# Human Subjects Research Committee Application

## Exemplar 1

## Application for Ethical Review of Human Research University of Lethbridge – Faculty of Education

<u>Note</u>: This exemplar contains documentation which address <u>all</u> components of a complete, comprehensive and complex HSR Application. Your application *may* not require all of these components, depending upon the complexity of your research. Be sure to consult the "*Guidelines for Application for Human Subject Research Approval*" for complete information, and contact the Office of Graduate Studies and Research in Education if you have any questions.



## APPLICATION FOR ETHICAL REVIEW OF HUMAN RESEARCH Faculty of Education

987-654-3210

Phone:

#### Instructions:

1.	Use the <i>Ethics Applications Guidelines</i> to complete this form. The Guidelines and all other forms are available on the Faculty of Education web site: <u>http://www.edu.uleth.ca/</u>						
2.	2. Submit one (1) original and three (3) copies to Office of Graduate Studies and Research, Faculty of Education. <i>Handwritten or electronic applications will not be processed</i> .						
3.	Use the appropriate include	d Participant	Consent Form (template) to	construct your consent	form (page 9 - 12).		
Α.	Applicant Information	on					
	Principal Investigator:	Agood St	udent	E-Mail:	agood.student@uleth.ca		
	Mailing Address:	12345 – Anystreet		Phone:	123-456-7890		
		Anytown,	AB				
		Z9Q X0Z					
	Are you: 🗌 Faculty	Staff	Graduate Student	Undergraduate	Student		
	If you are a student:						
	Name of Supervisor:	Dr. Great	Prof	E-Mail:	great.prof@uleth.ca		

#### **B.** Project Information

## Project Title: The Effectivness of Aacme Tutoring Inc. for Children with Significant Difficulties in Mathematics

Geographic location of study: Gophertown, Alberta

*Note*: If this study is to be located in schools within Zone 6, remember that once HSRC approval has been granted, the proposal will be forwarded to the Field Experiences Office, Faculty of Education for district and school approval prior to the study beginning. You will be notified by the Chair, HSRC upon receipt of district/school approval.

Is this a class project?  $\square$  No  $\square$  Yes *Note:* A class project application is normally submitted by an instructor who is teaching a research course and whose students will be conducting a mini research project for the course. Have you applied for funding for this project?  $\square$  No  $\square$  Yes (If "yes" complete the following )

Have you applied for funding for this project?		🗌 No	🛛 Yes	(If "yes", complete the following.)
	Source(s) of funding:	Exact title of grant(s):		):
1	Mathematics and Language Arts Research Council	Fourier-	Gauss Gr	aduate Scholarship
2				
3				
Ot	her Investigators on this project:			
	Name	Institution	nal Affiliati	on E-mail address
1				

2		
3		
4		
5		
Employees (e.g., research assistants) should	be listed as investigators. If investigators change, inform the Chair of HSRC.	
Proposed Start Date: October 15, 2	8 (allow 4-6 weeks for review)	

#### C. Signatures

Your signature indicates that you agree to abide by all policies, procedures, regulations and laws governing the ethical conduct of research involving humans. Policies and procedures can be found on the Faculty of Education web site: http://www.edu.uleth.ca/

Principal Investigator:		Date:		
<b>e</b> 1	sor below indicates that the supervisory committee has revisor has assisted the student in the preparation of this appl		pproved the student's	

Student's Supervisor:

Date:

#### D. Scholarly Review

Many research projects must undergo scholarly review. What type of scholarly review has this research undergone?

- None None
- External Peer Review (e.g., granting agency)
- Supervisory Committee (required for all student research projects)
- Special Review (explain below)

#### E. Research Project Information

The following information is required by the Committee to review the ethics of your research. Items marked by \* must be included as part of the process of informed consent for participants. Researchers are encouraged to adapt the information provided to the Committee for the consent form and process (see included "Participant Consent Form Template" page 11). The use of lay language is required. Use the space provided. If more information must be provided, append an additional page and label with the appropriate heading.

\* 1. What are the purposes and objectives of your research?

The purpose of the current study is to determine the effectiveness of the Aacme Tutoring Inc. Math program for children with significant difficulties in mathematics. The current study will, therefore, add to the literature base regarding effective treatments for children with Mathematics Disorder (MD).

\* 2. Why is this research important? What contributions will it make?

This study is necessary and important for several reasons: 1) mathematical skills are essential for all individuals to obtain independence and a high quality of life, and 2) practitioners, teachers, parents, and children with MD need and deserve a larger knowledge base of effective interventions to build mathematical skills. Effective treatments will directly improve the quality of life of children with MD and will therefore positively influence the quality of life of parents, teachers, and practitioners indirectly. It is also important to expand the knowledge base of effective treatments because of the extensive resources invested in interventions. Such precious resources are best invested in scientifically proven programs.

#### F. Participants

- \* 3a. How will you recruit participants?
  - By letter (enclose a copy) By telephone (enclose the script)
  - Through another organization or a third party (e.g., school records)

Enclose evidence of permission to use these organizations or third parties in recruitment. Other (please describe below)

Participants in the experimental group will be recruited from Aacme Tutoring Inc Centres in Gophertown, Alberta. Mane Man, an Aacme Tutoring Inc Canada manager, will help coordinate participant recruitment. Control participants will be recruited from schools in the Gophertown District School Board (GDSB). The GDSB Research Ethics Board is currently reviewing my application to conduct research within in the GDSB.

