UNIVERSITY OF TORONTO
Office of the Vice-Provost, Space & Facilities Planning

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May 6th, 2002.

MEMORANDUM

To: Planning and Budget Committee

From: Ron Venter, Vice-Provost, Space and Facilities Planning

Re: Institute of Child Study

Item Identification
Project Planning Report for the Institute for Child Study

Sponsor
Ron Venter, Vice-Provost, Space and Facilities Planning

Jurisdictional Information
The Committee considers reports of the Project Committee and recommends to the Academic Board approval in principle of projects.

Highlights
The Institute of Child Study [ICS], located at 45 Walmer Road, is a centre for pre-service teacher education, graduate studies and research in child development and education, affiliated with the Department of Human Development and Applied Psychology of OISE-UT. ICS offers a two-year graduate teacher Education program leading to an MA degree in Child Study and Education and a Certificate of Qualification for elementary school teaching in Ontario. In addition, ICS houses a model Laboratory School for children from Nursery [age 3] through Grade 6, and the endowed Dr. R.G. N. Laidlaw Research Centre which supports interdisciplinary research.

The Institute of Child Study began as a research unit within the Department of Psychology, University of Toronto in 1925. The Institute with its Laboratory School has evolved into one of the most complete incarnations of the Foundation's aim in establishing Child Study centres at major universities that blend research and practice.

In 1971-1972 the Institute of Child Study, including its Laboratory School, was amalgamated with the University of Toronto's Faculty [College] of Education and developed Diploma programs aimed at preparing university graduates to be skilled and knowledgeable teachers of young children or specialists in the assessment and counseling of young children and their parents in schools. The Diploma programs enhanced the Institute's professional educational mission within the University and secured ICS's reputation as having the finest program of its kind in the country

In 1996 the Faculty of Education of the University of Toronto, including ICS and the University of Toronto Schools [UTS] was amalgamated with the Ontario Institute for Studies in Education to create a new division called The Ontario Institute for Studies in Education of the University of Toronto [OISE-UT]. In this new division, ICS was linked administratively with OISE-UT's Department of Human Development and Applied Psychology and its faculty became members of that Department, and the Laboratory School [like UTS] was put on a self-funded basis reporting to the Dean's Office.

ICS is unable to realize its full potential within its current space at 45 Walmer Road. This Annex residence, donated to the University in the early 1950s, has contributed much to the character shared by staff and students alike of being part of a special learning community -- more like an extended family than a formal organization. However, the family and its activities have outgrown its current space. Extensive upgrading of facilities and construction of new space are needed to enable ICS to remain in the forefront of early childhood education, teacher education and research on children's learning and development. In particular, the Laboratory School needs additional space to offer programs in physical education, music and theatre arts as well as upgraded existing facilities for classroom instruction and research. The MA program needs larger, better equipped classrooms, more work space and research stations for its students, and more office and research space for faculty. Administrative staff need more and better space to carry out their responsibilities effectively.

In 2000 OISE-UT acquired the land and residence at 56 Spadina Road, directly east of 45 Walmer Road. Recent renovations have included significant upgrades to bring the building to current standards for institutional occupancy by the University. Campus Coop has been granted permission to occupy the building until July, 2004 when 56 Spadina will be returned to OISE-UT and ICS. The addition of 56 Spadina to the ICS space inventory in 2004 is anticipated to partially meet ICS's needs for faculty office and research space and for work space for its 80 full-time graduate students.

The physical facilities at 45 Walmer Road have been formally and informally the subject of various assessments and reports. For example, in October 1995, the Institute of Child Study was reviewed by OCGS during the application process for our MA in Child Study and Education. It was noted that the physical space of the Laboratory School was below standard for young children and recommended that space be one of the considerations as the MA program moved into its beginnings. The ICS Lab School is an independent school in the province of Ontario and is not subject to Ministry of Education requirements regarding space allocation but a 1996 review of our space revealed that the school is seriously under housed by guidelines of both the Day Nurseries Act and the Ministry of Education.

The current plan anticipates the renovation of existing buildings and the addition of a new *connector* building located on the rear lot of 56 Spadina and directly linking both existing buildings to seamlessly accommodate all functions of ICS. The program includes 1700 nasm of renovated space [of which ~300 has been significantly updated at 56 Spadina] and approximately 730 nasm of new construction. to consist of a double-height basement housing the gym, and new 2nd, 3rd, and 4th floors.

The total project cost estimate including all permits, professional fees, furnishings & equipment, landscaping, miscellaneous items, and allowances for escalation to the tender dates is $8,000,000. The approximate breakdown of this is $4,461,000 for 1,260 gross square metres of new construction and $3,539,000 to renovate 45 Walmer Rd. The estimate includes an allowance for escalation to the scheduled dates of tender beginning in April 2004. The project cost estimate is

based on the assumption that the project will be fully funded in advance of construction. The project cost is assumed to be fully funded, having a total project cost of $8,000,000, with funding sources to be sought through fundraising.

Under the Policy on Capital Planning and Capital Projects, the Project Committee will continue through the implementation phase. The Working Executive of the Project Committee will comprise the lead User, a Planner and Implementer all of whom have been intimately associated with the project definition since its inception; this membership is:

User: Director of ICS
Planner: Jennifer Adams
Implementer: Julian Binks

This Working Executive will expand to include a Project Manager; the role of the Working Executive is to ensure the successful completion of the project and to ensure that the user needs and concepts introduced into the Project Planning Report are addressed throughout the process of design and implementation which are carried out under the direction of the Chief Capital Projects Officer.

Funding Sources

Fundraising for the project will commence with the approval by University of Toronto governance of this report. It is expected that, at minimum, 2 years will be required to raise funds sufficient for the implementation of new and renovated spaces.

Recommendations

That the Planning and Budget Committee recommend to the Academic Board:

1. THAT the Project Planning Report for the Institute of Child Study Expansion be approved in principle.

2. THAT the project scope totaling 4310 gross square meters (of which 1250gsm will be new construction), will allow for renovations to the existing 45 Walmer Road and 56 Spadina Road and the addition of a *connector* building between the two existing buildings, requiring municipal approvals.

3. THAT the University of Toronto initiate discussions with the City of Toronto for the rezoning of the proposed site for new construction.

4. THAT the project cost of $8,000,000 be approved, with funding sources to be sought through fundraising.

(20117)

INSTITUTE OF CHILD STUDY EXPANSION

REPORT OF THE PROJECT COMMITTEE

TABLE OF CONTENTS

I MEMBERSHIP

Malcolm Levin (Chair), Acting Director, ICS
Elizabeth Morley, Principal, ICS Laboratory School
Rick Volpe, ICS Faculty Representative
Toni Luke-Gervais, Business Officer, ICS
Carol Rolheiser, Associate Dean, Academic Development, OISE/UT
Keith Oatley, Chair, Human Development & Applied Psychology (HDAP)
Tammy Smith, MA Graduate Student, ICS Student Representative
Ken Burke, CAO, OISE/UT
Julian Binks, Manager Project Planning, Facilities and Services
Elizabeth Sisam, Director, Campus and Facilities Planning
Jennifer Adams, Campus and Facilities Planning

II TERMS OF REFERENCE

1. Make recommendations for a detailed space program indicating how space and facilities for ICS should be organized at 45 Walmer Road and 56 Spadina Road.
2. Identify the space program as it is related to the existing and planned enrolment targets as approved in the academic plan.
3. Demonstrate that the proposed space program will take into account the Council of Ontario Universities and the University's own space standards.
4. Plan to realize maximum flexibility of space to permit future allocation, as program needs change.
5. Identify the equipment and moveable furnishings which will be necessary to the project.
6. Provide a total cost estimate which identifies all resource implications including a projected increase to the annual operating cost of the University.
7. Identify all sources of proposed funding for this project.
8. Report by January 31, 2002.

III BACKGROUND INFORMATION

Today the Institute of Child Study [ICS] is a centre for pre-service teacher education, graduate studies and research in child development and education, affiliated with the Department of Human Development and Applied Psychology of OISE-UT. As members of the Department, ICS faculty supervise masters and doctoral students in the Human Development and Education and School/Child Clinical programs. ICS offers a two-year graduate teacher Education program leading to an MA degree in Child Study and Education and a Certificate of Qualification for elementary school teaching in Ontario. In addition, ICS houses a model Laboratory School for children from Nursery [age 3] through Grade 6, and the endowed Dr. R.G. N. Laidlaw Research Centre which supports interdisciplinary research.

History

The Institute of Child Study began as a research unit within the Department of Psychology, University of Toronto in 1925 through the collaboration of a group of psychologists and psychiatrists representing a school of thought known as mental hygiene. Led by psychologist/pediatrician Dr. William E. Blatz and supported by a grant from the Norma Spellman Rockefeller Foundation, they formed an interdisciplinary child study team around a laboratory school and a parent education program to foster the positive development of children and families. The Institute with its Laboratory School has evolved into one of the

most complete incarnations of the Foundation's aim in establishing Child Study centres at major universities that blend research and practice.

The Laboratory School has played a vital role in ICS's mission since its inception, as a site for research on children's learning and development, as a secure, home-like learning environment for young children, and as a clinical setting where teachers-in-training could observe and learn about best practices in inquiry-based early childhood education. The vision of a school that challenges children to think independently and encourages them to follow their natural curiosity in exploring the world around them still guides the school today.

