Military Hospital in Montreal.

When Lamb returned to McGill in the fall of 1919 there were several issues related to physical activity that needed attention (Eaton, 1964). The university had agreed to assume financial control of the MSPE and a new two-year diploma program was beginning. McGill had initiated a required physical education program for the men in 1916 as part of the effort to physically prepare them for war. Was that program going to continue and, if so, in which facilities? The lines of authority in athletics were unclear, being shared among three groups: the Athletics Committee of McGill, the Students' Athletic Association (who did most of the work) and, the Graduates' Society which had just opened Percival Molson Stadium. Thus, Lamb was requested in the fall of 1919 to develop an organizational plan for a new Department of Physical Education, to which he would be appointed Director. The new Department would control all "gymnastic and athletic activities in the University, including the School of Physical Education" (Eaton, 1964, p. 45). The administrative relationship between units of physical education and athletics has continued to be a topic of some debate for almost 100 years. In some universities the preference is to have both function under one umbrella structure, while others separate them. If separated, physical education is usually placed in an academic unit (either its own faculty or as a school or department within a faculty), and athletics is aligned with a structure such as student services.

Structure and Function of the New Department

Lamb studied the athletic and physical education programs in the USA, and even consulted with Tait McKenzie (Eaton, 1970). On January 14, 1920 his report was accepted by the Corporation³. In simple terms, a standing committee was created for the new Department that replaced committees associated with the School of Physical Education, athletics, required physical education, and health services (Minutes of Corporation, January 14, 1920).

 A standing committee for Physical Education shall be appointed by the Corporation to replace the present Athletics Committee of Corporation, the Committee on Physical Training, the Committee of the School of Physical Education and any other committees of Corporation, at present dealing with Physical Training or Athletics.

- 2. This Committee shall be charged with the administration of physical education, including the management of the university Gymnasium, of the Stadium, through a representative of the Graduates' Stadium Committee and of the McGill School of Physical Education. It shall also be responsible for carrying out the regulations of the Corporation for Physical Training and for such other matters as shall from time to time be delegated to it.
- 3. The Committee shall consist of eight members and its composition shall be as follows:
 - a) The Principal of the university who shall act as Chairman.
 - b) A representative of the Governors of the university.
 - c) A representative of the Graduates' Stadium Committee.
 - d) The President of the Athletic Association (who shall be entitled to vote only on matters as bear directly on student activities).
 - e) Four members representing the Faculties of Law, Arts, Medicine and Applied Science to be elected by the several faculties from among their own members.
- 4. The Director of the Department of Physical Education and the University Medical Officer shall be responsible to the Committee for their efficient performance of their respective duties.
- 5. The Committee shall have power to appoint such Committees as may be necessary for the effective administration of the matters entrusted to it.
- 6. The Physical Director for Women or the Warden of Royal Victoria College, or both, shall be invited to attend Meetings of the Committee on Physical Education when special questions concerning women's interests are to be discussed.

A bit cumbersome in terminology, the new Department of Physical Education subsumed the School of Physical Education. The first individuals appointed to the Standing Committee of Physical Education were reported in the Annual Report 1919-1920 (p. 112). These appointees and who they represented were Principal Arthur Currie (Chairman), Lieut-Col. Hubert Molson (Board of Governors), Dr. Robert W. Lee (Law), Dr. D. D. MacTaggart (Medicine), Prof. E. Brown (Applied Science), Dr. A. S. Eve (Arts), A. P. S. Glassco (Secretary and Bursar), Major G. C. McDonald (Graduate Stadium Committee), Dr. J. M. Elder (Member at large, appointed by Corporation), Prof. J. C. Simpson (Member at large, appointed by Board of Governors), Karl Forbes (President Student Athletic Association), and J. W. Jenkins (Comptroller of the Students' Council and Secretary of the Graduates' Society). It made sense to have representatives from each faculty because the required physical education program, as one segment of the new Department of Physical Education, would impact students in each of those faculties. The President of the Athletic Association was a sensible appointment because Athletics was now part of the Department of Physical Education. However, it is odd that no specific representatives from the MSPE or Health Services were

appointed per se, rather, they were "responsible" to the Committee and thus attended its meetings. Nonetheless, the first Department of Physical Education was now officially an entity of McGill.

The first meeting of the new Department⁴ was held at the University Club on February 17, 1920, chaired by Vice-Principal Adams. Dr. Harvey, the University Medical Officer, and Lamb were present. Lamb was formally named as Director and received a seat on the Corporation. At the first meeting three subcommittees were created: one for finance, one for women's physical education, and one for the MSPE, which became known as the Executive Committee of the School. The first members nominated for this Executive were Lamb as Chairman, Harvey as Medical Director, Professor Dale, Cartwright as Physical Director for Women, and Hurlbatt as Warden of RVC. The Standing Committee of the Department did not have any female members, despite two of the subcommittees dealing only with women. The Warden of RVC was included on the Standing Committee in 1921, but over the objections of Lamb and Harvey who believed they could speak on behalf of women (Eaton, 1964).

Athletics also presented some immediate challenges to Lamb and the new standing committee. Intercollegiate athletics had been suspended during the war and was enjoying a revival as Lamb assumed leadership. There was much enthusiasm for football, ice hockey, basketball, and track and field, in that order (Eaton, 1964). There was also expansion of the number of universities involved in Athletics as the University of Western Ontario began to field teams along with McGill, Queen's and the University of Toronto. However, most of the revenue for athletics was generated by students and they demanded a voice in its administration. This resulted in the creation of a fourth subcommittee of the Standing Committee on Physical Education in 1923, the Athletics Board (Eaton, 1964).

Lamb was also faced with the disappointment of Ethel Mary Cartwright, who was not appointed to the Standing Committee on Physical Education (Walton, 1976). Her determination, energy, and creativity were largely responsible for the growth of the MSPE and the respect its graduates enjoyed. She had been the primary instructor of gymnastics for 14 years, a builder and promoter of athletics, and a coach. But she was not appointed to the Standing Committee despite having a wealth of knowledge and experience in the MPSE, athletics, and required physical education, three of the four divisions in the new Department. In addition, her long-time colleague Professor Dale had declined his nomination on the MSPE subcommittee that he had led so efficiently with Cartwright since 1912. Dale left McGill in 1921 (Frost, 1984). Cartwright was a member on the subcommittees of the MSPE and women, but felt slighted at not being appointed to the Standing Committee of

the Department (Walton, 1976). Initially, as might have been expected, there was friction between Cartwright and Lamb as the reorganization unfolded. Cartwright found herself in a position with minimal influence and recognition (Walton, 1976). Her trusted colleague Ethel Hurlbatt wrote to Lamb in 1919 to protest, and reminded him that "... no woman of initiative and high standing and tried capacity would be content to (sic) accepted appointment." (Walton, 1976, p. 94).

From the perspective of 2012, it is difficult not to interpret this slight of Cartwright in any way other than a manifestation of the social, political, and economic injustices faced by women in the early 20th century. The 1920s was a key decade in North American for the suffrage movement, but it cannot be claimed that McGill was an otherwise positive beacon for women's rights. For example, females were not even permitted to study for medicine until 1918 (Frost, 1984). It might be argued that Lamb's medical degree properly prepared him for leadership of the four divisions envisioned under the Department of Physical Education, particularly health services. But not to place Cartwright on the Standing Committee appears to have been short-sighted. As we will see, Lamb's accomplishments were exemplary in teacher education and the professionalization of physical education, but with regard to women, he was firmly planted in an earlier era. In addition, Lamb did not consult well with female staff. In 1922 he appointed a woman to the staff of the MSPE but failed to seek advice from Cartwright or the Warden of RVC, even though the school was housed in RVC. The Warden complained to Principal Currie, who suggested that Lamb should "consult his women colleagues on such matters" (Eaton, 1964, p. 72). Yet, many years later during Cyril James' principalship, one of Lamb's initiatives would be criticized again for failing to seek the advice of the women on his staff.

Despite their initial differences about administrative duties and leadership, Lamb and Carwright did manage to work together amiably. In part, this might have been due to holding similar views on major issues in physical education. They shared in their opposition to the rigidity and militarism of the Strathcona Trust program. They agreed that children needed a more playful and broad approach to physical education (e.g. Cartwright, 1916; Lamb, 1926). Neither believed that 45 hours was sufficient to develop a physical education teacher, as was the case with the Strathcona program. They both valued athletic competition, assuming amateur status, hard work, and sportsmanship prevailing over winning at all costs. There seems to have been no arguments about the nature of the MSPE program. Their respective backgrounds at Chelsea and Springfield College were not dissimilar. They believed modern education should include attention to

the physical aspects of skill, strength, and coordination, but in turn, physical education contributed to moral, social, and intellectual development.

In 1927, Cartwright retired after 21 years of stellar service to McGill, citing lack of facilities for the required program of physical education and the work of the MSPE. The programs moved from gym to gym at RVC, the MAAA, the High School of Montreal, the YWCA, and Molson Hall. Her reason for leaving McGill was remarkably similar to that of Tait McKenzie two decades earlier. In addition, she cited concern for her personal health, as she must have been exhausted from her teaching in the required program, coaching, and duties related to the MSPE (Walton, 1976).

In a letter to Lamb, Cartwright opined, "My personal relationship with yourself during the past few years had been so happy and so inspiring that I most sincerely regret we shall no longer work together on common ground" (Eaton, 1964, p. 112). Lamb asserted that "No woman has done more to further the ideas of the profession of physical education among the young men and women of this country than Miss Cartwright." (The McGill News, 1927, p.5). It may be that Cartwright was weary and frustrated from promoting a field about which many others did not share her passion and may have regarded as unimportant. In an institution such as a university, there should be equilibrium between an individual's aspirations and desires, and the ability or willingness of the institution to foster them. Otherwise much frustration can result, which might have been the case for Cartwright at McGill. In an interesting twist of fate, Cartwright and a friend began a poultry farm in Magog Quebec following her "retirement" (Walton, 1976). However, after two years with that venture, she accepted a position as head of a new school of physical education at the University of Saskatchewan. Its President, Dr. Walter Murray, had encountered Cartwright when she taught his daughters in Halifax. The two years of "retirement" may have permitted time to reflect and re-energize. She joined the University of Saskatchewan in 1929 as an Assistant Professor and brought the same energy, care, and values that typified her tenure at McGill. She continued as a fair but intense coach and teacher who promoted skill and sportsmanship. Temper and bad manners were not tolerated (Walton, 1976). In the 1933 creation of the Canadian Physical Education Association, she would work, once again, with A. S. Lamb.

Ethel Mary Cartwright was the first woman in Canadian physical education to be a full professor and was an instructor and coach until her last year, retiring for the second and final time in 1943. She was one of five inaugural recipients of the Tait McKenzie award created in 1948 by the Canadian Physical Education Association and was an inaugural inductee in the McGill Sports Hall of Fame in 1996.

The Two-Year Diploma Program

The new two-year program of the McGill School of Physical Education, which began in 1919, is outlined in Table 4.1 (McGill Calendar, 1922-1923). In general, courses were held over both semesters and were called *full courses*. It was not until the 1970s that the University moved to a system of primarily *half courses*, or term courses as they are now called. In addition, the full courses varied greatly in time allotted to them, from 30 minutes to 5 hours per week. Standardization of time in courses also came about in the 1970s when the current system of three hours of instruction per week for a 3-credit course began.

The curriculum was broad, much like the one in 1912, but the time spent per week provides some additional insights. There were 23 hours of instruction in Year 1(Junior) and 25.5 hours in Year 2 (Seniors). That was a significant amount of time in the classroom/gymnasium but not unlike other programs at that time. Also, 42% of a student's time was devoted to physical skill acquisition (i.e., gymnastics, games and activities, dancing, aquatics). In 2012, physical activity courses account for 19 credits in the 120-credit Physical and Health Education program, that is, 16% of the program. Over the two years of the 1919 diploma program, practice teaching amounted to 10% while in 2012 it is allotted 20 credits, or 17% of the program.

When the MSPE began in 1912, it was open to both men and women. But teaching was primarily a woman's profession, and with the exception of Hay Finlay who graduated in 1926, there is no record of men registering in the program until 1933-1934 (Figure 4-3). It may have been awkward for men who were contemplating physical education if they knew Donald Smith's rule of women only in RVC. In some years (e.g. 1930-1934) for reasons that are not clear, only women were permitted to enrol in the MSPE program. As the data in Figure 4-4 indicate, men did not register in large numbers until the immediate post-WWII years when a degree program was available and teaching for males, particularly in high school physical education, became a legitimate male profession. In the fall 2011 class of physical education and kinesiology students, there were 60% women and 40% men, which is consistent with the current make-up across all McGill programs.

While Cartwright had been the initial driving force behind the MSPE, Lamb certainly adopted it as his own child and moved it with vigor into the fabric of McGill. For example, the Executive Committee of the MSPE had awarded diplomas and organized its own graduation ceremony when it was an element of the Teacher Training Committee. Now that it was a

Table 4.1: The Two-Year Diploma Program

Diploma of Physical Education 1919-1920				
Juniors		Seniors		
Physics	1 hour	Kinesiology & Applied Anatomy	½ hour	
Chemistry	1 hour	Psychology	1 hour	
General Anatomy & Physiology	3 hours	Physiology of Exercise	1 hour	
Osteology & Myology	1 hour	Physical Diagnosis	½ hour	
Voice Development	½ hour	Remedial Gymnastics	1 hour	
Class Management	1 hour	Anthropometry	½ hour	
First Aid	½ hour	Preventive Medicine	2 hours	
Playground Problems	1 hour	Theory of Physical Education	1 hour	
Gymnastics	5 hours	Class Management & Teaching	1 hour	
Games & Activities	4 hours	Organization & Administration	1 hour	
Dancing	2 hours	Child Welfare	1 hour	
Aquatics	1 hour	History of Physical Education	½ hour	
Practice Teaching	2 hours	Gymnastics	3½ hours	
		Games & Activities	3 hours	
		Dancing	3 hours	
		Aquatics	1 hour	
		Practice Teaching	3 hours	
		Remedial Gymnastics & Massage	1 hour	

formally recognized program within McGill, Lamb ensured that the physical education graduates received their diplomas at the university convocation. Enrolment stood at about 50 during the 1920s and most graduates found teaching appointments (Eaton, 1964).

Perhaps concerned that the body was still not considered worthy of educational study, Lamb justified the existence of the MSPE in the Annual Report (1919-1920). He wrote that

The modern concept of education is one of intellectual, moral, and physical development, and not, as has been too frequently misunderstood, the development of the intellect alone. Intellectual development signifies the attributes of thinking, reasoning, and expression; moral development tends to stimulate honourable, righteous and

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BACHELOR OF ARTS
BACHELOR OF SCIENCE IN ARTS
BACHELOR OF COMMERCE
BACHELOR OF SCIENCE
(Engineering — Men only)
BACHELOR OF ARCHITECTURE
(Men only)
BACHELOR OF CIVIL LAW

DOCTOR OF MEDICINE
BACHELOR OF LIBRARY SCIENCE
BACHELOR OF SCIENCE IN
AGRICULTURE
BACHELOR OF HOUSEHOLD

Science (Women only) Doctor of Dental Surgery BACHELOR OF MUSIC
MASTER OF ARTS
MASTER OF SCIENCE
MASTER OF COMMERCE
DOCTOR OF PHILOSOPHY
DOCTOR OF CIVIL LAW
DOCTOR OF MUSIC

and offers diplomas in courses in:-

Social Work
Graduate Nursing
(Women only)

PUBLIC HEALTH
HOUSEHOLD SCIENCE
(Women only)
Music

Physical Education (Women only) Library Work

Books of information giving particulars of these courses may be obtained by applying to the Registrar's Office.

Figure 4-3: The McGill News, 1931—At times, only women permitted into the program

virtuous conduct; while physical development, or education, provides a base or foundation essential to the body in order that intellectual and moral development can be facilitated. It is through increased health, strength, efficiency and a more harmoniously co-ordinated muscular system, that the intellectual and moral attributes of character are stimulated and developed in the general scheme of education. (p. 113)

Such statements were repeated during the 1920s and were reminiscent of comments by McKenzie (1893).

Lamb also wrote that

It is significant that each year the School shows a growth but in spite of this growth and the larger number of graduates that are being turned out, there are still more applications for trained teacher than the School can supply. It is only another indication that a "strong back and a weak head" in a supervisor of physical activity are attributes no longer considered satisfactory in the conduction of the modern programme of Physical Education. Trained and skilful teachers, possessing the modern ideals in play and recreation, with a thorough and underlying knowledge of many difficult problems in exercise, are greatly in demand, a demand which the School is endeavouring to supply. (Annual Report 1920-1921, p. 119)

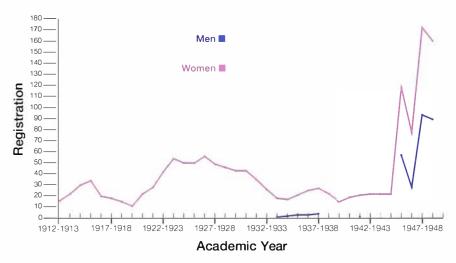


Figure 4-4: MSPE Registration 1912-1949 (Eaton. 1964)

The need for trained physical education teachers and the inability of the MSPE to educate sufficient numbers were themes introduced a decade earlier by Cartwright but enthusiastically championed by Lamb in every report or speech possible. His impact in Canada earned him the title, Dean of Physical Education in Canada. There was no difficulty in graduates of the program finding employment in education. By 1924-1925 the MSPE reported limiting registration to 50 because it could not accommodate others (Annual Report, p. 205) (Figure 4-5).

One challenge of accommodation was literally a place for students to live. A residence had been opened for 20 women at 3466 University Street in the previous year (Annual Report, 1922-1923). The Standing Committee of Physical Education actually operated the residence until 1932 when the Graduate School of Nursing assumed responsibility (Eaton, 1964). The women in physical education were not eligible for RVC accommodation because they were students of a diploma, not a degree. Yet, the University Street residence functioned like a sorority (Munro, 1984). The lack of residence space at McGil particularly affected the MSPE because students were attracted to the program from almost all provinces and in 1924-1925 there were 10 women from Ontario (Annual Report, 1924-1925, p. 205). There was also a lack of facilities for the MSPE, the required physical education program, and the athletic activities. In one year space in 13 different buildings were used for physical activity (Annual Report, 1922-1923, p.174).

Tait McKenzie had convinced the University to employ an assistant for him in 1896 (Board of Governors' minutes, September 26). Georgina Wood became Cartwright's



Figure 4-5: MSPE 1923-1924

assistant only in January of 1920 (Slack, 1934). Under Lamb's leadership, the 1920s saw unprecedented hiring of staff. Two regular instructors from the wider McGill community were Dr. William Tait from the Psychology Department and Dr. Frederick Tees, a physician and colleague of Tait McKenzie. Dr. Tees remained at McGill until the 1940s and assisted with the medical needs of the intercollegiate teams. Others were either full-time members of the Department who were titled assistant physical directors, instructors or coaches; or part-time members who usually taught specific physical skills. Throughout the 1920s, the staff of the Department included, at various times, Miss Ethel Wain, Miss Gladys MacCallum, Miss Ruth Harvey, Miss Georgina Wood, Miss Dorothy Porritt, Miss Lorna Kerr, and of course, Ethel Mary Cartwright. The men included F. M. Van Wagner, Frank Shaughnessy, George Smith, E. Robinson, G. Raimond, George Fox, Jr., E. Manley, E. Vernot, P. Smith, C. Powter, W. Werry, Dr. A. L. Walsh, J. McBrearty, Hay Finlay, and Major Stuart Forbes. A notable contributor to the Department of Physical Education was Frank "Shaq" Shaughnessy, who was also the first professional coach in a Canadian university, appointed at McGill in 1912. Forbes was appointed Manager of Athletics in 1923-1924 after creation of the Athletics Board and remained at McGill until 1956.

Since the Department included MSPE, required physical education, and athletics, Lamb could easily assign individuals to tasks which crossed the three areas. For example, Van Wagner was the track and field coach but also an instructor in the MSPE. By dint of their expertise, some individuals would spend more time in one role or another, but they were members of only one Department. A list of instructors over the 100 years is found in Chapter 11. While the MSPE is the focus of this book, Lamb promoted all aspects of the Department of Physical Education within McGill. The four sectors were

ably described in an article for *The McGill News* affirmatively titled "New department doing good work" (Lamb, 1922).

A Three-Year Diploma

The two-year diploma program had attracted students from across Canada, the graduates easily found employment, and school board personnel remained convinced that those teachers were conducting themselves as effective professionals. Eaton (1964) argued that Lamb had three reasons to pursue degree status for physical education at McGill. First, many universities in the USA in the 1920s offered bachelor degrees in physical education, and Lamb was convinced that Canadians could be educated as effectively in Canada. Second, a four-year program was essential for the optimal preparation of a teacher. Frequently he would assert that being a sport specialist who had attained some status as a competitor was not the appropriate background for a teacher. Physical educators must be educators, not technicians who know what to do but not why. Four years of study was necessary for physical educator to become educators. Third, he wanted to stop the flow of talented young Canadians going south for a degree and remaining in the USA.

In 1930 Lamb made his first attempt at convincing McGill authorities to offer a degree in physical education. In the Annual Report of 1930-1931 he called for more theoretical knowledge and "an extension of the present course to at least five years" (p. 7). He quickly realized that he had no chance of success (Eaton, 1964). The Chancellor, Edward Beatty, had ordered a survey of all departments and faculties as part of cost cutting measures soon after the stock market crash of 1929 (Frost, 1984). The survey included an exploration of the history and accomplishments of the unit as well as an outline of future directions. It had some similarities with the Cyclical Reviews of the 1980s and 1990s. The MSPE Survey was headed by Professor J. Simpson as Chairman, and included Professor F. Clarke, and Miss Jesse Herriott, with Lamb functioning as secretary (Report of Special Survey Committee, on the School of Physical Education, May 18, 1933). Herriott had replaced Cartwright in 1927 as Physical Director of Women. The report outlined some of the history of the School, noting that it remained the only two-year physical education program associated with a university in Canada and that graduates received a specialist teaching certificate in Quebec. The report also claimed 231 graduates, with 45% actively engaged in teaching. Reflecting the norms of women and marriage in the 1930s, 35% of the graduates were married and not engaged in teaching. It seems that a teaching

job was fine, but once married, women gave up their employment. The remaining 20% were engaged in work other than physical education.

The survey recommended two program changes to the Corporation which were implemented in 1933 (letter from Department of Physical Education to the members of the Corporation, May 13, 1933). Although the survey was searching for ways to cut costs, the two points for the MSPE were growth oriented: upgrade the diploma program to three years and establish a *Higher Diploma*. The two-year diploma was changed by modifying the entrance requirements in four ways.

- The entrance requirements were increased by requiring one year of study in Arts or Science. One year in a B.Sc. was preferable, but one year in Arts was acceptable if a science course had been followed.
- Students had to have completed 3 hours of physical education per week which would have been achieved through the required program.
- 3. Students had to demonstrate minimal neuro-muscular skill. In the McGill Calendar of 1934-1935 the ability to swim, play basketball and tennis, skate and dance, and to have had some instruction in gymnastics were considered important. Students were requested to consult with the head of the Department for detailed requirements. It would have been consistent with other physical education programs to have one's physical skills assessed prior to acceptance into the program. Precisely how that assessment was orchestrated is not clear.
- 4. Students had to possess an aptitude for the teaching profession.

Thus, the three-year diploma was one year in Science or Arts followed by two years in the MSPE. The second recommendation to the Corporation was to establish a *Higher Diploma* (letter from Department of Physical Education to the member of the Corporation, May 13, 1933). This program was for students who possessed an undergraduate degree in Arts or Science. They would complete the two-year diploma program but would also include a study of special problems, seminars, extended reading, and a thesis. This resembles a professional master's degree of 2012. The Higher Diploma did not become a very popular program, but one graduate, Zerada Slack, who was a MSPE instructor for many years, wrote a thesis titled, "The Development of Physical Education for Women at McGill University" (1934) that was a helpful resource for the present book.

The requirements for the "first" and "second" year of the program are listed in Table 4.2 (McGill Calendar, 1934-1935). The three-year diploma is organized in Table 4.3 as year 1 and year 2, just as it was described in the 1934-1935 McGill Calendar. Of course, all students entered year 1 after they had completed a year in Arts or Science. As was the case in the original two-year diploma, the total number of hours (26 per week) is high by today's standards. Physical Education practice

referred to activity courses such as gymnastics and basketball, which constituted 35% of the program, down from the 42% of the 1919 program. The actual activities listed in the 1934-1935 Calendar (p. 462) were low organization games, badminton, basketball, baseball, ice hockey, organization for mass activity, track and field, tennis, field hockey, archery, folk and interpretive dance, gymnastics, and aquatics, but use of the "etc." gave instructors some additional breadth. Referring to the physical activities as a collective (i.e. practice) remained until the 1970s when credits were assigned to each activity.

Table 4.2: The Three-year Diploma Program

Year 1	Lecture	Lab	
Anatomy	2	1	
Physiology 1	2	1	
Psychology 1	2	1	
Principles of Physical Education 1	3		
Personal and Community Hygiene	2		
Physical Education Practice		9	
Elective subject relevant to subsequent study in Physical Education	3		
(zoology, genetics, sociology)			
Total hours	14	12	
Year 2			
Physiology of Exercise	3	1	
History of Physical Education	3		
Principles of Physical Education 2	3	1	
Physical Education Methods	4	2	
Physical Education Practice		9	
Total Hours	13	13	

Principles of Physical Education was also an overriding term for content that would be differentiated today. Principles of Physical Education 2 was described as a continuation of Principles of Physical Education 1. Each was a full course crossing the entire academic year rather than being split into two courses, one from September to December and another from January to April. Thus, Principles of Physical Education was a two-year course and could cover a great deal of content. In 1934-1935, the content covered in Principles of Physical Education 1 and 2 included aims of physical education, program construction,

principles underlying a health program, the nature and function of play, the contribution of play to society, standards for judging teaching, principles of progression, the extra-curricular program, therapeutic gymnastics, corrective exercise, massage, and posture training. A great deal was covered under the title Principles of Physical Education!

The Required Physical Education Program

The MSPE was one of four elements in the first Department of Physical Education. Athletics, health service, and required physical education also fell under Lamb's direction. From the very first minutes of the new Department on Feb. 17, 1920, each of the four areas was represented. Lamb wrote about the achievements of the four areas in Annual Reports as well.

The required program of physical education for women had begun in 1907 under the direction of Cartwright and for the men in 1916 following intervention from the Graduates' Society during the war. The women had to accumulate 140 hours of physical education before graduation and had the luxury of the RVC gymnasium. The men were required to attend two hours of physical education classes per week during the first three years at McGill. In 1919 it was recommended to the Corporation that academic credit be awarded to physical education, an idea consistent with Lamb's views about the value of physical education, but this idea was dropped after strong objections from the Faculty of Arts (Eaton, 1964).

Lamb had to convince the Faculties of Science and Medicine to include space in their timetables for the required program (Department minutes, May 20, 1921). There was also a lack of consistency in applying the consequences of failing to complete the two hours per week for the men. At one meeting, Lamb noted that 18 students in Arts had been allowed to register for year 4 despite having a physical education deficiency from year 3 (Department minutes, November, 21, 1921). He had to work closely with the Deans in order to ensure the students understood the requirements and consequences of failing. For some years, a delinquent student could follow a supplemental course in September prior to registering for the next year's courses. According to Eaton (1964) however, no student was ever denied permission to register for failure of meeting this program requirement. The women did manage to enforce compulsory physical education and were highly regarded for using performance tests and written exams to determine a final grade.

The required program, particularly for the men, was severely limited by lack of facilities. Table 4.3 includes the location of various activities during the 1920-1921 academic year. In that year only eight different locations were used; in some years

the list grew as high as fifteen. Lamb continued to be adamant about the need for the required program across the university and in 1944 approached the Senate Committee on Physical Education to discuss the program in light of the opening of the Currie Gymnasium. Ironically, the discussion led to questions of the legality of the requirement, and considerable support emerged for voluntary participation. The required physical education program was cancelled for men and women in 1944 (Eaton, 1964).

Table 4.3: Where did the required program of physical education occur?

Location	Activity
Highlander Armoury	Basketball
High School of Montreal	Basebal, Gymnastic Club, MSPE
Union	Wrestling
Molson Hall	Gymnasium Work, Baseball, Basketball, Boxing, MSPE
Diocesan College	Fencing
YMCA	Swimming & Water Polo
RVC	Women's Activities
YWCA	Swimming

Health Services

Health Services as an entity at McGill were initiated by Tait McKenzie in the 1890s when he performed medical examinations on all freshman students. In 1895 he was appointed Medical Examiner and in 1901 he became Medical Director of Physical Training. McKenzie appears to have placed considerable emphasis on medical exams that could be interpreted in terms of required exercises, minor diseases, and defects. This is consistent with the title Medical Director of Physical Training. Frederick Harvey replaced McKenzie as Medical Director of Physical Training in 1904. His titles changed to Medical Director of Physical Education in 1910 and to University Medical Officer in 1920, suggesting that health services for the students were becoming more extensive and less tied to physical exercise. Harvey worked with Lamb for many years and was a regular lecturer in the MSPE. Harvey retired in 1938.

Health services during the 1920s and 1930s continued with the assessment of students, which were reported in the annual reports of the university. Table 4.4 is derived from 1922-1923 (p. 168). The health issues identified in 1921-1922 were appendicitis,

tonsillitis, hernia, special eye examinations, mumps, measles, pneumonia, pneumo thorax. pleurisy, tuberculosis, meningitis, and fractures of the skull (Committee on Physical Education, October 30, 1922). Lamb and Harvey convinced the university to move beyond medical exams and to develop health services. These services included a daily clinic for men, a twice-weekly clinic for women, referral services, inoculations, and hospitalization paid by the university, the latter through money raised by a \$2.00 Heath Services fee (Eaton, 1964). In the 1930s, the medical examination added urinalysis and chest X-rays for pulmonary tuberculosis. In 1936-1937, over 10,000 copies of a "Good Posture" pamphlet were distributed to the students. The Health Service program conceived by McKenzie and developed by Harvey and Lamb was the first in any university in Canada.

Table 4.4: Selected results from medical examinations (Annual Report 1922-1923)

	Average of all Exams	Average of those winning athletic insignia
Age (yrs)	19.8	20.7
Weight (pounds)	133.3	148.0
Height (inches)	67.0	68.2
Chest (inches) Compressed	33.1	33.7
Chest (inches) Expansion	34.8	37.7
Waist (inches)	27.7	28.9
Lung (ml)	231.8	271.7

Summary

In 1920 the MSPE became an official program under McGill University which enhanced its financial viability. It was placed in a Department of Physical Education alongside the required program of physical education, athletics, and health services. A new two-year diploma program to train teachers of physical education was created amidst a clash between two Canadian leaders, Ethel Mary Cartwright and Arthur Stanley Lamb. However, they saw the program begin in 1919 and both nurtured it for many years, before it was replaced by a three-year diploma in 1933. It was the only diploma program associated with a university in Canada, and attracted students from across the country. With the Department of Physical Education responsible for a required physical education program, teacher education (MSPE), and athletics, additional staff was hired. Intramural and intercollegiate programs flourished

From Bloomers to Body Mass Index

despite a severe shortage of space for physical activity. It would take a second world war, memories of Principal Sir Arthur Currie, and caring alumni to finally build a new gymnasium and create a bachelor's degree in physical education.

Notes

- "College" status within a university, rather than a Department, implied a more independent unit at a level akin to a
 Faculty. It was rather adventurous to suggest the struggling MSPE should be a college, but highlighted the fervor
 for physical education held by Cartwright.
- 2. Eaton was the prime biographer of Lamb and this section relies heavily on Eaton's account. But he will not be cited on every sentence.
- 3. The Corporation dealt with academic matters and was re-named the Senate in 1933.
- 4. The first meeting was chaired by the Vice-Principal because Currie had not yet arrived in Montreal.



he 1930 "survey" initiative created to locate units or operations that might be expendable did not result in significant cost cutting measures. All departments, like the MSPE, told a story about how much more effective they would be with additional staff and facilities (Frost, 1984). McGill not only held together following the economic crash, "but finally emerged with its ideals intact and its hopes unabashed" (Frost, 1984, p. 190). In many ways, units reaffirmed themselves and some, like the MSPE, made modest advances. Yet, the depression of the 1930s did result in an enrol ment decline within the MSPE. The years from Sir Arthur Currie's death in November 1933, through WWII and Lamb's retirement, would see the MSPE searching for space within McGill. The search was both physical and conceptual. A new gymnasium would finally be added to the campus, and the MSPE found shelter on Pine Avenue. But where did the MSPE fit within the university? By the 1950s it was wandering about rather aimlessly. But in 1936, with the Depression still apparent, and a World War looming, the school was almost abolished. In 1936 McGill had about 4500 students.

Macdonald Park and Molson Stadium

The McGil I stadium had been planned prior to WWI after Sir William Macdonald donated 27 acres of land north of Pine Avenue and east of University in 1911. It was designated

to provide students with a stadium, gymnasium, swimming pool, and residences. On March 13, 1913, a group of graduates, including Percival Molson, met to discuss plans for a running track and stadium on the newly acquired land (*The McGill News*, 1919). The Board of Governors advanced some money and the selling of rock excavated from the site contributed about \$36,000. The track and stadium opened in 1913-1914 but without a field house. When WWI broke out, Molson enlisted. During his second tour of duty in Europe in 1917, he was fatally wounded. He bequeathed \$75,000 to contribute to the cost of the stadium. Originally called the Graduates' Society Stadium, it was renamed the Percival Molson Memorial Stadium in 1919. The stadium had 7,700 seats on the north side. From this position "one can see not only the football field, but far across the city and the St. Lawrence" (*The McGill News*, 1919, p. 35). With Molson's history as an accomplished athlete and benefactor, it must have been an easy decision to rename it in his honour. Today, with a seating capacity of 25,000, spectators remain enthralled with the view of the city and river.

Chasing the Imaginary Gymnasium

The cynical student, athlete, gymnastic instructor, physical trainer, or physical educator who had cried for a new gymnasium at McGill since the days of Barnjum might have been somewhat pacified with the fact that every Principal since Dawson publicly supported the need for students to access a gymnasium and engage in physical activity. There was not enough money in the university coffers however, so the party line would go. In the first 40 years of the 20th century, architectural plans were created, financial suitors were pursued, and the location was debated. There was a great deal of dialogue, but as the saying goes, "if you don't do it, you don't believe in it." Taking a more positive stance, it is remarkable that so many students participated in physical education in the required program, in intramurals and in intercollegiate competition, often at locations that were scattered and inconvenient. The building of the Sir Arthur Currie Gymnasium was a testament to McGill alumni in 1939, while additions in 1994 were largely driven by student philanthropy.

As outlined in Chapter 1, the Barnjum/McGill gymnasium was opened in 1862 at 19 University Street. After 14 years it needed major repairs and was almost closed by the University in 1884 because of continuing deterioration. Its location was also inconvenient for the students, recognized in 1890 by Principal Dawson, who initiated discussion about building a new gymnasium on the lower campus. A competitor to the Barnjum/McGill gymnasium was the Montreal Gymnasium built in 1868 at the southeast corner of Mansfield

and Burnside (now de Maisonneuve). In 1881, the Montreal Gymnasium was purchased by the newly-formed Montreal Amateur Athletic Association (MAAA) (Turner, 1935a). The MAAA was Canada's first multisport club and was an amalgamation of the Montreal Bicycle, Snowshoe, and Lacrosse Clubs (Morrow & Walmsley, 2010). The MAAA moved to a new facility in 1904 on Peel Street, their current location. This provided an opportunity for McGill to abandon 19 University and lease the former Montreal Gymnasium at \$1125 per annum (Board of Governors' minutes, November 23, 1905). Thus, in 1905, the McGill gymnasium was now located at the corner of Mansfield and Burnside, much closer to the university. It was here that gymnasium instructor W. Jacomb would have led the physical education classes for the men. It was this same building that university architects declared unsafe in 1912 when a tunnel under the mountain was being constructed (Turner, 1935a). The closing of the gym occurred just a few months after the arrival of the new medical student and physical instructor, A. S. Lamb. Ironically, at the same Board of Governors' meeting on October 7, 1912, that Lamb was formally appointed Physical Instructor and about two months before the gymnasium was closed, the Board received \$50,000 from the Wicksteed estate. The instructions were to use the money to the best advantage, primarily for physical culture and secondarily for a university gymnasium. It is not clear how this money was eventually expended.

Following the unfortunate closure of the gym, plans began immediately for a new and modern gymnasium (Simpson, 1940). The Principal pointed to the "great desirability of preparing plans for a new gymnasium" (Board of Governors' minutes February 17, 1913), but the Board decided not to move forward until \$100,000 had been secured or was "in sight" (Board of Governors' minutes, May 12, 1913). Initially, there was hope that \$100,000 would be received from the Federal Minister of the Militia for a drill hall and gymnasium (Board of Governors' minutes, February 23, 1914), since war was looming in Europe, and if Great Britain declared war, Canada was involved automatically. But after much communication between the Principal and Minister of Militia, a letter was received from Prime Minister Borden to the effect that the government was committed to providing McGill with \$100,000, but not until the end of the war (Board of Governors' minutes February 15, 1915).

At the same time as the University was courting the Government for funds, Mr. J. K. L. Ross offered \$150,000 to build a gymnasium with equipment, which would be named the Ross Memorial Gymnasium after his late father. The condition set by Mr. Ross was that McGill would also contribute \$100,000, the amount that his father had given to the University previously (Board of Governors' minutes March 30, 1914). Not surprisingly, McGill would not contribute \$100,000 of its own money as long it believed financial support from the

federal government was forthcoming. The Board even received sketches and drawings of the new gymnasium at the February 15, 1915 meeting, the same time the Federal Government proposed to delay the \$100,000. The gymnasium was not a topic at the meetings of the Board again until 1918. At that point there was no mention of the financial gift from Ross, and the government contribution was never received. A lost opportunity for the University and its students! Nonetheless, Mr. Ross became the Chair of the Gymnasium Building Committee in the 1920s under Principal Currie.

Early in the 1920s, it was assumed that the gymnasium would be built at Macdonald Park in close proximity to Molson Stadium. The Annual Report for 1912-1913 stated "Behind the gymnasium with its swimming-pool, and a hockey rink, fronting on Pine Avenue, it is in contemplation to construct a large stadium for athletic purposes; and in the rear of that again will be a group of student residences."(p.7). Thus, 100 years ago there was a vision for a stadium, gymnasium, swimming pool, arena, and residences that remarkably resembles reality today. Tait McKenzie, always loyal to McGill, was consulted on the plans in the 1920s. But the road to Pine Avenue and Macdonald Park took several detours. The first detour was WWI during which athletic competition was cancelled along with most new construction at McGill. Compulsory physical training for men was instituted in 1916, essentially the beginning of required physical education for the men.

The Department of Physical Education created in 1920 consolidated four units. But McKenzie observed that the integration and administration of these varied programs would be challenging without one common physical location, a gymnasium (Simpson, 1940). McKenzie's insights into an integrated program would prove prophetic. From 1913, indoor facilities were rented from various organizations such as the MAAA, YWCA, YMCA, and the High School of Montreal. At McGill, Molson Hall in the Arts building was converted into a gymnasium from 1920-1926, made feasible, in part, by changing a smoking room into a classroom room (*The McGill News*, 1920). Coordination proved to be difficult without a central gymnasium (Simpson, 1940). The athletics program was administered from the Students' Union, the female MSPE instructors were housed in RVC, while Department offices and Health Service were found in buildings on University Avenue.