By advertisement (enclose a copy)

\* 3b. How will participants be selected? In the space below, provide the description you will use in the consent process to inform participants of why and how they were selected for inclusion in the study.

Experimental group participants will be selected based on the scores they obtained on Aacme Tutoring Inc's Placement Test. I will review Placement Test data collected by Aacme Tutoring Inc for recently enrolled students (less than one month prior to date of pre-testing). Children in grades four, five, and six who score at or below the median score on the Placement Test will be asked to participate. Children will only be informed that participants must be grade four, five, or six students in order to protect the identity and feelings of children with the lowest scores on the Placement Test. Parents will be informed that all children attending Aacme Tutoring Inc on selected days have been invited to participate to protect the identity of low scorers.

Control group participants will be selected based on grade and class size. I will choose schools with the largest grade four, five, and six classes to increase testing efficiency. Children in the control group will be informed of why and how they were selected for inclusion in the same manner as children in the experimental group. Parental information will be the same as well; with the exception that they will be informed that all grade four, five, and six students in their child's school have been requested to participate.

Of the collected data, I will only be including and analyzing the data of participants who score in the average range on the Verbal section of the CCAT (84 or higher) and in the lowest quartile on the Canadian Achievement Test, Third Edition (CAT-3).

4a. The competence and ability of potential participants to make informed decisions about whether to participate is an important consideration. Describe your prospective participants:

	Competent	adults
$\nabla$	Commentant	- <b>1</b> - : <b>1</b> - <b>J</b>

Incompetent adults

- Competent children/youth
- A protected or vulnerable population (e.g., inmates, patients)
- 4b. Provide details of the types of participants who will be included in the study (e.g., numbers, gender, age, position).

Both experimental and control groups will comprise 200 students and both groups will contain approximately equal numbers of students in grades four, five, and six, as well as approximately equal numbers of males and females. Parents will be asked to indicate whether their child is receiving withdrawal support (defined as placement in a regular class with instruction outside the classroom for less than 50 per cent of the school day from a qualified special education teacher). Both experimental and control groups will comprise approximately equal numbers of children who receive withdrawal support and children who do not receive support. There will be no inclusion or exclusion criteria pertaining to the child's ethnicity or socioeconomic status. Children identified by their parents as having a comorbid Reading Disorder and/or Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD) will be excluded from the study. Any child in the control group using an extra-curricular supplemental or remedial program will be excluded from the study and any child in the experimental group using an extra-curricular supplemental or remedial program other than Aacme Tutoring Inc Math will be excluded. All participants will be recruited from the Gophertown, Alberta area. 5. If participants will/may not be able to provide consent for themselves, how will you gain consent? See the Ethics Application Guidelines for further detail if your research involves children.

#### Parents will provide consent for their children to participate. Participants will also be asked to sign an assent form.

#### G. Procedures

- \* 6a. Which of the following will the participants be expected to complete? (check all that apply)
  - be interviewed individually  $\boxtimes$  complete a questionnaire be observed

participate in a group interview

- provide access to records or other personal materials  $\boxtimes$  Other (specify below)

To determine participant's intellectual abilities, I will need to access the participant's scores on the Canadian Cognitive Abilities Test (CCAT). This test is administered board-wide in Gophertown schools and in selected adjacent community schools when children are in grade four. I will need to access the Official Student Records (OSR) of control and experimental group participants who have already completed the CCAT.

6b. Provide details to your answer in 6a (e.g., name of questionnaire, source of documents, type of task). In an appendix, provide sample interview questions, copies of instruments, or examples of questionnaire items. Indicate below which appendix contains the information.

Participants will be required to complete the mathematics subtests of the Canadian Achievement Test, Third Edition (CAT-3) at pre-testing (November) and at post-testing (May). In the case of experimental group participants, some students will not have completed the CCAT as a part of their regular curriculum. If a participant did not already complete the CCAT, he or she will be required to complete the Verbal section of the CCAT.

Parents will be asked to complete a questionnaire regarding psychological diagnoses and supplemental/remedial educational programs pertaining to their child (Appendix A).

\* 6c. How will these procedures and methods be described to participants in the process of obtaining informed consent?

Children will be informed prior to signing the assent form and completing the CAT-3 (and CCAT if necessary) that I am completing a research study on grade four, five, and six children's mathematical abilities. Children will not be informed that I am specifically looking at children with mathematical difficulties in order to protect children with low abilities from stigmatization. Parents will be informed via the consent letter that the study is designed to determine the effectiveness of the Aacme Tutoring Inc Math program for children with significant difficulties, but also that children who meet the criteria for inclusion in the study will not be identified to anyone other than the parent (if requested).

\* 6d. How much time will be required to participate?

Pre- and post-testing will take approximately two hours.

\* 6e. Where will participation happen?

Control group children will complete the CAT-3 in their regular classrooms during regular school hours. Children in the experimental group will complete the assessment measures at their regular Aacme Tutoring Inc Centre during their regular lesson time.

6f. What special training or qualifications are required for data gatherers?

The administrator of the CAT-3 and CCAT needs only to be familiar with the test's administration quidelines and does not need any graduate level training in cognitive assessment. The individual interpreting and delivering the results of these tests, however, should have completed a Masters level course in Assessment and should have practical experience in the administration of achievement and ability tests with children. I will be the sole data gatherer/interpreter and I will be the only individual disseminating any results and I have both required gualifications.

#### H. Potential Risks and Benefits

\* 7. What are the potential or known inconveniences associated with participation and how will these be described in the consent process?