In 1971-1972 the Institute of Child Study, including its Laboratory School, was amalgamated with the University of Toronto's Faculty [College] of Education and developed Diploma programs aimed at preparing university graduates to be skilled and knowledgeable teachers of young children or specialists in the assessment and counseling of young children and their parents in schools. The Diploma programs enhanced the Institute's professional educational mission within the University and secured ICS's reputation as having the finest program of its kind in the country. Graduates of the program were highly sought after by the most demanding schools; some returned to take up positions in the Lab School and others joined the academic faculty after successfully pursuing doctoral degrees in education.

In 1992 a child study research centre was established with a million dollar endowment from the estate of former ICS faculty member R.G.N. Laidlaw to support interdisciplinary research on children in three institutional contexts - the family, the legal system and the schools. Research-oriented faculty members were recruited to teach and conduct research in these areas. New research programs were initiated and new courses were offered. In 1995 The Laidlaw Research Centre became a permanent unit supporting ICS's child study research mission and Laboratory School teachers collaboration with academic staff in carrying out classroom-based research projects.

In 1996 the Faculty of Education of the University of Toronto, including ICS and the University of Toronto Schools [UTS] was amalgamated with the Ontario Institute for Studies in Education to create a new division called The Ontario Institute for Studies in Education of the University of Toronto [OISE-UT]. In this new division, ICS was linked administratively with OISE-UT's Department of Human Development and Applied Psychology and its faculty became members of that Department, and the Laboratory School [like UTS] was put on a self-funded basis reporting to the Dean's Office.

In 1997 OISE-UT received approval to offer a new two-year research-based teacher education program at ICS leading to an MA in Child Study and Education and an Ontario elementary school teaching qualification. This program was an outgrowth of ICS's popular and highly respected Diploma Program in Early Childhood Education, with a stronger theory and research component. To expose students to children and teachers in a variety of settings and communities, new partnerships were established with selected public schools in downtown Toronto --most notably two professional development schools, Hillcrest and Rose Avenue, and a school for physically challenged children at the Bloorview MacMillan Centre where an experimental Integrated Kindergarten Program was created and staffed jointly by the Lab School and the Toronto Board. The new program also introduced students to the latest theories and research on child development and programming for young children, especially those with "special needs." Starting with an initial enrolment of 20, the MA in CSE attracted many highly qualified applicants and expanded its intake to its current limit of 40 per year in a 2 year program.

As a consequence of recent initiatives and new appointments and cross-appointments, the Institute is in the healthiest shape it has been in many years. It serves as a model of how exemplary classroom practice, pre-service teacher education and applied research can inform each other and be integrated in a

community dedicated to the welfare and education of young children and to the training and education of professionals who work with young children.

Nonetheless ICS cannot realize its full potential within its current space at 45 Walmer Road. This Annex residence, donated to the University in the early 1950s, has contributed much to the feeling shared by staff and students alike of being part of a special learning community -- more like an extended family than a formal organization. However, the family and its activities have outgrown its current space. Extensive upgrading of facilities and construction of new space are needed to enable ICS to remain in the forefront of early childhood education, teacher education and research on children's learning and development. In particular, the Laboratory School needs additional space to offer programs in physical education, music and theatre arts as well as upgraded existing facilities for classroom instruction and research. The MA program needs larger, better equipped classrooms, more work space and research stations for its students, and more office and research space for faculty. Administrative staff need more and better space to carry out their responsibilities effectively. The ICS community as a whole needs more meeting space.

In 2000 OISE-UT acquired the land and residence at 56 Spadina Road, directly behind 45 Walmer. Recent renovations have included significant upgrades to bring the building to current standards for institutional occupancy by the University. This work was done in order to provide transitional accommodation for the Campus Coop Day Care without consultation with ICS and without the aid of an comprehensive architectural vision. Campus Coop has permission to occupy the building until July, 2004 when 56 Spadina will be returned to OISE-UT and ICS. The addition of 56 Spadina to the ICS space inventory in 2004 is anticipated to partially meet ICS's needs for faculty office and research space and for work space for its 80 full-time graduate students. However, any architectural design concept will likely require some further renovation of this space to properly accommodate these functions. Not met is the need for larger, better equipped classrooms and a gymnasium/auditorium which will require extensive new construction. It is ICS's hope to expand accommodations without diminishing the ambience of the existing setting.

The current plan anticipates the renovation of existing buildings and the addition of a new "connector" building located on the rear lot of 56 Spadina and directly linking both existing buildings to seamlessly accommodate all functions of ICS. The program includes 1700 nasm of renovated space (of which ~300 has been significantly updated at 56 Spadina) and approximately 730nasm of new construction. The estimated cost of construction and renovation, including furnishing and finance costs is $8,000,000.

IV STATEMENT OF ACADEMIC PLAN

The MA Program

At the core of ICS's academic mission is the education and training of teachers of young children – from preschool through sixth grade. Over the past 30 years the Institute has offered an exemplary and unique (in Canada) two-year teacher education program for university graduates who wish to pursue careers as elementary teachers. It is the only teacher education program linked to a laboratory school and its graduates enter the profession with more supervised classroom and research experience in child study than any other body of new teachers in the country. Consequently, graduates of the program are highly regarded and sought after by both public school boards and private schools. Several teachers in the ICS Laboratory School and many associate teacher/mentors in the public school are graduates of the ICS teacher education program.

Accommodations for the approximately 80 students in the MA in CSE program are limited. 45 Walmer Road serves as a "satellite" of OISE/UT where students take most of their classes, meet with their teachers and supervisors, eat lunch and do their assignments, often in small groups. However, there are

only two academic classrooms in the building – and only one large enough to accommodate more than 20 students. There are no rooms in the building where all first or second year students can meet together. On site work-space for students consists of one small study/work room housing about 5 computer work stations and the current student lounge/lunch room can accommodate no more than ten students at one time. As well, in the first year of the program, students experience four different six-week supervised classroom placements (practica) and in the second year they are placed in one classroom for a 12 week supervised internship in either the first or second semester. Most students do one placement in an ICS Laboratory School classroom as well as observing Lab school teachers and children at work over the course of their program. Because of the intense nature of the MA in CSE program requiring students to be physically located at 45 Walmer for practica, and other learning within the Laboratory School, academic and study space associated directly with this location is essential to the program.

Academic Research

At present ICS has 16 research projects involving a total of approximately one half million dollars in external funding from a variety of sources including SSHRC, NSERC, the Ontario Neurotrauma Foundation, the Connaught Fund and the Ministry of Education. In addition several small scale projects are funded through The Laidlaw Centre's Mini-grant Program and OISE/UT.

Recently OISE/UT received a grant of $1.5 M from the Canadian Foundation for Innovation (CFI) to establish a network of three labs, connected via a dedicated high speed network to high capacity storage and application servers, at three sites within the OISE/UT campus. The labs will support an integrated program of research in technology-based knowledge building and education. The Lab School Innovation Lab will enable two aspects of the research infrastructure: the collection of knowledge building data from authentic classrooms, and the participation of teacher/researchers in the data-analysis/adaptations-of practice iterations of the dynamic research practice.

There are three post-doctoral fellows and more than 30 graduate students employed on a variety of projects. Most recently, our research has contributed to major advances and significant publications in cognition and instruction, children's thinking (Theory of Mind), intentional (child abuse) and unintentional injury prevention, and intergrated children's services.

Current space at 45 Walmer Road is insufficient to accommodate further expansion of research activity at ICS. Space limitations have also made it impossible for ICS to accommodate visiting scholars and researchers who have expressed an interest in spending time at ICS and working with our faculty and lab school staff.

The Laboratory School

The Laboratory School is a Nursery to Grade Six elementary school, which as part of the Ontario Institute for Studies in Education at the University of Toronto has a threefold mandate: teacher education, research and exemplary education for elementary school children. Since the 1920's, the school has been a research and education centre focused on the understanding, education and care of young children. The early foundations of the school's philosophy, a belief in inquiry and security for young children, remain central to the program at the Institute of Child Study Laboratory School. Today there are approximately 200 children at ICS from Nursery to Grade 6. The school has a waiting list of 1000 applicants.

There are strong connections between the Lab School and the ICS Master of Arts in Child Study and Education (M.A. in C.S.E.). Teachers in the Laboratory School provide over **8000 hours** of practicum placement and supervision to first and second year M.A. students annually. In addition, the B.Ed. Program occasionally places students when ICS students have completed their program. In 2002, the total number of hours of B.Ed. supervision is **300 hours**. Each year, Lab School teachers are involved in M.A.

course work in a range of ways. Each Lab School classroom teacher is hired with the understanding that this involvement is part of the role of Lab School teachers. These contributions, along with our visitor program are a measure of the unique way in which the Lab School is embedded and integrated into the academic purpose of the Institute and the University. A full listing of visitors and lab school staff visits can be found in Appendix H.

The Laboratory School's connection to the university influences everything from the high academic standards to the spirit of inquiry that pervades the classrooms. Collaborations between Lab School staff and faculty provide rich professional development opportunities, unique research intiatives and mutual gains as educators. The Laboratory School is a lively community of professional learners and a unique school workplace in all of Canada.

The Laboratory School at the Institute of Child Study, in addition to its specific role within our Institute, serves the broader mission of laboratory schools across North America in its emphasis on dissemination and visibility for best practices in education. In addition to strong connections within OISE/UT, the Lab School enjoys relationships with other laboratory schools through membership in the National Association of Laboratory Schools and in many international professional organizations related to research and practice.

The Laboratory School has been proactive in making changes to the physical facilities at 45 Walmer Road and have renovated six program related spaces over the past seven years. All of these changes have been done within the existing footprint of the building and most have been financed by the Laboratory School.