Upstairs or Downstairs

Campus discussion of a new gymnasium began once again in the early 1920s as the University was celebrating its centennial. With Lamb settled into his role as Director of

Physical Education, his thinking turned to the location of the new gymnasium. It had been assumed that the ideal location for the gymnasium would be Macdonald Park, adjacent to Molson stadium. But Lamb believed the gymnasium should be built on lower campus. He even convinced Principal Currie (Currie, 1922; The site of the new gymnasium, 1922). Lamb's logic reflects some of his perceptions of the new field of physical education. There was considerable space available on lower campus in the 1920s, on University Street and in the Sherbrooke-McTavish corner where outdoor tennis courts and hockey rink were located (*The McGill News*, 1922).

Among the reasons articulated for a lower campus location were:

- 1. The new Department of Physical Education should not be perceived as mere recreation or a diversion from academic matters that occurs only at the end of the day, which was the practice for Barnjum and McKenzie when gymnastic classes were held from 5:00-6:00 p.m. The objective of physical education is education that is central to student life. The argument was made that discussion of topics such as hygiene would occur in the required physical education program, and those courses should be available from 9:00 a.m. to 4:00 p.m., integrated within the overall university timetable. Late afternoon (4:00-7:00 p.m.) could be designated time for voluntary exercise and athletic competition, and study would occur after 7:00 p.m.
- The work of the MSPE, which trained instructors of physical education, would benefit from a central location as it integrated its practical work with its theoretical subjects.
- 3. Intramural competition would be facilitated with a lower campus location. Some of these sports were played in the stadium, but others occurred frequently in a gymnasium.
- 4. The health service dimension of the Department offered medical consultations during the lunch hour, which would be easier if students were not required to make the long walk to Pine Avenue.
- 5. If, in the future, a faculty was created for education (!), social work, or nursing, physical education would likely become a partner, and its integration into this new faculty would be facilitated by a more central location.
- 6. The medical examinations of the young men during WWI demonstrated them to be "deplorably physically inefficient" (Currie, 1922, p. 15). The Board of Governors should view the gymnasium for the whole student body, not simply for the intercollegiate athlete.
- 7. There were no residences "on the mountain" as there are in 2012, and a lower campus gymnasium would be closer to student activities at Strathcona Hall (YMCA), RVC, Presbyterian college, and fraternities.

The early 1920s were filled with plans and commentary about a new gymnasium, complete with reminders that it could function as a Convocation Hall and setting for theatre and concerts. Consistent with those days, it was also pointed out by Currie (1922) that the gymnasium would include smoking and common rooms! The University was 100 years old

in 1921, and a Centennial Fund of over \$6 million was gathered from graduates, the Quebec government, corporations in Montreal, and the Rockefeller Foundation (Glassco, 1940). Many worthy projects were proposed, the new gymnasium being one with considerable support from graduates. However, Glassco (1940) claims that by the time the discussion of where to place the gymnasium was made, the funds were exhausted. Despite the flurry of enthusiasm by Principal Currie, the Board, and Lamb, and moving forward as far as receiving construction tenders, the project was delayed and delayed. It appeared that the money to build the gymnasium was no longer available as the 1920s wore on. We can only speculate about how much the dialogue of where to locate the gymnasium contributed to eventually finding the financial trough empty. The market crash of 1929 might have been a clear punctuation to the end of that round of gymnasium optimism for many years, if not for some ingenious planning by Currie. Of even greater import was the very survival of the MSPE in the midst of economic collapse.

Close it or Move it to Macdonald College?

The MSPE had grown from the voluntary physical education programs initiated by Barnjum and advanced by McKenzie and Cartwright. Yet, its summer course of 1912 fell under the auspices of the Teacher Training Committee, which by 1907 was functioning at Macdonald College. The MSPE was a teacher preparation program and it was only a matter of time before moving it to Macdonald was proposed. Does it not make sense for physical education and math students to share a university teacher preparation program? In the end, this discussion was advanced by the depression. The School weathered the 1930 "survey" storm very well, but with only 19 students registered in 1934-1935, its economic viability was questioned and the Board of Governors considered closing the MSPE (Eaton, 1964). Fortunately, the matter was formally sent to a committee of the Board that was simultaneously considering the financial relationship between McGill and the training of teachers. There were five main questions about the School of Physical Education

- 1. Is there are need for such a School?
- 2. What is the value of the existing School?
- 3. How much does the School cost the university and what economy could be realized by its abolition?
- 4. Is the training of teachers of physical education a proper function of the university?
- 5. If the school is to be continued, should it be attached to the Training School for Teachers at Macdonald College? (Report of the Committee on the place in the University of the School of Physical Education, 1936, p. 1).

A report from the MSPE was submitted on May 12, 1935. In this report, Lamb proposed a reduction in the deficit of \$3873 by cancelling some courses, argued that the school does generate some revenue that would be lost if the MSPE was closed, and reminded the committee of the positive "survey" report. He contended that universities have an obligation to teacher preparation for both immediate and future needs of society. With specific reference to physical education, he asserted that the development of the body cannot be left to chance, but should be supervised by qualified teachers, not technicians. Since 1912, McGill had prepared such teachers who were better able to direct activities toward more desirable health standards than those without such preparation. Moreover, physical activity combats the harmful tendencies of the (present) day and contributes to moral and social maturity (Memorandum re suggestions to move the School of Physical Education to Macdonald College, 1935, brackets added).

Arguments posited for leaving the MSPE on the downtown campus included:

- Efficiency of responsibilities, that is, many full-time staff taught in both the MSPE and other areas of the Department of Physical Education.
- Students in the first year of the diploma were required to take courses in Arts and Science, which was located downtown.
- 3. City hospitals provided clinical opportunities in physiotherapy departments.1
- Practice teaching occurred by close association with the Protestant Board of School Commissioners.
- All students were part of the Students' Society and were eligible to participate in their activities (Memorandum re suggestions to move the School of Physical Education to Macdonald College, 1935).

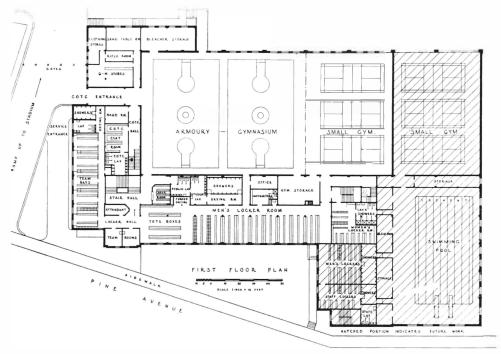
The Report on the place of physical education at McGill concluded unanimously that such a school was needed because physical education in school curricula is "highly desirable" and competent instructors should be provided. It acknowledged that the School was "heartily commended" and that Montreal schools had superior instruction in physical education compared to other cities in Canada. Moreover, from a financial viewpoint, terminating the program would not produce meaningful savings. After such positive observations and comments, the Report turned to the question of whether the training of physical education teachers was a proper function of the University. The answer was less enthusiastic, but perhaps realistic, "This is not in all cases an inescapable duty of the university to the Community. Yet is agreed that is isn't an obviously improper field of activity for a university which is already committed to the training of teachers in the intellectual disciplines." Thus, the School was engaged in the important task of preparing physical education teachers, and doing it very well. If Montreal schools had not acquired

the reputation of having excellent physical education programs, largely from the tenacious leadership of Cartwright and Lamb over many years, the University might have exercised its right to abandon certain duties that are not "inescapable." Members of the Committee must have been swayed by Lamb's reasoning to remain in Montreal because they were "strongly against" the move to Ste. Anne de Bellevue. Closer links to Macdonald College and the Training School for Teachers would re-emerge in 1957.

From Imaginary to Real Gymnasium

The stock market crash might have interrupted progress toward a new gymnasium, but it was never permanently deterred. An aptly named Gymnasium Fund Committee was established in 1931 (Turner, 1935a). This was a committee of the Graduates' Society which traditionally had been committed to physical activity and sport. Intriguing timing, so soon after 1929, but determined nevertheless. At the first meeting of the committee on Sepember 14, 1931, Currie proclaimed that, "of all the physical requirements of McGill University none is more urgent than a gymnasium" (Glassco, 1940, p. 27). An ingenious idea resulted from the committee; the initiation of a competition in September 1934 among McGill architect graduates for a new gymnasium complex (Turner, 1935a). At this point the desired location had reverted to Macdonald Park. The idea of a complex included a main gymnasium, a second smaller gym, a skating rink, two swimming pools, a curling rink, a wrestling and boxing room, a special exercise room, an armory, administration offices for the Department, and space for the Canadian Officers Training Corps (COTC). The proposals were evaluated by a panel that included Tait McKenzie. There was also an exhibit in the McGill Union with the first prize of \$1,000 awarded to A. J. C. Paine, a graduate of 1910 (Figure 5-1, Turner, 1935b).

The architectural competition reinvigorated the movement to build a gymnasium complex. One estimate of the total cost was \$1,720,000, but sections of the complex could be trimmed and added later when money was available. A more manageable \$250,000-\$300,000 for the gymnasium-armoury and swimming pool was approved in principle (*The McGill News*, 1936). Ultimately, the campaign objective was \$350,000 (Fisk, 1936). Several names were suggested for the gymnasium, with great support emerging for "The Sir Arthur Currie Memorial Gymnasium and Armoury," after the war hero and former Principal. As fund raising efforts moved forward, his comment about a gymnasium being the most urgent physical requirement at McGill became its slogan.



GROUND FLOOR OF THE SIR ARTHUR CURRIE MEMORIAL GYMNASIUM-ARMOURY
The hatched portion at right, which includes the swimming pool and additional gymnasium floor space, will not be built at this time.

Figure 5-1: Winning design for gymnasium by A. Paine 1935

The fund-raising campaign was forcefully announced in a summer 1936 *McGill News* article titled "A Gymnasium Is To Be Built!" (Fisk, 1936). *The McGill News* is the quarterly publication distributed to alumni. The timing of the launch was appropriate, it was argued, because the gymnasium would be a tribute to the memory of Currie, and a tangible demonstration to the new Principal, A. E. Morgan, of the support to him and the University from the graduates. Fisk (1936) reminded alumni of the long-standing need for a modern gymnasium when he quoted the Science valedictorian of 1896, who began with a plea for the new graduates to support the university in a number of areas, but "You have also left to your care that ideal gymnasium which for so long has been built in our imagination only" (Fisk, 1936, p. 31). The imaginary gymnasium was about to be real.

The gymnasium campaign was unique in at least one other important way. Most of the buildings at McGill, at that time, had been funded by very wealthy individuals: Macdonald, Strathcona, Redpath, and Molson (Fisk, 1936). On this funding occasion, the gymnasium would be built from donations received by the wider group of McGill graduates, and the

campaign conducted in such a way as not to interfere with any other general campaign (Glassco, 1940). This was the first time in the history of the University that such a strategy was used for a major building project. The opening dinner for the campaign was on June 4, 1936. Among the speakers were Chancellor Edward Beatty, Principal Morgan, President of the Graduates' Society John Hackett, General Campaign Chairman H. M. Jaquays, and R. Tait McKenzie. McKenzie's presence, and his participation as a judge in the architectural competition, must have been bittersweet. He had urged the University to build a new gymnasium in his oft-cited 1893 report, and he had moved to the University of Pennsylvania in 1904 because he had little faith that a new gym would be constructed at McGill in the near future (that turned out to be a rather excellent prediction!). Yet, here he was, on June 4, 1936, supporting his Alma Mater. Consistent with his long held beliefs, he remarked that the Sir Arthur Currie Memorial Gymnasium would fill three purposes: health, education, and recreation. He also tangibly assisted the gymnasium fund-raising by donating the 10-foot plaque, Brothers of the Wind, a plaster sculpture celebrating speed skating. Today it is displayed in the entrance of the Currie Gymnasium (Figure 5-2). Unfortunately, McKenzie died in 1938 before completion of the gymnasium.

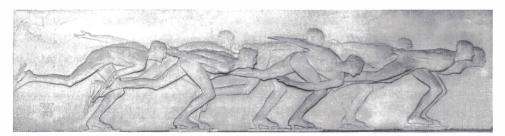


Fig 5-2: McKenzie's "Brothers of the Wind"

Hockey coach Dr. R. B. "Bobby" Bell supported the opportunity that this campaign provided.

In my visits as player and Coach of McGill Intercollegiate Teams, I have yet to come across a university, however small, that did not have a gymnasium, and the thing that impressed me was that so many of these gymnasiums were built by the graduates. Now we have our chance to do something for "Old McGill" that has done so much for us. This is an opportunity that we cannot possibly fail to take advantage of. (McGill Grad Cheerleader pamphlet, June 1, 1936)

Over the next few years the campaign continued with regular progress reports provided to alumni through *The McGill News* (e.g. Jaquays, 1936; Hackett, 1938; Crombie, 1939) and reminders to financially contribute. One method to raise funds, beyond the graduates,

From Bloomers to Body Mass Index

was the selling of specially-created McGill cigarettes (Figure 5-3). One advertisement stated: "There is pleasure and satisfaction in smoking good tobacco and you will obtain full measure of both from this new cigarette" (*The McGill News*, 1936). In 1938, \$3,140.96 was attributed to cigarette sales (*The McGill News*, 1938). From the perspective of 2012 and 72 years after the gymnasium opened, the irony of cigarettes contributing to the construction of the gymnasium cannot be overstated!



Figure 5-3: McGill Cigarettes sold to raise money for Currie Gymnasium

The campaign to fund the gymnasium and armoury began in 1936 when WWII was three years away; at a time when some elected officials and citizens believed war was imminent in Europe and others still hoped for a political solution. Graduates contributed individually to the fund and \$105,000 came from the unused Lady Strathcona Drill Hall Fund established in 1917 (Annual Report, 1938-1939; Glassco, 1940). This was one more link of the Strathcona name to the MSPE.

A modified architectural plan of Paine's original was used: for example, the swimming pool was not considered a high priority in time of war. Ground-breaking for the Sir Arthur

Currie Memorial Gymnasium began in July 1939, about three months before the outbreak of WWII. When Canada entered a state of war in September, work on the gymnasium became a round-the-clock effort, with the armoury aspects (e.g. rifle range and officer's rooms) receiving priority over other sections (Glassco, 1940). The cornerstone was laid on November 4, 1939. Available space was put to immediate use throughout the construction efforts.

Lamb (1946) recalled that on December 6, 1939, the McGill contingent of the Canadian Officers' Training Corps (COTC) paraded for the first time in a partially completed building. The priority during the war was officer preparation and drills; as early as spring 1940, 1400 new officers were available after training in McGill's newest facility (Glassco, 1940). In addition, the Senate declared that all male students of British nationality, which included Canadians, would take part in weekly military training (Frost, 1984).

The new facility functioned quickly for recreation as well as. The first intercollegate gymnastics meet was February 23-24, 1940, and the opening of the offices of the Department of Physical Education occurred in June (Lamb, 1946). In addition to officer training, recreational activities for other McGill students occurred with 23 intramural sports offered during the war. The gymnastics meet notwithstanding, intercollegiate competition was cancelled across Canada. Health Services was moved to the new gymnasium and included medical examinations and consultations, urinalysis, chest X-rays, and physiotherapy treatments (Lamb, 1946). Moreover, there was an average of 65 special functions per year. Full use of the gymnasium was swift (Lamb, 1946). The swimming pool and Memorial Hall were built after the war (MacDonald, 1951).

The Dean of Canadian Physical Education

A. S. Lamb was involved extensively within McGill, particularly the MSPE, health services, required physical education, and athletics. Always passionate about his ideas, he shared his thinking in publications (e.g. Lamb, 1925, 1926a, 1926b) and presentations (Lamb, 1931). Common themes were physical education as part of education and health, the need for citizens to be physically efficient, concern with the lack of health and fitness of WWI recruits, the use of scientific approaches with medical examination and remedial programs, the relationship of physical activity and factors such as alertness, confidence and self-control, the importance of play, and the need for professional supervision. He was very critical of the Strathcona Trust program when it functioned as *the* physical education program and in many cases was limited to "one of physical training and physical jerks of the 'I yell and you jump'

type of response" (Lamb, 1931, p. 1). Regular speeches within Montreal and at conferences were his favorite mode of expression; in fact, he did not publish in peer-reviewed journals frequently (Eaton, 1964). His talks were often reported in the next day's newspapers. For example, the Montreal Star reported on March 22, 1930, that he spoke to the Quebec Safety League about recreation safety. Many years later, the Montreal Star covered his June 26, 1942, presentation to the Quebec Association for the Prevention of Industrial Accidents in which he called for training for specific tasks required in the work place to reduce the loss of \$250 million annually to illness and absenteeism. In the same speech he remarked that the work hours per week should be no more than 60-65 for men and 55-60 for women. Times have changed! On March 1, 1935, he addressed the Lion's Club at the Mount Royal Hotel about his recent trip to Australia to attend the Intra-Empire schoolboy games. The Montreal Gazette shared Lamb's view that learning about the various sectors of the empire was much more important than winning. Competitive sport was fine as long as sportsmanship and education prevailed. This speech was followed by one reported in the Montreal Star ten days later when Lamb once again challenged the Strathcona program, and the miniscule 45-hour training syllabus, at the Canadian Physical Education Association meeting at the High School of Montreal.

Lamb was equally committed to the development of the profession and his leadership extended across the country (Eaton, 1964). He began the Quebec Physical Education Association in 1923 and the Canadian Physical Education Association in 1933 (now called Physical and Health Education Canada). He was the President of the latter association for its first six years, all the while calling for a unified professional association to plan for the future of physical education in Canada. In his keynote address at the first convention, he stated, "We must demonstrate how a modern programme in health and physical education can transform a community; how health, happiness, general well-being, and proper use of leisure will depend upon intelligent foresight and planning in these troubled times" (Gurney, 1983, p. xi). There was a noteworthy McGill impact on the first executive of the Canadian Physical Education Association. Of the six executive members, Lamb was President, Jesse Harriott (Physical Director of Women at McGill) was Editor of the *Bulletin*, and Ethel Mary Cartwright was a member, albeit working at the University of Saskatchewan at that time (Gurney, 1983).

At various times, Lamb was a member and contributor to the Amateur Athletic Union of Canada, the Canadian Olympic Association, and the British Empire Games Association of Canada. He remained a staunch supporter of amateurism and coined the term *shamateurism* to describe cases where people or organizations were inclined to bend from a strict

interpretation of amateur practices, such as indirect payment for playing. He also did not move from his beliefs about the physical limits of women in strenuous activities. According to Lamb, they were susceptible to injuries because they were highly strung emotionally and not physically capable (Eaton, 1964). As Canada's representative to the International Olympic Committee, he voted against the participation of women in the 1932 Olympic athletics (track and field) events. Canada's formal position was favorable, but he felt justified to vote with his conscience rather than as a representative of others. The motion to permit women in those events was passed.

Lamb was committed to professional associations concerned with his interests and held membership in at least 15, from the American Student Health Association to the Quebec College of Physicians and Surgeons. He was elected Fellow of the American Academy of Physical Education in 1931—the first person from a Canadian university so honored, Tait McKenzie being counted as an American since he worked in Pennsylvania. Lamb also achieved fellow status in the Royal Institute of Public Health and Hygiene, the American Public Health Association, the American Physical Education Association, and the Canadian Association for Health, Physical Education, and Recreation. His record of professional contributions led to great admiration in other fledging programs of university physical education and maintained his title as Dean of Canadian Physical Education.

While serving in Europe during WWI, Lamb became aware of the limited physical fitness of many of the recruits. As WWII drew near, he approached the Federal Government, as a private citizen and as President of the Canadian Physical Education Association, attempting to persuade the government to take action concerning the fitness of Canadians. He offered his services to the Federal Government to develop a national fitness program but there was little enthusiasm for his involvement, likely because his negative assessment of the Strathcona Trust program was well known (Eaton, 1964). Several times he attempted to convince the Military that he was willing to assist, but each time his proposal was rejected. Finally, giving up on the Department of National Defence, he went directly to the government to promote a national fitness program and even sent copies of his resolution to all relevant Departments of the Federal Government. In this endeavor, he enlisted the support from Principal James and the Dean of Medicine, Dr. Grant Fleming (Eaton, 1964).

The Canadian National Fitness Act was passed on October 1, 1943, and was the first piece of Federal Canadian legislation that dealt with physical fitness. A short and precise document, it created a national council to promote the physical fitness of Canadians. One of four means to promote fitness was to "train teachers, lecturers and instructors in the

principles of physical education and physical fitness" (Cosentino & Howell, 1970, p. 140).

The need for teachers, justified in the *Fitness Act*, was a springboard used by Lamb to propose a four-year degree program in physical education at McGill. He had worked diligently to promote physical fitness for reasons related to health, war, and the military, and had long desired a degree in physical education. He quickly and opportunistically advanced a four-year degree program at McGill after the *Fitness Act* was passed.

Physical Education and Athletics

Of all the sectors in the Department of Physical Education, Athletics was the most frustrating to Lamb (Eaton, 1964). He had been an athlete and coach, but he was aware of the intercollegiate difficulties evident in the USA with the growing prominence and importance attached to athletics. To Lamb, these difficulties were "evils" and included "under the table" agreements and payment, perverted amateurism, over-specialization, and commercialization. His values were expressed in papers and countless speeches. He viewed athletic participation as part of education for the total person and thought it should occur for the love of the sport, not for personal benefit. Moreover, since Lamb viewed sport competition as part of physical education, it made ideological sense that athletics fall within the administrative control of the Department of Physical Education (Eaton, 1964). Practices he opposed were recruiting, providing scholarships to athletes, placing too much importance on intercollegiate teams, hiring coaches who were not trained in physical education, paying a bonus to a winning coach, and permitting an athlete who transferred to a new university to play in the next year.

Intramurals are part of most athletic programs. The Annual Reports of the Department, which Lamb wrote, consistently referred to the number of intramural sports. It seems he was particularly proud of their growth (Eaton, 1964). Many students actively involved in a variety of sports was consistent with his beliefs.

On the other hand, the intercollegiate program caused him some consternation. Athletics was supported by student society fees through the Students' Athletic Association, and the stadium's maintenance was borne by the Graduates' Society. Thus, these groups had an inherent interest in the cost of athletics and the revenues produced through ticket sales at football games, for example. Revenues depended to some degree on the competitiveness of the football team. In short, the Students' Society and Graduates' Society demanded more authority in the

intercollegiate program. As mentioned earlier, difficulty in the lines of communication was one of the first challenges faced by Lamb when he became Director of the Department. An Athletics Board was constituted and held its first meeting on April 25, 1923. The first Athletics Manager, Stuart Forbes, took office on May 1, 1923 (Eaton, 1964). He was responsible for the administration and supervision of the Athletics program and thus was equivalent to a Director of Athletics today. The Students' Athletic Association was abolished, but students were represented on the Athletics Board.

Technically, the Athletics Board, and hence Forbes, who had been hired by Lamb, reported to him. Interactions between Lamb, Forbes, and the Graduates' Society may have been hampered, as McKenzie had predicted, without a common physical location. In the 1920s, the offices of Physical Education were found in Molson Hall while Athletics were located in the Student Union. Yet, this system worked quite well overall until Principal Currie died in 1933 (Eaton, 1964). At that point, the Athletics Board became responsible for its own financial affairs because the university declared that it would not cover its financial losses (Eaton, 1964). No doubt this was an outcome of the depression, but it would present new fiscal challenges for the Athletics Board. One story is illustrative of the anxiety Lamb experienced in his relationship with athletics. McGill won the intercollegiate football championship in 1938, and there was some discussion that the coaches should receive a bonus. This was unthinkable to Lamb (Eaton, 1964) and would have served as a simple reminder to him that a Director of Physical Education should oversee the athletics program. Since the Athletics Board was now financially liable for its program, it assumed more power, essentially becoming a separate administrative and policy-making entity, which worried Lamb, who remained steadfast in his values. From the viewpoint of the Athletics Board, the University had required it to have a responsible budget and therefore it became more independent, drifting further away from the often rigid thinking of Lamb.

Never shy to express his thoughts, Lamb drafted a new scheme for the re-organization of physical education and athletics when Principal Cyril James took office in 1940. Lamb convinced James that physical education and athletics would be best served under a single department with one administrative head in physical education, a managerial structure that existed in many universities. In a nutshell, Lamb eliminated the various sub-committees of student heath, the required program, athletics and the MSPE, integrating them into one Department of Physical Education. The University Medical Officer and Director of Student Health would have jurisdiction over student health; the Athletics Manager would have supervision over intramural and intercollegiate sports; the Assistant Director of Physical Education for women would supervise the intramural and intercollegiate sports for women and; the Assistant Director of Physical Education at Macdonald would represent the Director at Ste. Anne de Bellevue (Simpson, 1940). The Athletics Board would have advisory capacity but not executive control.

At first glance, this may appear to be no change at all, but one aspect of integration was financial, creating a central pool of money that would be directed to programs as determined by the Director. This latter point regarding finances was a major change from the Department of Physical Education prior to 1940. This naturally concerned the students who paid additional fees beyond tuition for athletics, but not, for example, to support the MSPE. In addition, the women instructors and coaches objected because they had not been consulted. The failure to consult with the women was reminiscent of the early 1920s which led to a mild scolding from Currie. Lamb's unwillingness to consult with women was "curious" (Eaton, 1964). The women's athletic and required programs, as well as their contribution to the teacher education in the MSPE, reflected all the values espoused by Lamb, much more than did the men's program. An explanation of Lamb's unwillingness to consult with women, in the context of Cartwright was sketched in Chapter 4.

The re-organization of athletics and physical education, known as the James plan, came into effect on June 1, 1940, with Dr. Lamb named Director, who reported directly to the Principal. It was consistent with McKenzie's ideas of one department led by a medical supervisor that would serve the well-being of the whole student body, and it might have been argued to be an effective use of scarce resources. The intercollegiate program was canceled due to WWII, and thus immediate criticisms of the new organizational structure of the Department of Physical Education were minimal from 1940-1945.

The Four-Year B.Sc. Degree Program

The National Fitness Act provided a window of opportunity to propose that a four-year degree program in physical education was justified and feasible at McGill. The Sir Arthur Currie Memorial Gymnasium had just opened, and the Department had 30 years of experience in preparing physical education teachers who were highly regarded in the local school system and across the country. Part of the degree proposal document pointed out that requests for establishing a degree program had been received from the National Council of the YWCA and YMCA, the National Physical Fitness Council, Provincial Departments of Education and Health, and McGill School of Physical Education Alumni Society (Memorandum concerning the proposal that the present diploma course in the School of Physical Education be extended to a degree course, 1945). Many USA schools had a degree program in physical education, and McGill had not been able to meet the demand for trained teachers of physical education. No doubt, to some degree, it was helpful that McGill's competitor, The University of Toronto, had started a degree program in physical education in 1940.

On May 16, 1944, the Faculty of Medicine acknowledged the urgent need for trained personnel to inculcate good health habits, that a four-year program was necessary, that the courses for the degree were already available, and there was a need for trained teachers. The proposed four-year curriculum was strongly based in science, as had been the case with the diploma programs since 1912. In fact, with an additional course in mathematics and chemistry, graduates would meet the minimal requirements for a teacher of science. Lamb had hoped that dual teaching certification in physical education and science would have been possible, but this was prevented by certification regulations (Meagher, 1958). Graduates would receive a B.Sc. in Physical Education, which included a teaching diploma. The program was approved by the Faculty of Medicine on May 15, 1945 and the Senate on May 23. At the June 17 meeting of the Board of Governors final approval occurred, but with the caveat that such approval was granted for five years only (Meagher, 1958).

Students enrolled in the new B.Sc. (Physical Education) in September, 1945. The structure of the program is sketched in Table 5.1. Physical Education courses 1-4 included 4, 6, 9, and 6 hours of instruction and practice in physical skills, respectively. The courses were similar in some respects to the Physical Education Practice courses in the three-year diploma inasmuch as they included quite a range of content within them. Overall, the total hours were about 25 per week for the new degree students. Thus the 4, 6, 9, and 6 hours devoted to physical skills represents 25% of the total program, down from 35% in the three-year diploma.

Alpine skiing was a relatively new sport in the 1930s and 1940s, but instruction began in the MSPE in 1939 and was an established activity for both sexes in years 2 and 3. There was also a new requirement noted in the 1946-1947 Calendar of attending an Outdoor School of three weeks prior to the beginning of lectures. Another innovation was a camp course, originating in 1950. More will be said about these three popular courses in the next chapter.

The End of the First Department of Physical Education

When the Second World War ended in 1945, there was major condemnation levied against the James Plan by the Students' Athletic Council and the Women Students' Athletic Association (Eaton, 1964). A Senate Committee was struck to explore the role of student athletics at McGill, and filed its interim report on February 19, 1947. It highlighted some of the positive aspects of an intercollegiate program for a university and its students, and reiterated the desire for McGill to continue an athletics program that was strongly student-oriented.

Table 5.1: Courses in the Four-year Degree Program (McGill Calendar, 1946-1947; full courses unless otherwise noted)

Year 1

English (Literature and Composition)

Physics 11

Chemistry 16

Botany 1a (half course)

Zoology 1b (half course)

Physical Education 1: Basic techniques in neuromuscular activity, introductory lectures and physical activity practice (e.g. track and field, soccer, gymnastics, dance, and skating)

Year 2

English 13 (Technique of the drama)

Functional Anatomy

Psychology 1

Sociology 1

Physical Education 2: Principles of physical education, analysis and practice of activity, lectures and physical activity practice (e.g. elementary school activities, fencing, skiing, and tennis)

Year 3

Psychology 6 (Growth and development)

Education 1 (General Principles of Education)

Education G (Use of Voice, half course)

Bacteriology (half course)

Applied anatomy, Kinesiology

Physical education 3: Methods and analysis of teaching and physical activity practice (e.g. tennis, water polo, squash, folk dancing, officiating, and tap dancing)

Year 4

Physiology of Exercise (half course)

Organization and Administration

History, Development and Present Day Requirements in Mental Health, Preventive Medicine, Nutrition and Technical Application of Physical Medicine (Equivalent to 3 full courses)

Physical Education 4: Principles of physical education, programme construction, curriculum planning, and physical activity practice (e.g. water safety, pageants, practice teaching, arts & crafts, and community recreation)

The report acknowledged confusion within the University about athletics and physical education, but did not find any monies had been diverted from student athletics fees to the MSPE. The Senate decided to rescind the James plans, and to create a Department of Athletics, Physical Education, and Recreation. This new unit dealt with intercollegiate sports and recreation for all McGill students and must have included physical education in its title to capture instruction in activities such as swimming for all students. Still, it was odd that physical education was included in the title if there had been confusion among students between physical education and athletics. More importantly, the Athletics Board of the new department would have policy-making and hiring powers. A separate Women's Athletics Board was also established. The MSPE become a separate unit with its own Director and fell under the jurisdiction of the Faculty of Medicine, no doubt because Lamb was a physician. This marked the end of the first Department of Physical Education, which had lasted for 30 years. Separating the School of Physical Education from Athletics would have been a severe disappointment to Lamb, but in part was caused by his own inability to change and accommodate.

Summary

On the doorsteps of the 1950s, the MSPE had found space in the long awaited Sir Arthur Currie Memorial Gymnasium. There was a new degree in physical education, which "Dad" Lamb had promoted for many years. He must have felt satisfaction and pride when three women graduated with the first degrees in physical education in 1946: Mary Varey, Alice Dickson, and Merelie Cayford (Figure 5-4).

On the other hand, Lamb had lost his fight for control over the athletics program, and the MSPE found itself divorced from athletics and health services, which must have been difficult for him. The MSPE had found a physical place, but would the intellectual link with Medicine last? In the next 20 years there was a need for physical education teachers, but the MSPE would be connected with four different units and three different undergraduate degree labels in a search for a conceptual home within the university. It would also be challenged by a university report which adamantly objected to a B.Sc. degree with professional content and wondered if physical education teachers in training should receive only a diploma!

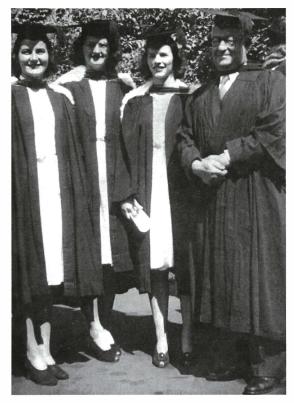


Figure 5-4: Dr. Lamb and the first three B.Sc. Physical Education graduates, May 1946



Notes

 Physical therapy grew from physical education. At this time the physical education students were assigned to clinical settings as physiotherapists.

A Matter of Degrees

rost (1984) refers to 1945-1960 as years of major development at McGill for three reasons: a revolution in university financing, an unprecedented expansion of knowledge, and an "immense and permanent" increase in the number of students enrolled in university. McGill had functioned like a private institution, as financial support from the government was paltry in comparison to other universities. As early as 1865, McGill recognized that all the money received from public sources in its history, amounted to one-fourth of the annual revenue received by the University of Toronto from the Ontario Government. Principal James led the dialogue with the Federal Government in 1951 to have universities recognized as fundamental institutions of higher education, culture, research, and professional education. He argued that they contributed to society at large, not just to those who received degrees. As such, universities were worthy of public funds (see Cyril James' commentary in the Annual Reports, 1949-1950 and 1950-1951). His efforts produced an immediate infusion of money into universities across Canada, but not in Quebec. A grant of \$615,270 to McGill was declined by the University due to pressure from the Quebec government who objected to Federal Government interference with provincial education matters.

By 1953, the Quebec Government began providing their own grants to universities explicitly recognizing their contribution to Quebec society. A fiscal transfer from Federal to Provincial coffers and then to Quebec universities was created in 1962. McGill now received significant government grants, thus becoming a public university.

The period 1945-1960 can also be characterized as the beginning of the knowledge explosion (Frost, 1984). World wars are destructive at the human level but often advance new technologies that benefit society. Electron microscopes contributed to molecular biology and in concert with genetic advances led to the discovery of DNA, the very essence of life. Rocketry resulted in space travel, advances in computer technology, and humans standing on the moon by 1969. Carbon 14, one technique of dating archeological data, provided new insights to the history of Homo sapiens. Universities were part of and influenced by these advances. Frost (1984) succinctly captured the importance of the knowledge explosion to universities. "It became socially acceptable to devote large sums of money to scientific teaching and research, so that individual scientists continued to find universities exciting places in which to explore their disciplines" (p. 256). This was a fundamentally different way of defining a university and permitted universities to raise the profile of research within their walls and to develop new expectations and opportunities for their faculty.

Teaching to medical, arts, and Normal School students was the main focus in early McGill. Many fine universities and liberal arts colleges continue to view their mission primarily as one of teaching and learning. But McGill's leaders in the late 1800s identified research as an important enterprise that should be nurtured. Ernest Rutherford won the Nobel Prize in Chemistry in 1908 for his research in radioactivity conducted at McGill. Tait McKenzie published clinical papers in the 1890s on physical rehabilitation. The idea of public money made available through competitive research councils to support research was largely a post-WWII phenomenon. Today, the vision of McGill is to be among the best research intensive, student centred, and publicly funded universities—and we are. Teaching and research are viewed as mutually reinforcing rather than in opposition, since the ideal is having world-renowned professors teaching their subject matter. This basic reasoning was expressed by Cyril James in the 1956-1957 Annual Report, "What is important is that the teacher should continuously be eager to engage in research that enriches and strengthens his knowledge" (p. 22). The corollary was that the university had a responsibility to provide opportunities for staff to engage in such research, particularly for younger staff. These themes re-emerged and expanded in the 1961-1962 Annual Report. As the 1960s began, there was no uncertainty that research would be highly valued at McGill.

As research expanded and excitement in its outcomes mounted, the standard demarcations between disciplines blurred (Frost, 1984). To understand humanity one had to explore biological, psychological, and cultural interactions rather than each separately.

Cross-disciplinary research became a buzzword. As the knowledge explosion was under way, McGill positioned itself to be at the forefront of research. This was closely related to expansion in graduate education as the next generation of scientists emerged. Also, universities immediately recognized the potential of computers despite their gargantuan size. Most universities needed a computer building to hold these beasts as the personal computer was many years away.

For over 100 years the enrolment at McGill showed a steady but not spectacular increase. Post-war McGill would see an immediate influx of war veterans that would swell its numbers from about 2,700 degree students in 1938-1939 and throughout the war, to 6,500 in 1946-1947 (Annual Report, 1946-1947), an impressive gain of 140%. This trend was seen in the MSPE (see Figure 4-4). The new degree attracted 118 students in 1945-1946 and 172 in 1947-1948. More importantly, there was an increase in the college-aged population who wanted a university education. Large numbers sought entrance into university convinced it would lead to greater prosperity, a notion generally supported by governments. While there was some discussion at McGill that it should limit its enrollment (Frost, 1984) a decision had to be made whether or not to become a small liberal arts university or accept expansion. Grow larger it did, from 7,352 students in 1950 to 16,818 in 1970.

Lamb's Latter Years and the Independent MSPE

Changes in university funding, rapid advances in knowledge, and a significant alteration in the size of the student body would impact the MSPE from 1945 to 1970. As described in Chapter 5, the post-war years were turbulent for Lamb and the MSPE. A new gymnasium was operating but the first Department of Physical Education created in 1920 had been dissolved by 1947. The required physical education program had been eliminated in 1944 and health services had been transferred to the Department of Health and Social Medicine in 1946 (Annual Report, 1945-1946). An independent Department of Athletics, Physical Education and Recreation was created with a separate women's Athletic Board, and the MSPE became an independent school reporting to the Faculty of Medicine in 1947.

Arthritis had harassed Lamb in the late 1930s, which only worsened in the next decade when he used one, and then two, canes to assist walking. He took a year's absence in 1947-1948 for a series of colitis operations from which he never fully recovered. He returned

to McGill in 1948-1949 as Director of Athletics, Physical Education, and Recreation. Victor Obeck, head football coach, was named Director of Intercollegiate Athletics and Dr. John B. Kirkpatrick became the new Director of the MSPE in 1948 as well. The Director of the Women's Athletic Board (Department of Athletics, Physical Education, and Recreation) was Iveagh Munro.

Many of the changes included in the Senate report of February 19, 1947 were debated and finalized at a time when Lamb was too ill to speak to the Senate. Eaton (1964) concluded that Lamb's retirement in 1949 was precipitated by both ill health and disappointment with dramatic changes that had taken place over a short period. Obeck replaced him as Director of the Department of Athletics, Physical Education, and Recreation in 1949. Lamb was named Professor Emeritus in 1950.

"Dad" Lamb experienced some disappointment at the end of his career, but was otherwise heralded as a visionary in teacher education and in professional development. Always determined to create a degree program in physical education, this was realized in 1945 five years after the University of Toronto. Only with highly trained teachers could the benefits of physical education become reality according to Lamb. He was tenacious in asserting that physical education was not simply fitness and skill development, although they were valued, but education as well. Lamb was a strong proponent of the new physical education in which learning about moral and social values had high importance (e.g. Wood & Cassidy, 1927). His prime disagreements with the Strathcona program were its excessive focus on the physical rather than education, its inappropriateness for children, and the impossibility of training a teacher in 45 hours. In the health arena, Drs. Lamb and Harvey moved far beyond medical assessment to a complete range of health support and services for McGill students. While his interactions with women were traditional, his views on education within physical education, the ideal of amateurism, sportsmanship, and a reasonable rather than excessive emphasis on intercollegiate sport resonated with his women students, who were quite devoted to him (Eaton, 1964). He did not instruct many men until the end of his career but they greatly admired and respected him as well.