Children may be inconvenienced because testing will occur during their regular school/Aacme Tutoring Inc lesson time. This means that the participant will have to complete the regularly scheduled material at another time. Parents of children in the experimental group may also be inconvenienced if their child requires extra time at their Aacme Tutoring Inc Centre to complete the tests, requiring the parent to wait longer than usual. These inconveniences will be outlined in the consent letter.

\* 8a. Are there any of the following potential risks to participants?

 $\square$  physical  $\square$  social  $\square$  psychological  $\boxtimes$  emotional  $\square$  economic  $\square$  Other (specify)

\* 8b. Provide details to your answer below and describe how you will explain the risks to participants.

Children may feel anxiety when asked to complete mathematics problems and tests, especially if they have significant difficulties in mathematics. Both parents and children will be informed of this risk in the consent and assent letters, respectively.

Parents may feel anxiety regarding their child's testing results. If parents choose to learn their child's results, it is possible that parents will misunderstand the meaning of the scores and may cause the parent to over or underestimate their child's abilities.

\* 9. If there are any anticipated risks, how will they be minimized and dealt with if they occur (e.g., provide referrals to counselling services)? How you will describe this minimization to participants.

Before administering the assessment measures I will remind participants that the results of the test will only be used in my research study and will not be used for report cards/Aacme Tutoring Inc programming. Children will also be informed that they can choose not to write the test and/or stop at any time without consequence by raising their hand and telling the administrator (me).

Parents will be informed in the consent document of their right to learn their child's testing results. Parents will also be informed of the possibility of misinterpreting test scores. If a parent chooses to learn their child's results, a formal meeting will be arranged for me to fully explain their child's results. Parents will be provided with my phone number and my supervisor's phone number to contact if they have any further questions or concerns regarding testing results.

\* 10a. Are there any potential or known benefits associated with participation?

 $\Box$  directly to the participant  $\boxtimes$  to society  $\boxtimes$  to state of knowledge

\* 10b. How will you describe these benefits to the participant?

The benefits to society and the state of knowledge regarding interventions for individuals with math disabilities will be explained to parents in the consent letter. Children will be informed via the assent letter that their participation will allow me to determine what math programs are the most helpful for grade four, five, and six students.

\* 10c. If there are any inducements (e.g., gifts, compensation, grades, bonus points) to participate, what are they and why are they necessary?

#### There are no inducements to participate.

#### I. Consent

\* 11a. Informed consent requires that participation be voluntary and that the participants have the right to withdraw at anytime without consequences. How will you explain these options to potential participants?

The consent letter will outline that participation is voluntary and that there will be no consequences to parents or their child should they choose not to participate. Parents will be informed that participation or non-participation in this study will not impact their child's schooling/Aacme Tutoring Inc programming. The consent letter will also outline that parents can withdraw from the study for up to two weeks following post-testing.

The assessment administrator will also explain to children before commencing that they can stop writing a test whenever they want by raising their hand and notifying the administrator. Children will be informed that there will be no negative consequences for quitting the study.

- \* 11b. What happens to a person's data if he/she withdraws part way through the study?
  - $\square$  it will not be used in the analysis  $\square$  it is logistically impossible to ren
  - it is logistically impossible to remove individual participant data
  - it will be used in the analysis if the participant agrees to this (specify how this agreement will be obtained)
- \* 11c. How will you explain this to the participants?

The consent form will outline that if a participant withdraws part way through the study, their data will be destroyed by shredding their documents. However, two weeks after post-testing is complete the parent can no longer rescind consent. This will be outlined in the consent form as well.

\* 12a. Are you in any way in a position of authority or power over participants?

Examples of a "power over" dilemma include teachers/students, therapists/clients, and supervisors/employees.

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Yes (If "yes", explain your relationship and how coercion will be prevented.)

- \* 12b. Provide a description of how this will be discussed in the consent process.
- \* 13. How will you provide for ongoing consent by participants during the data gathering period? How will this be described to participants?

This is primarily an issue in research that occurs over multiple occasions or an extended period of time.

One month before post-testing, a letter will be sent home to parents reminding them of their child's participation in the study and the upcoming testing. Parents will be reminded that they may revoke their consent at this point in time by contacting the primary investigator or her supervisor if they so desire.

\* 14. Do you anticipate that this research will be used for a commercial purpose?



 $\overline{\boxtimes}$  Yes (If "yes", explain how you will describe this to the participants in the consent process.)

The consent form will outline that the results from this study will be used in a thesis project and possibly in journal articles as well as public presentations. However, individual results and names will not be disclosed.

#### J. Anonymity and Confidentiality

*Questions 15 and 16 deal with anonymity and confidentiality. While these two concepts are related, they are NOT the same. Please refer to the Guidelines and the brief definitions below to assist you in answering these questions.* 

**Anonymity** refers to the protection of the identity of participants. Anonymity can be provided along a continuum, from "complete" to "no" protection. Complete protection means that no identifying information will be collected.

\* 15a. Will the anonymity of participants be protected?

 $\Box$  Yes (completely)  $\Box$  Yes (partially)  $\Box$  No

\* 15b. If "yes", how will anonymity be protected and how will this be explained in the consent process?

A five-digit code will be created for each participant. The first digit will represent the school/Aacme Tutoring Inc Centre, the second digit will represent the teacher/Aacme Tutoring Inc instructor, and the last three digits will represent the specific participant. This code will be the only identification on CAT-3 subtests and the CCAT (if it is administered as a component of this study). Teachers/Aacme Tutoring Inc Instructors will be given a master list in order to distribute testing materials to participants. Other

than on the consent forms and the master list, the participant's names will not be accessible. The consent forms and master list will be locked in a cabinet and will only be accessible to me. Once data collection is complete the master list will be destroyed by shredding.