The physical facilities at 45 Walmer Road have been formally and informally the subject of various assessments and reports. For example, in October 1995, the Institute of Child Study was reviewed by OCGS during the application process for our MA in Child Study and Education. External reviewer Ellen Jacobs from Concordia University noted that the physical space of the Laboratory School was below standard for young children and recommended that space be one of the considerations as the MA program moved into its beginnings. The ICS Lab School is an independent school in the province of Ontario and is not subject to Ministry of Education requirements regarding space allocation but a 1996 review of our space revealed that the school is seriously under housed by guidelines of both the Day Nurseries Act and the Ministry of Education.

V SPACE PROGRAM

In addition to COU required space allocation for academic space, faculty and administrative offices, research space and MA student related study and lounge spaces, a summary of the space needs accommodated in the space program for the Laboratory School includes:

1. Enlarging grade level classrooms in seven of the nine grades to more closely match basic guidelines for elementary classrooms in order that a lively, inquiry-based program including research, teacher education and information technology can be adequately housed at all levels.

2. Building a gym/theatre arts space to allow required access to physical education program space for all grade levels. This space is to be combined with theatre arts facilities. The physical education program for the Grades 3 - 6 classes currently takes place in Gym 25 at 371 Bloor St. W. for one half-hour per class per week (far below the Ontario norm for time in physical education).

3. Providing expanded facilities dedicated to the teaching of music and drama as outlined in the Ontario Curriculum Document, The Arts.

4. Providing a space capable of seating the whole school community for assemblies, dramatic productions, graduation, public meetings, large classes, conferences, etc. This space combines with the gym/theatre arts recommendations in item 2 and 3 above.

5. Building and renovating work stations for teachers, teacher researchers, graduate students and researchers who are actively engaged in work beyond the classroom walls.

6. Building alumni and archival space so that the newly formed Institute of Child Study Laboratory School Alumni Committee can be housed and our history can remain within our building. This space may also be used by the Parents' Association, for parent education and for community involvement.

7. Establishing a small covered playground space for use in all weather.

8. Building kitchen/lunchroom/staff lounge space to accommodate a staff of more than 20 FTE professionals and 200 children who are in full-day programs at ICS.

NON-LABORATORY SCHOOL SPACE PROGRAM

# of rooms	Program	Existing Nasm	Recommended Nasm Per	Recommended Total Nasm
	Offices			
10	Faculty Offices	120.97	13	130
2	Dept. Chair/Lab. School Principal Office	29.47	23	46
2	Other Academic Offices	9.59	13	26
5	Administration Offices	51.16	13	65
				267
	Laidlaw Centre			
1	Reception		20	20
1	Meeting Room		35	35
		35.14		**55**
	Classrooms Facilities			
1	MA classroom to seat 40	47.88	68	68
1	MA classroom to seat 30	29	50	50
				118
	Graduate Student Offices			
1	Computer Lab	25.48	42	42
4	group study/break out rooms		16	64
32	student research stations	33	1.8	57.6
				163.6
	Research Labs			
4	child friendly testing labs	13.3	8	32
8	individual researcher labs	70.18	15	120
		46.13		
				152
	subtract out student research stations			**94.4**
	Departmental Support Space			
1	Staff Lounge	22.04	35	35
3	Office Machines/Storage	35.33	10	30
1	Student Lounge		35	35
1	Professional Resource Rm		20	20
1	ICS Reception		20	20
1	Janitor locker room			8
	Janitor lunchroom			8
	Janitor w/c & shower			4
				150*
Total Non-Lab School Program		568.67		**848**

LABORATORY SCHOOL SPACE PROGRAM

# of rooms	Program	Existing Nasm	Recommended Nasm Per	Recommended Total Nasm
1	Daycare	42.61		
1	Daycare Office	8.37	15	15
1	Nursery - 20 students	36.8	85	85
1	JK - 22 students	45.36	85	85
1	SK - 22 students	107.8	85	85
1	Grade 1 - 22 students	73.27	74	74
1	Grade 2 - 22 students	66.05	74	74
1	Grade 3 - 22 students	46.92	74	74
1	Grade 4 - 22 students	48.79	74	74
1	Grade 5/6 - 22 students	60.875	74	74
1	Grade 5/6 - 22 students	60.875	74	74
1	Art	36.92	74	74
1	French - Junior	34.94	74	74
1	French - Primary	34.32	40	40
1	Resource/Special Ed	20	25	25
1	Music		74	74
1	Gymnasium/Theatre Arts Space		200	200
1	stage and wing space within gymnasium			
2	Change-rooms - boys/girls		22	44
1	equipment storage within gymnasium		18	18
1	kitchen		18	18
2	child w/c		10	20
1	Library	16.84	74	74
1	Community Association/Archival Space		26	26
4	Teacher/Researcher classroom observation/research offices		15	60
1	lunch room	20.29	74	74
1	lab school reception	15.58	20	20
3	AV storage	8.27	2	6
3	common storage for bins		3	9
Total Lab School Specific Program NASM		787.11		**1580***

TOTAL ICS SPACE PROGRAM

Total Lab School and Non-Lab School Program NASM	**2428**
Subtract Total Existing Assignable Space	1700
Total Additional Program NASM (to be built in addition to 56 Spadina)	**728**

* note: Janitorial space pro-rated 50/50 between Laboratory School and non-Lab School spaces

The net to gross ratio is estimated to be 1.8 for all spaces with the exception of the gymnasium. The gymnasium, requiring less non-assignable corridor space is calculated at 1.5 nasm. Therefore, the gross area (in gross square meters [GSM]) required to accommodate all functions of the Institute of Child Study is as follows:

Total GSM new and renovated 4310

528x1.8 + 200x1.5 = 1250

Total GSM New Construction 1250

Total GSM Renovation 3060

In addition to programmable spaces the following requirements must be met:

Non-Assignable Space

locker/cubby space		1 per child x 30cm square including two hooks for coat and shoe rack below = 196x30cm=60 sm
6 childrens w/c's		3 boy's, 3 girls - one each on lab school floors
4 adult w/c's		2 women's, 2 men's - one each for lab school staff and ICS related staff/students
garbage disposal including recycling		niches in walls for garbage and recycling
network closets - one per floor		
utility closets - one per floor		
custodial storage closet - one below grade		

Outdoor Spaces

1 outdoor/covered children's play area	60nasm	adjacent to outdoor playground or protected roof-top
2 Outdoor play areas		1 existing play ground, 1 additional outdoor space to include gardening area
outdoor storage areas		to store bicycles, nets, etc.

Summary of Space Utilization Analyses

The utilization of academic space was compared to the Council of Ontario Universities (COU) Space Standards as all reporting to the Ministry uses these standards as the benchmark. The University's own space standards were also applied when appropriate.

The Committee also reviewed the guidelines of the Day Nurseries Act of Ontario as well as space standards published by the Ministry of Education, the Metropolitan Toronto School Board and the Department of National Defense when reviewing space allocation for the programmable areas of the Laboratory School (see comparison chart in Appendix A).

A. Academic Spaces

i) Faculty and Administrative Offices

The Institute of Child Study currently accommodates 12 faculty offices including visitor and emeritus spaces in a total of 160nasm; and 5 administrative offices in a total of 51nasm. According to the Budget, the 2001/02 academic and administrative FTE (including the Lab School) for the department was 26.7.

Of the 26.7 academic and administrative FTE positions, 19FTE have been identified to require office space. According to COU guidelines an additional 15% of this space is made available for visitors and emeritus faculty. Thus space for 22 offices (17 at 13nasm, 2 at 23nasm for director/principle, 2 pro-rated areas within reception, 1 at 15nasm for daycare director) is included in the space program. In total 302nasm office space is programmed.

ii) Graduate Student Offices

A total of 58.5nasm of graduate student office space is currently allocated within ICS. This space includes a 25nasm computer lab and space for four Research Assistants.

The current student complement is 86.5FTE. According to the Council of Ontario of Universities Standards 1.85nasm of study space should be allocated for graduate students. Thus, 160nasm of space, an additional 100nasm to existing allocation, should be made.

The space program allocates 165nasm of graduate student office/study space, including an expanded computer lab (42nasm), 32 research spaces (1.85nasm each) and 4 group study/break-out rooms (16nasm each). Research spaces will be included in individual researcher offices and clustered in groups of four student research spaces each. Group study rooms will be equipped with receptacles and internet connections for easy lap-top use and will double as meeting and small classroom break-out rooms.

iii) Research Space

Research space is allocated on a percentage basis counting faculty, non-faculty researchers and graduate students. According to the COU formula for Education programs (and also for non-specified social science disciplines) the group E designation of 1x space factor translates to the need for 65nasm of space among existing faculty and researchers. However, 83nasm is currently allocated and further space has been identified as a requirement of the department in order to allow for each faculty/researcher to properly conduct research activities. Eight research labs of 15nasm each are allocated here. These spaces will also accommodate 4 graduate student work stations (1.8nasm x 4), thereby sharing the programmable area. In addition, four child friendly testing labs (8nasm each) are included to allow for researchers to take advantage of on-site child research. A total of 94.4nasm of dedicated research space, therefore, is included in the space program – 63nasm of which is researcher specific and 32 of which is takes specific advantage of ties between the department and the Laboratory School.

iv) Classroom Facilities

Currently two classrooms for the MA program are included in the space inventory. One room seats approximately 30 students in 47nasm (rm. 127) and a second seats 15 in 29nasm (rm. 232). Neither of these rooms adequately addresses the need for the MA program which is currently run with 86.5 FTE students in two years. According to COU standards, 1.2 nasm of classroom space should be dedicated to each FTE student generating 104nasm of space needed here.