Upon retirement, Lamb spent more time fishing on Green Lake north of Montreal as a member of the Ascension Fishing Club. He was responsible for the maintenance of the club which he undertook with the same vigour as his duties at McGill. He could also be found in a hammock playing his harmonica. While fishing with his friends, he would constantly bet on who would achieve the biggest catch of the day. In golf he would gamble throughout the 18 holes. As Eaton (1964) pointed out, it was almost impossible

to settle accounts at the end of the game. He was also a practical joker and on one April Fool's day presented an unannounced exam, and delighted in the worried faces of his students and the relief when the joke was apparent. Students also found "Dad" easy to talk with and frequently brought their troubles to him.

Mary (Varey) Wilkinson (Personal communication, 2010) recalls being interviewed by Lamb when she arrived at McGill in 1945. Mary had a B.Sc. degree from Saskatchewan but sought physical education teaching certification. Lamb informed her that if she was a good student she would receive her degree by the end of the year. Mary followed courses with both diploma and degree students from 9:00 a.m. to 6:00 p.m. (one spare only) and studied in the library every night from 7:00-10:00 p.m. Lamb must have shown considerable flexibility in developing a timetable for Mary since she would have taken classes with the last of the diploma course students and the first of the degree students. It is surprising that it was feasible to complete the program in one year. Never a spare moment during the year, she was complimentary about the teachers and she felt fortunate to have been taught anatomy by Dr. Lamb. Mary, and Alice Nicholson, a friend from Saskatoon, lived in Strathcona Hall, a residence used by pilots during the war (southeast corner of Sherbrooke Street and McGill College). It was "Spartan" according to Mary, somewhat cold but with a good cafeteria. McGill did not have a swimming pool at that time, so Mary would train Thursdays at the Knights of Columbus pool on Ste. Catherine's Street at 6:00 p.m. Missing the cafeteria supper, she would wait until 10:00 p.m. for the evening snack of milk and graham crackers.

Mary (Varey) Wilkinson and Alice Nicholson did graduate at the end of the year, along with Merelie Cayford becoming the first three physical education *degree* students in the history of the Department. Cayford had graduated from McGill with a B.Sc. in 1945. Mary was soon hired as an instructor of physical education at Macdonald College (1947-1951). She married Robert Wilkinson, a 1948 graduate and future chair of the Department. Together, they had seven children, three of whom graduated from McGill physical education, John, Jane, and Elaine. The Wilkinson's might be the "First Family" of McGill physical education! With Mary Wilkinson's importance in the first degree class and her enduring link to the Department, her invitation to be Honourary Chairperson of the Centennial celebrations in 2012 was uncomplicated (Figure 6.1). The Department was pleased that she accepted.

Lamb enjoyed a good debate. If someone disagreed with one of his decisions, he would happily explain, discuss, and argue. It often ended with a laugh. On one occasion

the McGill economy professor and noted humourist, Stephen Leacock, challenged the intercollegiate program as too much focus on the talented few, despite the athletics fee being paid by all students. In a *McGill Daily* piece (March 16, 1934) Leacock quips,

To a parent there is no finer sight than the broad playing field of such a school, dotted with a hundred little boys, intent on games, each playing worse than the other...Let me make one thing clear. I am not attacking athletics—meaning athletics in the real sense. The cultivation of a sound mind in a sound body. I have been an athlete all my life. In my younger days I was put off more football and cricket teams than any of my contemporaries. I played cricket for McGill University at Ottawa in 1904 in the presence of the Governor-General. He himself said that he had never seen cricket like mine.

One response to Leacock came at a Kinsman Club speech on April 5 where Lamb retorted—with some humour himself—but was very serious when he claimed that 55-60% of the students were engaged in some form of athletics. Lamb was not prepared to allow even the great humourist to enjoy the last word using erroneous data.



Figure 6-1: Mary Wilkinson

In 1951 Senate decided that first year students would be required to participate in a program of physical education, which must have greatly pleased Lamb (Figure 6-2). He had to be touched as well when colleagues and friends in the same year established the

Arthur Stanley Lamb Scholarships. Solicitations for the scholarship occurred in the annual Physical Education Newsletter sent to all MSPE alumni in the 1950s. The newsletters regularly presented an update on the growth of the Lamb scholarships and encouragement for graduates to contribute. There were also events planned, such as a folk dance evening, with proceeds directed to the scholarships (Alumni Newsletter, October 1958). The MSPE Alumni demonstrated their admiration for Lamb in this tangible way and the first A. S. Lamb scholarships of \$75 were awarded at the end of the 1951-1952 year. The foresight and generosity of the physical education alumni must be acknowledged: in 2012 there are six A. S. Lamb scholarships; three for physical education and three for kinesiology students, each worth an estimated \$1,000. Other awards available to students can be found in Appendix A.



Figure 6-2: Dr. A. S. Lamb

Lamb was rather pleased that he had developed a reputation for standing by his ideals, even if they were out of fashion. Four days before his passing he stated that he remained "a

dyed in the wool amateur at heart" (Eaton, 1964, p.190). Lamb died on September 4, 1958. His death was a subject in all the leading Montreal newspapers, one of which stated, "He belonged to a vanishing type, to whom the too often loosely applied term of sportsman could be bestowed without reservation."

The University Senate passed the following resolution.

The Senate of McGill University records with sincere regret the death on 4 September 1958, of Arthur Stanley Lamb, Emeritus Professor of Physical Education.

Dr. Lamb, or "Dad" Lamb as he was known to hosts of friends within the university and throughout Canada, served as Director of the School of Physical Education from 1920 until his retirement in 1949. During this period he gained international recognition as an authority in his field and in sports, social services and health organizations.

He was a man of tremendous energy and capacity. He found time to manage several Canadian Olympic Teams in Europe. He was head of the Canadian Physical Education Association, and the first Canadian to be selected a Fellow of the Society of Physical Education of America and of the Royal Institute of Public Health in England.

Above all, however, he will be remembered by his McGill colleagues for his unceasing devotion to the university. He was a forceful but kindly man, the friend of every McGill colleague and student he ever me.

To his widow and sons Senate sends it deepest sympathy.

Freshman Physical Education

The required physical education program had been cancelled in 1944 when legal questions were raised, and after voluntary participation garnered considerable support. The men had been obliged to complete two hours of physical activity per week, in years one, two and three. As noted in Chapter 4, the requirements for men were reduced in some years due to insufficient space in the rented facilities. RVC had made it easier for the women to achieve their required 140 hours over three years. With new facilities that now included the Memorial swimming pool in the Currie Gymnasium, which opened in 1950, it was possible to contemplate a return to some form of compulsory physical education. The new requirement applied only to first-year students and became known as Freshman Physical Education.

The program was designed to familiarize students with the McGill athletic facilities, provide instruction that would improve their skill in specific activities, and to physically exercise during the learning of those skills (Annual Report, 1950-1951; Griffiths, 1957; MacDonald, 1951). In the

McKenzie tradition, a medical exam prior to participation remained to ensure that the student was "fit" enough to participate. Only swimming required a test. If a freshman could not swim, he/she had to take swimming lessons (Griffiths, 1957). The activities were organized under the auspices of the Department of Athletics, Physical Education, and Recreation. Table 6.1 provides a glance at the intercollegiate, intramural, and instructional activities of 1955-1956 and the points offered for participating in each.

Table 6.1: Athletics Picture at the University (The McGill News, 1956)

	•		,
Activity	Intercollegiate	Intramural	Instructional
Badminton	10	4	5
Basketball	20	5	5
Boxing	20	4	not offered
Fencing	10	4	5
Floor Hockey	not offered	5	not offered
Football	20	5	not offered
Golf	10	4	not offered
Gymnastics	20	4	5
Harrier	10	4	not offered
Handball	not offered	4	5
Hockey	20	5	not offered
Judo	not offered	4	5
Rugger	20	not offered	not offered
Riflery	10	4	not offered
Squash	20	4	5
Swimming	20	4	5
			(beg & adv)
Soccer	20	not offered	not offered
Skiing	20	4	not offered
Softball	not offered	5	not offered
Tennis	10	4	Offered 1956
Track and Field	20	4	not offered
Table Tennis	not offered	4	not offered
Volleyball	not offered	5	5
Water Polo	20	not offered	not offered
Wrestling	20	4	5
Weight Training	not offered	not offered	5
Woodsmanship	not offered	5	not offered

Freshman students had to compile 20 points to satisfy the physical education requirement. In most cases competing in intercollegiate sports and active intramural participation exempted students from needing to collect points in the instructional program. Results from a questionnaire revealed that 94.1% of the students believed they had become reasonably proficient in the activities and 94.4% indicated they enjoyed the experience (*The McGill News*, 1956).

While the Freshman Physical Education program was not part of the MSPE, a number of its graduates became directors of that program; John Chomay (Figure 6-3), George Andrew (Figure 6-4), and Tom Thompson (Figure 6-5). Table 6.1 also demonstrates typical



Figure 6-3: John Chomay

activities in an athletics and recreation program in the 1950s. Boxing and riflery were standard offerings, while judo was the lone martial arts. In general, Table 6.1 depicts competitive team sports and activities with designated rules and specific facilities required. This made sense in the 1950s because the purpose of the Freshman program was to develop skills that would permit participation in activities that were available at McGill and elsewhere. Less competitive and more individual activities such as tossing a Frisbee, walking, yoga, aerobics, hiking, jogging, and cycling were many years in the future.

Tom Thompson (personal communication, 2012) was the last Director of the Freshman Physical Education program (1961-1964). There was an option of paying a fee if the physical education points were not achieved. A cohort of students was quite pleased to simply



Figure 6-4: George Andrew



Figure 6-5: Thomas B. Thompson

pay the fine in 1960-1961 prior to Thompson's directorship, resulting in \$25 collected from 46% of that freshmen class. Believing firmly in the value of physical activity, he promoted the freshman program in 1961-1962 by providing more options at a variety of times to best accommodate the students and even planned activities on Saturday mornings. He reduced the number of freshmen who paid the fine to 6%, effectively shrinking university revenue. In spite of this, Thompson enjoyed a stellar career in the development office of McGill, raising millions of dollars for the University. Freshman physical education was cancelled by Senate prior to the 1964-1965 year.

Viewpoints about *required* physical activity changed over time. Lamb insisted that students should be obliged to engage in physical activity if they would not do so voluntarily, with the hope that new skills would lead to continued participation. This is a form of "I know

what is best for you." By the 1960s an appreciation that university students were young adults capable of making their own decisions was emerging. Arguably, only voluntary activities will be truly meaningful to the students and this philosophy continued over time and is supported by self-determination theory today. Also, the University and Athletics staff wanted students to be active during the entirety of their programs, not only in the freshman year. Today, Athletics and Recreation maintains that 70% of the student body participate in some form of organized physical activity. With such figures, it is unlikely or desirable that the University will return to any form of required physical activity.

Changing Degrees and Academic Homes: The MacIntosh Report

Meagher (1958) provided a helpful analysis of the size and academic success of the early degree students. The first large graduating class of 1948 included 16 men and 18 women, many of whom were veterans and came from outside of Quebec. They were generally mature students who managed the academic demands of the degree, possibly because they were highly motivated and determined after the experience of WWII. The Freshmen class of 1948-1949 was also quite strong academically since only 7 of 29 students had more than two failures. Veterans were highly represented in the 41 graduates in the class of 1950, the largest class at that time from the MSPE. However, by the 1951-1952 session enrolment had dropped, the veterans had graduated, and the failure rate of first year students who had arrived direct from high school rose sharply. The enlarged failure rate was not unique to physical education as other faculties reported the same phenomenon, in some faculties as high as 40%. But it did not help that a review of MSPE was about to occur as the grades plummeted.

A special Faculty of Medicine committee, with Professor F. C. MacIntosh as chair, was established in 1952-1953 to study the three schools under its jurisdiction: Graduate Nurses, Physical and Occupational Therapy, and Physical Education (Annual Report, 1952-1953). This was consistent with the Board of Governors recommendation to review the MSPE degree after five years. The report recommended that the School of Physical Education be transferred to the Faculty of Arts and Science, ostensibly because the courses in the physical education degree program were primarily offered by that Faculty. Formal action by the University would not come until the next year, therefore the School had the opportunity to respond to the first draft of the report (MacIntosh, 1952).

The MacIntosh report did more than simply propose a change of venue for the MSPE. It was a critical document that would consume much energy within the School for the next five years. It contained some sound observations and recommendations, but was very biased against educationally relevant professional course work. The report stated that "We are satisfied that the Director of the School and his staff are competent and enthusiastic teachers, that the School exercises due care in the selection and promotion of its students, that it compares favourably with schools at other centres in the quality of professional training it provides, and that its graduates fill a useful place in the community." Pleasant comments perhaps, but they could hardly be considered an enthusiastic endorsement. Despite the B.Sc. (Physical Education) degree being four years in duration, the report questioned whether the program was worthy of degree status and if it might be better designated as a diploma. "The conferring of a degree should be a sign of scholarship, recognition of some standard of achievement in the pursuit of knowledge itself. Where the achievement is not essentially one of scholarship, but rather the attainment of some level of professional skill and competence, the reward should not be a degree but a diploma." The report went on to say, "As for the argument that the graduate must have a degree, since otherwise he will not get so good a job, we think it should be given some attention, but not much."

These introductory remarks in the report reflected thinking that held some sway in those days regarding diplomas, degrees, and professional skills. In letters between MacIntosh and Kirkpatrick during development of the report itself, Kirkpatrick acknowledged some academic shortcomings but was inclined to solve them by moving to a five-year program. The issue was creating a quality degree which included a strong discipline base but also critical professional experiences (e.g. physical education teaching methods, principle of education, activity courses, and practice teaching). The report suggested that the difficulty lay in developing sufficient depth of discipline knowledge and enough professional knowhow. This challenge was not new, as Lamb had floated the idea of 5-year degree program in 1930. It should be noted that the MacIntosh report was produced at a time of great concern for the quality of all undergraduates at McGill (Annual Report, 1954-1955), while it was coping with rapidly increasing enrolments. And, to be frank, it almost assuredly did not help that 20 percent of the content in the B.Sc. program was described as Physical Education and included gymnastics and basketball! To many, this was not appropriate credit toward a university degree. We will address the position and the purpose of physical skills in physical education programs later. The report suggested that no credit should be afforded to professional courses in an arts or science program.

It also stated that the MSPE program lacked rigor. These comments were based, in part, on the large number of introductory courses such as physics, psychology, and sociology which they contended was about one-third of the program (see Table 5.1). Students did not proceed to advanced courses in those disciplines which would have been evidence of attaining a standard of achievement in the pursuit of knowledge. Another one-third of the program load was professional courses in education or physical education. (Recall from the previous chapter that in each year there was a single full course called Physical Education.) These seem to have been dismissed out of hand as having any possibility to be recognized as scholarly, and certainly not worthy of academic credits in a B.Sc. degree. The Physical Education course in each year had multiple content, partly physical skills and partly topics like teaching methods and curriculum development, all of which was poorly defined in the University Calendars. This may have created an easy target for someone opposed to professional subject matter. The final one-third were described as "second-class" courses, or courses that even the Department giving them did not considered adequate preparation for further study. For example, Table 5.1 outlines some of the content taught in year four by members of the Faculty of Medicine that was equivalent to three full courses. The content did not represent specific courses offered in that Faculty but seemingly was an array of topics only for the physical education students.

The report also commented upon the generally poor grades obtained by physical education students in academic courses and attributed this to factors such as:

- 1. Admitting too many students with averages below the minimum of 65%
- Engagement by the students in too many extracurricular activities because they were "cheerful extraverts"
- 3. Physical education was physically tiring and hence less time to study
- Academic subjects received less attention when taught simultaneously with professional subjects
- Young men and women whose interests are mainly intellectual are not likely to enter physical education.

Accepting high school graduates with lower grades had some credibility (Meagher, 1958). The other explanations were stereotypic and speculative, but the reality that physical education students, as a group, did not generally fare well in "science" courses had some empirical validity (Annual Report, 1955-1956). There was a 40 percent failure rate in the freshman class of 1952-1953 and those admitted without a high school average of 65 percent fared even worse (Meagher, 1958). At least one very successful student from that era suggested that many of the students were admitted without sufficient science courses

even from high school. Most had fine backgrounds in sport with aspirations of teaching and coaching, but the degree demands were a miss-match with their academic background. The MacIntosh report was damaging to say the least.

Among the recommendations flowing from the report were the following:

- "The present affiliation of the School with the Faculty of Medicine confers no very obvious benefit to either party. It has come about mainly because the founders of the School, Drs. R. Tait McKenzie and A. S. Lamb, were medical men." For some valid and logical reasons, but also negative perceptions, the MSPE lost it place in Medicine.
- 2. The School of Physical Education should be transferred to the Faculty of Arts and Science because one-third of the MSPE courses were in that faculty, which would become a higher percentage if other proposals were heeded.
- Closer ties should be forged with the School for Teachers and the Department of Education, the later unit which trained teachers for high schools and was part of the Faculty of Arts and Science.
- 4. The degree should become a Bachelor's degree of Physical Education (B.P.E.).
- Incoming students should meet the entrance requirements of the Faculty of Arts and Science.
- 6. The program should ensure that is has continuation courses. Continuation simply meant at least three sequential courses in a discipline such as mathematics or psychology. This would achieve some depth of knowledge, and thus avoid the criticism of the program having too many introductory courses.
- 7. The first two years of the program should be held at Macdonald College with the School for Teachers to advance professional links and knowledge with that group, and years three and four should occur on the downtown campus where it would be easier to obtain the continuation courses.
- 8. One session of practice teaching was recommended only, at the end of second year.
- The program should include only one full year of physical education courses (e.g. physical education principles to curriculum development) and one full year of physical education activities (e.g. gymnastics, swimming, and basketball).
- The academic year should be extended in years 3 and 4 to include other professional activities

The last recommendation requires some explanation. In the 1950s, the regular academic year at McGill ran from late September until late April. The MacIntosh report recommended that September and May should be used for professional activities, realizing that the MSPE wanted more time devoted to the professional side of the program. This would effectively increase the academic year by two months in the final two years and not necessitate the program requiring a fifth year.

The MSPE was moved administratively to the jurisdiction of Arts and Science for the 1954-1955 year, the degree title changing from a B.Sc. (Physical Education) to a Bachelor of Physical Education (B.P.E.).

A Short Stay in Arts and Science

The MSPE was not inactive when the MacIntosh report was presented as a draft document. Under the leadership of the Director, Dr. J. B. Kirkpatrick, the School responded with realism and conviction. Kirkpatrick established a committee of Iveagh Munro, Winona Wood, Thelma Wagner and Robert Wilkinson, and met several times by himself with the MacIntosh committee. In a fine report of his meetings (June 18, 1952) Kirkpatrick (Figure 6-6) responded that the Senate would expect some of the changes recommended and that the School should welcome the opportunity to improve the program. He strongly objected to the idea that no professional course is worthy of degree credit but acquiesced that the degree would have to change to a B.P.E. to ensure professional course credit. Kirkpatrick's even personality and fine sense of humour proved to be assets as he dealt with the challenges to the MSPE.

The MSPE committee continued its work changing the curriculum. It included continuation courses in elective disciplines as recommended in the MacIntosh report and re-conceptualized Physical Education 1, 2, 3, and 4 as sequential courses that dealt with progressively more advanced professional content. By adding another physiology course they produced a continuation of courses from botany/zoology to anatomy to physiology to exercise physiology.



Figure 6-6: J. B. Kirkpatrick

When the MSPE was a special school in the Faculty of Arts and Science, the curriculum was in a constant state of flux. Some changes proposed in the MacIntosh report were attempted, but a year-to-year breakdown of specific courses was only evident in the 1956-1957 McGill calendar. Even then, the curriculum was accompanied with the following preamble:

The programme of training in physical education is under *constant* study, with a view to its possible improvement. The curriculum and course described should therefore be understood to apply only to the academic session for which this Announcement is used. While it is the intention to offer courses as outlined, the University reserves its usual right to amend or cancel any course if it appears in the best interests of the University and students to do so (p. 3109, italics added).

This was a depiction of a program in significant transition, and the academic moving van would transport the MSPE to its next home by September 1957.

Serendipity intervened as the MSPE was searching for a program home. The University was consolidating its efforts in teacher education. The School for Teachers had existed at Macdonald College since 1907 to prepare elementary school teachers, and a Department of Education within the Faculty of Arts and Science prepared teachers for high school. These units were formally combined in 1954 as an Institute of Education in Arts and Science. The experiment of having the MSPE as a separate unit in Arts and Science began in 1954: but with concern for the ability of the physical education students to meet the requirements of the degree, and some discussion of whether the content of the degree was the most desirable from the viewpoint of those students (Annual Report, 1956-1957). The critical MacIntosh report remained overhead, some program changes were never fully realized, and the disappointing average of 55.7 percent in a Genetics course by physical education students compared to the overall average of 69.59% was announced publicly in the Annual Report of 1955-1956. While such a public proclamation of academic difficulties would not permitted today, and some explanations of the low grades have been suggested above, the fact remained that the undergraduates from 1951-1957 were not performing well (Meagher, 1958, p. 67). In June 1956, Cyril James appointed a small ad hoc committee to explore the future development of the MSPE (Annual Report, 1956-1957).

In December 1956 the committee offered the following suggestions: the MSPE should be part of the Institute of Education, a two-year diploma could serve the majority of the candidates, and the degree program should be assimilated into the existing Bachelor of Education. In a few short years the program had moved from the Faculty of Medicine (B.Sc. Physical Education), to Arts and Science (B.P.E.), to the Institute of Education within Arts

and Science where students would receive a B.Ed. degree. The MSPE was dealing with its third degree in five years, and staff must have wondered if they had found a permanent academic home. Despite the challenges, the program continued to graduate educators who remained highly regarded and employable in the school systems, with some students moving seamlessly to graduate study. Things were not all that bad!

The strain from all the turmoil would have been felt most by Dr. Kirkpatrick, and one can only wonder if his resignation as Director of the MSPE in 1956 was related to the program criticism and difficulties he experienced. Kirkpatrick returned to the University of Saskatchewan as Dean of Education and was replaced by Professor David C. Munroe for 1956-1957. Munroe was Director of the Institute of Education and was appointed only as Acting Director of MSPE. He was assisted in the day-to-day operation by Iveagh Munro. It was likely fortunate that Munroe was Acting Director, because he would quickly come up to speed with the MSPE which had just parked its van in his Institute. As an educator he was sympathetic to the professional aspects of physical education teacher preparation.

Clearly during the 1950s there were lingering questions regarding the value of physical education and its validity as a field of university study, despite McKenzie and Lamb addressing those issues consistently from the 1890s onward. The poor academic performance of the students in the 1950s was not helpful. But there is also much truth that physical education was becoming naturally aligned with education, an argument expressed with great passion repeatedly by Lamb. The migration from Medicine to Education was surely multi-faceted, but reflected more natural links in the 1950s between physical education and education, than between physical education and medicine or science. Such linkages would be re-visited with the emergence of kinesiology. In short, having physical education with the Institute of Education made much sense in 1957.

Many staff in the MSPE had been hired under the old Department of Physical Education by Lamb. Their duties were assigned by him and included teaching in the MSPE, some coaching or intramural duties in athletics, or even teaching in the required physical education program. In fact, those individuals were often hired because they could make a contribution to two or more areas. With the separation of the MSPE and the Department of Athletics, Physical Education, and Recreation some staff remained with both units. For example, in the 1952-1953 McGill calendar, Howard Ryan was listed as an Assistant Professor of Physical Education under the School of Physical Education, and Director of Intramural Athletics under the Department of Athletics, Physical Education, and Recreation. Iveagh Munro was an Associate Professor of Physical Education in the MSPE and Director for Women in the

From Bloomers to Body Mass Index

Department of Athletics, Physical Education and Recreation. In general, the two units have managed together in shared facilities very nicely over the past 60 years, more frequently complementing each other and sharing expertise. But in the 1950s some of the men were responsible to two administrative directors which resulted in salary negotiations and workload assignment/discussion with two people—a bizarre arrangement! But, as Meagher (1958) observed, there were few serious problems due the goodwill of both directors. Still, some ill feeling existed because of inequity in workload. For women it was "differently bizarre." They did not have the same difficulties as the men because all women in the MSPE and Department of Athletics, Physical Education received assignments from one person, Iveagh Munro. Thus, based on gender, one person assigned workload in two separate departments. Strange indeed by 2012 expectations!

With new appointments and retirements over the next 10 years, all staff, men and women, became assigned either to MSPE or to Athletics, Physical Education and Recreation. A Director of Women in Athletics, Physical Education and Recreation would remain for a few more years.

Summary

The post-War years began with great excitement for the MSPE in new facilities and finally receiving degree status for its teacher education program. The link with medicine resulted from Lamb's personal background as a physician. Required physical education re-emerged in 1951 but under the control of Athletics, Physical Education, and Recreation. The 1950s became turbulent and challenging as enrolments in the MSPE dropped as quickly as the grades of its students. The MacIntosh evaluation and report found the MSPE ill-suited as a degree with a B.Sc. label. Faculty and instructors were forced to evaluate the undergraduate program and a new degree was created (B.P.E.) that incorporated many of the recommendations from the MacIntosh report. Finally the MSPE found a new home in 1957 at the Institute of Education. In five short years this arrangement would become a remarkably fortunate one, partly because of a revolution.

A Place Called Home and a Revolution

he changes that affected McGill in the post-war years regarding government financing, expansion of knowledge, and enlargement in the number of students enrolled in university, would continue to influence the 1960s. In addition, baby-boomers would trigger a demographic challenge as more students would seek entrance to universities, beyond the already increased number of university-aged individuals interested in pursuing higher education. Added to the mix would be student unrest at the university and their demands to participate in decision-making. All of these factors were stirred by the Quiet Revolution in Quebec.

Principal Cyril James had completed 22 years when he resigned in 1962. He managed enormous change within McGill and had contributed to advancements in higher education across the globe. His successor was selected by the Board of Governors, but for the first time, this decision was shaped by input from the Senate, which had agreed to a short-list of four candidates. "The degree of democratic participation, if not full and unlimited, was at least a decided advance on what had been the practice in the past" (Frost, 1984, p. 419). McGill was on the verge of moving toward a more democratic model of governance, which would receive a healthy push forward from students later in the decade. James was replaced by Dr. H. Rocke Robertson, a surgeon, and the first McGill graduate to serve as Principal. He had a reputation for working closely with colleagues and was a fortunate selection as Principal. He expanded the administrative staff and worked cooperatively with his senior team. The old biology building became the centre of University administration and would eventually be called the F. Cyril James building in honour of the former Principal.

The Four-Year B. Ed. (P.E.) Degree Program

The four-year program leading to a B.Ed. degree with a specialty in physical education began in 1957 under the Institute of Education and continued with relatively minor adjustments until 1972. The first two years of the program were held at Macdonald College and the final two years were downtown on the McGill campus as per recommendations in the MacIntosh report. Many students would benefit from this arrangement as they could transition from a small high school to Macdonald College with a student population of 2,000 and eventually to McGill with a student body of 15,000. The Macdonald campus was rural, yet a short walk to picturesque Ste. Anne de Bellevue, while McGill was decidedly urban and in the middle of nightlife, restaurants, museums, and theatre. Those students talented enough to play intercollegiate sport could compete for Macdonald and then McGill. Since the McGill teams were generally superior, one could have a taste of varsity sport at Macdonald but not make the grade at McGill. In terms of culture, lifestyle, and social purpose the opportunity to experience two venues while perusing one degree was value added.

Another recommendation from the MacIntosh report was to have discipline continuation courses (See Table 7.1). In fact, this cohort of physical education graduates received high school certification in a second teachable subject in addition to certification to teach physical education from kindergarten to grade 11. Admission into the program was raised to 70%, matching the expectations in Arts and Science which was another outcome attributed to the MacIntosh report. Applicants also had to submit a note from their minister or priest attesting to their spiritual worthiness as a teacher, a practice that was discontinued in the 1970s.

Physical Education 115, 215, 315, and 415 were peculiar courses, similar in many ways to Physical Education 1, 2, 3, 4 in the former B.Sc. and B.P.E. programs (1945-1957) and Principles of Physical Education 1 and 2 in the 3-year diploma program. The courses were intended to encompass some breadth of knowledge related to physical education. Perhaps it made sense in 1933 to have a course titled Principles of Physical Education which included wide ranging content from play to posture (see Chapter 4, Table 4.3). Likely, there was not sufficient knowledge to warrant a "course1" on play, so it was tucked into Principles of Physical Education. In contrast, research had been active in exercise physiology for decades and thus it became an early specialty area or subdomain of physical education.

Table 7.1: The four-year B.Ed. program in physical education (McGill Calendar 1966-1967)

First Year

English 100

Biology 120

Education 110 Orientation to teaching

One subject from each of two groups: a) Math or Latin b) French c) Music or Fine Arts

d) Physics or History e) Geography or Chemistry

PE 115: Physical Education in the Primary and Junior School

Second Year

Psychology 21

Anatomy 205

Education 212 The child and the curriculum

PE 215: Physical Education in the Upper Elementary School

One subject from each of two groups: a) Math or Latin b) French c) Music d) English 200 or 207

e) Physics or History f) Geography or Chemistry g) Botany and Zoology

Education 230 or 231 Curriculum and Instruction in Reading

Education 225 Student teaching in classroom and gymnasium

Third Year

Physiology 305

Psychology- any third year course except Psychology 31

PE 315 Physical Education in the Secondary School

Education 342 Curriculum and Instruction in the continuation subject

Continuation in one academic area

Education 325 Student teaching in classroom and gymnasium

Fourth Year

Physiology 405

Education 406 Educational Psychology

Education 407 History of Educational Thought

PE 415 School and community programmes in Physical Education

Continuation in one academic area

Education 425 Student teaching internship

Thus exercise physiology warranted its own course in the 1960s. In fact Physiology 405 (Table 7.1) was a course on exercise physiology. By the late 1960s, however, the knowledge in the field had expanded to include other sub-domains (e.g. motor learning, curriculum development, history) that warranted their own course designation.

There might have been some reluctance in the MSPE to highlight the sub-domains as specific courses because the MacIntosh report essentially proposed less professional physical education and more discipline-based subject matter. These curious courses (PE 115, 215, 315, and 415) might have been the result of McGill not having moved to a credit system based on semesters rather than the full year, nor had the university adopted a common standard of instructional hours per course. The comprehensive content included in Physical Education 115, 215, 315, and 415 is outlined in Table 7-2.

Physical activity skills were embedded in 115, 215, and 315 with content related to the level of schooling. Thus, in Physical Education 115, gymnastics instruction for the primary and junior school would have included basic rolls, climbing, leaping, and vaulting since these activities were appropriate for the elementary school level. In the third-year course, Physical Education 315, gymnastics included back handsprings, somersaults, advanced vaulting, with the men confronting routines on rings and parallel bars while the women dealt with the uneven parallel bars and balance beam. This was typical of the gymnastic content in most high school physical education programs. The physical activity courses constituted 20% of the program.

Student transcripts reflected only the course number (e.g. PE 115) and not the specific content sketched in Table 7.2. This may seem unimportant but an interesting story illustrates another view. While the author was Chair of the Department in 1998, he welcomed the class of 1948 to the Currie Gymnasium during their 50th year reunion. This group of 34 had met frequently over the years, so the 50th was particularly special. Toward the end of the evening, one lady asked if I would be kind enough to write her a reference letter for a substitute physical education position in California. It was impressive that she remained eager to teach children in physical education despite being over 70 years of age. She needed the letter because California education authorities questioned her qualifications as her transcripts included only a limited number of physical education courses. A letter was written with fuller course descriptions and her certification followed.

The B.Ed. (P.E.) program included practice teaching in three of the four years with students assigned to an elementary school in the second year, and to a high school in years 3 and 4. Adjacent to Macdonald College was a model elementary school located with-

Table 7.2: Content and hours of instruction in selected Physical Education course

PE 115: Physical Education in the Primary and Junior School (5 hours)

Orientation to physical education: 1 hour

Introductory skills and method necessary for teaching physical education in the elementary school, including suitable gymnasium and outdoor activities based on the fundamental principles of movement: 4 hours

PE 215: Physical Education in the Upper Elementary School (9.5 hours)

Methods in physical education 1: hour

Health education: 1 hour

Prevention and care of athletic Injuries: ½ hour

Continuation of introductory skills necessary for teaching physical education in the elementary school including rhythms, aquatics, gymnastics individual and team games: 7 hours

PE 315: Physical Education in the Secondary School (13 hours)

Psychology of motor performance: 1 hour

Fitness and athletic training: 1 hour

Introduction to community recreation: 2 hours

History of physical education: 1 hour

Physical education for the atypical child: 1 hour

Advanced methods and skills necessary for teaching physical education including, dance,

gymnastics, individual and team sports: 7 hours

PE 415: School and Community Programmes in Physical Education (5 hours)

Administration of physical education: 2 hours

Curriculum developments in physical education: 1 hour

Principles and philosophy of physical education: 2 hours

in the building now called Macdonald High School. The model school featured selected teachers whose teaching and classroom management skills matched what the professors at the college were discussing in their courses. Students observed the teachers in the model school during year one before teaching in subsequent years of the program. Student teaching occurred either in early September or April-May as suggested by the MacIntosh report, which recommended that much of the professional work within an education degree could be offered as book ends in years three and four. Student teaching was approximately 10% of the B.Ed. program. Other physical activities that were available prior to, or at the end of, the academic year were camp course and outdoor school.

A Triumvirate of Special Activities

Three different programs are often recalled by alumni as especially enjoyable and worthy: ski school, camp course, and outdoor school.

Ski School

Skiing in eastern Canada and the USA became popular and accessible in the 1930s as roads and railroads reached the mountains and rope tows were considered to be the latest in technology. Believing that skiing was a healthy and beneficial activity in Canada, the MSPE organized a ski school in the Laurentians in 1939. The first director was Iveagh Munro (1939-1946) followed by Winona Wood (1947-1957) and Peggy Walker (1959-1984) all of whom were MSPE professors. Even in 1952 the course was newsworthy and reported in the *Montreal Star* (January 7, 1952). The writer of the article, Myrtle Cook, was a 1928 Olympic gold medalist runner, who for many years promoted physical activity, particularly for girls and women. In the *Montreal Star* article, she quoted MSPE Chairman Kirkpatrick:

'We believe that skiing is an important activity which should be taught to all of our students. It is an outdoor activity, and we Canadians, who have such great resources in the out-of-doors should learn to use and appreciate them...' The McGill School of Physical Education does not attempt to train specialists in any field of coaching, but it does believe in giving all its students an experience in many different kinds of activity.

Several mountains were used over the years but the typical pattern was to receive a week of instruction in both downhill and cross-country skiing. The instructors were usually professionals from the host mountain or from the Quebec Ski Alliance. In the 1940s and early 1950s F. M. Van Wagner, a MSPE staff member and friend of Jack Rabbit Johansson, was the cross-country ski instructor. As the pictures (Figures 7-1 - 7-6) demonstrate, there was time for instruction, practice, and fun.

The first morning of the week included assessment of skiing ability which led to groupings of similarly skilled students who remained more or less intact for the complete week. As in other physical activity skill courses, the students had goals to 1) Improve their ability to ski, 2) Learn and practice how to teach skiing and, 3) Demonstrate knowledge



Figure 7-1: Skiing Instruction 1943



Figure 7-2: Skiing in the woods 1943



Figure 7-3... Skiing instruction 1946



Figure 7-4: Val David skiing instructions 1975

about skiing in a written exam. Until 1972, the cost of ski school was included in tuition fees. When a new curriculum was created, ski school became an optional course paid for by those who attended. Because it was held in early January or during spring break, it was a popular selection that removed one course from the remainder of the winter semester. It was dropped from the program as an option in 1996.



Figure 7-5: Writing skiing exam 1975



Figure 7-6: Eva Stelzer helps Cameron Frizzell on T-bar 1975

Camp course

Camp course was first offered in 1950 at Camp Nominingue as an experiment led by F. M. Van Wagner. Lac Nominingue is a beautiful lake approximately 2½ hours north of Montreal by car. In the early 1950s, most Canadians were living in urban settings, and concern that all Canadian children and youth should be exposed to the outdoors was beginning to be expressed in educational circles. Summer outdoor camps are very much a Canadian tradition, but available only to families who can afford to send their children to camp. Learning to canoe and hike in the wilderness, and to sleep "under the stars" were valued educational experiences. The MSPE believed a camp course would prepare its graduates to play an active role in promoting outdoor activities within school programs. It was easy to schedule camp course in early September because, as noted, the fall session at the University did not begin until later in the month.

Camp Nominingue, a rustic camp for boys, was founded in the 1920s by the same F. M. Van Wagner who taught cross-country skiing. Van Wagner was a member of the MSPE staff, and track and field coach at McGill from 1920 to 1951. Most of the staff for the McGill camp were MSPE faculty, many of whom had camping experience or were eager to participate in the course for one or two years before assuming leadership responsibilities.

McGill students spent a week at camp course. The course began as a 5-day cance trip only available to the men, another instance of program offerings based upon the notion of the frail female. The author recalls a relevant story from the 1980s when women were part of the course. While teaching how to lift the cance and adjust it on the head and shoulders, followed by a short walk, one young lady with cance held firmly overhead walked past and said, "My mother would be upset with you if she could see me now. She would claim you are destroying my child-bearing capacity." Such were commonly-held views for many years, explaining why women spent three weeks in the city at outdoor school in the 1950s (described later) while their brothers went to camp. Professor Peggy Walker led the first women students north to participate in camp course in 1961.

Learning to paddle, trim a canoe, portage, use a map and compass, set up shelters, and create safe fires for warmth and cooking, were among the experiences at camp course. For the first two days skills were taught in Camp Nominingue itself with one instructor per group of eight students. All cooking took place outside with improvisation needed during periods of rain as fire was the only source for cooking.

Following skill acquisition, including learning how to keep the canoe in a straight line (!), the groups of nine departed for a five-day, four-night canoe trip in what is now a provincial park, Papineau-Labelle.

Canoeing on a lake was magnificent, but even for physical education students it was physically taxing. As they reached the end of a lake students were happy to place both feet on the ground and begin the portage, despite having to carry the canoe on their head and shoulders with back packs firmly attached. They were equally pleased to see the next lake at the end of the portage! In 2012 the park has large portage markings and prepared maps that can be purchased at the ranger station. However, when the McGill students began canoe tripping in this area, the portages, which had been cleared and marked by former Camp Nominingue staff, had, as signs, painted tops of food cans hammered into the tree nearest to the portage entrance, and the only maps available were topographical maps from the government.