The consent form will inform parents of this code system and that their anonymity will be maintained as best as possible.

\* 15c. If "no", justify why loss of anonymity is required and explain how this will be explained in the consent process.

*Confidentiality* refers to the protection, access, control and security of the data and personal information.

- \* 16a. Will you provide confidentiality to the participants and their data (print & electronic)?
- \* 16b. If "yes", how will confidentiality be protected and how will this be explained in the consent process?

The consent form will outline that the master list of names and codes, as well as consent forms and completed assessment protocols will be locked in a cabinet that will only be accessible to me. After 5 years, these documents will be shredded.

\*16c. If "no", justify the lack of confidentiality and explain how this will be explained in the consent process.

#### K. Results and Uses of Data

\* 17. What other uses will be made of the data? How will this be described to participants?

The data will be used in a thesis project and possibly in journal articles and public presentations. This will be outlined in the consent form.

\* 18. When the research is complete what are your plans for preserving and protecting data or for destroying data (print & electronic)? How will these plans be described to participants?

All paper documents will be locked in a cabinet. This cabinet will only be accessible to me and my supervisor. In five years this data will be destroyed by shredding. All electronic data will be protected by a password. This password will only be known by me. At the end of the study, all data will be printed off and stored in a locked cabinet. The electronic copy will be permanently deleted after printing and the printed documents will be shredded five years after the completion of the study.

Published article

- \* 19a. How do you anticipate disseminating your results?
  - Directly to participants
  - Thesis/Dissertation/class presentation Presentations at scholarly meetings
    - Internet Other (specify below)
- \* 19b. How will you describe the dissemination of results to participants during the consent process?

The consent form will outline that I plan to disseminate my results in a thesis project and that the results may also be disseminated in published articles and/or presentations.

#### L. Contact Information

\* 20. How will participants be able to contact you (and/or your supervisor) if they have questions or concerns about the study? *Provide telephone numbers that participants may use for the principal investigator, and (if applicable) the student's supervisor, and other researchers. The consent form must include the telephone number of the Chair, HSRC (403-329-2425).* 

Participants will be able to contact me by phone (123-456-7890) and/or by email (agood.student@uleth.ca). Participants will be able to contact my supervisor, Dr. Prof, by phone (987-654-3210 and/or by email (great.prof@uleth.ca).

- \* 21a. Other than the investigators, what are the names of individuals (employees or volunteers) who will be involved in data gathering or management? *If not known at the time of submission, provide this information to us when it becomes available.* 
  - 1. **N/A**
  - 2.
  - 3.
  - *3*. 4.
  - 4.
  - 5.
- 21b. If these individuals require special training, skills, and/or qualifications, what are they and how will they be adequately prepared?

#### M. Additional review criteria

- 22. If there is anything else you believe the Committee should know about this study, provide that information below.
- 23. If applicable, attach the following documents to this application. Check those that are appended.
  - Consent forms (use the attached *Participant Consent Form Template*)
  - Recruitment materials (for individuals, organizations, etc.)
  - Interview schedules
  - Questionnaires
  - Permission to gain access to confidential documents or materials
  - Approval from external organizations where required (or proof of having made a request for permission). In the case of studies to be located in schools within Zone 6, remember that once HSRC approval has been granted, the proposal will be forwarded to the Field Experiences Office, Faculty of Education for district and school approval prior to initiation of the study. You will be notified by the Chair, HSRC upon receipt of district/school approval.



## PARTICIPANT (PARENT) CONSENT FORM Aacme Tutoring Inc Participants

#### The Effectiveness of Aacme Tutoring Inc for Children with Significant Difficulties in Mathematics

Your child is being invited to participate in a study entitled The Effectiveness of Aacme Tutoring Inc for Children with Significant Difficulties in Mathematics that is being conducted by Agood Student. Agood Student is a graduate student in the Faculty of Education at the University of Lethbridge and you may contact her if you have further questions by email at agood.student@uleth.ca or by phone at (123) 456-7890.

As a graduate student, Agood is required to conduct research as part of the requirements for a degree in Counselling Psychology. This thesis project is being conducted under the supervision of Dr. Great Prof. You may contact her supervisor by email at great.prof@uleth.ca or by phone at (987) 654-3210

This research is being funded by the Fourier-Gauss Graduate Scholarship.

The purpose of this research project is to determine whether Aacme Tutoring Inc significantly improves achievement in mathematics among children with significant difficulties in mathematics.

Research of this type is important because mathematical skills are essential to ensure academic and personal success. Scientifically proven intervention programs for children with significant difficulties in mathematics are sparse. The results of this study will enhance the knowledge of parents, psychologists and teachers regarding available, effective treatments for children with significant academic struggles.

You and your child are being asked to participate in this study because your child was recently enrolled in Aacme Tutoring Inc. All recently enrolled children in grades four, five, and six in certain Gophertown area Aacme Tutoring Inc Centres will be asked to participate in this study. All children (with consent to participate) will be tested to prevent the identification and stigmatization of children with the lowest math scores.