The program, therefore, calls for the creation of two larger rooms to better serve the MA population. A 40-seat and a 30-seat flat-floor classroom (68nasm and 50 nasm) totaling 118nasm with flexible furnishing to provide access to different teaching methods are included in the program.

Four group study rooms of 16nasm each, included in the program as graduate student study space, may be used from time to time as break-out classrooms to accommodate case-based teaching methods or for use by small seminar groups.

v) Departmental Support Space

Departmental Support Space is allocated as a percentage of faculty, administrative and graduate student office space. Currently 57nasm is allocated for departmental support including a 22nasm staff lounge and 35nasm of photocopy rooms and file support. Clearly, this category is under-served as 130nasm of support space is recommended by COU. The program therefore calls for just over COU recommendations at 140nasm space including an expanded staff lounge (35nasm), a student lounge (35nasm), a professional resource room (20nasm) and office machine/storage spaces (30nasm) and two pro-rated reception areas (2 @ 20/2 nasm).

B. Laboratory School Spaces

i) Classrooms

With the exception of a very few rooms, all classrooms are under-allocated with classroom spaces ranging between 45 and 60nasm. According to Ministry of Education standards for elementary schools, typical grade level classrooms should be allocated between 65 and 80nasm each. The space program, therefore, calls for an average class size of 74nasm assuming the lowest ministry allocation plus 10nasm allocation for computing (grades 1-6, art, music/drama, senior French). JK, SK and the Nursery are each allocated 85nasm in order to allow for the inclusion of an in-class w/c. Junior French and Special Education are allocated smaller spaces as their needs and usage dictates. All classrooms will be equipped with ample storage spaces. One adult-height and one child-height sink will be provided in each classroom. In addition, as the daycare will be run during off-hours in the Nursery, Music room and Lunchroom, each room is to be equipped with additional floor to ceiling lockable storage cabinetry for daycare specific use.

The library, suggested by the Ministry of Education to require approximately 90nasm, is allocated 74 here – a great increase from the existing 17nasm library. This space is envisioned as a series of smaller connected spaces – a 16nasm primary area and 30nasm junior area, a 13nasm library office and 15nasm AV storage room.

A gymnasium – not part of the existing program on the site currently – is allocated 200nasm. Although a regulation sized basketball court [the original desire of the committee was to accommodate this type of space] would require a floor area almost double the one proposed, the space program reflects the reality of working within a very tight site configuration. If the site is reconsidered, space for a larger gym which would accommodate basketball and volleyball should also be reconsidered. However, some review of junior school gymnasia in the Toronto area suggests that this size, with appropriate height, is suitable for the elementary levels. In addition to the main gym space, support space including change-rooms (2 x 22nasm), children's washrooms (2 x 10nasm), equipment storage (18nasm) and a kitchen (18nasm) are included in the program.

Although a dedicated stage area adjacent to the gymnasium was desired by the committee, space has not been included due to site limitations. If the site is re-considered, space for a dedicated stage should also be re-considered. This plan, however, anticipates the inclusion of a moveable stage that may be stored and assembled when required within the area of the gym.

ii) Support Space

Currently many students take their lunch within their classrooms. This poses certain sanitary problems and requires teachers to move student work, etc. each day. A lunch room is, therefore, included in the space program at 74 nasm. Again because of site limitations and cost considerations a larger room was not included and careful scheduling will be required to allow students to eat lunch in this room within the

given timetable. Additional cupboard space is included in this room in order that before and after school daycare may be run here.

iii) Research Interface

Four teacher/researcher observation rooms of 15 nasm each have been included in the program. These rooms, conceived by the committee as multi-functioning rooms will allow external viewing, audio and video taping and visitor participation in regular school instruction through the inclusion of two-way mirrors and audio/video devices. The rooms will ideally be located between two classrooms each (i.e. between Grade one and two, three and four, five and six, and JK and SK). The rooms will also be furnished with typical office furniture including lockable filing storage and a computer. The rooms will be available to teacher/researchers as quiet office space in close proximity to their classrooms.

iv) Outdoor Spaces

A covered outdoor space of 60 nasm is highly desired by the committee. However, because the current thinking suggest any new building will occur between the Walmer and Spadina Road buildings, this outdoor space may need to be designed as accessible roof space. The existing playground south of the Walmer Road house must remain un-touched as it is already tightly configured. However, the small outdoor area south of the new Lab School wing and adjacent to the large playground may be considered for this purpose. In this location, a roof structure has been costed to provide some sheltered play area with clear connections to the existing outdoor areas.

VI FUNCTIONAL PLAN

Approximately 1700 net assignable square meters are available between the existing buildings at Walmer Road and Spadina Avenue. However, the space program requires approximately 730 additional nasm in order to fulfill all the required space needs of ICS. In order to accommodate this additional space, a connector building including a two-storey gymnasium space (located one storey below grade and one at grade) and three additional storeys above grade is proposed on the rear lot of the 56 Spadina Avenue. With the inclusion of an elevator, this building will provide accessible connections between and through each of 45 Walmer Road at the basement, first and second levels, 56 Spadina at the basement, first, second and third levels and all levels of the new structure.

The plan envisions a two-phase project that will be determined based on budget availability and time. That is, new construction in the form of a "connector" building and renovation of the existing 45 Walmer Road and 56 Spadina buildings will occur as a part of this plan. In order that the least disruption to the programs is possible, ideally construction of all new facilities would occur in the first phase after which the existing structures would be renovated.

In order to understand fully the implications of a 2-phase plan and to best accommodate the requirements of the space plan with appropriate adjacencies and groupings, a comprehensive architectural design of all spaces should be commissioned before construction or renovation begins in order to envision both phases together. Renovation of the existing 45 Walmer building would best be further phased to occur during summer months as the laboratory school and most MA classes are out of session during these months.

Room Data Sheets found in *Appendix I* describe required and desirable adjacencies between and among rooms within the space program and also requirements for connections to the exterior and for particular requirements of accessibility and/or security.

Functional Space Allocation

To guide space planning aiming to provide adequate facilities, the Committee has articulated two guiding principles with regard to research space. First, the uniform conviction is to dispense research space throughout the Laboratory school and not locate it as a separate and isolated facility. Second, because of the inseparability of research, scholarship, and graduate supervision, there is a strong belief that whenever possible researchers and research teams should remain in close proximity.

VII ENVIRONMENTAL IMPACT

In order to realize energy savings, to reduce impact on the environment and to stimulate environmental awareness, recommendations made for the Child Care Facility currently under construction on the University campus are also recommended for the ICS facility as follows:

- Where energy efficient, warm lighting products are available they should be used in place of incandescent or other inefficient light sources.
- The creation of a "naturalized playground" is supported for a portion of the outdoor space. The opportunity exists for the creation of child-managed gardens and composting facilities. Rainwater can be captured and used to water gardens and landscape.
- Where there is direct access to the playground from activity rooms and/or classrooms, consideration should be given to preventing energy loss through heat escape.
- Consideration should be given and space should be allocated for appropriate waste storage and recycling facilities.
- Energy savings may be realized with the use of efficient and innovative kitchen, washroom equipment and fixtures.
- Consideration should be given during the selection of building materials to minimize environmental and health risks by selecting formaldehyde-free drywall, low V.O.C. paints, etc.

Energy and water use will be governed by the terms of the University of Toronto Environmental Protection Policy (see Appendix E).

VIII SPECIAL CONSIDERATIONS

Landscape Requirements

The committee recommends that ICS create a naturalized playground which encourges student interaction with the natural environment. A garden and composting facility maintained by the students should be included in the playground space (as mentioned in Section VII - Environmental Impact). All existing trees will be maintained.

The playground area must be enclosed by a fence which provides security and protection to the children and the school property. The fence should be child-friendly while maintaining security. A storage space is essential in the playground area to house all unfixed play items. This storage space must also be child-friendly and be lockable.

Accessibility

As much as possible, all ICS facilities should be barrier free. The inclusion of one elevator in this plan hopes to connect all but the third floor of the existing Walmer Road house.

Computing and Communications

An important aspect of the research program at the Laboratory School is the investigation into the role of technology in the education of children. The school has been a hub for technology research funded by the Networks of Centres of Excellence (NCE) for several years.

In the fall of 2002 The Institute of Child Study Laboratory School (ICSLS) will become part of an integrated laboratory network at the University of Toronto. This high-tech network will be dedicated to researching the innovative use of technology in education. As part of this network the ICSLS will be connected to the Education Commons and the Institute for Knowledge Innovation and Technology (both at OISE/UT) through a set of dedicated high bandwidth connections. Funded by a grant from the Canadian Foundation for Innovation (CFI) the ICSLS component of this network will involve all of the classrooms at the school. The Early Years classrooms (Nursery, JK and SK) will receive multimedia computers and supporting devices (e.g. scanners, digital cameras, e-tablets) to facilitate the use of computers by students with emerging literacy skills. In the Primary classrooms (Grades 1 and 2) the classrooms will both be equipped with data projectors and a complement of 7 desktop computers for the students. In the Junior classrooms (Grades 3, 4, 5 and 6) there will be class sets of laptop computers (i.e. 25 computers) that will have wireless access to the network. Each of these classrooms will also have data projectors permanently installed in the classroom. In all of these classrooms there will be audio/video installations to record classroom interactions. In addition, each of the classrooms will require suitable storage (for instance in the Junior Grades, a lockable place for the laptop computers) and suitable power service to support the technology. In addition to the technology for the classrooms there will be 7 multimedia stations setup within the school for the development of video artifacts and data analysis by both researchers and students.