The groups of nine did not share a campsite at the end of the day, although they occasionally ran into each other on the portages. Not surprisingly, a sense of affiliation with one's group developed over the five days, at the end of which tales would be shared about paddling through the rain, lashing canoes together to sail across a lake, mastering the J-stroke, diving off cliffs, sleeping under a canoe, getting a bit wet at night because you did not see the slope near your shelter, managing a long portage with those heavy cedar-strip canoes, carrying the packs, very occasionally tipping the canoe in a lake, appreciating a fabulous sunset and being amazed at the clarity of the sky and the shooting stars during a cloudless night. These stories would become indelible memories for many MSPE graduates. For example, in 1986 one energetic troupe of three men thought it would be a wonderful scheme to sneak up to another group across the lake and steal their paddles in the early morning. The wisdom of these ideas always made more sense at the moment. It was a feasible plan because a light fog remained on the lake to conceal the aggressors. With compasses in hand, they jumped into their canoe to execute their daring assault. After 30 minutes of paddling they saw the shore and morning fire, and silently moved toward their objective. With one pinched paddle in hand, they recognized the voices now mingling about the fire. After 30 minutes of paddling in a circle, they had successfully attacked their own group!

By the mid-1970s the enrolment in physical education had increased, and course options became highly-valued educationally. Activities were added to Camp Course based, in part, upon staff skill and availability. For many years sailing, orienteering, canoeing, and rock-climbing became part of the program (Figures 7-7-7-13). These were offered for three days;

allowing students to opt for two activities in one week.

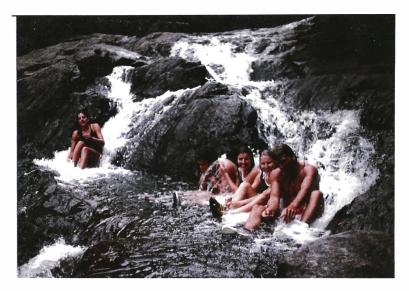


Figure 7-7: Cooling off at the falls, 1984



Figure 7-8: Jan Schopfer discussing dinner preparation with Jacques Dallaire and Doug Riley, 1984



Figure 7-9: Sue Brass enjoying a canoe sail across the lake, 1984

Camp course was an expensive operation. Classes were beginning earlier in September each year and finding instructors to teach was increasingly challenging. By the 1980s newly-hired faculty members may not have had the skill or inkling to be involved. When significant budget reductions were necessary in the 1990s, camp course became a victim, with the last visit to Camp Nominingue occurring in 1996. Camp course directors with approximate dates were F. M. Van Wagner during year one, followed by Bob Wilkinson, Peggy Walker (1973-1983), Dorothy Nichol (1984-1990), and René Turcotte (1991-1996). In 1973 Camp Course became Outdoor Education, and in 1979 it was renamed Summer Activities.



Figure 7-10: Peter Ridgeway (right) and team on canoe trip, 1984



Figure 7-11: Preparing for sailing, 1984



Figure 7-12: Cameron Frizzell repelling at camp course, 1975

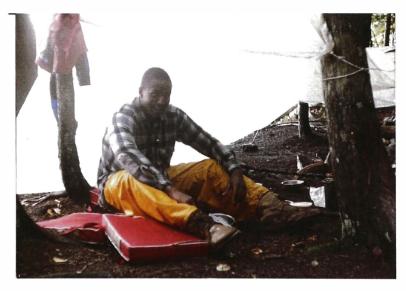


Figure 7-13: It did rain occasionally! Robin Phillips, 1984

Outdoor School

Outdoor school was held on the McGill campus for three weeks in either September or May. Students learned new sports and activities that were not included during the regular term. The usual format of physical skill courses was used: personal skill improvement, knowledge of rules and history, related lead-up games and activities that might be used for instruction purposes, some lesson planning and perhaps peer teaching, and a final written exam and personal skill evaluation.

The following playing surfaces were used: Forbes field adjacent to the residences, the field in front of McConnell Arena which is now a parking lot, and Molson stadium field and track. Outdoor school began in September 1946 and ended in 1972 when a new curriculum was initiated with each skill receiving its own course number.



Figure 7-14: Soccer at outdoor school, circa 1948



Figure 7-15 Hurdles at outdoor school, circa 1970

The End of the MSPE, a Lost Diploma, and the Potter Factor

A funny thing happened en route to the Institute of Education—the McGill School of Physical Education lost its name. The name wasn't changed by any act of the Senate, but within the Institute it became *Division 6*, a decidedly unimpressive and non-descriptive moniker! The four-year physical education degree was still offered, but the administrative unit listed in the McGill calendars was now called *Division 6*, not the MSPE. The more informal Alumni Newsletters, which had been sent annually to alumni since the 1920s, continued to refer to the MSPE, in defiance of the name change.

When the MSPE, or Division 6, found a home in the Institute of Education in 1957, a B.Ed. (P.E.) degree program was available to students. This was designed in light of the MacIntosh recommendations that any degree in physical education should become aligned with education. This was facilitated by David Munroe, the Director of the Institute and interim Director of the MSPE, 1956-1957. He was assisted by Iveagh Munro who had joined the university in 1939 as Physical Director for Women and Assistant Director for the MSPE. Munro replaced Jesse Harriott who, in turn, had replaced Ethel Mary Cartwright. The 1957 degree was slightly modified in the mid-1960s to become the degree outlined in Table 7.2.

The MacIntosh report had also suggested that the MSPE should offer a professional physical education *diploma* program over two years. Some of those committee members, no doubt, deemed that a short diploma program was all that was required to adequately prepare physical education teachers. Fortunately, the degree remained but a two-year diploma was also created that would be available only at Macdonald College. This would include certification to teach physical education at the elementary school level. This might have been perceived as sacrilege and a significant step backward after obtaining degree-granting status in 1945. However, the late 1950s and 1960s was a period of teacher shortage. Early baby boomers, those born in the years immediately following WWII, were beginning to move through the school system which necessitated the hiring of additional teachers.

A number of the professional and activity courses in the two-year diploma were identical or similar to the degree program. Sixty students might share courses at Macdonald College in the first two years, only to have 20-30 going on to pursue a degree at the McGill campus. Some overlap of courses between the degree and diploma students was an effective use of teaching resources and facilitated students who started the diploma program but who found themselves aspiring to the degree program after two years.

The two-year program appealed to those who needed, or wanted, to enter the teacher workforce without delay. One example of such a person was a gentleman by the name of Brian Potter, who studied at Macdonald, received his physical education diploma, and quickly accepted a position at an elementary school. In a few years he obtained the Bachelor's degree at Concordia after studying as an evening and summer student. A Education Master's degree followed at McGill, again using evening and summer courses. Potter went on to become an award-winning teacher of mathematics. Quite nicely done, Mr. Potter! There were other equally dedicated teachers who began with a Macdonald diploma and advanced through part-time studies.

This diploma program was no longer available after the next round of curricular changes in the early 1970s. Education would be dramatically elevated by the Parent Commission of the 1960s, when a university degree became the basic pre-requisite for teaching in the schools. Unfortunately, the 1957-1972 physical education diploma students are not designated as such in the records of McGill, and thus represent a lost group of physical education graduates. Disappointingly they were not contacted for the 2012 Centennial celebrations.

The Second Department of Physical Education

When the MSPE was transferred to the Institute of Education in 1957 it became Division 6, after the existing divisions of:

- 1. General Education
- 2. Foundations of Education
- 3. Methods of Instruction
- 4. Practice Teaching
- Graduate Studies

Each division had a Chairman and after one year with Munroe as interim leader, Winona Wood, who was first appointed to McGill in 1947, was named Chairperson of Division 6 in 1957-1958. Miss Wood possessed a B.Ed. degree from the University of Saskatchewan and an M.A. from Columbia. She led the physical education enterprise until 1965. A perceptive person, Wood recognized the changing terrain at the University and its growing emphasis on research and the rapidly expanding knowledge in physical education. Since 1912, only Lamb and Kirkpatrick possessed advanced degrees. Lamb had an M.D. degree and Kirkpatrick a Doctor of Education degree. Most instructors had only a Bachelor's degree

with a limited number having earned a Master's degree. Wood realized that doctoral studies would be required eventually to earn a position at the University. She encouraged Robert Wilkinson to obtain the doctorate and then assume the Chairman's position at McGill (Wall, 2012, personal communication). Wilkinson was a member of the class of 1948, an excellent athlete, its Gold Medal² winner and an artist. He had been hired immediately upon graduation at McGill and for a time was the university soccer coach, camp course director and instructor in the MSPE. Bob was a proud individual, sharpwitted, and articulate. He was an admirer of "Dad" Lamb, which may have influenced his decision to attend Springfield College. The McGill-Springfield connection, begun by Naismith, continued. Wilkinson took leave from McGill and returned with doctorate in hand to assume the Chairman's position in 1965. While the decision to attend graduate school might appear to have been a logical and easy one, it must have produced some interesting family dialogue, as Mary and Bob Wilkinson had six children at the time of the move to Springfield.

The Springfield connection and the need for professors to hold a doctoral degree was reinforced with the hiring of Dr. Vassilis Klissouras in 1967. Klissouras was the last doctoral student of famed exercise physiologist, Dr. Peter Karpovitch. Klissouras was a physiologist who conducted research on the genetic component of physical fitness. An energetic instructor, he was part physiologist and part philosopher, often hopping from one intellectual domain to the other in rapid succession. When Greece returned to democracy in the 1980s, Klissouras was enticed back to his country of origin as head of Physical Education at the University of Athens. He often recommended that his Greek students pursue graduate studies at McGill, accounting for many of the fine Greek students having completed their Master's or Doctorate degrees in physical education at McGill.

The Institute of Education was a consolidation of units traditionally contributing to teacher education; the Department of Education, the School for Teachers, and the School of Physical Education. There were discussions, even when the institute was created in 1954, that it might evolve and become its own Faculty. Described below, the Parent Commission raised the importance of teacher education within universities. Consistent with this thinking, on September 1, 1965 the Institute of Education became the Faculty of Education with Professor C. Wayne Hall as founding Dean. The basic university structure within a Faculty was a department; hence the physical education program and staff became the Department of Physical Education within the Faculty of Education. This was the second Department of Physical Education, which would evolve as such for the next 37 years.

A Quebec Revolution and Maître Chez Nous

When the Prime Minister of Quebec, Maurice Duplessis, died in 1959, the population did not expect to be thrown into a revolution every bit as culturally and socially profound as the French revolution 170 years earlier (Frost, 1984). Yet, Quebec was rapidly and almost seamlessly transformed to a nationalistic and secular community. French and English Quebecers had informally agreed on a non-interference policy for two centuries with the French providing leadership in personal and family law, politics, the arts, and medicine, while the English dominated in commerce, industry, and engineering. But this division would soon change as French Canadians asserted themselves in all domains of Quebec society, as summarized by the phrase "maîtres chez nous," or masters in our own homes. As Frost (1984) perceptively argued, McGill had undergone a change in students and professors from almost exclusively protestant and British to multiple faiths and languages, but this fact was largely unknown to French Canadians. In 1984 Frost could not have appreciated that he was only observing the tip of the multicultural iceberg. Canada's language and ethnic make-up is reflected in the mother tongues of students registered at McGill in the fall of 2011. English was 51%, French was 18%, and other languages were represented in 31% of the students. The undergraduates hailed from Quebec (52%), the rest of Canada (30%) and outside of Canada (18%). McGill is no longer an institution that serves only English-speaking Quebecers and it is justifiably proud of the mixture of mother tongues and places of origin.

But in 1960, nothing short of a new school system was required to reflect and advance social and cultural changes. The educational system had been designed to support a small elite group, yet changes regarding inclusion were now at hand (Munroe, 1966). Moreover, the process of teaching which had embodied recall of presented facts was challenged by research on motivation and learning. New forms of teaching were necessary and therefore new thinking about professional training was essential. Consistent with the knowledge explosion, there would be greater intensity of educational research. A Royal Commission on Education for the Province of Quebec was established in 1961 and included McGill Professor David Munroe as one of the eight commissioners, the same Munroe who had been interim Chairman of the MSPE in 1956-1957. The 1500-page report was released in three sections. Its significance was perhaps not even recognized by the commissioners themselves. Munroe (1966) said "Indeed, this Report may be more than a milestone; it may be a turning in the road" (p. 14). Informally, it was called the Parent Commission after its Chairman, Mgr. A. M. Parent.

If educational change was fundamental to a new Quebec society, it followed that how one thought about education would also have to change. Recognizing teacher education as a legitimate professional program that was fully integrated into the university with funding comparable to other degree programs were the fundamental principles of the Parent Commission (Frost, 1984). One specific recommendation called for all teachers to possess a university degree, either a B.Ed. or first degree (e.g., B.A. or B.Sc.) followed by a teaching diploma. Thus two-year diplomas after high school were phased out. This included the physical education diploma which ceased operation after the final students graduated in 1972.

Equally logical within the Parent framework was the elevation of the Institute of Education to a Faculty of Education. This was more than a change in nomenclature (Frost, 1984). The Parent Commissioners recommended professional improvement and development for all teachers, even those with a bachelor's degree. Thus, a Master's of Education degree was initiated at McGill in 1966, and Doctor of Education program in 1967. After the first Ph.D. was awarded in 1969, Frost (1984) asserted that "teacher training at McGill may be said to have finally arrived at full academic standing within the university" (p. 409). It was an elevation in status that was essential to the Faculty of Education. Today, the faculty does not see itself restricted to teacher education or to its original target audience of school-aged children. Its current mission is "the advancement of knowledge and its applications to the development of human potential in a variety of learning environments and over the lifespan" (Faculty of Education website, retrieved July 1, 2012).

The Parent Report advocated for closer ties between Education and the programs of Arts and Science. This was similar to the argument by Lamb for the MSPE to remain at McGill rather than transfer to Macdonald College. To address the Parent Report in this regard, McGill decided to increase the Arts and Science content at Macdonald College essentially proposing to move part of that Faculty to Ste. Anne de Bellevue. Students in Arts and Science as well as Education would study at Macdonald for their complete program. The proposal was rejected by the Ministry of Education, but they did provide \$5 million for a Faculty of Education building on the McGill campus (Frost, 1984) and for additions to the Sir Arthur Currie Memorial Gymnasium. The School for Teachers, which began at Macdonald College in 1907, and the MSPE, which had operated the first two years of its program at Macdonald since 1957, were moving downtown. The Faculty of Education building on upper McTavish Street opened in 1971.

With the impact of the MacIntosh report in the previous decade, the MSPE was fortunate to have survived. Aligning with the Institute of Education was fortuitous, because it permitted the MSPE to continue offering a degree, and several short years later was informed by the Parent Report that professional work for a university degree was highly valued, and only a minimal requirement for all teachers. This was a quick reversal in attitude in under ten years, but such was an outcome of the quiet revolution.

The Parent recommendations were advantageous for Physical Education as a unit, for reasons just outlined. Yet, the most significant proposal by the commissioners to affect universities was replacing classical colleges with *Colleges d'enseignement général et professional* (CEGEP). This would dramatically alter the complete Quebec university system, in particular McGill and the other English speaking universities. Classical colleges already existed in the French Quebec educational system and consisted of two years of education between high school and university that included instruction in languages, culture, and philosophy of ancient Greece and Rome. However, the classics were associated with education of the elite of society. The quiet revolution rejected this idea of restricting education on the basis of social class.

The CEGEP would offer two- or three-year programs. The two-year *general* program was prerequisite to university and allowed some degree of specialization in basic sciences or social sciences. The depth of the programs was sufficient to apply to medical or law school directly after CEGEP. The three-year professional programs were vocational, for example, in aircraft maintenance or police technology (A primer on Quebec education, 1969).

CEGEPs created a dilemma for McGill. Secondary school ended in grade 11 in Quebec, which now would be followed by two years at CEGEP and three years at university for an undergraduate degree—a total of 16 years of schooling. McGill had traditionally accepted students after grade 11 for a four-year degree, or after grade 12 for a three-year degree, both tracks ending at 15 years of schooling. Also, students finishing grade 11 in Quebec could gain entrance into the freshman year at other universities in Canada. As sketched by Frost (1984), there was fear that McGill would lose good Anglophone students to other provinces since they could receive the bachelor's degree in four years rather than five (2+3). Concern was also expressed that the new CEGEPs would not provide the quality of instruction available at university. To accept the CEGEP model would put McGill in step with Quebec, but out of step with the rest of North America. The CEGEP proposal engendered much debate at the university. In the end,

arguments that McGill received public funds and should demonstrate solidarity with Quebec, rather than portray itself as an Anglo-Saxon isolation, ruled the day. Narrowly, McGill voted in favour of the Parent Commission proposals (Frost, 1984).

Student Unrest and a Changed University

The foundation of the student movement in the 1960s was based in criticisms of the broader society, not simply the university (Frost, 1984). Students were disenchanted with the power, influence, and values of big corporations, the military, and the alliances they might have had with other organizations such as universities. There were calls for a more caring and egalitarian society as civil rights injustices to women and black people were highlighted, and the plight of those at the lower end of the social-economic continuum were documented. The Vietnam War, in which the USA was engaged, overshadowed all of this as its young people were forced to serve if they were drafted. There was a sense of powerlessness among students and youth in general, and a strong sense that established leaders in government and business were taking the country down the wrong path. Much of the sentiment was accurately captured by those who claimed to be "anti-establishment."

On March, 5, 1965, there was a protest by McGill students against the University. McGill was in a controversy with the Quebec government about financial support and was proposing that student fees be increased by \$100 (Frost, 1984). Ironically, there are ongoing and massive student protests against tuition fee increases at the moment³ but in 2012 it is against the Quebec government, rather than McGill specifically. In 1965, the crowd was waiting for René Lévesque, then Minister of Natural Resources in the Lesage provincial government, and supportive of the students. It was a bitterly cold day and his arrival 40 minutes late had thinned the crowd to about 40 stalwarts. Enthused by Lévesque's comments, this smaller group staged a sit-in, outside the Arts Council room, where the Board of Governors would hold a meeting later that day. This foreshadowed a protest 2½ years later and was an early indication that students could be mobilized on issues of importance.

Student unrest in the 1960s was a world-wide affair that peaked at McGill during November 3-10, 1967 (*The McGill News*, 1967). On November 3, *The McGill Daily* published a tasteless and fabricated piece about actions following President Kennedy's 1963 assassination. The paper acknowledged the next day that its publication was as an error in

judgement (*The McGill News*, 1967). The issue escalated to one of free speech, questions of morality, and censorship. Eventually the students occupied Principal Robertson's office in protest. Other similar disruptions and challenges to university authority occurred at McGill and at many sister universities. Younger professors had great sympathy with the students, or outright supported them, because the junior professors felt as disenfranchized as the students with regard to how the university was managed.

Prior to the events which led to the occupation of Robertson's office (April 1966), a Joint Senate-Board Committee had been established to study how the university went about its business. This committee had not included students. Their deliberations were accelerated after the events in the fall of 1967 and their report was soon submitted to the Senate and Board of Governors. The report established a basic principle that university governance was "one of cooperation among community representatives, the university administration, the academic staff, and the students, in carefully balanced proportions" (Frost, 1984, p. 455).

Prior to the student unrest at McGill, the Senate was composed of only 29 administrators and senior professors. Young professors and students had no mechanism to express their thoughts to this body which made most of the academic decisions of the University. By contrast, the Senate composition in 1968-1969 session included 23 administrators, 32 representatives of the academic staff, and eight students (Frost, 1984). In addition, five Senators would be elected to the Board of Governors, something that had never occurred to this appointed body of bankers and business leaders whose prime responsibility was university finance. The university changed the very essence of its governance with academic staff and students joining administrators as decision makers. In the end McGill changed "profoundly and permanently" and became a more democratic university (Frost, 1984, p. 455). The very patient Robertson acknowledged in the Annual Report of 1968-1969 that the academic work of the university continued during the "seemingly endless debates" (p. 3) but that he was cautiously optimistic in the long run about the beneficial outcomes from the "shaking up" of the university.

Summary

In 1965, the second Department of Physical Education became entrenched in the new Faculty of Education with its undergraduate program reflecting the MacIntosh report. The program was delivered at Macdonald College and downtown. The Parent Report gave high importance to professional study in teacher education and graduate programs at universities. The second

From Bloomers to Body Mass Index

half of the 1960s had witnessed student unrest and demonstrations, with students gaining appropriate representation on university committees alongside academics and administrators. By 1973 they even managed to have three students elected directly to the Board of Governors. The governance of McGill changed forever.

By 1970, the university had over 16,000 students and the Parent Commission proposals were still being implemented within the University that was learning how to manage itself in novel ways. The Department of Physical Education was about to enjoy expanded facilities in the Currie Gymnasium, but a new reality for the Department would emerge. The teacher shortage quickly disappeared and finding jobs in education would become a challenge never faced by students graduating from the program since 1912. The 1970s would also see graduate education and research expectations bringing new growth opportunities for the Department.

Notes

- 1. A university course at McGill in 2012 is usually 39 hours of instruction, three hours per week over 13 weeks.
- The Gold Medal is awarded to the student with the highest academic average in the program, now the highest CGPA.
- 3. During the spring of 2012.



Diversifying Assets

hanges in the new Department of Physical Education during the 1970s and 1980s would be affected by the Parent Commission, the CEGEP system it proposed, and by student activism of the late 1960s. For example, a new undergraduate program to follow the CEGEP system would begin in 1971, but it was created, in part, with student input. The very notion that current students might have something articulate to say about an undergraduate program would have been radical thinking when the four-year B.Ed. degree was created in 1957, but the late 1960s was a different time. Students in the Department of Physical Education were invited in 1969-1970 to assist in the construction of the 3-year degree program in physical education.

New issues would emerge in the 1970s and 1980s that would quietly but profoundly affect the Department's activities and priorities. These included a demographic shift of fewer students enrolled in the school systems and, hence, fewer new teachers being hired. In the English school system, this was exacerbated by the election of the Parti Québécois in 1976 and the resulting exodus of many Anglophones from Quebec. Graduate education and research would become a focal point of Department initiatives with a search for new research space taking priority over physical activity space. The undergraduate program would diversify from its 70-year emphasis on teacher preparation.

New students arriving at McGill in the early 1970s would not have been aware of the recent and dramatic alterations in decision-making at the University, but perhaps some were

cognizant of the new edifices in which they studied or followed classes. Dr. Robertson had overseen major construction that included McLennan Library, Burnside Hall, the Education Building, and buildings named after Otto Maass, Stephen Leacock, and Samuel Bronfman. Space had doubled at McGill from 1960-1966 and again by 1971 (Frost, 1984, p. 432). From 1960-1975 the campus had been almost totally rebuilt.

In 1969 Principal Robertson gave notice of his intent to leave office when a successor could be found. Underscoring the effectiveness of new thinking in administration that had evolved during Robertson's tenure, the Board of Governors maintained its right to make the appointment of principal, but agreed to select someone from a list of nominees generated by a committee of 18, broadly representing the University community. Its selection, the Principal of the 1970s, was a popular and conservative physics professor, Dr. Robert Bell.

New Space and New Professors

Accommodating all students and professors of the new Department of Physical Education at the Montreal campus required major expansion of the Sir Arthur Currie Memorial Gymnasium and constituted part of the enormous construction occurring at McGill. New space was added to the west end of the gymnasium (Figure 8-1). Offices were created on a new floor above the men's dressing room for professors and support staff. This area also included a library with a unique collection of physical education books and journals. A large room adjacent to the COTC lounge became a multi-purpose room: sometimes a laboratory and sometimes a common graduate student office. A meeting/seminar room for research presentations and graduate classes was also included. A new gymnasium modelled after those in schools was built, with wall bars, climbing apparatus, and formal gymnastic equipment. Many alumni will recall gymnastics and educational gymnastics instruction with Graham Neil and Jane Wardle respectively. Above this gym on level three, there was a dance studio, the place of many creative experiences orchestrated by Peggy Downey and Jennifer Wall. A classroom that accommodated 70 for lectures was also located on level three. On the fourth floor there was a classroom for 90 and a large research laboratory with three small adjacent rooms for offices or testing.

The space for research on the fourth floor was the first laboratory in the history of the Department. Presently it is dedicated to biomechanics. When it opened in 1971, it was envisioned as shared space for exercise physiology, biomechanics, and motor learning. A set of moveable curtains attached to runners on the ceiling, much like those surrounding



Figure 8-1: West Wing of Currie Gymnasium

hospital beds, did create three unique areas. While the curtains provided considerable flexibility of space, they were incapable of ensuring privacy or security. Quickly, professors realized that two activities could not occur simultaneously, and they created a sign-up schedule. The smaller testing rooms were used for experiments needing limited space. There was a locker room with a shower off the main laboratory, in anticipation that research would often involve exercise. In the early 1980s, a refrigerator was added to this room, as it became a biochemistry lab for Dr. Jacques Dallaire. As research grew in the Department and space became wanting, professors were very flexible—for example, a locker room and toilet morphed into a biochemistry lab!

Physical education teacher preparation that began at McGill in 1912 had focussed on creating and delivering the best possible diploma or undergraduate degree for school-based programs. Instructors were hired who could contribute to improving the teaching practices of the McGill students. Not surprisingly, from the 1920s through early 1960s, new professors were sought who had been former school teachers, could offer courses in the diploma or degree program, were able to teach one or more of the physical skills required and, could supervise student teaching. A Master's degree on top of those professional skills was

sufficient to be hired. In fact, students in the MSPE or Department of Physical Education were very well served by F. M. Van Wagner, Howard Ryan, Em Orlick, Iveagh Munro, Winona Wood, Dorothy Nichol, Peggy Walker, Douglas Riley, John Chomay, and Jane Wardle (a complete list of MSPE and Department of Physical Education instructors is found in Chapter 11). Prior to 1965, this might have sufficed in a teacher education institute, but it wasn't enough for the emerging paradigm in the 1970s and 1980s.

Young professors with doctoral training who wanted to pursue a research career, to contribute to the advancement in knowledge in physical activity, and to promote the new Department M.A. program were soon employed. These included Drs. Michael Greenisen, Daniel Marisi, Graham Neil, Paul Robinson, Gary Sinclair, and James Widdop. All of this was in line with research expectations at McGill. It is too simple to draw a line in the sand and assume all those with a doctorate shared some values that were inconsistent with those who didn't possess a doctorate. The 1970s and 1980s would witness some internal disagreements within the Department about workload and the integration of research and supervision of graduate students into that equation. These were also the two decades in which those without a Ph.D. still outnumbered those with a Ph.D., until the 1986 hiring of Dr. René Turcotte. With rational thinking and good will, disagreements were minimal and Department retreats were used to ensure focused debate and appreciation that staff could contribute in different ways to the overall well being of the Department.

A Three-year B. Ed. Degree in Physical Education

Students were admitted to this degree in September of 1971 as they were the first group to begin CEGEP in 1969. The required two years in CEGEP between grade 11 and university reduced most undergraduate degrees to 3 years. The total number of years until completion of a bachelor's degree in Quebec was now 16 (11+2+3) rather the 15 that had existed in pre-CEGEP days (11+4).

The pre-university courses at CEGEP could emphasize science, social science, or liberal arts. The *science* program had some language and humanities required, but otherwise was heavily laden with mathematics, physics, biology, and chemistry. University programs in cell biology, physiology, or neuroscience would require the CEGEP science program. It was this rigorous science program that the Parent Commissioners believed should lead directly to Medical School. To gain entrance to the CEGEP science program required certain courses in high school in mathematics and science. *Social science* programs also had some language and humanities courses but otherwise specialized in economics, history, psychology, geography, and political

science. *Liberal arts* programs had significant content in languages, history, and philosophy. The entrance requirement for the Faculty of Education and for those who sought certification in physical education was a CEGEP diploma. The Physical Education Department did not insist that a science program in CEGEP was required for admission into physical education.

The 1971 program was the first one in physical education at McGill to be created with student input. A committee of students in 1969-1970 was struck to make recommendations. This was a direct outcome from the guiding principle of University governance that students, academic staff, and administrators should be included in cooperative decision-making. It was an easy decision in hindsight, but the Department listened when the students questioned the necessity of the course in reading that had previously existed in the B.Ed. (Physical Education) degree (see year 2 in Table 6.2, Chapter 6). Graduates from physical education simply did not find themselves teaching reading. The three-year curriculum was also the first in which the University had moved primarily to term, rather than full, courses. A full course was one that continued throughout the year, September to April. Term courses, or half courses, were offered in either the fall or the winter semester.

Term courses needed consistency of instructional time and credits gained. Typical term courses would meet three hours per week if delivered in a lecture format, or two hours of lecture and two hours of laboratory experience, if that was desired. These courses were granted three credits. No longer would a wide variety of content be stuffed into an ill-titled, *Principles of physical education* course, which had been common since the 1933 three-year diploma. Table 8.1 outlines the three-year program following a CEGEP diploma that began in 1971.

Directed observation (435-245) was a 3-week placement in an elementary school, following the winter semester and the basic course in physical education methodology (434-242). Directed observation was designed for systematic and cautious adjustment of McGill students into a school with the hope that some teaching would occur by the end of the course. Most physical education students were eager to be involved and in a day or two were assisting the teacher; only infrequently would they not be teaching full classes by the third week. In combination with the major field experience in year three, 12 credits were designated for student teaching in the 1971 degree, which was 13% of the overall program of 90 credits.

Integrated Study of Teaching and Learning (448-305) was an innovative course that attempted to eliminate the artificial compartmentalization of education. Surely, teaching and learning should be based on philosophy, history, psychology, sociology, and research in education. The course featured a major lecture by one person and then small discussion groups led by a host of professors who would explore the lecturer's topic from an integrated

Table 8.1: The three-year degree program in physical education (Elementary and Secondary)

Year one	
Fall Semester	
Biological Foundations for Physical Education 434-205	3 credits
Tests and Measurements in Physical Education 434-207	3 credits
P.E. Skills and Techniques 434-241	3 credits
Health Education 434-204 OR Community Recreation 434-291	3 credits
Introduction to Education 448-204	3 credits
Winter Semester	
Elementary Physical Education Methods 434-242	3 credits
Directed Observation (Elementary) 435-245	3 credits
Integrated Study of Teaching and Learning 448-305	6 credits
Education Elective	3 credits
Year two	
Fall Semester	
P.E. Skills and Techniques 434-301	3 credits
Physiology of Man: Organ and Tissue 552-201	3 credits
Free electives	9 credits
Winter Semester	
P.E. Skills and Techniques 434-302	3 credits
Ergo-Physiology 434-391	3 credits
Free electives	6 credits
Department selection	3 credits
Year three	
Fall Semester	
Field Experience (Elementary and Secondary) 434-496	9 credits
Education Electives	6 credits
Winter Semester	
P.E. Skills and Techniques 434-402	3 credits
Psychology of Motor Performance 434-492	3 credits
Three of the following:	
Administration of physical education 434-493	3 credits
Principles and Curriculum Development in Physical Education 434-494	3 credits
Scientific Principles of Athletic Training 434-495	3 credits
Physical Education for Exceptional Children 434-496	3 credits
Historical and Comparative Aspects of Physical Education and Sport	3 credits

vantage point, from philosophy to research. This proved to be a difficult task for the majority of the professors who were challenged by the breadth of knowledge required to effectively integrate! The course was modified with the instructors assigned to the smaller groups presenting from their knowledge strengths. For example, Dorothy Nichol, an instructor from Physical Education, taught a very useful first aid course to the potential teachers. As she would admit, however, it hardly represented the finest of *integrating* disciplinary knowledge. The course was a valiant experiment, but was unceremoniously deleted in a few years.

The physical activity courses were called *Physical Education Skills and Techniques*. Consistency was achieved with each course meeting two hours per week and assigned one credit. They were more formally defined as personal skill development, with teaching sequences and strategies specific for the particular activity (McGill calendar, 1973-1974). Thus, the courses enabled students to acquire personal skill in the activity but also to advance their teaching abilities. The latter could be done in many different ways. Students might be assigned to prepare lesson plans for a particular age group, locate lead-up activities and present them to the class, teach a specific dance or segment of the activity to the group, or even engage in peer observation and teaching during skill development. The latter had two students working together. The professor might describe a movement and encourage practice, for example, the arm action of the freestyle swimming stroke. One student would swim across the pool while his/her peer observed from the pool deck. When the swimmer returned, the partner provided feedback. Roles would switch in a timely manner. This developed observational skills of the teachers in training and provided more specific feedback to the students in their quest of skill acquisition than would have been possible if relying on one professor for 20-25 students. Table 8.2 outlines the physical activity courses in the 1970s that were compulsory or optional. With 18 required credits, skills and techniques constituted 20% of the program.

The value of teaching episodes in physical activity courses was apparent to students in a folk dance class with Winona Wood in her last year of teaching at McGill. A confident student stepped up to teach his peers the dance assigned to him. His classmates listened attentively to his cheerful description of the manoeuvres, practiced the steps in the order presented while receiving positive feedback, and finally combining everything with the music. Everyone enjoyed his teaching and now had another dance in their repertoire, so they thought. Miss Wood called for the attention from the noisy class who were complimenting their friend for a job well done. First, she commented upon the exemplary passion and energy displayed and the obvious enjoyment by the "students." Congratulations were in order. Then she added with a smile, "the order of the steps was completely incorrect and you

need to spend more time in preparation before you teach another dance." Our class learned a lesson about preparation, but also about the power of teacher enthusiasm.

Table 8.2: Physical Education Skills and Techniques Courses

Required Men (9 credits) Required Women (9 credits)

Educational Gymnastics Educational Gymnastics

Elementary PE 1 Elementary PE 1

Folk Dance Folk Dance

Introductory Aquatics Introductory Aquatics

Introductory Basketball Introductory Basketball or Volleyball

Introductory Gymnastics Introductory Creative Dance
Track and Field Introductory Gymnastics

Introductory Volleyball

Outdoor Education

Outdoor Education

Optional Men (9 credits) Optional women (9 credits)

Advanced Aquatics Advanced Aquatics

Advanced Basketball Advanced Basketball

Advanced Football Advanced Creative Dance

Advanced Gymnastics Advanced Educational Gymnastics

Advanced Wrestling Advanced Field Hockey
Advanced Martial Arts Advanced Gymnastics
Advanced Ice Hockey Advanced Martial Arts

Advanced Volleyball Archery-Golf

Archery-Golf Badminton-Handball-Squash
Badminton-Handball-Squash Elementary School PE 2

Elementary School PE 2 Field Games 1
Field Games 2

Field Games Field Games 2
Introductory Ice Hockey Ice Activities

Introductory Wrestling Introductory Field Hockey
Lacrosse Introductory Martial Arts

Skiing Introductory Basketball or Volleyball

Team Handball Rhythmic gymnastics

Tennis-Curling Skiing

Introductory Martial Arts Tennis-Curling

All educational curricula should evolve, and such was the case with the specific activities included in "skills and techniques." As the 1970s and 1980s moved on, the required physical activities were a work in progress. The specific activities always reflected changing perspectives in education, society, and Department philosophies. If the physical activities were meant to mirror only school programs in Quebec, aquatics would not be required, because few schools have swimming pools or rent facilities. However, if one conceptualizes an ideal physical educator, it is difficult not to include aquatics, and, of course, graduates will not always remain in Quebec. Thus, aquatics remained a compulsory activity, as it is in 2012. Folk dance and creative dance had long been in the McGill physical education teacher preparation program, and feedback following practice teaching with younger elementary school students convinced the Department that greater emphasis on basic rhythmical activities was necessary. Thus, by 1981-1982, a Rhythmic Activities course had been included (McGill Calendar, 1981-1982). Challenges of McGill students in the activity domain of young children also resulted in a new course titled Early Childhood Activities. While the next major curriculum change to the undergraduate program did not occur until the late 1990s, the 1971 program was constantly undergoing home renovations, in search for the impossible perfect program.

The extent to which McGill physical education undergraduates should be personally skilled in activities has engendered considerable discussion. There has always been a component of the final grade that reflects skill. Since 1971 the physical activity courses have remained quite constant at about 26 hours of instruction; 2 hours per week over a 13-week term. Skill improvement can occur in 26 hours, but there are limits to this improvement, as the courses also include a strong teaching component. This is exacerbated, for example, when a student is a non-swimmer - rare, but it does happen. If an individual's activity history has not included any dance or ball activities, the courses become a particular challenge. An ongoing question has been to what extent should a physical education teacher be able to demonstrate skill? The consensus has been that reasonably skilled demonstrations should be expected in basic skills, but at a slower than competitive pace. Thus, the physical education students should be able to demonstrate a lay-up in basketball but not necessarily in game conditions, where opponents attempt to impede you. It has never been the goal to produce highly specialized performance in these courses. As the analyss of the various curricula indicate, the time devoted to physical activity skill courses has declined over the 100 years.

Internal Camaraderie and Outreach Activities

The Department of Physical Education has been a relatively small department with students following many courses together and often becoming lasting friends with their classmates. Physical activity courses, laboratory exercises, social activities, and extracurricular involvement lead to many graduates fondly remembering their undergraduate days at McGill and having a sense of pride of being associated with the MSPE or the Department of Physical Education. From the 1920s, there was a MSPE alumni association connecting graduates through the postal system with annual or bi-annual newsletters. Many graduating classes have had regular reunions in the fall at University Homecoming.

Until the 1960s, there was a tendency for professors to be highly regarded but somewhat detached from the students. Formality in North American society was greatly reduced in the 1970s and 1980s and professors became more accessible as students were perceived as colleagues in the learning process, not simply receptacles of knowledge (Figures 8-2, 8-3). One outgrowth of this change was the touring Gymnastic Team under the direction of Dr. Graham Neil, which began in the 1980s. Neil initiated the troupe but had faith in the students' abilities to be the prime organizers. The team went into schools, performed a brief routine, and then worked with the children in small groups on relevant gymnastic manoeuvres. The students were largely self-directed with regard to scheduling times with the schools and assuring that sufficient team members where available. A similar Dance Troupe was also begun by Professor Jennifer Wall and maintained following her retirement by Dr. Peggy Downey.



Figure 8-2: Dr. Graham Neil at final banquet 1976



Figure 8-3: Dr. Ted Wall in a snappy leisure suite at final banquet, 1976

In 1980, Drs. Greg Reid and Graham Neil conducted a needs assessment of several Cree communities on Hudson's Bay and elsewhere in Quebec with regard to their school and community physical education programs. This led to an ongoing program of teacher education in those communities, and later in Nunavut, spearheaded and taught largely by Neil. Neil was also the energy behind the re-formation of the Quebec physical education association originally created by Lamb in 1923. This association, now called the Association of Physical Educators of Quebec (APEQ), functions as a professional association of English-speaking physical education teachers.

University professors are expected to provide some service to their field and university. In 1982, John Chomay was the Program Chairman of the annual convention of the Canadian Association of Health, Physical Education and Recreation (CAHPER), Greg Reid was the Games Coordinator of the Quebec Special Olympics from 1979-1981, Jane Wardle was Chairperson of the Dance Committee of CAHPER (1982), and Peggy Walker contributed to the Master Plan of the Gault Estate. These are only a few of the achievements in the early 1980s. Later, Doug Riley was President of the National Committee of Deans and Directors of Physical Education, and Ted Wall was the co-chair of the Jasper Talks, a Canada-wide

initiative to coordinate and plan for advancement in Adapted Physical Activity (1985-1988). Wall also sat on the Board of the Canadian Fitness and Lifestyle Research Institute. Hélène Perrault was a founding member of the Quebec Association of Physical Activity Sciences; Jennifer Wall was President of the Committee on Dance and the Child International; David Montgomery, Blaine Hoshizaki, and Dan Marisi were consultants to Canadian teams competing in the Seoul Olympics Games; and René Turcotte was on the Quebec Committee for the Certification of Fitness Instructors. These are only a few of the major service contributions and do not begin to mention the scholarly journal reviewing performed by so many staff.