If you and your child agree to voluntarily participate in this research, your child will be asked to complete the mathematics subtests of the Canadian Achievement Test, Third Edition (CAT-3) in the Fall of 2008 and again in the Spring of 2009. The CAT-3 math subtests take approximately 110 minutes to complete and they measure mathematics skills. These tests would be written over two days, with one day of testing lasting about one hour and the second day lasting about 45 minutes. The second test included in this study is the Canadian Cognitive Abilities Test (CCAT), which measures cognitive ability. Many children in the Gophertown area are required to take this test at school in grade four (all Gophertown District schools and selected Adjacent District Schools – see Appendix for complete list). If your child has already written this test (and you give your consent to participate), Agood will retrieve your child's CCAT scores from his or her Official Student Record. If your child has not already written this test, he or she would be required to write the Verbal subtests of the CCAT at his or her local Aacme Tutoring Inc Centre in order to participate. This test takes approximately 45 minutes to complete and would only be written once, in fall 2008.

Although all children (with parental consent) will be tested to protect the identity of children with significant difficulties in mathematics, Agood will only include a child's test results in her study if the child meets two criteria. First, to be eligible, a child has to score at or below the 25<sup>th</sup> percentile on the CAT-3 (mathematics test). Second, the child has to have scored in the average or above average range on the CCAT (cognitive ability test). Children's names and other identifying information will not be included in the study (see more on anonymity and confidentiality below).

If you would like to be debriefed on your child's performance on the tests administered for this study (the CAT-3 and in some cases, the CCAT), you should contact Agood by phone or email to arrange a meeting. Results will only be shared with parents during scheduled meetings.

Participation in this study may cause some inconvenience to you and your child, such as interruption of Aacme Tutoring Inc instruction time during testing. Parents may also have to wait for their child to finish writing the test(s).

There are some potential risks to you and your child by participating in this research. You may feel anxious to know how your child scored on the achievement and ability tests and whether your child's data has been selected for use in the study. Your child may feel anxiety and/or frustration during testing. To prevent these risks, the following steps will be taken. First, no parent or Aacme Tutoring Inc instructor will be notified of the children selected for inclusion in the study. These measures are to protect the identity and prevent the stigmatization of children with significant difficulties in mathematics. You will, however, have access to your child's testing results if you schedule a meeting with Agood. To reduce the risk of children's anxiety and frustration during testing, children will be allotted the full testing time allowed by the administration procedures and children will be instructed that the test scores will not impact their Aacme Tutoring Inc grades and that the test administrator (Agood) only requires his or her best effort.

The potential benefits of your participation in this research include contribution to the scientific knowledge of effective programs for children with significant difficulties in mathematics, and specifically whether Aacme Tutoring Inc is effective for children with significant difficulties in mathematics.

Your participation in this research must be completely voluntary. If you decide to participate, you may withdraw at any time up until two weeks following the second round of testing in spring 2009. At this time all names will be deleted, making individual results irretrievable. Up until this time, you may withdraw your consent without any consequence or explanation. Your and your child's relationship with Aacme Tutoring Inc will not be affected whether you participate or not. If you withdraw from the study (before the aforementioned deadline), all data collected by the researcher up to that point will be shredded.

To make sure that you continue to consent to participate in this research, Agood will notify you of the second CAT-3 testing in the spring and your right to withdraw from the study one month before beginning this testing.

This research may lead to a commercial product or service. The nature of this commercial use is a thesis project and possibly published journal articles as well as public presentations. If this study determines that Aacme Tutoring Inc is effective, Aacme Tutoring Inc may use the results of the study to promote their business. Again, individual results and names will not be disclosed.

To protect your child's anonymity, your child will be assigned a 5-digit code. All documents administered by Agood will only contain this code. Individual results and names will not be disclosed in the final report. The master list of codes and participant names will be stored in a locked cabinet that will only be accessible by Agood and her supervisor. This master list will be destroyed by shredding in five years.

Your and your child's confidentiality and the confidentiality of the data will be protected by locking the master list of participant codes and names, consent forms, and CAT-3 and CCAT test forms (if administered by Agood) in a cabinet that is only accessible to Agood and her supervisor. After five years, these documents will be shredded. The computer used for data analysis and report writing will be protected by a password.

In addition to being able to contact the researcher and the supervisor at the above email addresses/ phone numbers, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Chair of the Faculty of Education Human Subjects Research Committee at the University of Lethbridge (403-329-2425).

Other individuals that may be contacted regarding this study include Mane Man, a manager at Aacme Tutoring Inc Canada. Mr. Man can be reached at mman@aacmetutoring.com or (555) 555-9999.

Your signature below indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have your questions answered by the researcher.

Name of Child

Date

Name of Parent

Signature of Parent

A copy of this consent will be left with you, and a copy will be taken by the researcher.



## **PARTICIPANT (CHILD) ASSENT FORM** Aacme Tutoring Inc Participants - CAT-3 Only

You are being asked to take part in Agood's study because you are in grade four, five, or six and because you just started the Aacme Tutoring Inc Math program. Agood is doing this study to learn how well Aacme Tutoring Inc helps children to learn math.

If you decide to take part in this study, you will be asked to write a math test. Don't worry about your scores on the tests. Your marks will not be shared with your Aacme Tutoring Inc teacher and your marks will not go in your Aacme Tutoring Inc books. Agood only needs you to try your best!

You might feel afraid to make a mistake or to get low scores on these tests. You don't have to worry about this because your Aacme Tutoring Inc teacher and classmates will not know your scores. You will be given as much time possible to finish the tests. Remember, Agood only needs you to try your best!

Your Mom, Dad, or Guardian has already given you permission to take part in this study. However, you are still allowed to say whether you want to take part or not. If you say yes now but change your mind later, raise your hand and tell Agood. You can stop at any time for any reason and nobody will be mad or disappointed.