ICSLS faculty now regularly co-author research reports and present papers at international research conferences (CSCL'99, AERA, the European Association for Research on Learning and Instruction, Telelearning 2000) and have won awards in competition with established university researchers. With CFI infrastructure funds, ICSLS teachers will have workstations on a par with those of researchers in the Knowledge Innovation Lab, and their classrooms will have the equipment and connectivity necessary for raising the level of innovation still higher. To participate fully in the kinds of research outlined in this proposal, and to play its key role in the worldwide research network that OISE/UT is spearheading, ICSLS needs to be brought up to a level of technology that is about 5 years in advance of where regular schools are and it needs to be equipped for high-quality minimally-intrusive data collection.

Although the space program takes into account current use of desk-top computers in classrooms, it is anticipated that no additional space needs will be required to accommodate the lap-tops and their accompanying lockable storage units.

As is currently the case, all ICS spaces, including the Laboratory School will be connected to the University of Toronto infrastructure using infrared technology.

Environmental Issues

Most of the environmental considerations have been identified in the previous section. In addition, individual temperature room controls in each classroom are required. A filtration system for the drinking water is needed.

Campus Planning

In order to alleviate pressures of space allocation for the Institute of Child Study including the Laboratory School, an adjacent property – 56 Spadina Road – was purchased by the University with the intention that the structure could be renovated to accommodate much needed contiguously located space for the

Institute. The space program developed by the Project Committee, however, requires area in excess of that available in the purchased property. To accommodate the needs of ICS, the Committee looked at several possible building options on the two sites and now recommends a reduced (from that originally proposed) space program be located within the two existing properties and within a new connector building to be located on the rear yard of 56 Spadina between the existing structures at 56 Spadina and 45 Walmer Road.

Both 45 Walmer Road and 56 Spadina Road would require re-zoning in order to permit additional construction on site. 45 Walmer Road is zoned R2 Z1.0 H12.0 allowing only residential uses with a maximum density of 1 times coverage and a maximum height of 12m. 56 Spadina is zoned R2 Z2.0 H14.0 permitting residential uses at 2 times coverage to a maximum height of 14m. Understanding that any construction on the Walmer Road site would have a greater impact on the surrounding residential neighbourhood, and that more height and density is permitted than exists on the 56 Spadina site, the committee has chosen to request permissions for re-zoning of 56 Spadina to allow additional building occur in what now is the rear yard.

In the area immediately surrounding 56 Spadina and 45 Walmer Road are located two medium rise apartment buildings of approximately 12 stories with density and height much in excess of area permissions. Also in the area, at 18 Spadina, an example similar to permissions being sought here of an in-fill condition in on a rear lot, has been successfully permitted. Because of the precedents set in the immediate area – permissions will likely be sought at the Committee of Adjustment level.

The plan calls also for a re-design of the Walmer Road frontage to include a safe parent drop-off zone. Architects will be asked to look at the possibility of a lay-by and or short term parking possibilities in this location.

Security

A high level of security with controlled access is required particularly for the Laboratory School areas. However, as the desire is to integrate, as much as possible, functions of the Laboratory School, the MA Program and the Research components of ICS, access will be particularly difficult to monitor. Access to the school is envisioned to remain primarily through the entrance on Walmer Road with secondary access off of Spadina Road. Because of this double entrance condition, each entrance will be monitored by reception desk personnel one each for the Laboratory School and for ICS as included in the space program. During non office hours the two main exterior doors will be equipped with individually encoded passcards. Each staff member will have a UofT magstrip passcard to allow them access to the building in off hours. An emergency phone should be located in the playground.

IX RESOURCE IMPLICATIONS

In arriving at the project cost estimate the advice of several consultants was sought. The combined 56 Spadina – 45 Walmer Rd site was surveyed by Speight Van Nostrand to establish boundaries, building locations, topography, and all floor elevations. This information helped to establish the feasibility of building a connecting structure between the two properties. The planned new structure built to the rear of 56 Spadina, will match floor elevations with the south wing of 45 Walmer, and will connect also to the back of 56 Spadina. The existing building at 45 Walmer was also surveyed by a representative of Leber Rubes to evaluate the changes which would be required to bring it to current building code requirements. Leber Rubes were also asked to evaluate the proposed complex as a whole. This information, together with the space program and room data sheets was provided to A W Hooker & Assoc. quantity surveyors, in order to produce a construction cost estimate.

The new addition at the rear of 56 Spadina is assumed to consist of a double-height basement housing the gym, and new 2nd, 3rd, and 4th floors. A new entrance would be created off the driveway at Spadina. An elevator is provided serving all floors of 56 Spadina and the new addition. The addition is assumed to be of reinforced concrete block construction with precast floor slabs. The exterior is of brick with generous window area. The structure is considered the quickest and easiest to erect given the extremely tight confines of the site. The interior partitions are a mixture of concrete block and drywall as appropriate. Flooring is generally either sheet vinyl or carpet, ceilings are generally lay-in tile. Walls are painted. The building is fully air-conditioned, and would have electrical and data services as required. New furnishings and equipment are included.

The existing house at 56 Spadina has been extensively renovated. Other than the minor required demolition at the rear, the work of making the connections and co-ordinating the life safety systems, no further upgrades are anticipated in this cost estimate. However, once commissioned, the comprehensive architectural design concept may require some additional renovations to this building in order to appropriately accommodate program areas which will be required to be offset by costs associated with planned renovations in 45 Walmer Road. New furnishings and equipment are included.

Fairly extensive renovations to 45 Walmer are planned. To minimise disruption to the school, these are planned to occur in two phases: phase 1 would cover the basement and ground floors, and phase 2 the 2nd and 3rd floors. All windows will be replaced, all flooring replaced, partitions relocated as required, and new ceilings and lighting provided. The building would receive new electrical and water services and would be completely rewired, and have a sprinkler system throughout. Washrooms would be renovated. New cabinetry is provided as required. New furnishings and equipment are included. The building would be air-conditioned throughout, and have new fire alarm, emergency lighting, PA, and security systems. Outside, a new canopy is provided in the playground with lighting, new paving, and play equipment.

Assuming that the schedule below is followed, the total project cost estimate including all permits, professional fees, furnishings & equipment, landscaping, miscellaneous items, and allowances for escalation to the tender dates is $8,000,000. The approximate breakdown of this is $4,461,000 for 1,260 gross square metres of new construction and $3,539,000 to renovate 45 Walmer Rd. Details are shown in Table 1, Appendix B. This estimate includes an allowance for escalation to the scheduled dates of tender as indicated below in Section XII. The project is assumed to be fully funded.

X OPERATING COSTS

Facilities and Services estimates the total annual operating cost at 45 Walmer to be $120,500 today, and $222,000 when 56 Spadina and the new addition are added and the whole is air conditioned. The following chart demonstrates these costs:

ICS expansion **Annual Building Maintenance Cost**

Building No.	Year	GSM	MTCE Cost	Total Operating cost	Total Utilities Cost	Total Building Cost	Annual Cost per M2
53	2000/01	2,489	29,880	51,639	25,874	107,393	43.15

	1999/00	2,489	35,386	68,743	22,738	126,867	50.97
	1998/99	2,489	35,462	71,713	20,064	127,239	51.12
Average Cost			**33,576**	**64,032**	**22,892**	**120,500**	**48.41**

Proposed expansion will increase the building(s) area to 4,400 GSM. The proportional increase on the maintenance budget would be as follows:

53	**Future**	**4,400**	59,355	113,194	40,468	**213,017**	48.41

Providing air-conditioning to the new complex would require an additional cost as follows:

	GSM Floor Area	GSF	Rton/Ft2	Required Max. Rton/Hr	Annual Rton Requirement @ 900 EFL	Energy consumption @1.25kW/Rton	At $0.1/kWh
Energy Cost	4,400	47,344	800	59	53,262	66,578	**6,658**

Annual maintenance cost of the air-conditioning system based on present service contract would be **$2,500.**

Note:

1./ The 60 Rton cooling will be adequate only if the building envelop (windows) will be upgraded.

2./ The cooling energy cost was based on approximately 200 bodies in the building.

3./ The annual air-conditioning maintenance cost includes only 3 service visit, no parts, no trouble calls

Estimated annual building maintenance/operation cost would be $222,000.

XI FUNDING SOURCES AND CASH FLOW ANALYSIS

ICS is committed to hiring a full-time professional development officer coordinated through the University of Toronto and OISE-UT to develop a capital campaign plan and strategy and then run the campaign itself. In addition, ICS has enlisted two long-time ICS supporters as co-chairs of its future Capital Campaign. In anticipation of the future Capital Campaign, ICS had on staff a half-time development officer in 2001. While at ICS she put together a list of prospective donors to a future capital campaign. The list includes alumni of ICS, parents and grandparents of children who have attended the Lab School and Foundations that typically support early childhood research and education projects. Preliminary research suggests that it may be possible to raise as much as $10 million from the list of potential donors.

With approvals of this report from the Planning and Budget Committee and Governing Council in June of this year, fundraising can begin in earnest early in the Fall 2002. All funds for new construction and renovations will be raised from private sources through the Capital Campaign. ICS hopes to have enough money raised by 2004 to begin new construction and/or renovations that summer.

XII SCHEDULE

Fundraising for the project will commence with the approval by University of Toronto governance of this report. It is expected that, at minimum, 2 years will be required to raise funds sufficient for the implementation of new and renovated spaces outlined herein. Once sufficient funds are raised (shown for scheduling purposes here as spring 2003), the Committee suggests an architect be hired to layout the project across the existing and new structures in order to understand the extent to which renovations are necessary and where connections must be considered. Once schematic design is complete, municipal approvals will be sought for the project. Renovation and new construction will follow as funds become available.