The First Master's Program and Baby Steps in Research Funding

The early 1970s was ripe for a graduate program as new faculty members with doctorates were hired, the Parent report had placed new emphasis on graduate studies, research monies for students were available from government agencies, the new lab had opened in the Department, and McGill was positioning itself to raise the research profile in all departments. In 1969, the Department of Physical Education accepted the first students into a new M.A. program with specialization in biomechanics, exercise physiology, or motor learning/psychology of motor performance. The professors providing leadership were Dr. Louis Elfenbaum, Dr. Vassilis Klissouras, Dr. Robert Wilkinson, and Dr. James Widdop. The latter two had been the prime proponents and creators of the program that included four full courses and a thesis:

- 1. Thesis preparation/research methodology 6 credits
- 2. Statistics 6 credits
- One course in area of specialty: either biomechanics, exercise physiology, or motor learning
 6 credits
- 4. One option 6 credits
- 5. Thesis

Since a thesis was mandatory, the program usually required two years of study. Among the first graduate students to finish the M.A. were Joanne Carson, Peter Bender, Wayne Halliwell, and George Weber. Adapted physical education was added as the fourth program of emphasis in the late 1970s. Brian Morin and Doug Collier were the first M.A. graduates with that emphasis.

A student was not admitted to the M.A. program unless a professor was prepared to supervise him/her. The professor would guide the student conceptually and methodologically as

the research problem was developed. This usually culminated in the student writing the first three chapters of the thesis. In the early 1970s, all professors advised students in physical education to use the traditional six-chapter format: introduction, review of literature, method, results, discussion, summary and condusions. A public thesis colloquium occurred when the first three chapters were complete, and the student presented the rationale and method of the proposed research, with the expectation that all professors in the Department would attend and provide feedback to every student. As the number of students in the program grew, the process was modified with the advisor and graduate student requesting only two other professors to read the proposal and join them in the colloquium rather than expecting all professors to attend.

Table 8.3 has the number of graduate students enrolled in the program over the 1980s as well as the total research funding acquired by department professors (some Annual Reports did not include all of the information).

Table 8.3: Graduate Students and Research Funding 1980s (from Department Annual Reports)

Year	Number of Graduate Students	Total Research Funding
1980-1981	20	
1981-1982	14 full-time, 35 part-time	\$138,000
1982-1983	17 full-time, 35 part-time	\$65,000
1983-1984	19 full-time, 32 part-time	\$70,000
1984-1985	31 full-time, 31 part-time	\$31,000
1985-1986		\$15,420
1986-1987		\$58,574
1987-1988		\$95,689
1988-1989	34 full-time, 19 part-time	\$97,464
1989-1990	30 full-time, 19 part-time	\$107,500

At least one trend is clear from Table 8.3. The number of graduate students remained quite constant, about 50 in the 1980s, but there was a shift from predominately part-time students to full-time students. In the 1970s and 1980s, part-time students were usually teachers who worked during the day, and graduate courses were intentionally offered in late afternoon or evening to capture that audience. With a largely part-time population, students took several years to complete their program, and their only research experience would be their own thesis. Some professors began to accept only full-time students and to include these students as an integral part of their own research programs. This was a subtle change. Today, almost all graduate students are full-time.

Table 8.3 also includes the research funding acquired by Department professors. There would have been almost no research monies in the 1970s from competitive research councils. Submitting grant applications was not a Department expectation at that time. It was noted in the Department Annual Report of 1981-1982 that securing research funding was a relatively new phenomenon in the Department. Also, only half of the professors possessed the Ph.D. Table 8.3 depicts rather modest research dollars, but the necessity to record such information was informing staff that this was an expectation in the 1980s.

Baby Boom Bust and Politics

The 1970s began with graduates from the undergraduate program finding teaching positions rather easily. However, by 1977 the Department realized that, for the first time since 1912, some graduates who sought teaching positions would not be hired (Department Annual Report, 1976-1977). This was a sobering realization. The explanations for the drop in the number of students in the English school system were clear and without hope that it might be temporary. The early baby boomers were already through the school system and enrolments in schools began to drop naturally. In addition, the Parti Québécois had been elected in the fall of 1976, and many English-speaking citizens decided to leave Quebec for fear it might become an independent country. One of the components of the Charter of the French Language, Bill 101 (1977), required most new immigrants to attend French schools. These factors produced a precipitous drop in the number of English-speaking students in the school system. With little likelihood of securing a teaching position, registration dropped immediately and dramatically in the Faculty of Education's bachelor and post degree diploma programs. There was an undergraduate enrolment decline of 43 percent from 1975-1980 in the Faculty of Education (The McGill News, 1980). From 1975-1983 staff were pared down from 149 to 123 and departments in the Faculty of Education were reduced from 13 to 8 (Hussey, 1983). The Faculty would respond by devoting much of its energies to graduate education and research, continuing education, and international leadership programs. However, the Department of Physical Education did not experience a similar enrolment decline (see Table 8.4).

The stability of the undergraduate registration in physical education was likely due to more work opportunities outside schools than was the case for other education students. As early as 1921-1922 and continuing until the MSPE moved to the Institute of Education, there was a description of the *field* for trained physical education specialists in the McGill calendars. Beyond schools, YMCAs, YWCAs, playgrounds, colleges, recreation centres,

Table 8.4: Enrolment in the Department of Physical Education from 1979-1984

Academic Year	Enrolment	
1979-1980	212	
1980-1981	237	
1981-1982	237	
1982-1983	230	
1983-1984	221	

industrial organizations, welfare and social clubs, Church clubs, boy scouts, and girl guides were listed as potential organizations for employment. Arguments against some of these for full-time employment could be mounted. However, the 1980s witnessed a boom in personal fitness and employment opportunities in the fitness industry—in assessment, prescription, instruction, as well as personal training and management. Thus, the basic physical education degree, even with a school focus, was perceived by prospective students to be a flexible and useful background for a breadth of employment possibilities. This is supported by a Department survey, which showed that 90% of the graduates found employment, but only 37% secured work as school teachers (Department Annual Report, 1983-1984).

When the need for teachers in English Quebec declined in the late 1970s, the Department of Physical Education did not stand by idly, unaware that their undergraduate registration would not be affected. A discussion of a potential M.Ed. (PE) was initiated in 1978-1979. The Department also organized a two-day retreat at Mont St. Hilaire that focussed on goals and priorities of the Department (Department Annual Report, 1980-1981).

While many topics were discussed at St. Hilaire, younger staff challenged some traditional workload allocations and tried to elevate the role of research in the Department. A typical workload per semester included at least two three-credit courses, one or two skill courses, and student teaching supervision. The major school teaching stint for the students was in the fall. The tradition had all professors assigned to supervise these students. It was also traditional practice for professors to visit each student five times over the semester. In the fall of 1980 there were 840 school visits (Reid, 1980). Two immediate problems were put forward at the retreat with regard to student teaching. How could the Department assign someone with a background in biomechanics, who had never taught in a public school, to evaluate the undergraduate student teacher? More and more individuals were hired for their discipline expertise and potential contribution to research and were not former teachers. The second problem or challenge, was the sheer amount of time devoted to supervising student teachers. It was estimated that supervision would constitute 20% of workload in the fall

semester, which detracted from other activities such as developing a research program and working with graduate students (Reid, 1980).

Dialogue and debate about the goals of research for the Department were also part of the St. Hilaire conversation. Research takes time, from conception of the problem, to submitting and operating a grant, to gathering data, to analysing and interpreting the data, to writing reports and preparing publications. As the graduate program was unfolding in the 1970s and research in the Department was evolving, no equitable way to include research in workload allocation existed. In some ways it was treated as an addon that was pursued for intrinsic interest. Specifically, workload credit was not received for supervising graduate student research projects, reading courses, or student theses (Dallaire & Montgomery, 1980). As long as someone was teaching a course, credit could be assigned easily, but independent research and mentoring graduate students were considered to be nebulous activities. Younger staff sought the opportunity to pursue research as part of their contribution to scholarship that was required for promotion and tenure, and to have those aspirations recognized in workload. It was accepted that workload assigned for research would be accompanied by performance evaluation with such measures as research grants received, publications, and conference presentations. This would fundamentally alter workload allocations by increasing research expectations for some and increasing teaching requirements for others. The ideas were fleshed out at Mont St. Hilaire and led to an important decision the following year: if one did not supervise graduate students and publish regularly, his/her teaching workload would be increased (Department Annual Report, 1981-1982). Professor Dorothy Nichol, a senior professor committed to teacher education but without a research background, astutely recognized the ongoing transition toward research. She put forth the motion, which signified that staff could make different contributions to the overall well-being of the Department and that research must be a valued activity in the Department. Today, all full-time professors in physical education and kinesiology have externally-funded research programs that support graduate students and necessary technicians in their laboratories.

In anticipation of a declining undergraduate enrolment base, the Department began discussion about the feasibility of the undergraduate programs from coaching to health promotion at another retreat, this time in the Faculty Club. In the end, three new programs received Senate approval: Dance Education, Fitness Education, and Recreation Education. They began in 1984-1985.

The First Cyclical Review

Principal Robert Bell resigned in 1979 and was replaced by a young lawyer, David Johnston. Professor Johnston was an engaging individual who often referred to himself modestly as McGill's biggest cheerleader. He worked tirelessly to convince the Quebec government that it was systematically underfunding McGill in comparison to other Quebec universities. His considerable energies also enabled him to advance McGill's capital campaign of \$200 million, at that time the largest university fund raising initiative in Canada. He was the University's leader for 15 years and is currently Governor General of Canada.

One of the initiatives under Johnson's administration was the "cyclical review" of departments, an idea linked to decentralized administration. It was largely an opportunity, albeit mandatory, to take stock of the current state of the department and explore its future aspirations. The first phase was a self-study document, which was a collection of data relevant to the department such as enrolment or research funding over several years, an outline of current programs, and short-term and long-term goals. Student representation was now commonplace and expected in the 1980s. The internal nature of this phase permitted the unit to self-reflect, an exercise that is always beneficial from time to time, if not on an ongoing basis. The next phase included an outside "expert" receiving the self-study report and visiting the department for two days of interviews and discussion. The expert, who was usually a senior individual from a similar unit at another university, then wrote a report with recommendations to the Cyclical Review Committee. This latter committee comprised McGill academics from other departments and was chaired by someone in the home faculty. The Cyclical Review Committee wrote the final report and recommendations. The recommendations were not binding but were returned to the specific department and faculty for action in the ensuring years. The cyclical reviews were intended to be repeated every seven years.

The first cyclical review in Physical Education occurred in 1983-1984 in the context of anxiety over the future of the Department. Having devoted itself to undergraduate teacher education historically, the Department now had three new undergraduate programs (dance, recreation, and fitness), was waiting for approval of a M.Ed. program, had 20 full-time and 30 part-time graduate students, and had a young faculty who were attempting to carve out research programs. Overall, there were 13 full-time professors. The external expert summarized the Department as "understaffed, underequipped, and underbudgeted" (Cyclical Review Report, 1984, p.4).

The final Cyclical Review report noted some polarization and tension in the Department between those older members of staff dedicated to teacher education and those younger members with research career aspirations. They also realized that overall there remained an esprit de corps within the Department, attributed largely to the fine leadership of Douglas Riley, an affable and efficient Chairperson, but also to Department members who were dedicated and very hardworking. The 13 staff had high teaching loads, equivalent to three courses in a semester, and were active in service internally and externally to the University. Six had advanced degrees and were contributing to research and the graduate program. The report cautioned that the Department was attempting to manage too many tasks with limited resources. It was apparent that the Department needed to define its mission. The report acknowledged that enrollment in Physical Education was stable over the past five years, unlike the remainder of the Faculty of Education, which had suffered shrinking enrolments and consequently budget constraint. At this moment in history, Physical Education was not well placed in the Faculty of Education because the overall budget of the Faculty was reduced each year, and rarely were professors who left the University replaced. Ultimately, by the early 21st century, the 13 departments of the Faculty of Education with a total of 149 professors were reduced to four departments with only 85 professors.

Specifically, the 1984 report recommended:

- The Department should change its mission to the creation and dissemination of knowledge of sport science, the training of practitioners being one component.
- The B.Ed. non-certification should be progressively revised to enhance the sport science¹ component.
- The B.Ed. non-certification program should require a health science or pure and applied science pre-requisite CEGEP program.
- 4. Quotas for both types of programs should be lowered.
- Core education courses and physical activity courses should be reduced in the noncertification programs.
- 6. Additional course work in science and medicine should be required in fitness education.
- A closer alignment of the B.Ed. non-certification programs and the M.A. program should be forged, with those programs becoming the primary focus of the Department; the teacher education stream should be de-emphasized
- 8. The Department should not pursue the M.Ed.
- Enrolments in graduate programs should be reduced in keeping with resources available
- Graduates from outside Quebec should be recruited for the Master's program because too many students were the Department's own undergraduates.

- Vacancies in the Department should be filled with professors having good research credentials.
- 12. At least one position at the Associate level should be created immediately.
- The Deans of Education and Student Affairs should begin discussions to establish more congenial administrative arrangements between the Departments of Physical Education and Athletics.
- The Department of Physical Education should continue pursuing and implementing the Sport Science Centre.
- A one-time grant apart from the Faculty of Education budget should be made to purchase capital equipment.
- The Reading Room (a small supervised library) should be phased out so that it does not require supervision.
- If the mission of the Department was to change, the administrative structure should be addressed.

A thoughtful set of observations and recommendations from the graduate students was presented, with agreement that 6 staff for 50 students was insufficient. The overall lab facilities, equipment, and office space were considered to be inadequate. They also pointed out the weakness of the library/reading room with regard to needed journals, levels of funding, and the availability of computer terminals for students.

It was clear that the Department was in a state of evolution. Programs in Fitness Education, Recreation Education, and Dance Education were initiated in the fall of 1984-1985. Wisely, as it turned out, the teacher certification program was not relegated to a minor program in the Department. Faculty wanted to see how many students would be attracted to the three new programs. Fitness Education was quite successful, but Recreation and Dance were short lived and were cancelled under the leadership of the next Department Chair, Dr. A. E. (Ted) Wall, in an attempt to sharpen the Department's offerings and focus. The Fitness Education program was modified over the ensuing years, by reducing the number of education-based courses and skill and technique courses, as well as adding physical activity courses designed only for fitness students. The number of science options were increased, and the practical placement experiences were improved (Department Annual Report, 1987-1988). While Fitness Education was a viable addition, there were typically only 15-20 new students per year, hardly sufficient to displace the teacher certification program as the Department's primary undergraduate program. Fortunately, the Department did not move quickly to reduce the number of students in the teaching stream. On the other hand, more students might have enrolled in Fitness Education if the Department had followed the recommendation of the Cyclical Review Committee and required a science CEGEP

program for entry. This was not adopted, the Department arguing that the different CEGEP backgrounds of teacher education and fitness education groups would have produced negative consequences when teaching courses followed by both groups.

Table 8.5 outlines a "second generation" Fitness Education program with much of the educational content removed as per the cyclical review recommendations. Fortunately, the recommendations also suggested additional hires were justified in Physical Education at a time of minimal hires within the Faculty of Education. Thus, Dr. Hélène Perrault would join the staff in 1984, and two years later, when Dr. Dallaire departed, he was replaced by Dr. René Turcotte, who assumed leadership for the Fitness Education program.

The Master of Education was never offered (in fact it did not receive government approval), and the one-time equipment grant was not realized. More graduate students from outside McGill were attracted, however. The potential of the Department in making the shift to greater emphasis on graduate education and research was recognized. When departing staff were replaced, it was standard practice to expect new professors to possess the Ph.D. The Department of Physical Education had not lost its undergraduate student base over the 1980s, modest advances in the graduate program were evident, and the positive health benefits of physical activity were becoming public knowledge. It would have been ill timed to reduce the capacity of the Department.

The field of physical education was also in a state of transition by the early 1980s. One aspect was increased research specialization in sub disciplines such as exercise physiology, biomechanics, and motor learning. A seminal paper by F. Henry in 1964 called for more disciplinebased research in physical education and by 1980 the field was on the verge of seeing research journals and conferences with foci such as sport psychology, exercise psychology, adapted physical activity, nutrition and metabolism, exercise biochemistry, and sport medicine. A second and related aspect in the transition was re-thinking the traditional audience of physical education. In the Department Annual Report of 1987-1988, Charperson Ted Wall recognized that physical education was undergoing a paradigm shift from physical activity programs delivered to children in schools, to becoming a critical component of community health programs that promoted wellness and empowerment of individuals across the lifespan. This vital observation presented a broader conceptualization of physical education as a field of growth and critical contributor to society, not a domain restricted to schools. While teacher education would remain strong, the Department was prepared to provide leadership in physical activity, a central component of health. Wall pointed out that the research growth for 20 years had clearly demonstrated the health benefits of being physically active. Tait McKenzie had put forth this position almost 100 years earlier, but without a great deal of scientific evidence.

Table 8.5: The Fitness Education Program, 1992-1993 ("A" denotes a fall course, "B" denotes a winter course; 3 credits unless otherwise noted)

Year 1 Motor Development 434-261A

Structural Analysis 434-205A

Fitness Leadership 434-201A

Nutrition 433-455 OR 283-207B

Applications Software 1 432-200

Optional courses Psychology (204-100; 337; 300; 429), or Biology (117-122; 115; 200) (6

credits (6 credits)

Introductory Homeostatic Physiology 434-331B

Practicum 434-250B

Weight training 434-200B (1 credit)

First Aid 434-211B (1 credit)

Physical Education Skill and Technique (1 credit)

Year 2 Psychology of Motor Performance 434-492A

Measurement and Evaluation in Physical Education 434-207A

Ergo-Physiology 434-391A

Dance and Fitness 434-244 (1 credit)

Scientific Principles of Athletic Training 434-495B

Physical Education for Special Populations 434-496B

Principles of Helping Relationships 416-501A

Kinematic Analysis 434-206 B

Practicum 434-350

Physical Education Skills and Techniques (5 credits)

Year 3 Introduction to Business 628-282

Administration of Physical Education 434-493B

Scientific Principles of Exercise for Selected Populations 434-485B

Prevention and Care of Athletic Injuries 434-311

Practicum 434-450 B

Free electives (12 credits)

Education electives (3 credits)

Summary

The 1970s had begun optimistically after several years of student protest and unrest. As the Department adjusted to the new CEGEP system in Quebec, the two-year diploma in physical education was eliminated, and a university degree was now perceived as a minimum requirement for a teacher. Graduate education and research were added expectations of the Physical Education Department, and advances in both occurred in the 1970s and 1980s. Application for research funding was now part of the Departmental enterprise, along with mentoring graduate students, and presenting and publishing one's research. New research facilities, not activity areas, were at the top of the list of needs. The significant drop in students enrolled in English schools had a minimal impact on the Department other than spurring its members to create alternative programs for which it really did not have the resources. Looking through a 2012 lens, it would have been more sensible to have developed the graduate program than to offer additional streams at the undergraduate level. However, the Department could not predict that its traditional teacher education program would remain strong, and expanding into new undergraduate professional programs was commonplace in the 1980s. While budget cuts became part of the lexicon of the 1980s, particularly in the Faculty of Education, we had not seen anything yet!

Notes

Sport science was a common title for the study of the biological, mechanical, psychological, social, and culture
dimensions of physical activity. See Chapter 10 for a discussion of why Kinesiology was deemed to be a more
appropriate title for the Department in 2002.

A Confusing Decade of Reduction and Growth

n 1976-1977 McGill had a balanced budget (Annual Report, 1976-1977). But in several years deficit financing became an annual event as the University attempted to advance its mission of excellence. Perhaps the financial frustration at McGill can be illuminated by data and remarks from Principal Johnston in the University Annual Report of 1986-1987. Over the previous eight years there had been an operating budget decline of 25% from the provincial government, and a 10% drop in staff at McGill. At the same time, student enrolment had increased by 20%, and external funding for research had increased by 40% as McGill professors led the country in per capita research grants. Johnston posited that such achievement was the result of the people in the University, the motivation and commitment of professors and students. He highlighted the example of students raising over \$4 million for a new athletics complex. Principal Johnston and his staff tried to convince the Quebec government that its funding formula for universities was disadvantageous to McGill. Bluntly, as the argument went, McGill received less than its fair share. A new and equitable formula was implemented for the 1989-1990 academic year (Vroom, 1989). However, by that time McGill had accumulated a debt of about \$80 million.

Deficits had also been a characteristic of most provincial and federal governments since the early 1970s, and Canadian citizens recognized that this could not continue. The late 1980s and 1990s was a time of severe fiscal restraint, not only at McGill and in higher education, but also in provincial and federal legislatures. Governments and universities were in debt, and eliminating or reducing services and programs would be inevitable. Research

granting agencies were provided with less money from their respective governments as the latter attempted to balance budgets and pay off debts. Thus, the pot of money available for research competitions declined. As a publicly financed university, McGill eventually developed a "mortgage" plan to reduce its \$80 million debt over a number of years.

The University continued with Capital Campaigns, but the tradition of new monies for new initiatives stood firm. There was growth in some areas as a result of philanthropy, but at the faculty and department levels there would be annual budget reductions throughout the 1990s. In the Department of Physical Education, about 95% of the budget was staff salary. This provided a challenge in managing annual budget reductions of 3-5%. For perhaps the first time in its history, Physical Education began to explore means of revenue production to offset the inevitable reductions. Overall, deans and chairpersons would have to be focussed and strategic to justify new initiatives, maintain programs, especially those that were expensive, and replace faculty members who left the University. This was the fiscal reality that faced Professor Ted Wall as Dean of the Faculty of Education and Professor Greg Reid who became Chairperson of the Department of Physical Education during the 1990s. Wall was the first member of Physical Education to serve as Dean of Education.

It was in this context of financial restraint within McGill, and at provincial and federal levels, that the Department of Physical Education would be asked to make significant inroads in securing external research funding from dwindling competitive sources. Principal Johnston would utter the rallying cry of "doing more with less" to underscore that all aspects of department operations must be efficiently orchestrated to enable new growth and advancement in key areas. Despite fiscal restraint, program progress in the Department of Physical Education would continue, and new laboratories for research would become available. Planning for significant additions to the Currie Gymnasium began in the 1980s, and new research laboratories for physical education became part of that planning. It was quite fortuitous that the necessity of new research space for a sport science centre coincided with expansion of the Currie.

A second cyclical review of the Department of Physical Education was initiated in 1989. At this juncture, there was no question that research had to be nurtured within the Department. There were significant advances in research dollars raised in the 1980s (see Table 8.3 Chapter 8) as well as in publications and presentations. The second review would acknowledge these advances, but challenge the Department that its research output remained rather unimpressive, and a greater commitment to research would be expected from all professors. The review also reiterated the impoverished facilities and lack of

equipment available for research and student laboratory experiences which had been noted in the first cyclical report. As the second cyclical review was completed, new opportunities immediately arose with the long-awaited sport science centre.

Building Research Capacity

Productive research programs are primarily based on excellent ideas, but space, facilities, and talented graduate students are also important. The unfortunate state of the research equipment was noted in the 1983-1984 cyclical review and the University was encouraged to assist. In fact, assisted by the Alumni Association, the Department had already taken the initiative of having professors and volunteers spend an evening telephoning Physical Education alumni to raise \$50,000 for a metabolic cart. This was required for the assessment of maximum oxygen uptake, and was important for research, and undergraduate student labs. More than half of this money was collected in the first year (Department Annual Report, 1983-1984). An equipment grant was not received from the University until the later 1990s. Faculty members realized that much equipment would have to be secured through competitive research grants.

Many research programs at universities across Canada lost their funding, and laboratories closed as governments reduced costs in the late 1980s. The one benefit for the Department of Physical Education was that a technician from a defunct McGill laboratory was made available to the Department of Physical Education, which had requested technical support for a number of years. Such individuals had employment security, and many were placed in new laboratories or units in a "relocation" program in which initial costs for the individual's salary were shared by the University, faculty, and department, and over time were borne by the faculty. The need for technical support had been noted in the first cyclical review, so the argument to have one of the relocation individuals assigned to Physical Education was relatively straightforward. The Department acquired its first technician in 1988.

As noted, new laboratories for the Department of Physical Education in conjunction with the Faculty of Medicine were planned as part of the Currie Gymnasium expansion. In the early 1980s, the Currie Gym was woefully inadequate for the enormous increase in student population from 1950-1980. McGill students supported a referendum to increase their fees for new athletic facilities in 1982 (McGill Track & Field History retrieved July 25, 2012). This benevolent act was expected to attract other donors as it demonstrated high student commitment. These students would graduate before they could enjoy the

upgrade in facilities. The ideal space was east of the Currie Gymnasium, which is now Tomlinson FieldHouse. However, the plot of land was technically part of Mount Royal Park, and it required years of political manoeuvring to secure it before ground could be broken for construction. The Department had to wait almost a decade after the cyclical review recommendation for new research labs before it could move beyond the "embryo" stage of research development. If new research oriented staff were hired, and they had space in which to create labs, their ideas would attract research funding. The new facilities would go a long way to removing the "underequipped" tag used in the Cyclical Review.

Mr. Robert Dubeau, Director of Athletics and Recreation, led the development of the expansion project. Professor Ted Wall, as Chair of Physical Education in the late 1980s, represented the Department. Dr. Wall was particularly adamant about developing a conceptual plan for the complex to ensure efficient flow of people within the complex, realizing that visitors would be activity users, spectators, sport medicine patients, and students attending lectures. Moreover, he consistently advanced the discussion of new research facilities being included in the new complex. Eventually, funding was secured from the Seagram's Foundation for the Seagram Sport Science Centre (SSSC; Figure 9.1).



Figure 9-1: Seagram Sport Science Centre

Doctoral students play a significant role in university research environments. The first doctoral student admitted to the Department was Mr. George Vagenas (Figure 9-2), a student from Greece who had completed his Master's degree under the supervision of Dr. Blaine Hoshizaki (Department Annual Report, 1984-1985). Dr. Hoshizaki, a professor of Biomechanics, encouraged students to study full-time and directed Vagenas in his Ph.D. program, from which he graduated in 1989. There was no formal doctoral program in the Department, but McGill permits any student to make the case for studying with a particular supervisor in any department if the context is unique, positive, and resources can support the research and learning of the student. With some technical support and equipment, space, and experience in guiding master's and doctoral students, the research culture of the Department could now be advanced at an accelerated pace.



Figure 9-2 George Vagenas, First Ph.D. Graduate, 1989

The Second Cyclical Review

The self-study document was prepared during the school year of 1989-1990, but the final report with the external examiner's comments was not submitted to the Department until early 1993. There were 37 recommendations directed to the Department regarding its mission, staffing, administration, facilities, undergraduate program, graduate program and research, sport science centre, and relationship with Athletics and Recreation. There were also 10 recommendations for the Faculty of Education and the University when the Department recommendations depended upon decisions at a Faculty or University level.

Among the salient suggestions for the Department were:

- 1. Clearly define a common "mission" and program priorities that will advance the mission.
- Replace Professor Douglas Riley, who is retiring, with a researcher in the area
 of physical education pedagogy, and create another position in sport sciences
 to complement adapted physical activity, exercise physiology, biomechanics, or
 psychology of motor performance.
- All Department members should be expected to contribute to the Department's research and graduate training.
- 4. An additional secretarial position should be authorized.
- 5. A. S. Lamb reading room should be improved.
- 6. The Department should generate an undergraduate laboratory equipment list and that of a department in another university to which McGill compares itself to assist the Dean in negotiating with the University for acquiring the equipment.
- 7. The Department must establish a plan for obtaining state-of-the art equipment for research laboratories for adapted physical activity, exercise physiology, biomechanics, and psychology of motor performance.
- The Department should work with those in the microcomputer lab of the Faculty of Education to develop plans to upgrade the Department's computing facilities.
- The Department should continue to make the Physical Education and Two-Subject Programs the top undergraduate priority unless new resources become available.
- Professors should provide undergraduates with experiences so that they can see the relevance of theory and research to practical problems in physical education.
- 11. A second methods of physical education course should be added
- All aspects of the Fitness Education program should be reviewed to determine the sustainability of this program and to make its field experiences more efficient.
- 13. The Department should establish a pedagogical research focus for its graduate program and modestly increase the number of doctoral students.
- 14. The Department should explore ways of improving the quality of students in the graduate program and decrease their time to complete the degree.
- 15. The Department should attempt to improve external funding for research, equipment, and research assistants.
- 16. The Department should identify one or more persons to advance the McGill Sport Science Centre and its links with other colleagues at McGill.
- 17. Staff from Athletics who teach skills courses for Physical Education should be granted Professional Associate status and be given voice in Department meetings.
- 18. Physical Education and Athletics should work more closely together in provision of support services.
- 19. The Chair of Physical Education, or designate, should have a seat on the Athletic Advisory Board to provide more direct input involving facilities and equipment.

Responding to the second cyclical review was the focus of a retreat on December 14 and 15, 1993. The first cyclical review committee (1983-1984) had considered the Department to be understaffed with 13 full-time faculty members. In 1993-1994, only 11 were available to respond to the newest recommendations. Douglas Riley was replaced in 1993 by Dr. Ben Dyson, a pedagogical expert. An additional secretary had been hired in 1991. While losing two staff of 13 was difficult, it was not as catastrophic as the loss of full-time professors in other departments of the Faculty of Education, which continued to shrink.

The 1983-1984 and 1989-1993 cyclical review teams both acknowledged the need for the Department to explore and specify its mission so that its priorities could be identified efficiently. It was never an issue of the Department not being engaged in sufficient activity, but rather too many and sometimes disparate activities in light of resources. To assist the Department with a keener focus, the following Mission Statement was generated in the fall of 1992. The mission of the McGill University Department of Physical Education is to advance the learning of physical activity science through teaching, scholarship, and service to society by:

- offering undergraduate programs in education leading to specialization in teaching or fitness education
- offering graduate programs in education leading to specialization in biomechanics, exercise physiology, and psychology of sport and motor behaviour
- 3. carrying out scholarly activities related to physical activity science, and
- 4. providing service to society relating to physical activity science insofar as this service flows from and reinforces teaching and scholarship.

The 1983-1984 cyclical review report had recommended enhancement of the Fitness, Recreation, and Dance programs. Recreation Education was largely taught by Mr. Paul Cappelli, who was a full-time instructor at the Dawson College CEGEP. Despite his gallant efforts, he was only a part-time instructor with limited time to devote to nurturing a new university program. There were no new appointments for the dance program either, as existing professors with dance expertise were already occupied with teaching in physical education. Poor enrolment and lack of full-time staff led to the Dance and Recreation programs being cancelled.

By 1989-1993, the cyclical review recommendation reverted to one of maintaining the Physical Education and Two-Subject programs as the prime undergraduate offerings and to review the Fitness Education option to determine its long-term viability, given low intake of students in 1991 and 1992. The Two-Subject option had a flexible enrolment cap of 15 per year. Graduates of this program received a certificate to teach physical education and

an additional subject at the high school level. It was popular for those who believed their employment options would be aided by certification in two subjects or for those who had no desire to teach at the elementary school level. The program had started in the 1980s in the Faculty of Education. The two subjects might have been physics and mathematics, but physical education and another subject was also an option that became popular. It was not a program that was initiated in the Department of Physical Education. Table 9.1 is a snapshot of the undergraduate enrolment in the early 1990s, which was an increase of about 30 students per year over the early 1980s (see Table 8.4 in chapter 8).

The elementary and secondary Physical Education program accounted for 62 percent of undergraduate enrolment, while Fitness Education and the secondary Two-Subject program contributed 13 and 25 percent respectively.

Most of the undergraduate recommendations were acted upon. A second course in teaching methods was soon developed, and instructors began to include examples of research to reduce the perceived gap between recommended professional practices and supporting research. In addition, grading guidelines for physical activity courses were developed, inasmuch as the majority of these courses were being taught by part-time staff and graduate students and there were inconsistencies across courses. On several occasions, the Chairperson met with those instructors to share Departmental concerns and to receive their input. The grading guidelines were flexible: for example, skilled performance could be assigned up to 50 percent of the final grade and resource files could constitute up to 30 percent. A booklet for part-time instructors was created and distributed.

Table 9.1 Undergraduate programs and enrolment over five years of each program, 1991-1996 (Intra-department memo September, 21, 1995)

Program	1991-1992	1992-1993	1993-1994	1994-1995	1995-1996
Elementary and Secondary Physical Education	154	154	167	155	161
Fitness Education	32	23	36	32	44
Secondary 2-Subject	67	66	60	69	78
Total	253	233	253	256	283

A list of required equipment for undergraduate labs was generated and shared with the Dean. In the 1990s, a capital equipment fund existed within the Faculty, to which Departments could apply. Even in the overall context of budget reductions, the Department did secure \$200,000 over the five-year period of 1990-1995 (Department Strategic Planning, May 8, 1995). This was money for equipment in the areas of physiology, psychology, pedagogy, adapted physical activity, and biomechanics, with 90% used for physiology and biomechanics. The equipment was often used for both student labs and research. The Department received an equipment grant of \$38,000 from the University in 1998 for the Seagram Sport Science Centre. Finally, the Department equipment inventory was growing.

The low enrolment in Fitness Education had precipitated the recommendation to review this program. New courses were added, and the practical placements were revamped. For example, a list of placements was developed to assist students in locating placements, and written report forms were created to guide the evaluation of the students following the practical experience. As the Fitness Education program broadened and student placements reflected sport leadership and administration, the fitness title appeared to be limiting. Thus, in 1999 a new program titled Kinesiology replaced Fitness Education. The program included a wider range of options after a common core of courses. The options were sciences, social perspective of health, management and administration, certified fitness appraiser and personal trainer. The program also included nine physical activity courses and a three-credit practicum in each year. The entrance requirements remained a CEGEP diploma, not a science program and the degree awarded was a Bachelor of Education (Kinesiology).

A number of recommendations in the 1989-1993 cyclical review focused on graduate studies and research. There were sufficient numbers of Master's students, usually about 50, but too many of them required more than two years to complete the program; hence the quality of the students was questioned by the cyclical review committee. It was also fair to say that the students lacked sufficient equipment, lab space¹, and funding to complete their Master's theses, and this was a joint issue of lack of research grants obtained by professors and the University's inability to provide some basic equipment as had been recommended in the first review. There was some improvement in scholarly output of professors from the first cyclical review, but the current status (Table 9.2) remained quite average. Presentations were frequent but the content did not often reach the printed page. It was not a good report card regarding scholarship for a department at McGill.

However, a research culture and commitment in the Department was slowly coming to light. A goal of two publications per year per professor was established. As Table 9.3 outlines, the overall research funding increased in the next five year period (compare to

Table 9.2: Research and Professional Activities 1985-1989 (from 1989-1993 Cyclical Review)

Product	1984-1985	1985-1986	1986-1987	1987-1988	1988-1989
Refereed Journal Articles	9	7	7	10	31
Non-refereed Journal Articles	4	2	5	2	2
Published Abstracts	7	8	14	14	21
Book Chapters	1	2	1	0	1
Books edited/written	0/0	3/0	0/0	0/0	0/1
Manuals	6	2	2	0	3
Scholarly Presentations	15	27	33	38	41
Workshops	10	6	14	13	9

Table 8.3), but the figures declined within the 5-year window. The publication output reflected an average of about one publication per professor. There was certainly room for improvement. Teaching had always been highly valued in the Department, and professors were expected to be current with the literature, but now they were also expected to be creating the literature. This research ethos was long-standing in many, but not all, departments at McGill. Physical education was engaged in a shift to McGill expectations.

There were real constraints as well in the 1990s. Research grants were being submitted, but at a time when less money was available due to the austerity of the governments. No professor had a lengthy track record of funding success to act as a mentor. Also, new professors entered the university system directly from Ph.D. programs rather than following post-doctoral training, an expectation in the new millennium.

It was common in the Department during the 1990s to hire sessional lecturers and delay full-time tenure track appointments due to budget reductions. Sessional lecturers were full-time appointments but usually limited to one year. They were less expensive than assistant professors, and there was no job commitment beyond a year. Among these lecturers were Banville, Seidl, Sveistrup, and Vardaxis (see Chapter 11). They taught with considerable enthusiasm but were typically completing their own doctoral programs rather than contributing to the publication count of the Department.

Table 9.3 Department research funding, publications, and scholarly presentations 1991-1995 (from Departmental Annual Reports)

Product	1990-1991	1991-1992	1992-1993	1993-1994	1994-1995
Total Research Funding	\$330,000	\$272,500	\$180,000	\$171,793	\$80,091
Publications	19	12	7	8	12
Scholarly Presentations	18	14	16	21	19

Strategic Planning—Doing More with Less

Principal Johnston stepped down after 15 years at the helm of McGill and was replaced in 1994 by Dr. Bernard Shapiro, a McGill graduate from 1956. Principal Shapiro's inaugural address spoke of choices that would have to be made in light of the fiscal challenges. The McGill community would have to choose the areas in which we could be truly great and decide how we could re-imagine and re-invent teaching and research services as we simultaneously decreased costs and increase productivity. Choosing, he put forth, is also about letting go. This was the context of the Faculty of Education strategic planning exercise of 1995.

A committee of Professors Downey, Perrault, Dyson, and Reid met almost weekly to plan for a strategic planning retreat in May of 1995. The mandate of the committee was to plan for more effective and efficient Department programs and professorial scholarship. This was part of the Faculty-wide strategic planning project and was a timely follow-up to the Cyclical Review Report. Staff were encouraged to think "outside the box" and place anything on the table for discussion, even ideas that might seem outrageous at first glance. A number of thoughtful recommendations and practices were adopted.

In the realm of graduate studies, it was decided to reduce the program from 48 to 45 credits and structurally align the thesis credits to match that of other Quebec universities, which would place the students in a more advantageous position to receive government funding. The graduate research methods course was cancelled, with students required to follow a comparable course in the Faculty of Education. This would reduce the overall workload of professors in the Department and thus provide more time for them to work with individual graduate students to reduce the time to graduate. From a purely financial standpoint, the government funded graduate students for 1½ years only, and thus the University's desire to have master's students finish in two years made considerable sense.

Professors had traditionally handled much of the undergraduate student advising. In some cases, it was the undergraduate program director. Many graduates from the 1970s and 1980s recall with considerable fondness the assistance and support from Professor John Chomay (Figure 9-3). For a short time after he departed in 1990, all professors were assigned 20 students for whom they had advising responsibilities. But as computer technology advanced (for example, using a thing called the World Wide Web!), it made sense to divorce undergraduate advising from professor workloads. Advising could be dealt with as effectively (more effectively?) by a non-academic person rather than a professor. At the same time in the 1990s, the personal computer essentially eliminated the need for traditional secretaries, who had typed hand-written notes from professors. Technology was rapidly changing how the Department went about its business.