Ask Agood any questions you have about this study. Then, if you want to take part in this study, write your name on the line below.

Child's Name



You are being asked to take part in Agood's study because you are in grade four, five, or six and because you just started the Aacme Tutoring Inc Math program. Agood is doing this study to learn how well Aacme Tutoring Inc helps children to learn math.

If you decide to take part in this study, you will be asked to write two tests. Don't worry about your scores on the tests. Your marks will not be shared with your Aacme Tutoring Inc teacher and your marks will not go in your Aacme Tutoring Inc books. Agood only needs you to try your best!

The first test is a math test and it will ask you several math questions. The second test will ask you vocabulary and sentence questions and it tests your ability to do well in school.

You might feel afraid to make a mistake or to get low scores on these tests. You don't have to worry about this because your Aacme Tutoring Inc teacher and classmates will not know your scores. You will be given as much time possible to finish the tests. Remember, Agood only needs you to try your best!

Your mom or dad has already given you permission to take part in this study. However, you are still allowed to say whether you want to take part or not. If you say yes now but change your mind later, raise your hand and tell Agood. You can stop at any time for any reason and nobody will be mad or disappointed.

Ask Agood any questions you have about this study. Then, if you want to take part in this study, write your name on the line below.



## PARTICIPANT (PARENT) CONSENT FORM GDSB Participants

#### The Effectiveness of Aacme Tutoring Inc for Children with Significant Difficulties in Mathematics

Your child is being invited to participate in a study entitled The Effectiveness of Aacme Tutoring Inc for Children with Significant Difficulties in Mathematics that is being conducted by Agood Student. Agood Student is a graduate student in the Faculty of Education at the University of Lethbridge and you may contact her if you have further questions by email at agood.student@uleth.ca or by phone at (123) 456-7890.

As a graduate student, Agood is required to conduct research as part of the requirements for a degree in Counselling Psychology. This thesis project is being conducted under the supervision of Dr. Great Prof. You may contact Agood's supervisor by email at great.prof@uleth.ca or by phone at (987) 654-3210.

This research is being funded by the Fourier-Gauss Graduate Scholarship.

The purpose of this research project is to determine whether Aacme Tutoring Inc, an after school program, significantly improves achievement in mathematics among children with significant difficulties in mathematics.

Research of this type is important because mathematical skills are essential to ensure academic and personal success. Scientifically proven intervention programs for children with significant difficulties in mathematics are sparse. The results of this study will enhance the knowledge of parents, psychologists and teachers regarding available, effective treatments for children with significant academic struggles.

Your child is being asked to participate in this study because your child attends a school in the Gophertown District School Board (GDSB). Children in the GDSB will be compared to students attending Aacme Tutoring Inc's Math program. All students in selected grade four, five, and six classes in GDSB schools will be asked to participate. These classrooms are selected solely based on size and location (in order to make the study more efficient). All children (with consent to participate) will be tested to prevent the identification and stigmatization of children with the lowest math scores.

If you and your child agree to voluntarily participate in this research, your child will be asked to complete the mathematics subtests of the Canadian Achievement Test, Third Edition (CAT-3) in the Fall of 2008 and again in the Spring of 2009. The CAT-3 math subtests test take approximately 110 minutes to complete and they measure mathematics skills. This test would be written over two days, with the first testing session lasting about one hour and the second lasting about 45 minutes. All children in the GDSB complete the Canadian Cognitive Abilities Test (CCAT) in grade four. If you and your child consent to participate in this study, Agood will retrieve your child's CCAT scores as well.

Although all children (with parental consent) will be tested to protect the identity of children with significant difficulties in mathematics, Agood will only include a child's test results in her study if the child meets two criteria. First, to be eligible, a child has to score at or below the 25<sup>th</sup> percentile on the CAT-3 (mathematics test). Second, the child has to have scored in the average or above average range on the CCAT (cognitive ability test). Children's names and other identifying information will not be included in the study (see more on anonymity and confidentiality below).

If you would like to be debriefed on your child's performance on the CAT-3, you should contact Agood by phone or email to arrange a meeting. Individual results will only be shared with parents during scheduled meetings.

Participation in this study may cause some inconvenience to your child, as testing will occur in your child's regular class time. Although testing will occupy some of your child's class time, all participating children will be tested at the same time.

There are some potential risks to you and your child by participating in this research. You may feel anxious to know how your child scored on the achievement test and whether your child's data has been selected for use in the study. Your child may feel anxiety and/or frustration during testing. To prevent these risks the following steps will be taken. First, no parent or GDSB teacher will be notified of the children selected for inclusion in the study. These measures are in place to protect the identity and prevent the stigmatization of children with significant difficulties in mathematics. You will, however, have access to your child's testing results if you schedule a meeting with Agood. To reduce the risk of children's anxiety and frustration during testing, children will be allotted the full testing time allowed by the administration procedures of the CAT-3 and children will be instructed that the test scores will not impact their school grades and that the administrator (Agood) only requires his or her best effort.

The potential benefits of your participation in this research include contribution to the scientific knowledge of effective programs for children with significant difficulties in mathematics. In the future, this may increase children's access to effective math programs.

Your participation in this research must be completely voluntary. If you do decide to participate, you may withdraw at any time up until two weeks following spring testing. At this time individual names will be deleted, making individual results irretrievable. Up until this time, you may withdraw your consent without any consequence or explanation. Your and your child's relationship with the GDSB will not be affected whether you participate or not. If you withdraw from the study (before the aforementioned deadline), all data collected by the researcher up to that point will be shredded.