For the purposes of TPC estimate included in this report, the following schedule has been assumed:

Report to Planning and Budget	May 2002
Approval to hire architect	June 2003
Tender of new construction	April 2004
Approval to proceed	April 2004
56 Spadina vacated by Campus Coop and occupied by ICS	July 2004
New construction starts	July 2004
New construction complete	April 2005
Tender of Phase 1 renovations	April 2004
Phase 1 renovations complete	August 2004
Tender of Phase 2 renovations	April 2005
Phase 2 renovations complete	August 2005

The schedule depends on Campus Coop exiting 56 Spadina on July 01, 2004. The work in 45 Walmer Road has been phased to allow it to be undertaken over two summer holiday periods.

XIII RECOMMENDATIONS

That the Planning and Budget Committee recommend to the Academic Board:

1. THAT the Project Planning Report for the Institute of Child Study Expansion be approved in principle.

2. THAT the project scope totaling 4310 gross square meters (of which 1250gsm will be new construction), will allow for renovations to the existing 45 Walmer Road and 56 Spadina Road and the addition of a "connector" building between the two existing buildings, requiring municipal approvals.

3. THAT the University of Toronto initiate discussions with the City of Toronto for the rezoning of the proposed site for new construction.

4. THAT the project cost of $8,000,000 be approved, with funding sources to be sought through fundraising.

APPENDICES

Appendix A. Comparison of Space Standards

Note: all areas translated to gross square meters

Space Category	Ministry of Education: Intermediate Level	Metropolitan Toronto School Board: Intermediate Level	Department of National Defense
Administration		114	0.12 per pupil place
Art Room	84-102	112	93
AV & Darkroom		37	
Art Workroom/Prep Room		37	
Classroom	65-79	84	70
Computer Studies Room		93-112	
Computer Prep Room		28	
Guidance Centre	23-65	46	28
Single Gymnasium	279-372	315	
Double Gymnasium	418-632		
Change Room	46-79	130	
Stage, projection, dressing, chair storage		74	
Gymnasium - Auditorium			496
Stage & wing space			89
Equipment and Storage Room			19-28
Kitchen			14
Dressing Area			37
Shower Area			28
Health Unit	19-56	42	19
Laboratory, Sciences	84-93	121	112
Lab prep & storage			23
Library resource centre	93 – 0.46 per pupil	279	140
Lunch room	93 - 0.31 per pupil	0.53 per pupil	.33 of population * 10
Music Room (instrumental)	102-130	149	93
Music Room (keyboard, strings)		112	
Music Room (vocal)	84-102	91	74
Staff Facilities		0.3 per	
Staff Room: First teacher			9.3
Each additional teacher			2.3
Theatre Arts		84	

Appendix B. TABLE 1: Total Project Cost Estimate

Items	New addition to 56 Spadina 1,260 GSM	Renovations to 45 Walmer 2,622 GSM.	Total Project Cost estimate		
Construction Cost Note A	2,905,000	2,150,000	5,055,000		
escalation Note B	203,350	169,050	372,400		
Construction Contingency	310,870	226,930	537,800		
Applicable GST	78,985	58,815	137,800		
Total Construction Costs, incl taxes	3,498,205	2,604,795	**$6,103,000**	**$0**	**$0**
Site Services, new	inc	inc	**inc**		
Infrastructure Upgrades in Sector	na	na	**na**		
Secondary Effects	na	na	**na**		
Demolition	inc	inc	**inc**		
Landscaping Note C	10,000	0	10,000		
Permits & Insurance	42,950	16,050	59,000		
Professional Fees Note D	501,820	445,180	947,000		
Computer Wiring & Telephone Terminations	35,000	33,000	68,000		
Moving & Staging	0	15,000	15,000		
Furnishings & Equipment see schedule.	350,000	405,000	755,000		
Miscellaneous Costs [signage,security..]	13,000	20,000	33,000		
Donor Recognition	10,000	0	10,000		
Finance Costs see cashflow	0	0	0		
Total Project Cost Estimate GST included	4,460,975	3,539,025	8,000,000		

prepared 24 Apr 2002 jcb

Table 1 - TPC Notes:

A For a new building of 1,260GSM, and renovations to 2622GSM. Based on a report from AW Hooker 23rd April 2002. Renovations cost includes a $50K allowance for asbestos removal.

B New Construction tendered in April 2004. Renovation in 2 phases: phase 1 April 2004, Phase 2 April 2005.

C Minor at 56 Spadina.

D Includes allowances for renovations and C. of A.costs.

Appendix C. ICS, Cashflow
(preliminary)

Approval in Jun 2003, new constr & Phase 1 reno tendered in Apr 2004. Phase 2 reno tendered in April 2005.
Cash flow by quarter

Quarter		may-jul	aug-oct	nov-jan	feb-apr	may-jul	aug-oct	nov-jan	feb-apr	may-jul	aug-oct	nov-jan	feb-apr	may-jul	totals
		2003	2003	2003-4	2004	2004	2004	2004-5	2005	2005	2005	2005-6	2006		
Approval															
Design															
Construction, new															
Construction, reno					ph 1				ph 2						
Funding:															
1 before & during proj.		715	0	0	0	6,114	0	0	0	1,171	0	0	0	0	8,000
2 LT Finance		0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal		715	0	0	0	6,114	0	0	0	1,171	0	0	0	0	**8,000**
Expenditure:															
proff fees & permits.		90	190	190	245	55	55	55	55	38	33	0	0	0	1,006
construction new		0				874	874	874	876	0	0	0	0		3,498
reno						400	1,276			150	778				2,604
furn,equip, misc, land.			0	0	0	0	302	0	418	0	172	0	0	0	892
subtotal		90	190	190	245	1,329	2,507	929	1,349	188	983	0	0	0	0 **8,000**
net cash flow		625	-190	-190	-245	4,785	-2,507	-929	-1,349	983	-983	0	0	0	
open bal		0	625	435	245	0	4,785	2,278	1,349	0	983	0	0	0	
change		625	-190	-190	-245	4785	-2,507	-929	-1,349	983	-983	0	0	0	
3 int exp @	**5.0%**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0 est. projec**
close bal		625	435	245	0	4,785	2,278	1,349	0	983	0	0	0	0	**intr. exper**
															0.00%

Notes:
1 minimum amounts in account to start phase.
3 expect to pay money market rate plus 0.25% for short term financing.
prepared jb 24 04 2002

Appendix D. Furniture and Equipment Schedule

	ICS	Furniture			Equipment		
		#	allow	extn	#	allow	extn
office	bookshelves in constr	0		0			0
	w/o desk	7	2800	19,600			0
	full allow less BC	10	3500	35,000			0
research lab	fc	4	600	2,400			0
	wkstn	4	1500	6,000			0
	sw chr	4	300	1,200			0
	chr	5	120	600			0
	table 4' dia	1	600	600			0
	fl lamp	8	150	1,200			0
dir office	fc	2	600	1,200			0
	sw chr	1	300	300			0
laidlaw recept	sw chr	1	300	300			0
	chr	4	120	480			0
	sm tables	2	120	240			0
laidlaw conf	tables for 15	5	600	3,000			0
	sw chr	15	300	4,500			0
	credenza	1	1000	1,000			0
	video conf unit			0	1	5000	5,000
	OH projector			0	1	1000	1,000
MA classroom	data projector			0	2	10000	20,000
	OH projector			0	1	1000	1,000
	seminar table 6'	15	500	7,500			0
	chrs	43	120	5,160			0
	cabt	1	1000	1,000			0
MA breakout	tables	2	600	1,200			0
	chr	15	120	1,800			0
	wkstn	4	1500	6,000			0
	cabt	4	1000	4,000			0
	comp			0	4	3000	12,000
MA seminar	data projector			0	1	10000	10,000
	tables	10	500	5,000			0
	chrs	35	120	4,200			0
MA comp lab	cabt	1	1000	1,000			0
	wkstn	15	1500	22,500			0
	printer table	1	500	500			0
	sw chr	15	300	4,500			0
	comp			0	7	3000	21,000
Teach lab	video cameras			0	8	1000	8,000
	child tables	4	1000	4,000			0
	child chrs	16	100	1,600			0
	TV/VCR			0	2	1000	2,000
student lounge	couches/sofas for 20	20	700	14,000			0
	coffee tables	3	300	900			0
	Mwave, fridge			0	2	600	1,200
	recycle bin	1	100	100			0
staff lounge	couches/sofas for 20	20	700	14,000			0
	coffee tables	3	300	900			0
	Mwave, fridge			0	2	600	1,200
	recycle bin	1	100	100			0
storage	cabt	1	600	600			0