Figure 9-3: John Chomay was an effective student advisor

At the undergraduate level, cyclical reviews had encouraged more science content and more talented students. Quite a radical recommendation resulted from the 1995 retreat. The Department proposed a four-year 120 credit undergraduate program, realizing that the knowledge base in the field had expanded exponentially in the previous 20-30 years, and it simply did not fit into a 90-credit package. The first two years would constitute a common core of courses for all students, who would then specialize in either teacher education or exercise science in years three and four. Unexpectedly, in a few months, the Quebec government would mandate that teacher preparation programs increase to four years. Rather timely indeed! A 30-credit certificate program was also proposed by the Department to upgrade current teachers. It may seem odd that the Department was adding to its workload by advocating such a certificate while simultaneously realizing that it must increase its output in graduate education and research. However, the courses would be primarily taught during the summer by specialists from outside McGill, and overall it was considered to be a revenue

producing initiative. Seeking more talented students was attempted by increasing the minimal CEGEP average to gain entrance to the undergraduate program to 75%.

Funding to faculties, and subsequently to departments, was largely based on student enrolment in courses. It was advantageous to have many students beyond those from the home department registered in a course. The Department decided to offer a course titled Nutrition and Wellness for the general student body, believing its content would be attractive as an optional course to many young students. In this case, Dr. David Montgomery assumed the teaching and attracted around 300 students. These were not Physical Education or Fitness Education students, but undergraduates from any faculty. In effect, this was a form of revenue production in a time of budget reduction. In this era, as one Vice-Principal so eloquently put it, what matters in terms of budget are "bums in the seats."

The Department also explored ways to reduce expenditures in the physical activity courses, which increasingly were taught by part-time staff. It decided not to offer a course unless enrolment was at least 20. Although a larger than 20:1 student-to-professor ratio made no sense pedagogically, the number of optional physical activity courses was reduced to ensure a cap on registration of about 20. The role of advanced physical activity courses was also reconceptualised. Basketball 2 or Advanced Basketball, as they were titled over the years, were coaching-like courses, important for high school teachers. However, by the 1990s the National Coaching Certification Program (NCCP) had acquired 30 years of development and offered high quality preparation of coaches whose certificates of achievement were now required by many sport organizations. Within the University, it was also being recognized that a professional degree was only the starting gate of professional practice, not the end product. Graduates could never be prepared for all situations at a university, and the concept of personal responsibility for ongoing professional development was gaining acceptance. In the end, advanced physical activity courses were eliminated since coaching knowledge was available with the NCCP.

Three courses were particularly expensive: summer activities, ski school, and first aid. Summer activities at Camp Nominingue were no longer considered central to a program preparing physical education teachers. Many of the skills were now covered in a 3-credit outdoor education course that occurred in Montreal and surrounding environments. Ski school was costly for a week of professional instruction and involved added administration compared to other courses. First aid had been a course in the program since the summer of 1912, and there remained a sense of obligation to offer a course if it was a program requirement. But organizations such as St. John's Ambulance presented excellent and readily

available first aid and cardiopulmonary resuscitation courses. Therefore, since 1996 students in physical education or kinesiology have had to prove current certification in first aid and resuscitation courses before receiving their degrees, as is the case in physical therapy and medicine. Reluctantly, for efficiency and cost, summer activities, ski school and first aid were cancelled as university courses.

Another cost-saving measure was cancelling the exchange program that Professor Jennifer Wall had initiated with the Chelsea School of Human Movement in 1978. Again, this was done reluctantly, but resulted in a considerable administrative saving. Today the McGill Study Abroad program exists in conjunction with a number of universities around the globe.

Among the strategic suggestions to improve the overall research in the Department were:

- Encourage a closer link between the theses of the Master's students and the line of inquiry of each professor.
- 2. Eliminate teaching for one professor per year.
- Include some professorial input into teaching timetables so that complete days are free from teaching responsibilities.
- Encourage collaborative research with colleagues in other McGill departments and external to McGill.
- Expect all faculty members to submit competitive grants to support their research, fund graduate students, and purchase laboratory equipment.

The Department was not able to eliminate teaching for one professor per year, since it had downsized to 9 full-time professors by the end of the 1990s. But it reaffirmed the expectation that research funding was primarily a responsibility of individual professors. The strategic planning was also forward-looking as it proposed more collaborative research. With health research initiatives, Departmental expertise could contribute to larger research projects that were impossible without input from a variety of experts. This would be facilitated by the Seagram Sport Science Centre.

The Seagram Sport Science Centre (SSSC)

Planning for a sport science centre started with Ted Wall while he was Chairperson of the Department in 1989. He highlighted Canadian initiatives such as the Canadian Fitness Survey (1981) and the Coaching Association of Canada to demonstrate that Canadians were being encouraged to assume personal responsibility for their health and wellbeing. This touched several units at McGill and it was timely to provide a multi-disciplinary centre to explore factors associated with physical fitness and athletic performance. The responsibilities of

the centre would be to facilitate research, promote education, and provide service to the community.

As noted earlier, it took almost 10 years to move from a student referendum to elevate student fees for expansion of the Currie Gymnasium, to construction. By the early 1990s, students were beginning to exert pressure on the University to use the money that had been accumulating with no evidence of new facilities. This led to phase one, the new 8-lane swimming pool. Seagram's Foundation had already donated \$1 million for a sport science centre, and the Department of Physical Education suggested that the centre should be built above the swimming pool. September 14, 1993, was a significant day when the 6,000 square foot SSSC opened. It was a complex of four distinct labs that were earmarked for biomechanics, exercise physiology, and sport and motor performance. It also included the sport medicine clinic of the Department of Athletics and Recreation. The SSSC was a joint project of the Faculties of Education and Medicine, with the first co-directors being Dr. David Montgomery and Dr. Eric Lenczner. The Tomlinson Fieldhouse was opened the next year.

The lab designed for psychology of motor performance and learning was immediately used by Dr. Dan Marisi, who was conducting research with motor sport racers. He and his colleagues were attempting to describe and understand the factors associated with success on the race track, whether physical (Figure 9-4) or psychological (Figure 9-5). The lab for exercise physiology immediately sought accreditation from Sport Canada as an elite athlete assessment centre. In part, this involved a site visit by athletes with known physical statistics and national assessment administrators. Essentially, the SSSC personnel had to demonstrate the ability to use a battery of tests and produce the same results as had been generated in other labs once accredited. National teams could arrange to have their athletes assessed in the SSSC. This generated some minor income for the Department and useful experience for students who were trained to administer the tests. Dr. David Montgomery had the physical fitness assessment contract with the Montreal Canadiens hockey team for over 20 years, and their assessment also generated some funds and positive media reports for the Department.

As the new millennium approached, the SSSC was developing a focus on ice hockey, and a skating treadmill was purchased to explore its efficiency as an assessment tool for hockey players. Another lab of the SSSC became home to a Hyperbaric Oxygen Chamber (Figure 9-6), described in *The McGill News* as McGill's most expensive chair (Gagliardi, 1998). It was a \$250,000 enclosed chamber in which a person breathes 100% oxygen at higher than atmospheric pressure. There are a number of medical conditions for which it is accepted practice, such as carbon monoxide poisoning, and at that time there were

anecdotal reports of its effectiveness in treating soft tissue injuries and reducing fatigue.



Figure 9-4: Physiological testing

Several professional sport teams used hyperbaric oxygen therapy and claimed positive results. Dr. Montgomery, as a scientist interested in elite athletes, was eager to assess the truthfulness of the claims. At the time, there was also great interest in this form of therapy in cerebral palsy. It was an expensive treatment, and health authorities needed evidence for its effectiveness before they would prescribe and pay for this treatment. Aided by a gift from John and Pattie Cleghorn the chamber was installed and the research began. To assess the impact on cerebral palsy, a grant of about \$1 million from the Quebec government was obtained by Dr. Montgomery and several medical col bagues across the province. It was a good example of multi-disciplinary collaborative research. When the clinical trial had been completed, hyperbaric oxygen therapy was found not to positively alter cerebral palsy. The enthusiasm from the athletic community had soured, and when Dr. Montgomery suddenly passed away, the chamber was sold and the lab space was turned over to a new researcher,

Dr. Paul Stapley. Without the SSSC, the hyperbaric story would not have been possible, even if, in retrospect, the therapy was not effective. The SSSC was a needed boost for growth in Department scholarship, and it continues to be home for four different labs. In addition, the fourth floor lab that was built in the 1970 west wing expansion had become the biomechanics lab. In the next chapter, changes that led to two additional labs will be sketched. Chapter 12 will describe the research questions being pursued by current faculty members in these labs.

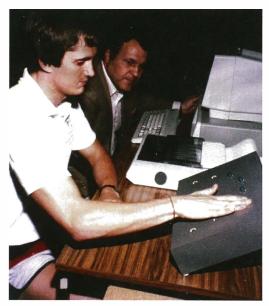


Figure 9-5: Psychological testing

The Return of the Four-year Program

The four-year undergraduate physical education teacher preparation program had closed after students graduated from it in 1972. That group had entered McGill directly from Quebec high schools after grade 11. It was replaced with a post-CEGEP three-year degree program, which remained until 1998, when another four-year specialist program began.



Figure 9-6: Hyperbaric Chamber

The new four-year program was necessary for two major reasons. First, the government wanted the undergraduate programs to include 700 hours of field experience, or practice teaching as it had been traditionally titled. Previously, education graduates would be hired by a school board but technically were on probation in a school until they successfully completed two years of teaching. There were procedures to demonstrate teaching success and justification that a permanent teaching certificate was warranted. With the 700 hours of field experience, it was argued that the probation period would no longer be necessary. Support for this change came from arguments that teacher expertise was an ongoing affair that extended much beyond two years, that teachers would be expected to progress at different rates, and that professional development over many years must be inculcated in every teacher. Hence, a specific number of probation years made little sense.

The second reason for a 4-year program was that the Ministry of Education and school boards wanted teachers to be certified in two subject areas. This could only occur with an additional year in university to obtain the courses in, for example, chemistry. Specialist teaching certification in physical education would continue to be issued at both elementary and secondary levels, but the second subject certificate was restricted to one level only. The three potential subjects at the elementary level were moral and religious education, arts, or social science. For those who opted for the second subject at the high school level, they could select from moral education, general science, biology, chemistry, physics, geography, history, and vocational education. The reality in Quebec schools was that an individual had to be a certified teacher, but not necessarily certified in the subject he/she was teaching. This change was motivated by the desire to have more teachers certified in the subject matter they were teaching.

Table 9.4 outlines the four-year program. All courses are three credits unless noted otherwise. While this program provided the Department with the opportunity to modify and perhaps add content in physical education, the extra year and 30 credits were essentially spoken for with the second subject and the increase in the field experience.

Table 9.4: Four-year physical education undergraduate program 1998

Physical Education Theory		Skill and Technique Courses				
Structural anatomy	434-205	Required (all are one credit)				
Biomechanics of human movement	434-206	Rhythmic activities	434-202			
Evaluation of human performance	434-207	Educational gymnastics	434-210			
Motor development	434-261	Aquatics	434-213			
Homeostatic physiology	434-331	Basketball	434-214			
Ergo-physiology	434-391	Gymnastics	434-216			
Nutrition and wellness	434-392	Track & Field	434-217			
Psychology of motor performance	434-492	Volleyball	434-218			
Adapted physical activity	434-496	Basic games	434-223			
Social psychology of sport	434-498	Badminton	434-226			
		Softball	434-236			
		Dance	434-243			
		One of Soccer or Field Hockey				
		6 other electives				
Minor in a second subject		Foundation Courses				
21 credits		Required				
		Policy issues in Quebec Education	411-405			
		Educational Psychology	416-300			
		One of :				
		Philosophical foundations	423-400			
		or Philosophy of Catholic education	415-398			
Pedagogical courses		Pedagogical support courses				
Physical education methods	434-342	One multicultural course				
Physical education pedagogy	434-442	One media, technology course				
Curriculum development	434-494					
Field experiences		Elective courses				
First year (Elementary level)	435-246	6 credits				
Second year (Secondary level)	435-374					
	435-348 (6 cr)					
Third year (Elementary level)	433-346 (0 U)					

The physical activity courses and field experiences were 15% each of the overall program. The field experiences were certainly longer than the previous program with the requirement of 700 hours. However, the percentage of time devoted to in-school practice changed only from 13% in the three-year program to 15% in the 1998 program. There was less variety of physical activity courses available to students in the new program, in part, because the advanced/coaching courses had been canceled. Also, only 6 credits of the 18 required in skills and techniques were optional. This was a reduction from the previous program and permitted greater ease with course scheduling and ensuring 20 registrants per course.

The idea of having physical education specialists certified in an additional subject was logical in a public school context. Degree students in the 1960s followed a second course in which they were certified, and the secondary two-subject option program in the 1980s and 1990s was popular. The primary difficulty with the new four-year 1998 program was that universities had enormous problems in creating schedules that permitted students to simultaneously pursue physical education, arts, and sciences courses. The McGill Department of Physical Education managed it but with less flexibility in the second subject options than was intended. This four-year program was short-lived, and would be replaced early in the new century with a program designed to drastically reform Quebec schools, to an extent that almost matched the Parent Commission changes.

Summary

Budget cuts, strategic planning, loss of faculty members, redefining Department business procedures, and slower than desired growth in research and scholarship were ongoing challenges in the 1990s. The Department had 13 full-time faculty members in the mid-1980s but only nine by 2000. Perhaps the Department was fortunate to have survived. As Principal Johnston predicted, growth would continue despite diminishing monies from the provincial government. Personal computers and network technology increased efficiencies, the SSSC opened, registration in courses remained strong or increased, a new undergraduate program began, equipment for labs was purchased, and research grants were sought by all faculty members. The USA Surgeon General's Report on physical activity in 1996 reaffirmed what many professionals in the field already knew: regular physical activity was good for your health. This was no longer a claim but a scientifically document fact. It augured well for the fields of physical education and kinesiology. The next decade would witness a shift of

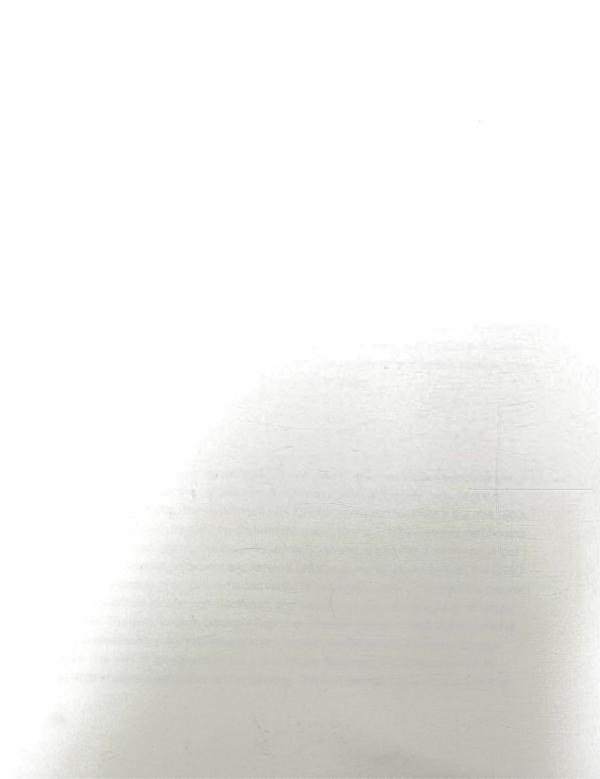
From Bloomers to Body Mass Index

Department emphasis toward kinesiology, as the teacher education program in physical education would be restricted in size by the Quebec government.

As the year 2000 began, there were still deficits at McGill and department budget reductions, and some long serving Department members were about to retire. There were also signs of renewed growth in research infrastructure from governments, new monies and initiatives to advance research, and greater public recognition of the importance of physical activity as preventative medicine, and as component in health. Cautious optimism was apparent, even if it would take five years or so to move beyond nine department faculty members.

Notes

Lab space was not a problem when the Seagram Sport Science Centre was finally opened in the fall of 1993.
 However, much of the cyclical review report was written before it was certain that the centre would become a reality.





he possibility of a date-related worldwide computer crash in the year 2000 was much discussed in 1999 as some predicted a universal system collapse and the horrific outcomes that might result, from scrambled airline signals to lost records of money in banks. The scare of Y2K, as it became titled, was perhaps a metaphor for the dependency upon technology that exists today, but without dire consequences. Advances in technology from 2000-2012 would be extraordinary with YouTube, Facebook, Twitter, texting, and iPads making their impact on teaching, research, and student life. As the year 2000 entered without incident, the number of full-time students at McGill was 22,000.

The financial difficulties of the 1990s were not behind the university or Principal Shapiro; budget reductions remained, but they became less severe. On a more optimistic note, governments soon claimed triumphantly that their budgets were balanced and deficits were being trimmed. They also admitted, as Principals and Presidents of universities had been telling them, that Canada was losing ground to other countries with regard to spending and promotion of research. The infrastructure in universities was old, and an infusion of competitive research funds was crucial. Change was coming. There were also predictions that health research would become a priority, which it did, something that was encouraging to kinesiologists and physical educators.

Within McGill, as in many other universities, there was anticipation of a significant turnover in staff within 10 years, with retirements of a large cohort of professors hired in

the 1970s. McGill expected 100 staff to be hired each year for 10 years. This would add 1000 new faces to the complement of 1550 faculty at the University, that is, two out of three professors would be "new" (Masi, 2006). These predictions mirrored the reality in the Department of Physical Education where four faculty members were nearing retirement age in 2000. The year 2012 would find only three members of staff hired prior to 2000.

The staff had shrunk in size from 13 to 9 full-time faculty members by 1999 when Hélène Perrault became the second female leader of the Department. Dr. Perrault crafted a vision for the Department that involved many changes: the incorporation of Kinesiology into the department name, a greater emphasis on faculty research and scholarly activities, collaborations with experts from other domains, more opportunities for graduate student retention and funding, and a strategic growth plan in areas such as health, exercise, and physical activity. Her vision coincided with many of the initiatives that were also being launched across other departments in the University and a number of new opportunities available through federal and provincial governments. In time, Dr. Perrault would become an Associate Provost of McGill, and currently is Dean of Education.

New Opportunities

A number of initiatives from federal and provincial governments, as well as McGill itself, would attempt to redress the sorry state of research support that existed in Canada at the end of the 20th century. These included the Canadian Foundation for Innovation, Canadian Research Chairs program, McGill's James McGill and William Dawson Scholars, and the provincial Chercheurs-Boursiers Awards from the Fonds de recherché Santé – Quebec (FRSQ). The Department benefitted greatly from these programs.

The Canadian Foundation for Innovation (CFI) program was initiated to respond to the need of improving the infrastructure for research, that is, equipment, bricks, plumbing, and painting. The competition was launched in 1999. More formally, it funds "state-of-the-art equipment, laboratories, databases, specimens, scientific collections, computer hardware and software, communications linkages, and *buildings* necessary to conduct leading-edge research" (Canadian Foundation for Innovation website, retrieved August 10, 2012, italics added). The CFI is awarded to universities and covers 40 percent of the cost of a particular project, with the remaining 60 percent derived from other partners such as the university itself or an affiliated institution, company, or individual philanthropist.

CFI projects must align with university objectives and the Department was pleased when (1) health and safety, (2) cognitive, biological, and behavioural neurosciences, and (3) integrative systems biology were identified by McGill as main themes for collaborative, inter-faculty, and inter-disciplinary research (Masi, 2006). While a CFI award is technically awarded to the university, it begins with creative ideas from individuals or groups. Successful CFI funding has been received by Department Professors Stapley, Coté, Taivassalo, Rassier, and Hepple.

The Canadian Research Chairs (CRC) program also began in 2000 as a means "to attract and retain some of the world's most accomplished and promising minds" (Canadian Research Chairs website, retrieved August 10, 2012). It is at the centre of a national strategy to make Canada one of the leading countries in the world in research and development. A Tier 1 CRC is for an outstanding researcher while a Tier 2 is for exceptional emerging researchers. McGill had an allotment of 160 such chairs which have been used to attract outstanding researchers from across the globe (Masi, 2006). Currently, Dr. Ross Andersen is a Tier 1 CRC within Kinesiology and Physical Education.

McGill created internal programs to parallel the CRC. The titles of James McGill and William Dawson Scholar were designed to retain outstanding professors already employed by the University, not to attract new stars. The number of internal scholars matches the number of CRC chairs. The James McGill Scholar is an award for the more accomplished scientist, while the Dawson provides support and recognition for excellent but younger individuals. Dr. Dilson Rassier and Dr. Dennis Jensen are currently William Dawson Scholars in the Department.

The Chercheurs-Boursiers Awards (FRSQ), like the Canadian Research Chairs program, has senior and junior levels. The FRSQ is the provincial funding agency that plans the development of health research. Thus, it is a body to which researchers in Kinesiology and Physical Education specialists often apply for funding of their research. The Chercheurs-Boursiers program within the FRSQ provides four-year salary awards at both junior and senior levels. In the junior program there are two tiers. If the junior 1 recipient demonstrates excellent research growth over the four years, he/she can receive junior 2 support for an additional four years. The junior award is for scientists with potential for having an international impact, while the already accomplished scholar would attract a senior award. Department members who have held these awards over the last 12 years are Professors Stapley, Coté, Taivassalo, and Rassier.

The awards described provide much needed change to the physical environment and access to equipment (e.g. CFI) but also support the researcher by providing release from teaching duties (e.g. CRC, Chercheurs-Boursiers Awards James, and McGill and William Dawson Scholars). With such assistance, professors are expected, of course, to compete

successfully for operating grants for their labs and establish a high level of productivity. Salary awards such as the Chercheurs-Boursiers are made to the university to ensure that the candidates spend at least 75% of their workload in research. In some universities, it is possible for recipients of a CRC, for example, to be exempt from all teaching. McGill has always insisted that its most senior and accomplished scientists also engage in some teaching, and not only in small graduate courses. It takes pride in asserting that the academic stars also share their knowledge and insights in undergraduate courses, including introductory ones (Masi, 2006).

There have also been new opportunities in teaching and learning spearheaded by McGill since 2000. Teaching and Learning Services assists units to create and support innovative learning environments which are pedagogically sound (Teaching and Learning Services website, retrieved August 24, 2012). In seminars, workshops, and on-line presentations, professorial and TA assistance is provided in a wide range of areas including course design, evaluation, and teaching strategies. One initiative provides each professor with a laptop that can be used in all university classrooms. Technological advances can be exploited, such as YouTube, in which lectures, debates, or news footage from around the world can be shared with a class prior to discussion. The technological revolution played a significant role in the closing of the A.S.Lamb reading room in 2000. The books were moved to the Faculty of Education library and half of the space became the A.S Lamb Learning Centre in September 2003, replete with computers stations. How will personal laptop computers, which are now owned by so many students, and hand-held computers affect the future teaching and learning environment at McGill?

What's the Big Deal about Kinesiology?

In the first program of physical education in 1912, kinesiology was included as one of the subject domains. In Chapter 3, it was noted that kinesiology referred to biomechanics and this interpretation remained for decades into the 20th century. But in 2002 the Department decided to change its name to Kinesiology and Physical Education, and this did not refer to Biomechanics and Physical Education!

Physical education typically refers to education in physical activity of children and adolescents in schools. Programs may have emphasized the physical (e.g. Strathcona Trust Program or physical fitness) or education through the physical (e.g. Lamb and Cartwright notions of sportsmanship and social values), but physical education was the stuff of the

school system. Many of our alumni have dedicated their professional lives to this noble mission. In higher education, Departments of Physical Education were created to prepare young women and men to become teachers. Acquiring professional skills to use as a teacher was the primary emphasis in university diplomas or undergraduate degrees. The term physical education, as a professional distinction, served the field very well for many years. In the late 1960s, however, there was a gradual shift away from the teacher education model as the primary, or only, professional emphasis in university physical education programs (Newell, 1990a). In the 1970s the baby boom was over, and the need for school teachers declined at the same time as new professional emphases emerged. These professional and clinical fields included coaching, health club instruction, exercise therapy, corporate fitness, and athletic training (Newell, 1990a). Physical Education was perhaps not the best label to encompass these broad professional foci.

Also, when interpreted in the usual context of school-based programs, physical education was unable to account for the breadth of the research questions being posed by professors. The current research interests of Department members are included in Chapter 12. Some explore molecular muscle contraction, mitochondria, optimizing performance in sport, and how the sensorimotor system functions in learning to control movements. Physical education did not seem to be the best collective term for such work.

In addition, Henry argued in 1964 that physical education was overly concerned with professional practice and should develop its disciplines (e.g. exercise physiology). James Bryant Conant, a former President of Harvard, had also severely criticized graduate degrees in physical education in the USA as lacking in rigor (Zeigler, 2000). These forces produced significant change in many universities. Some, including Waterloo and Simon Fraser in Canada, abandoned the professional aspects of physical education and teacher preparation in the early 1970s to pursue disciplinary explorations of physical activity and new professional outlets. More frequently, as was the case at McGill, graduate programs were created along disciplinary lines (e.g. exercise physiology, biomechanics, and motor performance) and new professional areas such as Fitness Education began. With these changes, many departments searched for new department nomenclature, usually as a means to recognize the sizable diversity in both discipline and professional dimensions in the field, once simply called physical education. Little consensus was apparent in the early 1990s as over 70 different department labels for physical education were identified in the USA (Newell, 1990a). One can only imagine the chaos if the Departments of Psychology or Physiology had sister units in other universities with so many unique titles.

Newell (1990b) contributed to the debate and dialogue by advancing the logic that the label should flow from a discussion of the central focus of the field. He suggested physical activity was the key focus, while others proposed human movement. Sport science and exercise science were generally rejected as department titles because sport and exercise limited the movement forms of legitimate inquiry. Physical activity sciences might have been the most truthful, but a field that had struggled for academic recognition for many years, some of it self-inflicted, needed an "ology." Newell (1990b) posited five criteria for department names: representative of a field of study, intuitively meaningful in higher education, academic linkage, brevity, and uniqueness. In North America, kinesiology became a popular name for departments since it met the five criteria. The term "Human Movement" held sway in other areas of the world, such as Australia.

In 2002, the Department of Kinesiology and Physical Education replaced the second Department of Physical Education. Kinesiology refers to a multidisciplinary field that studies human movement from cultural, psychological, mechanical, and biological perspectives. It is sufficiently broad to encompass the research conducted in the Department. Physical Education remained in the title because it accurately described the primary professional outcome of the program, that of preparing physical education teachers.

Following Henry and Conant, improving the quality of discipline related research led to 40 years of discipline specialization (Clark, 2008). Specialty conferences, journals, societies, doctoral and post-doctoral education were among the outcomes of this silo and bunker mentality (Kretchmar, 2008). The road to specialization was successful in producing young scholars who could publish in the best journals and could secure funding from the most competitive research grant competitions (Clark, 2008). For example, respiratory exercise physiologists would publish in the best respiratory physiology journals, not simply in the fine exercise physiology journals. In today's university environments, there is great emphasis on interdependency and collaboration as teams of researchers attempt to understand phenomenon, such as physical activity, from molecular to cultural levels (e.g. Hatfield, 2008). But each faculty member joins these collaborative teams with disciplinary expertise.

The Times They are A-Changing

The four-year physical education program with certification in a second subject lasted only from 1998 to 2003, when it was replaced with a four-year program in physical and *health* education. At first glance, the primary difference was replacing the second subject

certification with a health certification. As noted in Chapter 9, scheduling the second subject at universities had been extremely difficult. Health had traditionally been part of many physical education curricula, at least health topics related to school-aged children. Also, new research, already mentioned, had clearly demonstrated that regular physical activity reduced the risk of coronary heart disease, obesity, some forms of cancer, adult onset diabetes, and the side effects associated with Type 1 diabetes. Physical activity also contributed to positive psychological health and cognitive function. Thus, adding health to the undergraduate program made considerable sense. However, the Physical and Health Education program encompassed much more than merely inserting Health for a second-subject certification.

The Physical and Health Education program was associated with the new vision of the Quebec Education Program (QEP), motivated, in part, to reduce the high school drop-out rates and to decentralize the school system. Emphasis on life-long learning, making personal choices, critical thinking, integrating learning into real situations, and assuming personal responsibility for learning were among the desired outcomes for the students. The student was placed squarely at the center of instruction and all school life. Teachers could no longer function only as transmitters of stable knowledge and values who assessed children prior to and at the end of a knowledge unit. Teachers were now conceived as transformative guides who helped students to co-construct meaning and understanding in our shared world. Educators were encouraged to recognize themselves as inheritors of culture and knowledge, but the culture and knowledge could have many viewpoints. Teachers should become critics who help students and themselves to understand assumptions and co-interpret culture. To achieve this new constructivist orientation of education, the Quebec teacher education programs were designed to develop 12 professional teaching exit competencies (Martinet, Raymond, & Gauthier, 2001). The movement toward competency-based, professional teaching was initiated in university programs but was envisioned as continuing throughout each teacher's career. In other words, teacher development was a lifelong process, not a four-year set of courses at university. Table 10.1 outlines the four-year Physical and Health Education program that began in 2003.

Beyond new conceptualizations of professional competencies for teachers, curriculum areas for students were also reformed in the QEP. There is a broad area of learning that identifies health as an overall objective for every student and the entire school. It is now expected that the whole school community take responsibility for all student health and well-being. Three related competencies are proposed for physical education.

Competency three is a penultimate exit competency and consists "simply" of healthy active living. Students graduating from the school system should have the skills, knowledge, and attitudes to engage in regular physical activity and, hence, be capable of reaping the health and social benefits so often articulated by physical education and kinesiology professionals, noted at the beginning of this section. Competency one refers to individual activities, while competency two deals with activities having interactions with others. Learning and participating in cross-country skiing would be one way to satisfy competency one, while badminton would satisfy competency two. The QEP does not dictate that any specific activity must be included in the physical education curriculum—only that competency is obtained in both the individual and social/group activities so that healthy active living can be realized. Traditionally, the foundation of many physical education programs were gymnastics, games, dance, track and field, and swimming, when facilities permitted. The three competencies are a very new way of looking at the physical education curriculum for elementary and secondary schools. With an emphasis on healthy active living, the importance of gymnastics and track and field can be critically analyzed. They have great historical importance, remain exciting activities for those who wish to pursue them at a competitive level, and may educate citizens to be more informed sport spectators for the Olympics. However, beyond some of the running events in track and field, most adults do not find them particularly attractive as recreational/healthy active pursuits. Not many young adults seek out opportunities to throw the javelin or perform on the parallel bars!

The QEP has much contemporary strength, such as embedding assessment within the teaching process and rejecting quantitative pre- and post-instruction measures. Discovery learning, tactical approaches for team concepts, and instructional models are proposed to lead instruction rather than skill technique and drill. It requires a new way of thinking, planning, and leading instruction.

Two new courses related to health (Health education and Physical activity and health) were added to the academic courses. In other courses, such as Curriculum development, course outlines were modified to embed health into the program more effectively. A course on the history of physical education, sport, and kinesiology (Historical perspectives) was added because the overall program lacked a voice from the humanities. During the consultation process, students and teachers informed the Department that dealing with challenging student behaviour was a significant issue in schools. Hence, the required course, Personality and Social Development, was included because it had a strong applied behavioural analysis component. The field experiences represented 17% of the credits, and physical activity courses constituted 16%, negligible changes from the 1998 program

Table 10.1: Four-year physical and health education undergraduate program 2003 (all courses are 3 credits unless otherwise noted)

Academic Components		Physical Activity Courses			
Health education	EDKP 204	Required (one credit unless otherwise noted)			
Biomechanics of human movement	EDKP 206	Principles of Dance	EDKP 254 (2 cr)		
Evaluation in Physical Education	EDKP 307	Aquatics EDKP 2			
Motor development	EDKP 261	Basketball	EDKP 214		
Anatomy & Physiology	EDKP 293	Gymnastics	EDKP 253 (2 cr		
Physical activity and health	EDKP 330	Track & Field/Cross country	EDKP 217 (2 cr)		
Ergo-physiology	EDKP 391	Volleyball	EDKP 218		
Nutrition and wellness	EDKP 292	Basic games	EDKP 223 (2 cr)		
Skill learning & expertise	EDKP 393	Raquet sports	EDKP 252 (2 cr)		
Adapted physical activity	EDKP 396	Soccer	EDKP 233		
Historical perspectives	EDKP 394	5 electives			
Sport psychology	EDKP 498				
		Foundation Courses			
		Required			
		Policy issues in Quebec Educa	tion EDEM 405		
		Educational Psychology	EDPE 300		
		Philosophical foundations	EDER 400		
		Personality and social development	nent EDPE 208		
Pedagogical courses		Pedagogical support course	s		
Physical education methods	EDKP 342	One multicultural course			
Physical education pedagogy	EDKP 442	One media, technology, computer	s and education		
Physical education curriculum		course			
development	EDKP 494				
Field experiences		Elective courses			
First year (Elementary level)	EDFE 246	18 credits			
Second year (Secondary level)	EDFE 373				
Third year	EDFE 380 (7 cr)				
Fourth year	EDFE 480 (7 cr)				

with the minor subject. Today, a course in research methods is part of the program, student assignments required accessing research literature, and there are some opportunities to engage in research with professors. The logic, of course, is that students should view the research enterprise as part of all learning, not restricted to graduate programs.

The need for ongoing professional development is part of the new QEP reform. The Association of Physical Educators of Quebec (APEQ) conference is supported each year by the Department. To inculcate professionalism, the senior Physical and Health Education students are required to attend their November conference, usually held in the Currie Gym. A highlight is the Jennifer Wall Lecture, which attracts a world-class expert in school-based physical education (Figure 10-1). The first Wall Lecture was delivered by Dr. Judith Rink in March 2005. For the past 10 years, Dr. Gordon Bloom and Dr. William Harvey have been the McGill Department of Kinesiology and Physical Education liaisons with APEQ.



Figure 10-1: Jennifer Wall Lecture 2010. (L-R) Billy Harvey, Grodon Oliver, Krista Smeltzer, Mary O'Sullivan (lecturer), Dean Hélène Perrault, Gordon Bloom, Greg Reid

"Skills and Techniques" had been the title for specific sport, dance, and games courses offered in the physical education program since 1971. In 2003 they became "Physical Activities." One reason for this change was to underscore the philosophy toward healthy active living inherent in the new Quebec curriculum. Perhaps not a great deal of skill is necessary to live actively. In addition, the Teaching Games for Understanding movement laid claims that individual and team strategies can be developed through small group games, and this should be presented before skill development (Bunker & Thorpe, 1986). The skills and drills approach, which attempts to have all learners performing identical movements, was losing advocates. In addition, some of the physical activities became 2-credit courses

when justified by the amount of content. This had a desirable effect of requiring fewer parttime instructors who need to be co-ordinated with major points of emphasis presented in pedagogical courses. The Department was very much aware of the challenges for the students if pedagogical courses presented a message that was contrary to experiences in the physical activity courses. There were few full-time staff teaching physical activity courses in 2003, and there are none in 2012.

In the late 1990s, the Provincial government set quotas for numbers of graduates of education programs based on need predictions in Quebec. McGill's number for Physical and Health Education was 40. Table 10.2 outlines the number of graduates in the last 10 years in the teaching program. In some years, more than 40 students were put forth by McGill to Quebec authorities, and, thankfully, all received teacher certification. In 2012 the Department is very close to the quota, and 40 is a number that the Department feels it can deal with efficiently.

Table 10.2: Number of graduates in the three undergraduate programs 2003-2012

	Physical	Physical and Health Education			B.Ed. Kinesiology		B.Sc	c. Kinesio	ology	Grand Total
	М	F	Total	М	F	Total	М	F	Total	
2003	14	22	36	8	18	26				62
2004	18	20	38	7	25	32				70
2005	14	21	35	16	22	38				72
2006	12	23	35	10	27	37	5	10	15	87
2007	15	36	51	7	6	13	13	23	36	100
2008	19	24	53	1	0	1	16	25	41	95
2009	15	25	40	0	1	1	7	17	24	65
2010	25	19	44	0	0	0	22	36	58	102
2011	18	23	41	0	0	0	17	29	46	87
2012	21	18	39	0	0	0	17	39	56	95

The Second B.Sc. Program

The Fitness Education undergraduate program had been created in the 1980s during the fitness boom and was broadened in 1999 as Kinesiology to attract students for careers in fitness, wellness, coaching, and personal training. Student enrolment in Fitness

Education had hovered around 35 across all three years in the early 1990s (see Table 9.1 in Chapter 9) but grew to about 35 graduates per year as Kinesiology in the years 2002-2005 (Department Annual Reports; Table 10.2). There was clearly a niche for such a program. However, the students informed the Department that they desired access to a wider variety of courses at McGill and viewed Kinesiology as a stepping stone for physical and occupational therapy and medicine. Because the Fitness Education and Kinesiology programs had been fashioned after the Physical Education program, there was substantial time devoted to field experiences and physical activity courses. These were not always necessary according to the students consulted via focus groups and surveys. In addition, the entrance requirement was any CEGEP diploma, not a specialization in science.

An undergraduate B.Ed. degree in Kinesiology was a very odd combination indeed. Kinesiology, as the scientific study of human movement from multidisciplinary perspectives, results in B.Kin. or B.Sc. degrees at most other universities. The optional courses required by the students and their career aspirations led to a logical but significant conclusion. It was time to heed a recommendation from the first cyclical review and require students in Kinesiology to possess a science diploma from CEGEP. This would enable them to follow courses in the Faculty of Science and the content of Department offerings could reflect a strong science background. Also, graduates should be awarded a B.Sc. degree. In the first cyclical review, it had been proposed that Fitness Education students be required to possess a science diploma, but this was rejected by the Department because of the perceived difficulty of teaching students from two different CEGEP streams. The time was now ripe, however, to propose a degree in Kinesiology in which its students would enjoy full access to other science programs at McGill, and this would necessitate a CEGEP science background.

A freshmen class was admitted in 2004 to a new three-year B.Sc. in Kinesiology program that required a science CEGEP diploma. Students outside the province could be admitted to a year of prerequisite courses, called the Science Freshman program, as was the case for any student who desired to study physiology, cell biology, or neuroscience. The year is spent taking courses outside the Department and, with some variations, includes at least two post-high school level courses in biology, chemistry, physics, and calculus. The degree program, outlined in Table 10.3, was totally reconceived to reflect B.Sc. degrees elsewhere at McGill. There were three options within the Department's second B.Sc. degree: General, Applied, or Honours.

In a nutshell, all Kinesiology students had a common set of required courses in the Department of Kinesiology and Physical Education and complementary courses in anatomy, physiology and statistics. The Applied student stream was designed for those who sought employment in the fitness and wellness arena and, therefore, included 18 credits with professional outcomes. Chairperson, Dr. Ted Milner, who assumed leadership in 2008 felt the Applied stream lacked focus and initiated a program revision. It has become a Clinical Exercise Practice program which holds much promise. Currently under review at McGill, the program will provide students with the competencies and practical experience to pass examinations and qualify for accreditation as a Certified Exercise Physiologist by the Canadian Society for Exercise Physiology or as a Clinical Exercise Specialist by the American College of Sports Medicine. The Honours program was created for those who obtained a CGPA of 3.30 after two years and desired a research experience. Initially the Honours students were required to complete only a 3-credit research project. This is currently a 9-credits package (over two courses). Many of these students manage to present their research at scientific meetings and publish in academic journals. The General Kinesiology program had the most elective credits at 30, intentionally permitting and encouraging pursuit of minor programs elsewhere in the University. It was anticipated that physiology, psychology, nutrition, and management might be popular, but course-work in languages, history, economics, or art were possible as well.