To make sure that you continue to consent to participate in this research, Agood will notify you of the second CAT-3 testing in the spring and your right to withdraw from the study one month before beginning this testing.

To protect your child's anonymity, your child will be assigned a 5-digit code. All documents administered by Agood will only contain this code. Individual results and names will not be disclosed in the final report. The master list of codes and participant names will be stored in a locked cabinet that will only be accessible by Agood and her supervisor. This master list will be destroyed by shredding in five years.

Your confidentiality and the confidentiality of the data will be protected by locking the master list of participant codes and names, consent forms, and CAT-3 test forms in a cabinet that is only accessible to Agood and her supervisor. After five years, these documents will be shredded. The computer used for data analysis and report writing will be protected by a password.

It is anticipated that the results of this study will be shared with others in a thesis project and possibly in a published journal article and/or a public presentation. If this study determines that Aacme Tutoring Inc is effective, Aacme Tutoring Inc may use the results of the study to promote their business. No individual results or names will be shared.

In addition to being able to contact the researcher and the supervisor at the above email addresses/ phone numbers, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Chair of the Faculty of Education Human Subjects Research Committee at the University of Lethbridge (403-329-2425).

Your signature below indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have your questions answered by the researcher.

Name of Child

Date

Name of Parent

Signature of Parent

A copy of this consent will be left with you, and a copy will be taken by the researcher.



## PARTICIPANT (CHILD) ASSENT FORM GDSB Participants

You are being asked to take part in Agood's study because you are in grade four, five, or six. Agood is doing this study to find out how much student's math skills get better during the school year.

If you decide to take part in this study, you will be asked to write a math test. Don't worry about your scores on this test. Your marks will not be shared with your teacher and your marks will not go in your report card. Agood only needs you to try your best!

You might feel afraid to make a mistake or to get low scores on these tests. You don't have to worry about this because your teacher and classmates will not see your scores. You will be given as much time possible to finish the tests. Remember, Agood only needs you to try your best!

Your Mom, Dad, or Guardian has already given you permission to take part in this study. However, you are still allowed to say whether you want to take part or not. If you say yes now, but change your mind later, raise your hand and tell Agood. You can stop at any time for any reason and nobody will be mad or disappointed.

Ask Agood any questions you have about this study. Then, if you want to take part in this study, write your name on the line below.

Child's Name

#### **Parent Questionnaire**

Dear Parent/Guardian:

If you consent to have your child participate in the study "The Effectiveness of Aacme Tutoring Inc for Children with Significant Difficulties in Mathematics," please complete this form. If you do not give consent, you do not have to complete this questionnaire.

Please indicate whether any of the following apply to your child by marking the corresponding box. If none of the following apply to your child, please leave all the boxes blank .

My child has been formally diagnosed (by a Psychologist/Psychological Associate/Medical Practitioner) with a Reading Disability, Attention Deficit Disorder and/or Attention Deficit Hyperactivity Disorder.

П

My child participates in supplemental or remedial education programs/activities outside of school (such as tutoring, Sylvan Learning Centre, Kumon, Aacme Tutoring Inc, WXYZ Learning Centres, etc.).



One of the situations above applies to my child but I would rather not specify which one.

Also, please indicate whether your child receives withdrawal assistance (your child is in a regular class but also receives instruction outside the classroom, for **less than 50 per cent** of the school day from a special education teacher)



Yes, my child receives withdrawal support.



No, my child does not receive withdrawal support.

I'm not sure if my child receives withdrawal support or not.

Your signature below indicates that you have read, understood and completed this questionnaire. Thank you for your time.

Name of Child

October 2, 2008

University of Lethbridge Ethics Committee

To whom it may concern:

Aacme Tutoring Inc has given Agood Student permission to conduct research at selected Aacme Tutoring Inc centres in the Gophertown area. As she has outlined in her proposal to us, she will be conducting testing of Aacme Tutoring Inc students in their respective Aacme Tutoring Inc centres. The individual centre owners will have given their permission to any testing, and all students' parents will also have given prior written permission using the documentation that Agood will provide to them.

We will be providing support to Agood to help facilitate this process as needed.

If you have any questions, please feel free to contact me.

Sincerely,

Mane Man Aacme Tutoring Inc

mman@aacmetutoring.com 555-555-9999

#### **Requests to Conduct Research in the Gophertown District School Board**

#### 2008-2009

#### **Application Process**

Any person who wants to conduct research activities in the Gophertown District School Board (GDSB) must submit an application to the Board for approval. This includes people or agencies that plan to recruit research participants from schools and conduct the research off GDSB premises. Send <u>three copies</u> of all documentation, as described below, to the attention of Ms. Dire Educ (Director of Education), at the Gophertown Education Centre, 666 Halloween Ave. Gophertown, AB, A1A B2B. For legal reasons, please submit paper copies of all documentation with your original signature; faxed or e-mailed applications cannot be accepted.

The Director will inform applicants of the decision of the GDSB Research Review Committee by mail. Applicants who receive approval at the Board level must then contact the Principal(s) of the school(s) in which they want to conduct research. *Principals have the prerogative to decide whether or not a research project will be conducted in their school. Approval of research projects by the Board, while mandatory, does not oblige the principal to accept the project in his or her school.* Applicants must present the letter of approval and a one-page summary describing the project to the principal prior to obtaining school approval.

#### Police Reference Check

As a result of changes in the Education Act, many researchers will be required to complete a Police Reference Check prior to commencing their research.