proff resources	table	1	1000	1,000			0
	chrs	4	120	480			0
	wkstn	2	1500	3,000			0
	sw chr	2	300	600			0
	arm chr	2	700	1,400			0
	low table	1	400	400			0
	cabt	1	600	600			0
				185,660			82,400
	contingency		5.00%	9,283		10.00%	8,240
	escalate to mid 2005		10.00%	20,099		10.00%	9,345
	PST GST		10.31%	22,171		10.31%	10,308
	total			**237,212**			**110,293**
	Lab school	**Furniture**			**Equipment**		
daycare off	allow	1	4000	4,000			0
daycare				0			0
nursery	dry rack	1	1000	1,000			0
	puppet theatre	1	1000	1,000			0
	low table	1	500	500			0
	comp table	1	500	500			0
	sw chr	1	300	300			0
	comp	0		0	1	3000	3,000
	tables	5	500	2,500			0
	chrs	20	100	2,000			0
	low comp table	1	500	500			0
	printer table	1	300	300			0
	book shelves	2	700	1,400			0
	child couches	2	700	1,400			0
JK	dress-up centre	1	1000	1,000			0
	tables	6	500	3,000			0
	chrs	24	100	2,400			0
	wkstn	1	1500	1,500			0
	rug	1	1000	1,000			0
	craft tables	2	1000	2,000			0
	chrs	8	100	800			0
	low comp table	7	500	3,500			0
	chrs	7	120	840			0
	printer table	1	500	500			0
	data projector	0		0	1	10000	10,000
SK	wkstn	1	1500	1,500			0
	craft tables	1	1000	1,000			0
	chrs	8	100				
	rug	1	1000	1,000			0
	printer table	1	500	500			0
	child couches	2	700	1,400			0
	BC	2	600	1,200			0
	low comp table	1	500	500			0
	comp			0	1	3000	3,000
	data projector			0	1	10000	10,000
Gr 1	wkstn	1	1500	1,500			0
	craft tables	2	1000	2,000			0
	water table	1	1000	1,000			0

	sand table	1	1000	1,000			0
	easels	4	100	400			0
	BC	2	600	1,200			0
	couch	1	700	700			0
	printer table	1	500	500			0
	data projector			0	1	10000	10,000
Gr 2	wkstn	1	1500	1,500			0
	BC	2	600	1,200			0
	low comp table	8	500	4,000			0
	chr	8	100	800			0
	craft tables	2	1000	2,000			0
	printer table	1	500	500			0
	data projector			0	1	10000	10,000
Gr 3	tables	6	600	3,600			0
	chrs	22	100	2,200			0
	wkstn	1	1500	1,500			0
	BC	2	600	1,200			0
	printer table	1	500	500			0
	data projector			0	1	10000	10,000
Gr 4	tables for 6	4	600	2,400			0
	chrs	22	100	2,200			0
	wkstn	1	1500	1,500			0
	craft tables	1	1000	1,000			0
	chrs	8	100	800			0
	BC	2	600	1,200			0
	rug	1	1000	1,000			0
	printer table	1	500	500			0
	data projector	1		0	1	10000	10,000
Gr 5/6	wkstn	2	1500	3,000			0
	tables for 6	8	600	4,800			0
	FC	2	600	1,200			0
	BC	4	700	2,800			0
	printer table	2	500	1,000			
	data projector			0	2	10000	20,000
Art room	kiln			0	1	5000	5,000
	wkstn	1	1500	1,500			0
	tables for 12	3	500	1,500			0
	stools	12	100	1,200			
	low comp table	3	500	1,500			0
	chrs	3	100	300			
	display shelves	2	500	1,000			0
Prim French	wkstn	1	1500	1,500			0
	low comp table	3	500	1,500			0
	chrs	3	100	300			0
Jun French	wkstn	1	1500	1,500			0
	low comp table	2	500	1,000			0
	chrs	2	100	200			0
	tables	6	500	3,000			0
Spec Ed	low comp table	2	500	1,000			0
	chrs	2	100	200			0
	wkstn	1	1500	1,500			0
	table	1	500	500			0
	chrs	5	100	500			0
	couch	1	700	700			0
Music	chrs	25	100	2,500			0
	FC	1	600	600			0
	desk	1	700	700			0

	sw chr	1	300	300			0
	tables	6	500	3,000			0
	low comp table	2	500	1,000			0
	chrs	2	100	200			0
Gym/Theatre	data projector			0	1	10000	10,000
	chrs	150	100	15,000			0
	audio sys			0	1	10000	10,000
kitchen	fridge			0	1	1000	1,000
	stove			0	1	1500	1,500
	DW			0	1	1000	1,000
	Mwave			0	1	500	500
	kettle			0	1	100	100
Library	office set	1	4000	4,000	0		0
	tables	2	600	1,200			0
	chrs	8	120	960			0
	TV/VCR			0	1	1000	1,000
	cart	1	500	500			0
	couch	1	700	700			0
Archival	table	1	500	500			0
	chrs	5	120	600			0
	wkstn	1	1500	1,500			0
Class Obs	BC	8	600	4,800			0
	wkstn	4	1500	6,000			0
	sw chr	4	300	1,200			0
	LFC	8	600	4,800			0
	stools	32	100	3,200			0
Lunch Rm	combo table+seats	15	1000	15,000			0
Outdoor play	allow	1	10000	10,000			0
School Recept	armchr	2	700	1,400			0
	LFC	1	600	600			0
	small safe	1	500	500			0
ICS recept	allow	1	5000	5,000			0
				0			0
	total			195,900			116,100
	contingency		5.00%	9,795		10.00%	11,610
	escalate to mid 2005		10.00%	21,207		10.00%	13,167
	PST GST		10.31%	23,394		10.31%	14,524
	total			**250,296**			**155,401**

	Furniture	Equipment
grand total	**487,508**	**265,695**

prepared Apr-02
jcb

Appendix E: University of Toronto Environmental Protection Policy

PREAMBLE

The University of Toronto is committed to being a positive and creative force in the protection and enhancement of the local and global environment, through its teaching, research and administrative operations. Recognising that some of its activities, because of their scale and scope, have significant effects on the environment, the University as an institution, and all members of the university community, have the responsibility to society to act in ways consistent with the following principles and objectives:

FUNDAMENTAL PRINCIPLES

- Minimisation of negative impacts on the environment
- Conservation and wise use of natural resources
- Respect for biodiversity

SPECIFIC OBJECTIVES

In adopting these fundamental principles, the University will be guided by ethical attitudes towards natural spaces, and will take all reasonable steps to meet the following objectives:

- Minimise energy use, through efficient management and practice
- Minimise water use, through efficient management and practice
- Minimise waste generation through reduction, reuse and recycling
- Minimise polluting effluent and emissions into air, land and water
- Minimise noise and odour pollution
- Minimise and where possible eliminate use of chemicals, including outdoor salt, pesticides herbicides and cleaning agents
- Include biodiversity and environmental concerns in planning and landscape decisions
- Meet and where possible exceed environmental standards, regulations and guidelines

IMPLEMENTATION

To implement this Environmental Protection Policy:

- An Environmental Protection Advisory Committee (EPAC) will be established consisting of administrative staff, academic staff and student groups, to be chaired by a member of the University's academic staff. The Committee will provide advice to the Assistant Vice-President, Operations and Services, on programs to meet the environmental protection objectives. Membership of the committee will be made known to the community to ensure that new and existing initiatives are brought forward for consideration. The meetings of EPAC will be open.
- Facilities and Services, through the Waste Management Department will facilitate the development, implementation and evaluation of environmental protection programs, and will liaise with the EPAC and all three campuses on the programs.
- In this role Facilities and Services will:
  - Regularly review university policies to ensure consistency with this policy;
  - Carry out appropriate environmental audits and pilot projects;
  - Undertake education and training programs to inform the University Community about this and how its members, both personally and collectively, can best meet the objectives set forth in it;
  - Inform all contractors, service operations and users of University facilities that they must comply with the requirements of the policy;
  - Annually issue a report concerning the University's impact on the environment, summarising initiatives undertaken and identifying matters which require particular attention.

Approved by Business Board of the Governing Council on March 7, 1994.

Environmental Checklist for Users Committees (5/99)

1. General planning principles: Consideration of alternatives, Life cycle approach

2. Minimize Energy Use
   a) Thermal Energy: Heating, Cooling
   b) Lighting/Use of Natural Light
   c) Ventilation/Windows
   d) Machinery/Equipment
   e) Orientation of Building - effect on building energy needs
   f) Roof Design

3. Minimize Water Use (Maximize Reuse)
   a) Flushing b) Washing - hands and body
   c) Building Cleaning d) Drinking
   e) Experimental/Labs f) Equipment Cooling
   g) Outdoor Vegetation - choice and watering (see #4)

4. Utilization and Diversion of Rainwater
   a) Use of Roof Water b) Porous Pavements

5. Waste Management (offices, classrooms, food outlets, outdoors, construction/demolition)
   a) Reduction b) Reuse
   c) Recycling d) Treatment and Disposal - possible on campus

6. Effluent and Emissions (reduce, reuse, recycle, dispose)
   a) Indoor (Air Toxicity, Noise, Odours, Ventilation)
   b) Outdoor Air - laboratory emissions
   c) Water - Hazardous Wastes
   d) Land

7. Reduce Harmful Chemicals
   a) Outdoor Salts b) Pesticides/Herbicides
   c) Cleaning Agents

8. Outdoor Environment
   a) Encourage Biodiversity (encourage and protection of species)
   b) Landscaping/Shading - effect on building energy needs in summer and winter
   c) Use of outdoor space (e.g. rest areas, roof gardens)

9. Monitoring and Metering of Use of Resources and Wastes
   a) Water b) Electricity
   c) Heat d) Wastes

10. Visibility of Environmental Concerns
    a) Pilot Projects b) Posters/Displays

11. Material Choice (Use of endangered/exotic materials, off-gassing)
    a) Building Fabric
    b) Fixtures and Furnishings

Appendix F. Current ICS Academic Research

P.I.	Janet Astington
CICHD Fellowship	Jodie Baird
Sponsor	National Institutes of Health (US) (NIH)
Title	Children's understanding of intention and morality
Start Date	Feb 7/00
End Date	Feb 6/03
Total Amount Funded	21,579.90
Sponsor	Natural Sciences and Engineering (NSERC)
Title	Language and theory-of-mind development
Start Date	April 1/01
End Date	Mar 31/06
Total Amount Funded	96,000
Sponsor	Social Sciences and Humanities (SSHRC)
Title	Why Language Matters for theory of mind (Conf. Acct.)
Start Date	Feb 1/02
End Date	Apr 30/03
Total Amount Funded	10,000
Research Fellowship Award for Professor Janet Astington	
Sponsor	Connaught Fund
Title	Development of the Child's Theory of Mind: Why does language
	matter? - Research Fellowship
Start Date	Jan 1/02
End Date	June 30/02
Total Amount Funded	26,800 *ICS portion