The first 11 students to receive the B.Sc. Kinesiology degree were Adrian Albu, Marianne Champagne, Vanessa Grutman, Siobhan Hopkins, Bradley Jawl, Alia Karmali, William Lee-Shanok, Daniel Marcjak, Patrice Mason, and Judith Richardson. The Kinesiology program has grown, with an average of 44 graduates in the last 6 years (Table 10.2). In 2007 it was accredited for seven years by the Canadian Council of University Physical Education and Kinesiology Administrators. To reach out to a wider McGill, a minor program in Kinesiology for science students was created in 2005. This is a 24-credit program, which has attracted students primarily from anatomy and cell biology, physiology, and neuroscience, and extends the excitement of a field dealing with physical activity, health, and sport to a wider youthful audience. Also, Milner spearheaded the recognition of 15 Kinesiology and Physical Education courses by the Faculty of Science as electives in their programs. The minor kinesiology program and acceptance of courses as science electives, and research collaborations, integrates the Department into the wider University, rather than remaining as a rather isolated entity.

Table 10.3: Three-year kinesiology undergraduate program: General, Applied, & Honours 2004 (all courses are 3 credits unless otherwise noted)

Required Courses		Complementary Courses	
Biomechanics of human movement	EDKP 206	Systemic anatomy or equivalent	ANAT 21
Motor development	EDKP 261	One of the following:	
Nutrition and wellness	EDKP 292	Anatomy/limbs and back (4)	ANAT 31
Physical activity and health	EDKP 330	Structural anatomy	EDKI
Ergo-physiology	EDKP 391	One set of the following:	
Skill learning and expertise	EDKP 393	Human physiology: Control systems AN	D
Adapted physical activity	EDKP 396	Human physiology: Body functions	
Historical perspectives	EDKP 394	OR	
Research methods	EDKP 443	Mammalian physiology 1 AND	
Exercise pathophysiology 1	EDKP 485	Mammalian physiology 2	
Scientific principles of athletic training	EDKP 495	One of the following:	
Sport psychology	EDKP 498	Biometry	BIOL 37
		Principles of statistics	MATH 20
		Statistics 1	MGCR 27
		Introduction to psychological statistics	PSYC 20
		Statistics in social sciences	SOCI 35
Applied Kinesiology			
18 credits from the following:			
Weight training (1)	EDKP 200	Practicum 2	EDKP 35
Physical activity leadership	EDKP 201	Practicum 3	EDKP 45
Physical activity appraisal (1)	EDKP 249	Personal trainer practicum	EDKP 45
Practicum 1 (3)	EDKP 250	Fitness and lifestyle consulting	EDKP 45
Racquet sports (2)	EDKP 252	Physiological assessment: sport	EDKP 55
Principles of dance (2)	EDKP 254	Elective courses:	
Athletic injuries	EDKP 311	21 credits	
General Kinesiology			
9 credits from the following:			
Weight training (1)	EDKP 200	Exercise and health psychology	EDKP 44
Physical activity leadership	EDKP 201	Exercise pathophysiology 2	EDKP 44
Dance and fitness (1)	EDKP 244	Practicum 3	EDKP 45
Physical activity appraisal (1)	EDKP 249	Personal trainer practicum	EDKP 45
Practicum 1 (3)	EDKP 250	Fitness and lifestyle consulting	EDKP 45
Advanced Biomechanics	EDKP 303	Sport and society	EDKP 50
Athletic injuries	EDKP 311	Physiological assessment: sport	EDKP 55
Practicum 2	EDKP 350	Biomechanical assessment	EDKP 56
Ergonomics	EDKP 444	Biomechanics instrumentation	EDKP 56
Exercise metabolism	EDKP 445	Elective Courses:	
Physical activity and aging	EDKP 446	30 credits	
Motor development 2	EDKP 447		

(Continued on next page)

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Honours Kinesiology

12 credits from the following		Exercise pathophysiology 2	EDKP 449
Advanced Biomechanics	EDKP 303	Sport and society	EDKP 505
Ergonomics	EDKP 444	Physiological assessment: sport	EDKP 553
Exercise metabolism	EDKP 445	Biomechanical assessment	EDKP 566
Physical activity and aging	EDKP 446	Biomechanics instrumentation	EDKP 568
Motor development 2	EDKP 447	Elective Courses:	
Exercise and health psychology	EDKP 448	24 Credits	

New Kids on the Block

The Department of Kinesiology and Physical Education reflected the massive turnover of staff evident at McGill after 2000. Hélène Perrault began her tenure as Chairperson in 1999 with a staff of nine and in a few short years had commemorated the retirement of four long serving Department members: Jane Wardle, Ted Wall, Graham Neil, and Peggy Downey. In fact, the 2003-2004 year began with only 8 full-time professors but with the hiring process underway, which resulted in Paul Stapley joining the Department in the spring of 2004. Following Perrault, Chairpersons Greg Reid, René Turcotte, and Ted Milner, continued the transformation of staff. By 2011-2012, the Department could boast of 15 staff (Department Annual Report, 2011-2012), the highest number in its history and almost double the number in 8 years. Many on this group had expertise in the Kinesiology disciplines and joined the Department after postdoctoral training. Requiring postdoctoral experience was new to the Department as it approached its centennial, but was a necessary change that ensured new hires possessed the necessary skills and experience to establish their research labs rapidly.

Each new professor established a research program, secured funding, established his/her lab, attracted graduate students, and found a niche in teaching. Over a six-year period, the external research funding of the Department was admirable (Table 10.4). In the 2011-2012 academic year a total of \$3,412,048 was secured, representing \$220,000 per capita funding (Department Annual Report, 2011-2012).

Table 10.4 represents grants as principal investigators and co-investigators from agencies such as the Canadian Institutes for Health Research (CIHR), Natural Sciences and Engineering Research Council of Canada (NSERC), Social Sciences and Humanities

Table 10.4: Department External Funding per year from 2004-2010 (from Department Annual Reports)

Research Council of Canada (SSHRC), Sport Canada, Health Canada, Le programme Établissement de nouveaux professeurs-chercheurs (FQRSC), National Institutes for Health (USA), and Fonds de la recherche en santé du Québec (FRSQ).

The "best of times" was also a product of McGill initiatives emanating from strategic planning, led by Principal Heather Munroe-Blum and Provost Anthony Masi. For example, in the domain of research, action I.4.1 in Strength, Forces, and Achievements (Masi, 2006) provides start-up funds for new professors to improve their chances of securing competitive research grants. This was intended to have labs operational in short order after a professor's arrival. It was expected that research funds would subsequently be obtained by all professors, but the University was making an important contribution to the early success of this new group of professors. Start-up monies had existed previously but were unevenly available in the University. This is only one exemplar of support from the University. With CFI monies available, renovations were possible that would not have been attainable in the 1990s. For example, the transformation of the gymnastics room, built in the west wing expansion of 1970, was converted into a two-tier state-of-the-art laboratory directed by CRC Dr. Ross Andersen. Alumni might also remember the Turner Bone room adjacent to the Currie gymnasium. It is now home to the Clinical Exercise and Respiratory Physiology Lab of Dr. Dennis Jensen. In 2012, the Department is nicely housed.

Table 10.5 lists the Department labs, and Figures 10-2 – 10-10 offer a glimpse of those facilities. Each current professor describes his or her research interests in Chapter 12.

Table 10.5: Laboratories in the Department of Kinesiology and Physical Education

Laboratory	Professor
Muscle Aging Diagnostic Lab (MAD Lab)	Dr. Russell Hepple
Ice Hockey Research Group (IHRG)	Dr. David Pearsall & Dr. René Turcotte
Clinical Exercise and Respiratory Physiology Lab (CERPL)	Dr. Dennis Jensen
Muscle Physiology and Biophysics Lab	Dr. Dilson Rassier
Occupational Biomechanics and Ergonomics Lab	Dr. Julie Cote
Sport Psychology Research Lab	Dr. Gordon Bloom
The McGill Health Promotion Lab	Dr. Ross Andersen
Choices in Health, Action, Motivation, Pedagogy and Skills (CHAMPS) Physical Activity Lab	Dr. William Harvey
MI3 Lab (Lab for investigation of Mitochondrial impairment, impact and intervention)	Dr. Tanja Taivassalo
Neuromuscular Control Lab	Dr. Theodore Milner

The Last Word on the Graduate Program and Research Outcomes

The first graduate program in the Department was a Master of Arts begun in 1969. By the early 2000s, it was clear that attracting students in Exercise Physiology and Biomechanics was difficult because the outcome was an M.A., not an M.Sc. It was perceived that moving onward for a Ph.D. in those areas would be hampered by the M.A. label. In November 2000, the Department put forth a motion to change the degree designation from an M.A. to a M.Sc. for Exercise

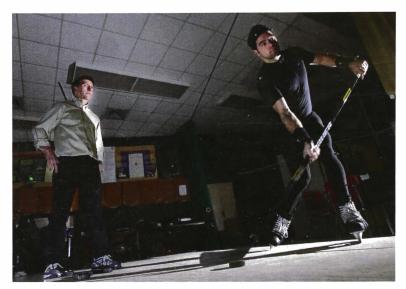


Figure 10-2: Ice Hockey Research Group, Dr. David Pearsall (left) and student (right)

Physiology and Biomechanics students. The M.A. nomenclature remained for Adapted Physical Activity, Pedagogy, and Sport Psychology and Physical Activity (Graduate Program handbook, 2003-2004). By 2008, Motor Control and Learning had been added to the specialty areas in the M.Sc., and Sport and Exercise Psychology was adopted as a more contemporary name in lieu of Sport Psychology and Physical Activity.

From 2002-2012, the M.A. has been awarded to 59 students and the same number have received the M.Sc. (Department Graduate Records, August, 2012). The 1980s cyclical



Figure 10-3: Neuromuscular control laboratory, Dr. Ted Milner (left) and student (right)



Figure 10-4: MI3 lab, Dr. Tanja Taivassalo

reviews noted that students remained too long in the master's program. The average time for the master's students to graduate today is 2.5 years (Department Annual Report, 2012). The most significant change in the graduate program in the last six years is the number of doctoral students, which has grown from 3 to 19 (Department Annual Report, 2011-2012). This was one of the goals of Dr. Ted Milner, Chairperson from 2008-2012. The Department of Kinesiology and Physical Education currently has a doctoral program that rivals or exceeds the number of students in comparable physical education and kinesiology Ph.D. programs across Canada. Yet, the Department does not have a formal doctoral program. Students and professors use the Ad Hoc route while discussions are ongoing with other units for an interdisciplinary health science Ph.D. program.

A significant award was initiated in January of 2012. Dean Perrault was proud to announce that Dr. Steven Blair was the first recipient of the Bloomberg-Manulife Prize for promoting active health research. It includes a financial stipend to support the individual's future research. Dr. Blair presented lecures in both Toronto and Montreal as part of the prize.

Funding for graduate students in Quebec paled in comparison to Ontario prior to 2000. McGill has provided more financial assistance to graduate students in recent years, and Milner set graduate funding as one of his priorities. He significantly increased and guaranteed Department support with money received from Chercheurs-Boursiers Awards, usually matched from grants of professors. In 2012, the first Ph.D. Bloomberg-Manulife doctoral

fellowships were awarded to Jeffrey Caron and Maddy Purves-Smith, worth \$22,500 each. In 2006-2007, the funding for graduate students was \$284,720, and it almost doubled to \$536,088 by 2011 (Department Annual Reports, 2006-2007 and 2011-2012).



Figure 10-5: Muscle Physiology and Biophysics Laboratory, technician Ivan Pavlov



Figure 10.6 Sport Psychology Research Laboratory, Dr. Gordon Bloom speaking with coaches

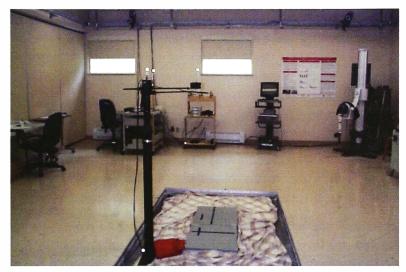


Figure 10-7: Occupational Biomechanics and Ergonomics Laboratory



Figure 10-8: McGill Health Promotion Laboratory

All faculty members hired in the past 10 years have taken advantage of traditional and new research funding opportunities with considerable success (Table 10.4). Some have obtained teaching reduction awards. Most graduate students are now being funded appropriately. New laboratory space has been created and labs are efficient and productive. As expected, all of these factors have contributed to new levels of achievement. Table 10.5 provides some of the accomplishments in terms of scholarly presentations and publications of all Department members

over the past eight years. These figures are quite impressive and a giant step forward from comparable accounts in the 1980s and 1990s (Chapters 8 and 9). The Department goal of two publications a year in the 1990s has been met repeatedly, and in the past two years the average number of publications has exceeded 3 and 4 respectively. The quality of the journals has been very high as well. With additional doctoral and post-doctoral students, these figures may increase. The achievements evident in Table 10.6 were aided by adept hiring, government and University strategic planning, but also by professorial commitment. It has been said many times that people ultimately make the University. The new kids on the block are doing just fine.

Table 10.6: Publications and Professional Activities 2004-2011 (from Department Annual Reports)

Product	2004	2005	2006	2007	2008	2009	2010	2011
Refereed Journal Articles	13	14	16	26	32	33	46	61
Refereed Conference Proceedings/Presentations	23	19	42	11	24	48	80	76
Refereed Published Abstracts	4	16	11	1	5	5	5	4
Book Chapters	1	3	1	4	2	4	8	4
Books - Edited	1	0	0	0	0	0	4	0
Books - Written	0	0	0	0	0	0	0	1
Total Refereed Publications	42	52	70	42	63	90	140	146
Non-refereed Publications								
Reviews (e.g., books)	0	0	1	0	0	0	0	0
Non-refereed Journal/ Magazine Articles	Ť	5	0	4	3	3	6	0
Manuals	0	0	0	0	0	0	2	6
Total Non-Refereed Publications	†	5	1	4	3	3	6	0
Presentations/Workshops	32	20	13	65	55	79	94	6
Total Publications and Professional Activities	76	87	85	115	124	175	248	158

Summary

The Department had a significant makeover in the first 12 years of the new millennium. It changed its name to reflect an inclusive research environment and new disciplinary emphases. The Kinesiology B.Sc. appears to be a rewarding program for students, judging from the current enrolment. Exciting modifications of the Physical and Heath Education program occurred, and are still unfolding. With an emphasis on health and physical activity, perhaps Kinesiology is now the prime undergraduate program in the Department. The broad contribution of Kinesiology to society is something to celebrate and advance, as long as the teaching ideals of McKenzie, Cartwright, Lamb, Wood, Wilkinson, Riley, and Wall are not forgotten and the physical and health education program continues to thrive.

Since 2000, the Department almost doubled its number of professors, the M.Sc. designation was appropriately adopted for three of the graduate options, and a large group of doctoral students has emerged. The many new faces in the professoriate highlight the transition that is occurring in the Department. Record levels of funding for graduate students, research, and physical renovations resulted in scholarly outcomes that are commensurate with McGill expectations. The momentum and international impact must be maintained. The collaborative research of the new professors with colleagues elsewhere at McGill has moved the Department forward, from a somewhat isolated unit to one whose tentacles extend throughout the University. The Department is increasingly integrated into the fabric of McGill, underscored on April 24, 2012 by the McGill Board of Governors. The McGill University Centre for Physical Activity and Health was formally accepted. It is a conceptual and collaborative centre composed of individual labs of the Department, but more importantly aspires to become the centre of physical activity and health research, with an international reputation, in the University.



any men and women provided instruction to McGill students in gymnastics in the 19th century, in required physical education in the 20th century, and to those in professional programs of the MSPE and Department of Physical Education in the 20th and 21st centuries. The nature of the interaction between professors and students has changed over the 100 plus years of our historical journey. At some times the relationship was decidedly hierarchical, and the lighter side of the professors was rarely seen. At other times the distinction between teacher and learner was blurred, particularly at the graduate level. The concept of interdependent learners, instructors and students pursuing ideas together, emerged as the University matured. In recent years the notion of instructors as facilitators of learning has gained much prominence. High praise is given to professors who are catalysts for self-directed learning and who inspire students to learn. The role of the instructor may have changed from delivery to facilitation, but it remains critical. A quote outside a library of a prestigious university claims that "A true university is a collection of books." More correctly, it is two or more people interacting with the books and ideas that define the university experience. Learning is a social adventure.

It is impossible to list all the students over the 100 years of kinesiology and physical education, but this chapter attempts to present some of the instructors. We begin with the 14 administrative leaders. Education professor James Dale, as Chairman of the executive committee of the MSPE under the Teacher Education Committee, was technically the first head of the unit. He was an ardent supporter of Ethel Mary Cartwright (see Chapter 3) whose

energy was largely responsible for the early survival of the school. Each of the leaders, and their accomplishments, has been noted at the appropriate juncture in the previous chapters.

Instructors and researchers since Frederick Barnjum, 1862, are then presented. The list of over 100 was generated from studying the biographies of McKenzie, Cartwright, Lamb, consulting calendars and annual reports of the University and Department, and reading with great interest the annual Alumni Newsletters from 1924-1970 and 1989-2000. Each person is presented with his/her years of service, courses taught, and major awards received. Calendars, annual reports, or Newsletters are not infallible, and there are inconsistencies over the years. For example, in some McGil calendars, the instructors of specific courses are listed, but in many others they are not. Terminology also changed over the 100 years. From 1920-1950 full-time instructors were often appointed and listed in calendars as Assistant Physical Directors. This title meant that they instructed a variety of physical activities in the required physical education program, but the specific activities were not often mentioned. Intentionally, there was no attempt to "update" terminology. Thus, Winona Wood remains the Chairman

The first challenge in creating this inventory of people was how to deal with members of Athletics and Recreation. All were included prior to 1948 because the athletics program was a component of the first Department of Physical Education. After the two units separated, those individuals who had responsibilities in both units remained in the inventory. Those who were hired exclusively by the Department of Athletics, Physical Education, and Recreation after 1948 are not included.

Another decision was made not to list part-time instructors. The Department has depended upon as many as 30 people a year to teach selected courses, particularly the physical activity courses. The knowledge and enthusiasm of "part-time" instructors has been vital to the quality of the program since its inception in 1912. Many came from Athletics and Recreation or were students in the graduate program. On regular occasions the Department has sought their input regarding the physical activity courses and attempted to create more efficient lines of communication between these instructors and pedagogical professors. The current Department of Kinesiology and Physical Education could not maintain its operation without these committed part-time individuals, but their numbers are in the hundreds since 1912.

Administrative Leaders

Professor James A. Dale (photo not available)
1912-1920: Chairman, Executive Committee of MSPE

Dr. Arthur Stanley Lamb 1920-1948: Director, Department of Physical Education 1948-1949: Director, Department of Athletics, Physical Education, and Recreation



Dr. John B. Kirkpatrick 1948-1957: Director, School of Physical Education

Professor David Munroe 1957-1958: Interim Director, School of Physical Education





Professor Winona Wood 1958-1963: Chairman, Division 6, Institute of Education

Dr. Robert E. Wilkinson 1965-1977: Chairman, Department of Physical Education





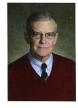
Professor Douglas R. Riley 1977-1982; 1983-1986: Chairman, Department of Physical Education

Dr. Graham I. Neil 1982-1983: Chairman, Department of Physical Education



Dr. A. E. (Ted) Wall 1986-1990: Chairman, Department of Physical Education

Dr. Greg Reid
1990-1992; 1993-1999:
Chairperson, Department of Physical
Education
2005-2007: Interim Chairperson,
Department of Kinesiology and
Physical Education





Dr. David L. Montgomery 1992-1993: Interim Chairperson, Department of Physical Education





Dr. René Turcotte
Fall 2007; 2012—: Chairperson,
Department of Kinesiology and
Physical Education

Dr. Theodore Milner 2008-2012: Chairperson, Department of Kinesiology and Physical Education



Academic Staff

Elnor Adams (photo not available) 1942-1943: Instructor

George Andrew 1960-1965: Instructor and anatomy demonstrator





Dr. Ross Andersen 2007 —: Physical activity and health, exercise physiology Canadian Research Chair

Dr. Dominique Banville 1996-1999: Teaching methods, curriculum development, evaluation of human performance, volleyball, badminton, aquatics





Carolyn Barnes 1970-1975: Movement education and dance

Frederick S. Barnjum 1862-1888: First McGill instructor of gymnastics/physical director for men



Helen O. Barnjum (photo not available) 1889-1895: First McGill instructor of gymnastics for women/physical director for women

Patricia Barton (photo not available) 1963-1965: Instructor in elementary methods



Dr. Gladys Bean

1943-1983: Instructor of administration in MSPE, intramurals, swimming and diving coach, began synchronized swimming program at McGill Last Director of Women's Athletics, Physical Education, and Recreation at McGill

Last Director of Women's Athletics, Physical Education, and Recreation at McGill 1976-1983: Assistant Director of Athletics (after men's and women's departments were merged). Tait McKenzie award from Canadian Association for Physical Education, Health, and Recreation

C. R. S. Blackstock (photo not available) 1947-1949: Instructor Tait McKenzie award from Canadian Association for Physical Education, Health, and Recreation

Dr. Gordon Bloom 2000 —: Sport psychology, teaching methods, sport and society



D. J. Bowie (photo not available) 1932-1935: Parks and playground

Ethel Mary Cartwright
1906-1915; 1916-1927
Sixth instructor of gymnastics for women, Instructor in theory of physical education
class management and teaching, history, practice teaching.
Member of the chartered Society of Massage and Remedial Gymnastics.
Tait McKenzie award from Canadian Association for Physical Education, Health, and Recreation



Brian Cleary (photo not available) 1965-1967: Elementary school methods, gymnastics.

Len Cooper (photo not available) 1963-1964

Joan Coster (photo not available)
1915-1916: Gymnastics instructor for women during
Cartwright's war duty

John Chomay 1968-1990: Organization and administration, basketball, student advisor





Dr. Julie Côté 2003—: Biomechanics, anatomy, work place ergonomics

James A. Dale (photo not available) 1912-1920: Pedagogy, history of physical education



Dr. Jacques Dallaire 1980-1986: Exercise physiology and biochemistry, summer activities



1976-1977: Sport Psychology



Dr. Margaret (Peggy) Downey 1990-2005: Creative and folk dance, pedagogy, teaching methods, curriculum development, analysis of instructional behaviours, psychology of motor performance



Ruth Duncan 1952-1962



Dr. Ben Dyson 1993-1996: Pedagogy, rugby, volleyball, outdoor education

Dr. Louis Elfenbaum (photo not available) 1969-1971: First-Aid, care and prevention of athletic injuries, anatomy and physiology, tests and measurements

Lilian Norton Evans (photo not available) 1895-1898: Second instructor of gymnastics for women

Hav Finlay 1923-1957: Soccer and gymnastic coach, assistant physical director, gymnastics, first male graduate of the MSPE 1926



Stuart Forbes (photo not available) 1923-1949: Athletics Manager

Margaret G. Finley (photo not available) 1938-1939: Instructor in remedial gymnastics and message

Elizabeth R. Fotheringham (photo not available) 1904-1906: Fifth instructor of gymnastics for women

Miss C. L. Gates (photo not available) 1937-1940: Visiting lecturer MSPE



Dr. Enrique Garcia 2005 -: Curriculum development, health and lifestyle education, physical activity and health, health education

Dr. Michael Greenisen 1973-1979: Scientific principles of athletic training, kinesiology, biological foundations, physiology, athletic training, summer activities



May Hamilton (photo not available)

1898-1899: Third instructor of gymnastics for women

Heneage Hancock (photo not available) 1925-1930: Remedial gymnastics and massage,

Dr. Fred W. Harvey (photo not available)

individual gymnastics and massage

1905-1939: Kinesiology and applied anatomy,: anthropometry remedial gymnastics and massage, medical director of physical training, university medical officer following McKenzie

Margaret Harrington (photo not available) 1952-1953

Ruth Harvey (photo not available)

1925-1939: Theory in physical education, class management and teaching, practice teaching, assistant physical director for women, dance, gymnastics, games and athletics

Dr. William Harvey 2006—: Pedagogy, adapted physical activity, teaching methods



Elsie May Heathcote (photo not available)

1925-1936: Physical training

Dr. Russell Hepple
2011 —: Exercise physiology, physical
activity and aging



Jesse S. Herriott (photo not available)

1927-1939: Physical director for women following Cartwright. Theory of physical education, history, gymnastics, dancing

Vendla Holmstrom (photo not available) 1899-1904: Fourth gymnastics instructor for women

S. Holtze (photo not available) 1932-1933: Danish gymnastics Dr. T. Blaine Hoshizaki 1980-1994: Biomechanics, anatomy, wrestling. Supervisor of first Ph.D. graduate



Dr. Dennis Jensen

2011 —: Exercise and respiratory physiology, pathophysiology William Dawson Research Scholar Award, McGill

Mr. W. Jacomb (photo not available) 1904-1912: Physical director for men following McKenzie

Alice Joedicke (photo not available) 1944-1947: Physical training instructor in the school for teachers, Macdonald College

Joan Johnstone 1956-1960: Physical training instructor in the school for teachers, Macdonald College



Margret Kindle (photo not available) 1935-1939: Physical training

Dr. Vassilis Klissouras 1967-1982: Anatomy, physiology, ergo-physiology





Dr. Arthur Stanley Lamb

1912-1949: Theory in physical education, class management and teaching, playground problems, exercise physiology, organization and administration, sports and activities, anatomy and physiology, physical director of gymnastics.

1920-1947: Director of Department of Physical Education

Tait McKenzie award from Canadian Association for Physical Education, Health, and Recreation Fellow, American Academy of Physical Education

Jack G. Lang (photo not available)
1936-1940: Visiting Lecturer in MSPE
Tait McKenzie award from Canadian Association for
Physical Education, Health, and Recreation

Shirley Lister-Piercy
1985-1986: Outdoor education,
aquatics





Dr. Todd Lougheed 2003-2005: Sport psychology

Queenie MacDermot (photo not available)
1944-1945: Lecturer

Prof. MacDonald (photo not available) 1944-1945: Personal, community, and school health **D. Edgar MacLachlan** (photo not available) 1947-1949: Assistant professor physical education



Dr. Dan Q. Marisi 1971-1998: Motor learning and performance, measurement and evaluation, martial arts, sport psychology, research methods

Mrs. H. A. McKean (photo not available) 1930-1944: Remedial gymnastics



Dr. R. Tait McKenzie1890-1905: Instructor in gymnastics and physical culture; assistant demonstrator of anatomy; medical examiner
Fellow, American Academy Physical Education

B. MacTier (photo not available) 1969-1971: Visiting Lecturer

Dr. John Meagher (photo not available) 1951-1957: Lecturer in MSPE Tait McKenzie award from Physical and Health Education Canada



Dr. Theodore Milner
2008—: Motor control, motor
behaviour and disability
2008-2012: Chair of Kinesiology and
Physical Education

Dr. David L. Montgomery 1974-2004: Physiology, exercise physiology, scientific principles of athletic training, physiological assessment in sport, track and field, ice hockey





Iveagh Munro

1939-1966: Physical director for women, assistant physical director in physical training, assistant physical director of the MSPE. Personal, community, and school health, principles of physical education, physical activities, elementary and secondary methods.

Honor Award from America Association for Physical Education, Health, and Recreation.

Tait McKenzie award from Canadian Association for Physical Education, Health, and Recreation.

James Naismith 1888-1890: Instructor of gymnastics for men





Dr. Graham I. Neil

1970-2002: Sport psychology, social behaviour and sport, motor learning, summer activities, gymnastics, team handball

1982-1983: Chair, Department of Physical Education 1989-1981: Associate Dean, Faculty of Education





Emanuel Orlick (photo not available) 1940-1952 Tait McKenzie award from Canadian Association for Physical Education, Health, and Recreation

Dr. Caroline Paquette 2012—: Motor control, biomechanics, aging





Dr. David Pearsall 1995 – : Anatomy, biomechanics, gymnastics, track and field

Dr. Hélène Perrault

1984 – : Cardiorespiratory physiology, exercise physiology
1999-2005: Chair of Kinesiology and Physical Education
2006-2008: Associate Provost
(Budget and Planning)
2008 – : Dean, Faculty of Education



Charles B. Powter (photo not available)

1925-1930: Instructor in organization and administration, sports and activities, practice teaching

Dr. Dilson Rassier
2005—: Exercise physiology, research methods,
nerve-muscle exercise response
2010-2011, 2012—: Associate Dean, Research, Faculty Education
William Dawson Research Scholar Award, McGill





Dr. Greg Reid

1973-2012: Community recreation, elementary school methods, adapted physical activity, history, motor development, aquatics, and summer activities 1990-1999; 2005-2007: Chair, Department of Kinesiology and Physical Education Fellow, American Academy of Kinesiology and Physical Education



History, curriculum development, volleyball, summer activities, sailing 1977-1986: Chair, Department of Physical Education





Dr. Paul Robinson 1971-1973 Biological foundations, kinesiology

Howard R. Ryan 1948-1958 Assistant professor of physical education, intramurals





Dr. Catherine Sabiston 2007-2012 Exercise and health psychology, research methods, sport psychology, physical activity psychology Chercheur Étoile (Research Star) Quebec 2010

Christine Seidl
1992-1993
Adapted physical activity,
administration of physical education,
principles and curriculum of physical





Zerada Slack 1928-1939 Assistant physical director for women, swimming, track and field

Frank Shaughnessy 1912-1927 Football and hockey coach, instructor in sports and activities





Dr. Gary Sinclair 1969-1971 Psychology of motor performance, volleyball

Alicia Spicer (photo not available) 1939-1940; 1942-1943 Physical training instructor at Macdonald College



Dr. Paul Stapley 2004-2011 Motor control, motor behaviour and disability, skill learning

Campbell Stewart 1979-1980 Biomechanics, anatomy, summer activities



Hilda Strachan (photo not available) 1926-1927 Instructor in story-telling, playground problems

Heidi Sveistrup 1992-1993 Biomechanics, first aid, early childhood activities



Dr. Tanja Taivassalo 2005 — Exercise physiology, physical activity and aging, pathophysiology, research methods

Dr. Fred J. Tees (photo not available) 1926-1935 First aid

Beverly Thompson (photo not available) 1928-1929 Coach ice hockey

Jeff Toward 1992-1994 Motor development, motor learning, sport psychology, early childhood activities, rhythmic activities





Dr. René Turcotte 1986—

Exercise physiology, measurement and evaluation, exercise leadership methods, cardiorespiratory exercise physiology, ice hockey, summer activities.

2007, 2012 -: Chair, Department of Kinesiology and Physical Education

Joyce Tyrrell
1940-1945
Physical activities, aquatics, history,
practice teaching



From Bloomers to Body Mass Index



F. M. Van Wagner 1920-1951

Track and field coach, basketball coach, management and teaching, organization and administration of physical education, camp course, gymnastics.

Tait McKenzie award from Canadian Association for Physical Education, Health, and Recreation

Jacques Vanden Abeele (photo not available) 1965-1966





Dr. Vassilos Vardaxis 1993-1995 Biomechanics, anatomy, first aid

Thelma Wagner 1939-1966 Assistant physical director for women, modern dance, gymnastics



Ethel Wain (photo not available)

1922-1936

Assistant physical director for women, theory in physical education, class management and teaching, track and field, gymnastics, dance, practice teaching

Dr. A. E. (Ted) Wall

1967-1973; 1975-1976; 1986-2002

Community recreation, elementary and secondary methods, skill learning and expertise, adapted physical activity, summer activities, wrestling 1986-1990: Chair, Department of Physical Education 1991-1998: Dean, Faculty of Education

Student research prize established in his honour: Active Living Alliance for Canadians with a Disability





Jennifer Wall 1965-1990

Foundations of movement education, creative dance, curriculum and instruction, elementary and secondary methods, lacrosse

Honour Award, Canadian Association for Physical Education, Health, and Recreation

Margaret (Peggy) Walker 1954-1958: 1960-1985

First appointed as instructor and basketball coach in Athletics; taught curriculum and instruction, athletic training for women, swimming, basketball, ski school

and camp course



Arthur Walsh (photo not available)

1918-1925

Physical Director, Department of Physical Education for Men

Jane F. Wardle

1975-2004

Movement education, educational gymnastics, elementary school teaching methods, student teaching supervision

Distinguished service award, Canadian Association of Health, Physical Education, Recreation and Dance





Dr. James H. Widdop 1960-1970 Elementary achool teaching methods, gymnastics, tests and measurements

Mary (Varey) Wilkinson 1947-1951 Instructor in physical education, Macdonald College





Dr. Robert E. Wilkinson

1948-1986

Instructor in observation and classroom practice, elementary and secondary teaching methods, school and community programs, squash and badminton, summer activities, motor learning. 1965-1977: Chair, Department of Physical Education

Jean Wilson (photo not available) -1966

Georgina Wood (photo not available)

1920-1925

Assistant physical director for women, secondary teaching methods, school and community programs



Instructor in school and community programs, secondary teaching methods, folk dance 1958-1963: Chair of Physical Education



Support Staff Office staff



Kay Cresswell 1925-1967 Princpal secretary for Dr. Lamb

Thelma DeGravina-Solon 1971-1978 Administrative Assistant Nadine Chudobey-MacPherson

y-MacPherson 1978-1988 Secretary



Andrée Ippersiel

Administrative Assistant

1998-2001

Christine Zilberman 1978-1998 Administrative Assistant

Erin O'Brien 1988-1991 Secretary Angelica de Angelis 1988-1990 Secretary

Secretary

Toby Cape



Maricruz Garcia-Rejon 2002 — Administrative Assistant





2002

Nada Abu-Merhy 2007— Administrative Assistant-Student Advising

Ana Chicoine 2003-2007 Student Advisor



Eileen Leduc 1992 — Secretary and graduate program co-ordinator

Tammy Hughes 1991-1998 Secretary

Equipment Managers

John Tymyc 1970-1990

Stephane Leblanc

1992 —

Department Technicians

 Jan Chumsky
 Kevin Whittaker

 1988-1993
 1998-2002

Martin Croce Sanjeev Panigrahy 1993-1998 2002-





n 2012 the Department of Kinesiology and Physical Education celebrated its 100th birthday with a number of events throughout the year. The motto of the year was actively moving forward (Figure 12-1) which recognized the past and predicted the future. The Honorary Chairpersons for the celebratory activities were Mary Wilkinson, one of the first three students to receive the B.Sc. degree in physical education in 1946, and Michael Babcock, 1986, coach of the Detroit Red Wings. The activities started in the first week after the Christmas and New Year break with the first Bloomberg-Manulife Prize for the Promotion of Active Health awarded to Dr. Steven Blair. His lecture argued that augmenting physical activity was really more important than decreasing obesity.



Figure 12-1: Actively Moving Forward Logo

A seminar series of three former graduates who pursued academic careers was initiated by Dr. Randy Flanagan who spoke on February 17 about "The remarkable dexterity of the human hand: How does the brain do it?" He was followed by Dr. Glen Tibbits' presentation on "Cardiac contraction and sudden cardiac death: The role of troponin," March 30. The final presentation was by Dr. Bernard Jasmin on April 13 who addressed the topic of "Exercise mimetics as potential therapeutic agents for Duchenne muscular dystrophy: How basic biology can lead to clinical trials."

On the lighter side of things, the students rallied at a February ice hockey game and enjoyed some wine and cheese, before cheering on the Redmen. At convocation on June 6, a special 100th anniversary cake was shared with 39 B.Ed. Physical and Health Education and 56 B.Sc. Kinesiology graduates outside the Bell Centre, home of the Montreal Canadiens (Figure 12-2). Convocation 2012 was also the opportunity to present Dr. Carl Cotman with an Honorary Degree in recognition of his outstanding research demonstrating the positive effects of exercise on brain health and as a means to combat Alzheimer's disease.



Figure 12-2: 100th Anniversary Cake

Festive activities anticipated at Homecoming, October 2012, include a mini-museum of pictures, clothing, and awards; interactive activities in research labs; and Dr.Kerry Courneya presenting the Beatty Memorial lecture, *Physical activity in cancer: A field in motion*. The annual Beatty lecture is one of the most prestigious lectures at McGill. Finally, at the conference of the Association of Physical Educators of Quebec in November, a special tribute to teachers of physical education will take place.

The previous chapter was titled "People Who Care" to underscore the necessity of talented, hardworking and committed individuals in higher education for teaching, research, and service to the university and community. They have existed in the Department since

1912. Current staff members were included in Chapter 11, but in this chapter they receive the last word, since they represent the future. Thirteen full-time faculty members were requested to introduce themselves, as well as two part-time staff who have made particularly effective and long-standing contributions to the undergraduate program of the Department. Each was then encouraged to speak about where we will be in 50 years' time. It is obvious from their remarks that the Department of Kinesiology and Physical Education will be actively moving forward.

Ross Andersen

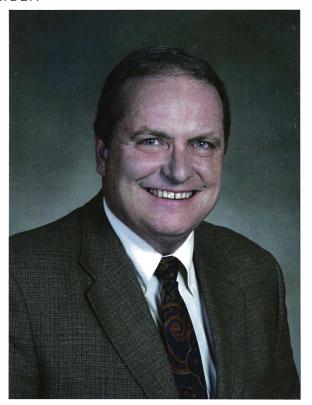


Figure 12-3: Ross Andersen

Dr. Ross Andersen grew up in Montreal and completed his B. Ed and his M.A. in the Physical Education Department at McGill. He pursued his Ph.D. in exercise physiology at Temple University and completed his Post-Doctoral Training at the University of Pennsylvania, School of Medicine. He then joined the faculty at the Johns Hopkins School of Medicine in

Baltimore, where he served for 12 years. In 2007, Ross returned to McGill University as the Tier 1 Canada Research Chair of Physical Activity and Health. He teaches several courses at McGill including: Physical Activity and Health (Undergraduate), Bioenergetics (Graduate) and Research Methods (graduate). Currently, there are several Masters', Ph.D. and Post-Doctoral fellows working in the Andersen Lab. In 2008, Dr. Andersen began building a new state-of-the-art health promotion center in the old Gymnastics' Gym (Room 101 Currie). This new lab has incredible facilities for teaching and training students on how to help sedentary individuals and many patient populations adopt more active lifestyles. Much of the focus in this new lab is to help overweight and obese adults and children develop exercise programs. His work is often featured in the media, and he tries to conduct work that helps influence health policy in Canada and around the world. Dr. Andersen had published over a hundred research papers as well as three textbooks. In his leisure time, he remains an avid alpine skier and cyclist and is passionate about fly-fishing.

The Future

In the next 50 years we will seek ways to re-engineer physical activity back into our daily routines. We have seen a dramatic decline in incidental physical activity over the past 50 years. Passive commuting, elevators, labour-saving devices, sedentary careers, and excessive television watching are all associated with reduced energy expenditure at the population level. This partially explains why we are seeing higher rates of overweight, obesity, hypertension, and diabetes in both adults and children in most countries around the world. Strategies to help people to become less efficient in their daily lives will become a public health priority. We will also need exercise scientists and physical educators to become strong advocates for all students to continue receiving physical education in both elementary and high school. In addition, physical education will need shifts in focus with a stronger emphasis on teaching both children and adolescents strategies to eat well and develop plans to remain active throughout their adult years. In the same way that we gradually eliminated smoking in public places, the next 50 years will see local neighbourhoods engineered with sidewalks and lighting to enhance walkability and neighbourhood safety. We will also see increased access to healthier fresh fruits and vegetables in local stores, school cafeterias, and fast-food restaurants. In short, the next 50 years will focus on reducing the toxicity of our environments and will begin nurturing strategies that promote active living and healthy eating.