P.I.	Andrew Biemiller
Sponsor	SSHRC
Title	CSSE annual meeting
Start Date	April 1/00
End Date	March 31/03
Total Amount Funded	200
Sponsor	Transfer Grant
Title	Developing classroom procedures to enhance vocabulary in
	vulnerable elementary children
Start Date	Nov /01
End Date	
Total Amount Funded	20,459

PI	Carl Corter
Co-Investigators	Dr. Janette Pelletier, Professor Donald McKay (Ryerson Polytechnic U)
Sponsor	City of Toronto, Atkinson Charitable Foundation

Title	Early Childhood Education, Development and Care Pilot Project Evaluation
Start Date	Sept 1/01
End Date	Dec /04
Total Amount Funded	$341,697

P.I.	Joan Moss
Sponsor	Connaught Fund (Start-up)
Title	Raqtional number teaching project
Start Date	July 1/01
End Date	June 30/03
Total Amount Funded	10,000

P.I.	Jan Pelletier
Sponsor	Connaught Fund (Start-up)
Title	Developing Teacher Beliefs and Practices in a Teacehr Education
	Program
Start Date	July 1/99
End Date	June 30/02
Total Amount Funded	10,000
Sponsor	SSHRC (small scale)
Title	The effects of learning in a second on mental understanding and
	higher-order reading comprehension
Start Date	April 1/00
End Date	Mar 31/03
Total Amount Funded	2,472
Sponsor	Connaught Fund
Title	The realtion between metacognitive language development and
	reading comprehension in first and second language learners
Start Date	May 1/01
End Date	Apr 30/03
Total Amount Funded	20,000
Sponsor	SSHRC
Title	School readiness for diverse families: A kindergarten intervention
	program
Start Date	Apr 1/02
End Date	Mar 31/06
Total Amount Funded	139,329
Sponsor	Transfer Grant
Title	Moving parenting and readiness centres to kindergarten
Start Date	Nov /01
End Date	
Total Amount Funded	21,506

P.I.	Rick Volpe
Sponsor	Various Sponsors
Title	Life Span Adaptation projects
Start Date	Aug 1/78
End Date	
Total Amount Funded	27,961.83
Sponsor	Ministry of Community and Social Sciences
Title	Life Span Adaptation
Start Date	Aug 1/00
End Date	Apr 30/02
Total Amount Funded	14,000

Sponsor	Laurentian University
Title	Life Span Adaptation project design for injury prevention in NE Ontario
Start Date	Feb 1/01
End Date	Apr 30/02
Total Amount Funded	9,000
Sponsor	Ministry of Transportation
Title	Context, risk, and identity in young drivers
Start Date	Feb 15/01
End Date	March 30/02
Total Amount Funded	36,175
Sponsor	Ontario Neurotrama Foundation
Title	Development of a compendium of best practices in neurotrama injury
	prevention - Edition II
Start Date	Oct 10/01
End Date	Nov 30/02
Total Amount Funded	73,500

Total funding at ICS: 880,679.73

Appendix G. Laboratory School Research *2000-2001*

PROJECT TITLE	AGE GROUP	INVESTIGATORS
Reading to Children: Using Metacognitive Terms	Nursery	Dr. Joan Peskin
Language and Theory of Mind Development: Children's Performance On Verbal vs. Visual False-Belief Tasks	Nursery, JK	Dr. Jodie Baird Dr. Janet Astington
How Children Learn New Vocabulary Meanings	SK, 1, 2, 3	Dr. Andy Biemiller
Beyond Schooling: Situating the K-12 Research Agenda in the Knowledge Society	1, 3, 4, 5/6	Dr. Marlene Scardamalia, Elizabeth Morley, Richard Reeve, Patti MacDonald, Robin Shaw, Mary Jane Moreau, Richard Messina Bev Caswell
Story Grammar and Narrative Retelling	2, 3, 4, 5/6	Shanna Francis
Learning Through the Arts	Nursery, JK, SK	Dr. Rena Upitis, Dr. Katharine Smithrim, Elizabeth Morley Research Associates: Cindy Halewood, Julie Comay, Carol Stephenson, Heather Gilman
Bloorview MacMillan: Reverse Integration	JK, SK	Dr. Rick Volpe, Elizabeth Morley, Linda LaRocque Research Associates: Heather Gilman, Paul Alcamo
Understanding False Belief	Nursery / JK	Dr. Janet Astington
Children's and Parents' Perception of Children's Rights Issues	4, 5, 6	Dr. Michelle Peterson-Badali
Patterns and Predictors in Young Children's Developing Understanding Of Print	Nursery / SK	Dr. Jan Pelletier Jennifer Lasenby
Language and Theory of Mind Development: Children's Narrative Production	SK	Dr. Janet Astington Julie Comay
Children's Narratives as a Function of Listener's Knowledge	Nursery, JK, SK	Dr. Janet Astington Dr. Jodie Baird
Children's Perceptions of Physically Disabled Peers	JK, SK	Dr. Jan Pelletier Katherine Nowack

Appendix H. Visitors to the Laboratory School *2000-2001*

- 20 Teacher Education Students and Faculty -- Kobe Shinwa University (Japan)
- 2 Professors -- Open University of Israel
- 1 Staff Member -- Open University of Israel
- 1 Professor and Student -- York University (Toronto)
- 5 Staff Members -- Bishop Strachan School (Toronto)
- 2 Teachers -- Elkhorn Public School (Toronto)
- 1 Professor -- Athens University and Tech Institute (Greece)
- 1 Professor -- Chao-Yang University of Technology (Taiwan)
- 2 Journalists -- Commonwealth Magazine (Taiwan)
- 1 Staff Member -- Center for Instructional Technology in Education (Hong Kong)
- 2 Instructors -- Fanshawe College (London, Ontario)
- 1 Professor -- University of Padova (Italy)
- 1 Staff Member -- Toronto Rehabilitation Institute
- 10 Teacher Education Students and Faculty -- University of Melbourne (Australia)
- 1 Professor -- Memorial University (Newfoundland)
- 2 Senior Educators -- New Zealand
- 3 Professors -- Kyoto University (Japan)
- Founder of Reading Recovery -- New Zealand
- Montessori Staff -- Taddle Creek (Toronto)
- 1 Elementary School Writing Teacher -- Los Angelos (California)
- 15 Teachers and Administrators -- Sao Paolo, Brazil
- 3 Research Administrators (U of T)

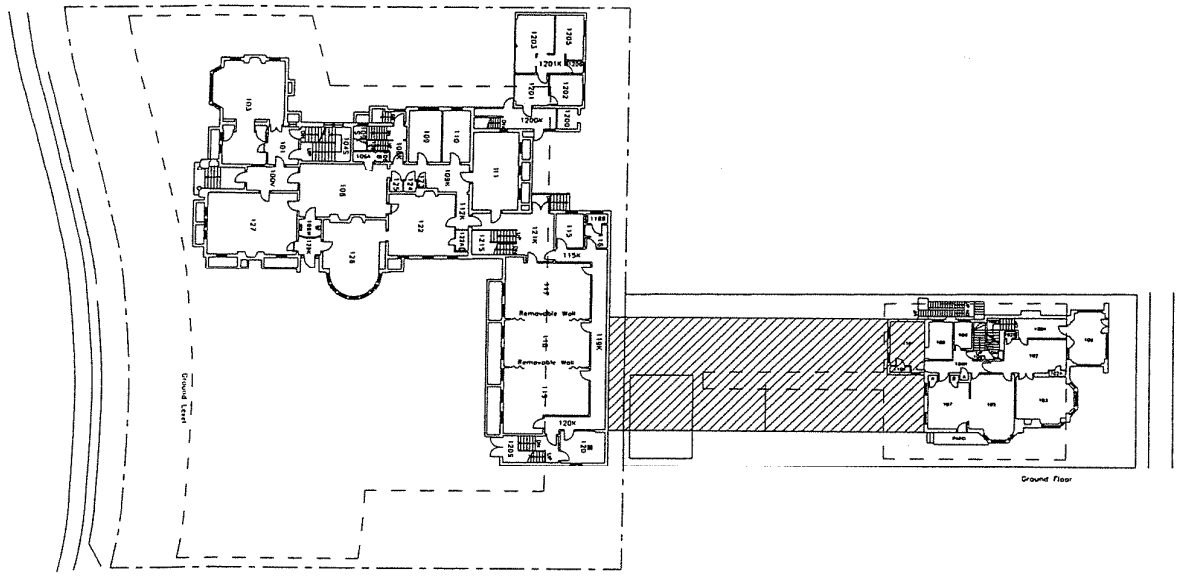
Laboratory School Visits by ICS Teachers

- Mills College Laboratory School -- Oakland California
- Falk Laboratory School -- University of Pittsburgh, Pittsburgh Pennsylvania
- The Children's School -- Carnegie Mellon University, Pittsburgh Pennsylvania
- The University of Minnesota Lab School -- Minneapolis, Minnesota
- The University of Toronto Schools -- Toronto, Ontario

Appendix I. Room Data Sheets

Available Upon Request

Appendix J. Site Plan



Note: hatched area = new building location