Gordon Bloom

Born and raised in Toronto, Gordon Bloom earned his Ph.D. degree from The University of Ottawa in Sport Psychology and has been working in the field for 20 years. Gordon worked at California State University, Fresno, prior to his appointment at McGill in 2000. He is currently director of the McGill Sport Psychology Research Laboratory¹, which focuses on applied and theoretical research in sport, physical activity, and health promotion. The goal of the applied research program is to help athletes and coaches achieve personal development and performance success. His primary area of research examines the knowledge, leadership skills, and behaviours employed by both elite and youth sport coaches that, in turn, create a positive environment for excellence and participation in sport. This research often involves strategies employed by coaches in terms of leadership



Figure 12-4: Gordon Bloom

and coaching styles, or team building techniques. Another stream of research investigates various social and psychological factors affecting environments of concussed athletes. Concussion incidence and prevalence in sport have increased steadily over the past two decades. Thus, Dr. Bloom added a focus on the psychological effects of concussion and how it impacts rehabilitation and return to sport. Aside from his teaching and research responsibilities, Dr. Bloom is a current member of the Canadian Sport Psychology Association and has taught athletes from Olympic, professional, and amateur levels how to use mental skills to accelerate their level of performance in sport and life. Gordon still competes in ice hockey, ball hockey, softball, and tennis, and coaches his children in hockey, soccer, and baseball during his leisure time.

The Future

In the next 50 years, the disciplines of both Kinesiology and Physical Education will serve a more prominent role in helping people improve the quality of their lives. Individuals from these professions will become more ingrained in the health care system by integrating sound theoretical research into various clinical practices. For example, the need for qualified and competently trained coaches will grow to ensure that athletes of all age and ability levels are receiving the best physical and emotional quidance. Part of this change will involve a call for coaches with training in physical education pedagogy and sport psychology, where individuals such as McGill graduates Peter Smith (Head Coach McGill Martlets hockey), Chantal Vallée (Head Coach Windsor University Lancers basketball), and Mike Babcock (Head Coach Detroit Red Wings, NHL) become the norm instead of the exception. Another trend will be multidisciplinary collaboration, particularly with injured athletes. For example, one day a concussed athlete may have the benefit of receiving guidance and support from a team of specially trained individuals who can help meet the different contemporary needs facing athletes. More specifically, the team will include a sport medicine doctor to deal with the physical aspects of the injury, a psychologist to deal with the emotional trauma and depression resulting from the injury, and a sport psychology specialist to deal with issues such as isolation from teammates and fear of return to play and re-injury. Overall, our discipline will continue to grow and play a greater role in helping individuals lead healthier and more productive lives.

Julie Côté

Originally from Québec City, Dr. Côté completed her undergraduate and Master's degrees in biomechanics at the University of Wisconsin—Madison's Department of Kinesiology,

while competing in track as a scholarship athlete. She then moved to Montreal to pursue a doctoral degree in biomedical engineering at the Université de Montréal, studying the biomechanics and control of multijoint tasks. She trained at the post-doctoral level at Ste. Justine Hospital, developing techniques to model postural stability in children with postural disorders. As associate professor, she is currently a research scholar from the FRSQ, and the Department's undergraduate program director. Dr. Côté's current research focuses on



Figure 12-5: Julie Côté

the mechanisms of musculoskeletal pain and injuries, in particular those related to repetitive movements. Muscle fatigue is a known risk factor for sports, as well as work-related injuries. The injury mechanism can also be exacerbated by inadequate or prolonged static postures. From a fundamental perspective, Dr. Côté's research program seeks to understand how the human body adapts and coordinates its movements and posture in dealing with repetitive motion-induced fatigue. One common task that combines constraints of posture and repetitive movements is computer work, which is associated with high prevalence of

pain and absenteeism, especially in women. Part of Dr. Côté's work seeks to identify the time course of fatigue and pain development and to adapt work schedules and postures to prevent injury development. Kinesiologists are the human movement specialists; through teaching biomechanics and ergonomics courses, Dr. Côté contributes to the formation of kinesiologists who can perform such interventions.

The Future

It will be important to better incorporate, and promote a more informed use of science and technology to improve health; kinesiologists and physical educators will need to develop their repertoire of means to make effective health interventions. For instance, many technological and online tools (e.g. games, applications) are marketed as effective means of losing weight and leading a healthy lifestyle. Faced with a multitude of tools, one role of kinesiologists and physical educators will be as advocates for optimal use of these tools and educators on the scientific merits of such tools. Similarly, as researchers, we will need to deploy more efforts to insure that the knowledge that we develop can be used optimally. "Train the consumer as a scientist"? We will also have to more effectively include physical activity (or minimize physical inactivity) within our busy lifestyle (e.g. work). With recent findings showing that high exercise intensity is not always essential to promote health, we could develop more creative ways to create practical opportunities for everyone to incorporate physical activity into daily lives. Many of us spend many hours a day in a static position, whether in the car or in front of the computer or TV. As such, employers are increasingly recognizing that a work environment that better promotes movement may be an effective way to decrease costs related to absenteeism. Kinesiologists and physical educators should be trained to "train the worker as an athlete" and to consider more creative uses of daily life environments to promote active living.

Enrique García

Originally from Spain, Dr. Garcia has degrees from his home country and Canada. Guided by an ecological perspective that acknowledges the importance of multiple levels of the person-environment system, an important part of Dr. Garcia's recent work has focused on the promotion of physical activity and healthy living habits in community- and school-based settings. Typically, this work uses a participatory approach that involves intended knowledge users in the research process and the dissemination of findings. An example of this is

Dr. Garcia's work with the well-established Kahnawake Schools Diabetes Prevention Project (KSDPP) to develop and evaluate the physical activity component of an existing school wellness policy in collaboration with relevant stakeholders in the aboriginal community of

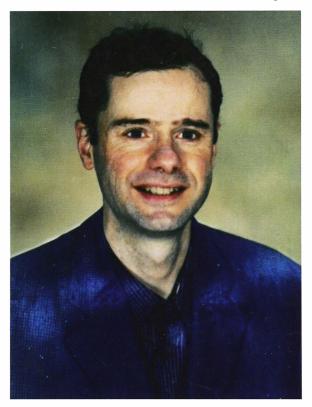


Figure 12-6: Enrique Garcia

Kahnawake, in the south of Montreal. In a related vein, Dr. Garcia is currently collaborating with colleagues from the University of Zaragoza in Spain in the evaluation and analysis of data from "Health Footprint," a whole-of-school collaborative intervention to promote adolescent physical activity. A second major area of focus of Dr. Garcia's recent work has been adolescent development and socialization in sport, with a particular interest in the interrelated role of interpersonal and activity contexts of participation. Toward this end, Dr. Garcia and his colleagues have recently developed and provided initial evidence of validity of two multidimensional instruments intended to assess, respectively, interpersonal and activity-based features of the sport environment that may impact upon adolescent motivation and sport participation. In his spare time, Dr. Garcia enjoys tennis, cycling, and cross-country skiing.

The Future

The Department of Kinesiology and Physical Education at McGill University is a dynamic and thriving environment where teaching and research are highly valued and inform each other. The Department offers a variety of undergraduate and graduate programs that are responsive to the evolving needs of society and attuned to developments in the field. Professors, graduate students, and post-doctoral researchers conduct cutting edge research that addresses the bio-psycho-social dimensions of physical activity, all of which are equally valued, along with their relations. An atmosphere of respect, open communication, collaboration, and collegiality characterizes the interactions among Department members, students, and staff.

William Harvey

Born and raised in Montreal, Dr. William Harvey completed his Ph.D. in the Department of Kinesiology and Physical Education at McGill University. He was appointed to a faculty position in 2006 after a 17-year work experience as a physical educator and department head at the Roberts Recreation Center of the Douglas Mental Health University Institute. He is currently director of the Choices in Health, Action, Motivation, Pedagogy, and Skills (CHAMPS) physical activity laboratory where his research program focuses on selfdetermination and self-regulation by exploring these constructs through the physical activity experiences of persons with mental health problems. Current mixed-methods research projects have investigated physical activity of people with attention-deficit hyperactivity disorder and developmental coordination disorders in school, clinic, community, and home. A unique service-learning project has sparked a second line of research to investigate instructional effectiveness and treatment interventions for children with behavioural problems. A third research stream explores the perceptions and professional development of physical education teachers. Dr. Harvey teaches graduate and undergraduate students in both adapted physical activity and physical and health education pedagogy. He currently sits on the Board of Directors of Physical and Health Education Canada and is a member of the North American Federation of Adapted Physical Activity. William enjoys spending the majority of his leisure time with his family and playing golf—a sport that has, and should continue to, haunt him for many years to come!



Figure 12-7: William Harvey

The Future

Sitting at the desk of R. Tait McKenzie, one wonders if the fields of Kinesiology and Physical Education will be as prophetic as this famous McGillian of 70 years ago. Our profession is wading into the exciting world of interdisciplinary research and practice. As a result, one day our researchers, clinicians, and teachers will be led to a unified vision of human development, health and well-being across the lifespan. The daunting task of translating research into practice may create the sparks that challenge us to develop close, iterative, and much-needed relationships between research and practice. The challenge to "actively moving forward" will be the inclusion of all people in physical activity. For example, individuals with mental health problems will overcome many societal, attitudinal, and personal barriers to participate fully in physical activity and exercise programs in our communities. Further, a unified vision of human development, health, and well-being will also enable the children of our world to overcome the obesity epidemic and sedentary issues that currently plague our society. In turn, our clinical kinesiologists and physical and health education

specialists will become increasingly more relevant in a fast paced, ever-changing world. For these changes to occur, our physical activity delivery systems will need to adapt to societal needs that take into account age, gender, poverty, and cultural diversity. Thus, in 50 years, our profession will grow into a strong entity where early intervention, disease prevention and health promotion become the cornerstones of health and well-being research and practice, much like R. Tait McKenzie envisioned so many years ago.

Russell Hepple

Dr. Hepple holds a primary appointment as an Associate Professor in the Department of Kinesiology and Physical Education at McGill University where he teaches, and a research appointment at the Royal Victoria Hospital as a member of the McGill University Hospital



Figure 12-8: Russell Hepple

Center, in the Department of Critical Care Medicine. He pursues questions relating to factors causing muscles to atrophy and lose their contractile function with aging and how this can be exacerbated by disease or attenuated by exercise training. His primary focus is the study of the so-called powerhouses of our cells, the mitochondria. He approaches mitochondria from the perspective of a physiologist who has been strongly influenced by exercise physiology. His athletic background explains his interest in exercise physiology. As new immigrants to Canada from England, his parents enrolled him in the quintessentially Canadian sport of ice hockey. Sadly, he could not skate to save his life, and rather than risk further embarrassment, his parents threw him into water. He swam competitively until 15 years and held some provincial records. Unfortunately, he was born a year after Alex Baumann (1984 Olympic medal winner) and never managed to break any of his Canadian records. As a Ph.D. student, he became a competitive triathlete, and to his credit, he continues to run and swim today. His experience as an athlete drew him into exercise physiology in an effort to understand how muscle adapts to various stresses, including that of exercise. He has a B.Sc. in Physiology from the University of Saskatchewan and a M.Sc. and Ph.D. from Toronto. Postdoctoral training occurred at the University of California, San Diego. He joined McGill after 11 years at the University of Calgary. He has enjoyed the interaction between researchers at McGill who have an interest in muscle from diverse perspectives spanning the whole spectrum of molecular biology, medicine, and exercise physiology.

The Future

The biggest challenge will be having kinesiology graduates receive a professional designation that permits them to become part of the health care system. It is well known that exercise is the best medicine, but for reasons that escape logic (but are likely explained by good old politics), exercise is not part of medical curriculums. We need to move to a model where Kinesiology trains exercise specialists who will provide the knowledge across the full spectrum of exercise: from assessment and prescription to behavioural counselling to help people fit exercise into their lives. These people should be part of the health care system in a very similar way as physiotherapists. There should also be an exercise component in medical school curriculum that would be taught by kinesiologists so that physicians have a foundation in recommending exercise to their patients. On the research side of things, there will continue to be research into the understanding of the mechanisms by which we can promote health through active lifestyle and other lifestyle choices (e.g., nutrition). It would be satisfying to see the lines between kinesiology and medical sciences become further blurred to the point that a new discipline emerges that integrates basic molecular biology of muscle

into exercise physiology. This would be a different kind of "interdisciplinary research" than that which usually comes from the tongues of university administrators, but is every bit as relevant (and likely more so) in advancing this type of research.

Dennis Jensen

Dennis Jensen has been an assistant professor of Kinesiology and Physical Education at McGill University since January of 2011. He is Director of the Clinical Exercise and Respiratory Physiology Laboratory, McGill University; Associate Member of the Respiratory Epidemiology and Clinical Research Unit, Department of Medicine, Montreal Chest Institute; and Medical Scientist of the Research Institute of the McGill University Health Center. In 2001, he graduated with a Bachelor's (Honours) degree in Physical and Health Education from Brock University. He then obtained a M.Sc. (2003) and Ph.D. (2008) in Exercise Physiology from the School of Kinesiology and Health Studies at Queen's University. Finally, he completed a Post-Doctoral Research Fellowship (2010) in Clinical Exercise and Respiratory Pathophysiology in the Department of Medicine at Queen's University. Dr. Jensen's research centers on exercise and health science, with a particular focus on better understanding the mechanisms of activity-related breathlessness and exercise intolerance in variants of health and in patients with chronic cardiopulmonary disease. He currently holds a Chercheurs-Boursiers Junior 1 Award from the Fonds de recherché Santé — Quebec and a William Dawson Research Scholar Award at McGill, Dr. Jensen teaches courses in exercise and respiratory physiology/pathophysiology in the Departments of Kinesiology and Physical Education, Physiology and Medicine at McGill.

The Future

Enthusiasm for the discipline of "Systems Biology," particularly as it relates to physical (in) activity and its association with morbidity and mortality in patient populations, has increased dramatically over the past 10-15 years. Generally speaking, systems biology addresses the integrated and interacting network of genes, proteins and biochemical reactions that are ultimately responsible for an organism's structure and function. Clearly, there is huge potential for the discipline of systems biology to contribute importantly to our ability to better diagnose and treat disease. Attainment of this altruistic goal, however, will not be met (at least not anytime soon) unless physiologists and molecular biologists recognize the need for a collaborative partnership (a.k.a. "Translational Research"); that is, physiologists cannot do it alone, and molecular biologists



Figure 12-9: Dennis Jensen

cannot do it alone. Establishment of such collaborations is essential to the transfer of information from bench to bedside and back. Kinesiologists, particularly exercise physiologists, are ideally positioned to drive the proverbial "Translational Research" bus into the future and beyond.

Theodore Milner

Dr. Theodore Milner has been Professor in the Department of Kinesiology and Physical Education at McGill University since 2008. He held academic positions in the School of Kinesiology at Simon Fraser University from 1992-2007 and the Institut de génie biomédical at Université de Montréal from 1986-1992. He was a post-doctoral fellow in Brain and Cognitive Science at the Massachusetts Institute of Technology from 1984-1986. He has a B.Sc. (Physics), M.Sc. (Physiology), and Ph.D. (Physiology) from the University of Alberta. His research is aimed at understanding how the human sensorimotor system functions in learning to control movement

of the body. This involves the study of both normal and dysfunctional control. He uses behavioural, physiological, and computational tools to explore how this knowledge can be translated into an effective rehabilitation strategy for patients suffering from movement disorders. His research addresses two basic questions. One is whether the activation of groups of muscles, rather than individual muscles, represents the fundamental mechanism for controlling body movement. Such a strategy would simplify the control problem faced by the central nervous system by reducing the number of ways in which a movement could be produced. The second is whether simple learning algorithms can explain how the central nervous system is able to iteratively improve performance with repeated practice. This has led to the development of a simple model for motor learning which can explain observed changes in muscle activation. The knowledge of how the brain controls movement is being applied to devising effective strategies for rehabilitation of motor function after stroke. Professor Milner teaches courses in biomechanics, motor control, and physiology.

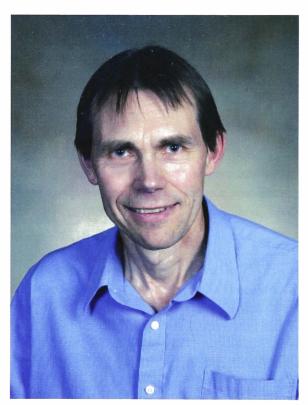


Figure 12-10: Theodore Milner

The Future

In the next 50 years, advances in knowledge about mechanisms of motor learning and neural plasticity will be used to improve the recovery of motor function following brain trauma or stroke and to limit the progression of motor impairment in disorders such as Parkinson's disease. This will involve brain-imaging studies to determine which functional connections in the brain have been affected by injury or disease and personalized therapy programs involving machine-assisted exercise and targeted brain stimulation to enhance activity in the network connections that are most likely to promote recovery of sensorimotor function.

Gordon Oliver

Gordon Oliver graduated from McGill in 1971 in the second to last Physical Education Diploma class and started to teach in Montreal immediately. After teaching for two years and attaining his permanent teaching certificate he returned to McGill for a B.A. majoring in Geography, becoming interested in the connection between outdoor pursuits (canoeing, rock climbing, kayaking, hiking, skiing) and educating students about the natural environment. He wanted to develop expertise in environmental education, thus focussing on environmental geoscience. In 1976 at Mountainview elementary school in Otterburn Park, he became part of a teaching team that had a very well developed outdoor education program. Oliver worked for the Department of National Defense Schools in Lahr West Germany from 1989-1992 and returned to McGill in 1996 for a Master of Education, focusing on environment education programs. In 2003, he was invited to become a part-time instructor in the Department of Kinesiology and Physical Education for one year. That one-year replacement lasted 10 years. He has retired from Mountainview and continues to work two days a week at McGill. He teaches four courses, games principles and practice 1 and 2, physical education methods, and winter outdoor activities. He also works as the coordinator for all student teaching field experiences and has served on the Board of Directors of Physical and Health Education Canada.

The Future

Our program at McGill must prepare physical and health education graduates to meet three main challenges: the obesity crisis, declining levels of physical activity, and classroom management. It is no longer sufficient to be a subject specific technician who focuses on skill development. We must prepare the students to be professional educators who participate

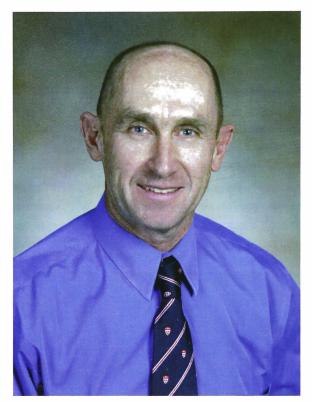


Figure 12-11: Gordon Oliver

actively as members of the educational team in developing school wide programs that will meet the needs of all children. Recent data indicates that nearly one-third of Canadian children are either overweight or obese. These numbers are increasing at an alarming rate. Our graduates must develop programs that will provide students with the knowledge and understanding that will allow them to make better nutritional choices for themselves. Young children spend more time in sedentary activities that ever before and this trend is increasing. As a direct result, children are not developing fundamental movement skills at an early age and therefore they cannot participate in more complex physical pursuits later in life. McGill physical education graduates must ensure that every child has the opportunity to participate in an activity that will become a lifetime pursuit. Variety in programming is essential. Finally, classroom management has been singled out as the greatest challenge for teachers in general, not just new teachers. We must provide our pre-service teachers with the most recent and up to date resources and strategies that will give them the confidence to develop and maintain a classroom management system that will lead to student success.

Caroline Paquette

Dr. Caroline Paquette is a new professor in the Department of Kinesiology and Physical Education, originally from the Laurentians, in the outskirts of Montreal. She has a B.Sc. and M.Sc. in Kinesiology from Laval University and trained in Rehabilitation Science for her Ph.D. at McGill, where she specialized in motor control of gait and posture in the healthy elderly and in stroke patient populations. She further pursued her training with a first postdoctoral fellowship at the Oregon Health and Science University where she developed expertise in the study of neurological patient populations with Parkinson's disease and Cerebellar ataxia. She then came back to McGill for a second postdoctoral fellowship with the Department of



Figure 12-12: Caroline Paquette

Neurology and Neurosurgery to gain expertise in brain imaging and brain stimulation. Using the latest technology in brain imaging and brain stimulation, she is currently setting up an innovative and unique laboratory dedicated to the study of brain structures involved in gait.

Her research focuses on understanding the mechanisms of gait and brain plasticity. Her goal is to use this basic knowledge on brain function during gait to develop effective preventive gait training programs that can be used by kinesiologists to help prevent age-related frailty and maintain autonomy and independence in the elderly and in neurological populations. Dr. Paquette teaches in the areas of motor control, aging, pathological populations, as well as biomechanics.

The Future

It is widely known that our Canadian population is aging. As our life expectancy rises, these demographic changes are already having profound repercussions on our economy through increase in acute and chronic care loads. One important aspect of aging is of course the decline in physical and cognitive functions. When such dedines are present, not only does it create major demands on our society as a whole, it also has direct devastating consequences for the aging individual by reducing quality of life. Declines in function, mobility, and independence with aging also deeply affect caregivers through increased burden of care. Research has clearly demonstrated that the benefits of physical activity can be substantial in many aspects of our lives and most importantly to older adults who can benefit physically, emotionally and socially from engaging in regular exercise programs. Therefore, our role as Kinesiologists over the next decades is to become leaders in preventive medicine. We are in a unique position to improve quality of life with advancing age and reduce the burden on our society through the development of training strategies and programs. Our goal should be to reverse and/or offset the effects of aging and increase the number of years with good quality of life through physical activity and health promotion programs. Our approach should be multidisciplinary ranging from basic mechanistic research that will contribute to the development of more efficient training programs to the development of policies aimed at shifting the view of our healthcare system from primary care to preventive medicine. Kinesiologists can potentially have considerable impact on delaying the consequences of aging and contribute to the reduction and cost control of our healthcare system.

David Pearsall

David Pearsall examines human biomechanics: the physical interaction of form and function. After obtaining his Bachelor degree in Physical and Health Education, he further studied Biomechanics (M.Sc.) and then Anatomy (Ph.D.) at Queen's University. He continues to both teach and research in these areas. His specific research interests focus on human locomotion such as walking and running on irregular terrains (e.g. over slopes, slippery



Figure 12-13: David Pearsall

surfaces, around or over obstacles); sport helmet impact properties, and sport equipment assessment, specifically in ice hockey (e.g. skate, sticks).

The Future

With current trends in low cost micro-sensors (e.g. GPS, accelerometer, camera, video, heart rate monitor, pedometer) and wireless connectivity with portable computer devices (smart cell phones, computer tablets), these sensors may well become common parts of clothing, helmets, balls, bats, clubs, shoes, joint replacements, etc. In conjunction with apps/software, these sensors will have growing practical applications such as feedback "coaching," monitoring, logging, and analyses of exercise practices, both for personal use and group teaching in the gym and on the field. With these tools in hand, much of the physics of sport and musculoskeletal assessment can be feasibly and practically used.

Hélène Perrault

Dr. Hélène Perrault is Dean of the Faculty of Education at McGill. Previously, she was the Associate Provost (Planning and Budgets) and has served as Department Chair, Kinesiology and Physical Education. Holder of a Ph.D. in Exercise Physiology (1983) from the Université de Montréal, she remains a Professor in the Department of Kinesiology and Physical Education and an Associate Member of the Department of Medicine Division of Respiratory Medicine of the McGill University Health Centre. She has also been a Professor in the Laboratoire de Bioénergétique Fondamental et Appliquée of the Université Joseph Fourier in Grenoble, France. Dr. Perrault pursued a research career in Clinical Exercise Physiology, first as a research associate with the Department of Cardiology and Respiratory Medicine of Ste. Justine Pediatric Hospital and since 2000 as a Medical Scientist in the Respiratory Division of the MUHC at the Montreal Chest Institute. She was amongst the first to use exercise as a means to advance knowledge on the physiological and functional limitations of children and young adults operated on for a congenital heart disease or suffering from cystic fibrosis, with the view to design appropriate guidelines for exercise prescription or therapeutic interventions. More specifically, her work targeted advancing knowledge on the effect of surgical repair of cardiac birth defects or chronic disease on cardiovascular regulatory mechanisms as well as on the heart-lung interactions. She has contributed to a large number of scientific publications and has supervised the work of numerous graduate students, focused primarily on the physiology and/or the functional repercussions of chronic heart or lung disorders. A past-president of the Canadian Society for Exercise Physiology Dr. Perrault has, and continues to foster academic and research collaborations between exercise sciences and medicine for health promotion, advancement of knowledge, and the development of therapeutic modalities and applications.

The Future

As a result of research from the last half century, physical activity had become a recognized and effective adjunct intervention to promote healthy aging or for the clinical management of chronic conditions or disease and has been accepted as an intervention for optimizing health outcomes. The research challenge for the decades to come will be to ensure that we refine this knowledge such that exercise can be prescribed in a way



Figure 12-14: Hélène Perrault

to modulate the biological responses for optimizing its effectiveness whether in health or disease. The professional challenge will be to ensure that our kinesiology academic programs build on strong biological and psychosocial disciplinary foundations to provide an integrated transdisciplinary approach to the prescription and supervision of exercise interventions.

Dilson Rassier

Dr. Dilson E. Rassier is the Associate Dean for Research in the Faculty of Education at McGill where he is also an associate professor in the Department of Kinesiology and Physical Education with associate memberships in the Departments of Physiology (Faculty of Medicine) and Physics (Faculty of Science). He holds a William Dawson chair at McGill.



Figure 12-15: Dilson Rassier

Dr. Rassier finished his undergraduate degree in Physical Education in Brazil in 1988. He pursued a Master's degree on Exercise Physiology (1991-1994, Brazil), after which he went to Canada to complete Ph.D. studies in Muscle Physiology (1994-1998) in the Faculty of Medicine at the University of Calgary. During his Ph.D. he performed basic and applied research looking at mechanisms of muscle contraction in healthy muscles and muscles affected by disease. After completing his doctorate and a period of teaching at universities in Brazil, he returned to North America where he underwent post-doctoral training in different laboratories in Canada and USA. Dr. Rassier directs the Muscle Physiology and Biophysics laboratory at McGill, which focuses on mechanisms of muscle contraction and regulation, using preparations that range from the single molecule to muscle cells. He has been awarded distinctions from the Canadian Institute of Health Research (CIHR) and Fonds de la Recherche en Santé Québec (FRSQ).

The Future

The field of muscle biophysics is changing rapidly with the advancement of new technologies that allow the investigation of mechanisms of contraction with a precision and depth never considered before. These technologies include laser trapping of single molecules, mechanical measurements in isolated sub-cellular structures (e.g. myofibrils) using nano-devices, live imaging of actin motility, and will shape the field in the next years. These experimental advances will enable scientists to deeply investigate the molecular and cellular mechanisms of contraction and force generation. Research in the field will test scientific incursions at the level of single molecules performing the most varying tasks; myosin molecules producing power-strokes and sliding actin filaments, troponin molecules changing their configuration upon binding of calcium ions, tropomyosin uncovering actin binding sites for myosin, among others. This reductionist approach will merge with applied science produced in the fields of muscle physiology and biomechanics, increasing our understanding on how molecular events lead to an amplified response of the muscular system. Such response is ultimately reflected in human movement and mobility.

Tanja Taivassalo

Dr. Tanja Taivassalo received a B.Sc. from McGill (1993) in biology where she developed a keen interest in the remarkable cellular "powerhouses" known as mitochondria. At the same time, she used her muscle mitochondria as part of the McGill Varsity Cross Country Running and Track and Field teams (1988-1993). Her long-standing passion for endurance sports is likely linked to genes and heritage as she was born in Finland, a country known for its love of nature, sauna, and Sisu. Her personal enthusiasm and belief in exercise led to a Ph.D. in Neurological Sciences based at the Montreal Neurological Institute. Her research assessed the safety and efficacy of exercise training in patients with mitochondrial DNA disorders, a genetic neuromuscular disorder with no known treatment. Dr. Taivassalo expanded her knowledge of cardiovascular physiology and molecular biochemistry in conditions of rare muscle metabolic diseases during post-doctoral studies at the Institute for Exercise and Environmental Medicine in Dallas, Texas. In 2005, she was thrilled to come full circle, joining the Department of Kinesiology and Physical Education, and bring forth her multidisciplinary expertise in neuromuscular disease and exercise science. Her current research program has two major lines of investigation: 1) understanding the nature of mitochondrial impairment and its repercussions at the level of physiological and functional disability in conditions of muscle

and other chronic disease; and 2) development of innovative exercise interventions that induce adaptive muscle responses to reverse or prevent disease or age-associated declines in physiological and functional ability. She teaches undergraduate and graduate courses in exercise pathophysiology. Dr. Taivassalo hopes to excite young minds about the power and potential of muscle mitochondria and adaptation to exercise!



Figure 12-16: Tanja Taivassalo

The Future

An emerging and important direction for Kinesiology is in the domain of clinical exercise physiology, which focuses on theory and application of physiological and psychobehavioural assessment, monitoring and management of various clinical populations as it relates to acute and chronic exercise. In today's society, given the prevalence of common chronic conditions such as cardiovascular disease, diabetes, obesity, and the dramatic increase in the aging population and lifestyle changes promoting physical inactivity, there is an urgent need for

Kinesiologists to apply their knowledge in this domain to improve the health and well-being of people along a continuum from healthy normative aging to advanced chronic disease. In fact, the Department is currently in the process of developing a specialized Clinical Exercise Practice stream, which will arm students with the most current and advanced knowledge in this domain through the expertise of our Faculty members within the Department in cardiorespiratory and muscle physiology, neuroplasticity and health behavior and motivation. This expertise will also introduce students to less well-recognized disease conditions for which exercise prescription is not yet readily applied but will likely soon be, such as multiple sclerosis, neuromuscular and neurodegenerative disorders. The theoretical and practical experiences developed into this specialized stream are consistent with the competencies required for accreditation by the FKQ and CSEP to become a professional kinesiologist and certified exercise physiologist respectively, and is anticipated to launch our students to the forefront of Clinical Exercise Physiology in Canada. The success of this vision is, however, predicated on the recognition and acceptance of Kinesiology as an integral part of the health care system, which today does not yet exist but is highly anticipated.

René Turcotte

Dr. Turcotte began his studies at Laurentian University in Sudbury doing an Honor's degree in Physical Education, graduating in 1975. He developed a strong interest in exercise physiology, which evolved into an appreciation for the importance of physical activity as part of a healthy lifestyle and has remained part of his life ever since. After the undergraduate degree, he completed his Master's and Ph.D. at the University of Alberta, graduating in 1985. It was during those years in Edmonton that Dr. Turcotte deepened his understanding and appreciation of exercise physiology both from an applied and basic science perspective, having done an applied degree at the Masters level (Physiological aspects of ice hockey in young boys 8-11 years of age) and a basic science degree (Calcium regulation of skeletal and cardiac myofibrils in Sprague-Dawley rats) at the Ph.D. level. Dr. Turcotte's studies left him with a broader perspective and an appreciation for fundamental and applied aspects and the importance of both research approaches to our field. It was through his work at McGill since 1986 that he began to appreciate other research fields including psychosocial aspects and the role of physical educators in effecting behavior change in children and adults so that they can take advantage of the many benefits of regular physical activity as a part of a healthy lifestyle.



Figure 12-17: René Turcotte

The Future

In Dr. Turcotte's view, our field is constantly evolving. But in a manner never before realized, people at McGill, in Canada, and throughout the world are recognizing the importance of research in kinesiology and physical education and its impact on health. The future of our field will focus on the impact of physical activity on health. To be successful, Dr. Turcotte believes our research must address all aspects, from fundamental bench science to applied and behavioral research, so that we can translate our research and apply it in practical ways. Fundamental research is needed to understand the mechanisms of why and how physical activity is beneficial, and applied and behavioral research is essential to find appropriate and successful interventions for typical and special populations with chronic disease.

Johanne Vaillant

Johanne Vaillant is a part-time lecturer in the Kinesiology and Physical Education department. She is a native of Montreal and graduated from McGill with a B.Ed. (PE) in 1984. Her background includes over 20 years of teaching physical education and health, administrative posts, and as consultant for several school boards in the Montreal area. This experience has led to further work as a collaborator for the Ministry of Education Leisure and Sports (MELS) towards the implementation of Quebec's new competency based curriculum focusing on a child centered approach to teaching. In 2009 she also became a consultant and teacher-educator involved in the development of physical education and health programs for the Inuit of Nunavik under the Kativik School Board and McGill Department of Integrated Studies. Frequently she travels to the Arctic to oversee and teach many of these programs. She carries a lifelong passion for exercise and fitness, particularly swimming, having played on the



Figure 12-18: Johanne Vaillant

Canadian national water-polo team for 3 years. She has developed a particular interest for maximizing active participation in physical education at the elementary school level. At McGill, she teaches assessment.

The Future

Major attention for the next generations will focus on health in light of epidemic levels of obesity in elementary school children. Research has already established the clear relationship between the practice of daily exercise and academic performance, and should be a major focus of our school physical education programs. Hopefully, in years to come the role of the physical educator will have shifted to an educator/facilitator engaging children in their learning about health, wellness, lifestyle and the importance of regular practice of physical activity on a daily basis. Teaching physical education and health benefits will therefore be at the center of every child's learning as are literacy, science, and technology.

Notes

1. (http://sportpsych.mcgill.ca/)

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Comments

A number of decisions were made to facilitate retrieval of cited documents without an excessively long reference list. Primary sources such as McGill's Board of Governors' minutes are referenced in the text with the appropriate dates and not repeated in the reference list. The same strategy was used for information from the Corporation, Senate, Annual Reports of the Governors, Principal, and Fellows of McGill University (or simply Annual Reports of McGill University as they became titled in later years), Calendars, Department Annual Reports, and Old McGill. These are readily available at McGill University Archives or publicly in the library.

The reference list above uses standard methods of citation for books and journal articles. For other documents classification numbers from McGill Archives are included, when available, to ease retrieval. In addition, some useful sources of information came from copied reports or memoranda. These are referred to as a mimeographed copy, followed by the physical location of the document, usually the Department of Physical Education or Athletics and Recreation.

Appendix A

Graduate and Undergraduate Awards and Fellowships, 2012

Gold Medal

Awarded to the student demonstrating the highest academic and professional proficiency throughout the Physical Education or Kinesiology programs.

- Graduating student
- Minimum 90 credit program
- · Based on CGPA

A.S. Lamb Scholarships (since 1951)

Six scholarships with current <u>estimated</u> value of \$1,000 each. Awarded to students in the *Physical Education and Kinesiology programs*, on the basis of academic merit and professional promise. No application necessary.

- Three awards to Physical Education students and three to Kinesiology students.
- The three awards in the Physical Education program are awarded to one student entering each of the second, third, and fourth year.
- The three awards in the Kinesiology program are awarded to one student entering the second year, and two students entering the third year.
- A student must have completed a minimum of 27 credits at McGill University.
- Based on sessional GPA.
- Potential December graduates qualify and are to receive full amount scholarship.

Strathcona Trust Plaques

Four plaques awarded at the end of the second and third years of the Physical Education program to the man and woman in each year who obtained the highest standing in physical activity courses.

- Minimum of 6 physical activity credits must have been completed.
- Based on physical activity GP:A.

John Chomay Award (since 1991)

One award with current value of \$450. Awarded on the basis of academic achievement and participation in students athletics, to a student entering the final year of either the Physical Education or Kinesiology programs, with preference to members of intercollegiate sport teams. Awarded by the Faculty of Education's Committee on Student Standing on the recommendation of the Department of Kinesiology and Physical Education.

- · Completed minimum of 48 credits at McGill University.
- A student must have completed a minimum of 27 graded credits in the regular academic year exclusive of courses completed under the Satisfactory/Unsatisfactory grading option.
- · Based on sessional GPA.
- Potential December graduates qualify and are to receive full amount of scholarship.
- · Application required.

Adriano Tassone Award (since 2010)

One award with current value of \$2,000 Students who have completed U1 and/or U2 in the Department of Kinesiology and Physical Education in the Faculty of Education to gain practical experience in the area of research in Kinesiology through a summer internship award.

- · Based on student's CGP'A.
- The student must be supervised by a KPE faculty member for 12 weeks
- · Priority will be given to students who have not been previously awarded this Award
- The student cannot receive credits for the work done as part of this Award
- The student is expected to work full-time in the supervisor's laboratory for the entire Summer
- · Applicants fitting in either of two categories will be considered:
- Students receiving matching funds (additional \$ 2,000) from the supervisor

Bloomberg-Manulife Fellowships

The Bloomberg-Manulife Fellowships for the Promotion of Active Health have been established in 2010 by Lawrence Bloomberg and Manulife to recognize outstanding incoming Ph.D. student(s) in the Department of Kinesiology and Physical Education whose research will have an impact in the area of Physical Activity, Health and Well-being. The Fellowships will be awarded by the Graduate and Postdoctoral Studies Office upon the recommendation of the Faculty of Education's Department of Kinesiology and Physical Education on the basis of academic merit, achievements to date and future career plans.

Eligibility

In order to be eligible, candidates must be graduate students aspiring to start a doctoral program of study related to physical activity health and well-being at McGill University's Department of Kinesiology and Physical Education.

Value

\$22,500 each (2 awards available)

Daniel O. Marisi Award:

Established by friends, colleagues, and former students in honor of noted sport psychologist Dr. Dan Q. Marisi.

Eligibility

Awarded by the Department of Kinesiology and Physical Education to a graduate student (Masters or Doctorate) in Sport and Exercise Psychology. All applicants must have been a full-time student for at least one semester of the current year. Criteria used to access the award are: academic merit (current graduate GPA and undergraduate CGPA), conference presentations, and community service in sport and exercise psychology.

Value

\$500.00

David L. Montgomery Award

Established in 2007 by family, friends, colleagues, and former students in memory of noted sport and exercise physiologist Dr. David L. Montgomery. The award is also supported by the annual David L. Montgomery 10 Km Run which takes place each year during Homecoming. Awarded by the Department of Kinesiology and Physical Education to a graduate student in Sport and Exercise Physiology.

Eligibility

Awarded by the Department of Kinesiology and Physical Education to a graduate student (Master's or Doctorate) in Sport and Exercise Physiology. All applicants must have been a full-time student for at least one semester of the current year. Applicants will be assessed based on academic merit, conference presentations, and community service in sport and exercise physiology.

Value

\$3.500

R. E. Wilkinson Award

Awarded annually to a student who has obtained the B.Ed/B.Sc. degree (Physical Education or Kinesiology) from McGill, is a full-time student entering a graduate program in the Department of Kinesiology and Physical Education and who best combines academic merit (CGPA), and exceptional professional leadership.

Value

\$800



Photo Credits

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100 Years Logo by Steven McClenaghan, courtesy of Department of Kinesiology and Physical Education, McGill University

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How times have changed!



Q. How can we raise money to build a gymnasium . A. Why, through the sale of cigarettes, of course

In *From Bloomers to Body Mass Index*, Greg Reid takes us on a fascinating romp through the history of physical education at McGill, as full of adventure and wit as the characters who inspired generations of students!





100 years of Kinesiology and Physical Education at McGill

ACTIVELY MOVING FORWARD