#### **Applications from University/College Students**

Usually, student applications are accepted only for Master's and Doctoral theses approved by their supervising faculty. Students conducting other research, including undergraduates engaged in theses or independent research projects, may ask their supervising professor to submit the application on their behalf if the proposed project is part of the professor's ongoing research program. All such projects are to involve current, original research. Thesis advisors or supervising faculty members must sign student applications. A supervisor's signature constitutes acceptance of responsibility for the conduct of the research.

#### Modification of Approved Research/Extension of Time to Complete Research Projects

Permission is granted to conduct the research as described in the application. Modifications to the approved research require permission from the Board, and may require a separate application. Similarly, Board approval is required to continue the research beyond the time specified in the original application.

#### Assistance from GDSB Staff

Board staff generally cannot provide assistance in packaging and distributing materials or providing other technical and administrative help.

#### Translation

Because many of our students come from homes where English is not spoken, we request that all information sheets, letters to parents/guardians and consent forms be made available in the language spoken in the child's home.

#### Timelines

The GDSB Research Review Committee meets three or four times a year to consider research applications. Deadlines for applications are **August 31, 2007**, **December 3, 2007** and **February 4, 2008**. External research activities should not be conducted in the schools **before October 15** or **after May 12** (May 1 in elementary schools, because of the heavy testing schedule in May).

#### **Application Materials**

Please submit <u>three copies</u> of the following materials:

- A completed **Research Application** (attached).
- **Summary**. A one-page summary of the proposed research including the title, rationale and relevance to education, logistic details (e.g., numbers and other pertinent sample information), description of procedures and instruments to be used, and proposed method of data analysis.
- **Research Proposal**. This should normally not exceed 5 pages. The proposal should include the following sections:
  - (a) statement of objectives and theoretical framework
  - (b) design and methodology (including hypotheses, subjects, data collection procedures)
  - (c) proposed data analysis procedures
  - (d) school resources required
  - (e) educational relevance of the project

Applicants may substitute a detailed proposal to an external funding agency, a recent manuscript or reprint, or a thesis proposal which contains all required information. Attach a brief outline to describe how the proposed project extends the research described in the manuscript, and indicate any changes to the procedures that will be followed in the proposed research.

- Additional Materials
  - Copies of all instruments, non-standard tests, protocols, surveys etc. to be administered to GDSB students or staff
  - For students under 18 years of age, a letter to parents/guardians explaining the purpose of the research including a consent form
  - A copy of the approval of the Ethics Committee of your institution

#### Acceptance Criteria

Proposals are evaluated on the basis of the following criteria:

- Scholarship (literature review, rationale, references).
- Educational merit (relevance to education). Priority is given to projects that address 1) instruction of students,
  2) health and well being of students, 3) issues important to the school community. Research undertaken for commercial purposes is not accepted, with certain exceptions (e.g. to develop norms for standardized instruments). Research done for political reasons is not acceptable.
- Research design (methodology, procedures related to sampling, confidentiality, data collection, instruments, data analysis).
- Demands from schools (minimal disruption to classroom activities; moderate demands on student/staff time and school facilities).

<u>Note.</u> In some cases, external research requests will not be accepted because of ongoing research activities or Board and/or Ministry initiatives that already make heavy demands on students and staff in GDSB schools.

#### **Final Report**

On completion of your project, please send a copy of any reports or manuscripts you write based on your research to the Research Department of the Gophertown District School Board.

#### Gophertown District School Board Research Application 2008-2009

This form must be completed, signed and sent to the Director of Education.

Identifying Information					
Name of Primary Investigator: Agood Student					
Institution/Agency: University of Lethbridge	Institution/Agency: University of Lethbridge				
Mailing Address: 12345 – Anystreet, Anytown, AB, Z	29Q X0Z				
E-Mail Address: agood.student@uleth.ca	Fax: N/A				
Home Telephone: 123-456-7890	Business Telephone: N/A				

Name(s) of Collaborative Investigators: Dr. Great Prof (Supervisor)

1. Is your project a(n):

Doctoral thesis	Master's thesis	Х	Institutionally funded project	
Contractual project	Externally funded project		Ministry transfer grant project	

Give details, if necessary:

 Do you have permission to conduct research from your university/institution, including ethical review? Please obtain all required approval before submitting this application and submit a copy of the ethical review certificate.

I am not able to submit my research proposal to the University of Lethbridge ethics committee until I have completed a colloquium with my thesis committee (scheduled for October 7<sup>th</sup>). However, I have attached the completed ethics document. In order to meet the August 31, 2008 GDSB deadline and maintain my project's timeline, I had to submit this request prior to receiving permission from my university.

3. Do you have sufficient funds to conduct the study? If yes, indicate the funding agency.

Yes, I have sufficient funding. I received the Fourier-Gauss Graduate Scholarship from the Mathematics and Language Arts Research Council in May 2008, worth \$12 000.

#### 4. Title of the proposed research

The Effectiveness of Aacme Tutoring Inc for Children with Significant Difficulties in Mathematics

#### 5. Requirements from the school system

School facilities required: I will need to test approximately five classrooms each of grades four, five, and six (once in October and once again in April). Children will be tested during regular school hours in their regular classrooms. Testing should take approximately half an hour each time. Schools will also be required to provide access to participant's scores on the Canadian Cognitive Achievement Test (CCAT) (often housed in student's OSR).

School personnel assistance required: Teachers will be asked to collect consent forms prior to commencing the study. Teachers will also be asked to distribute testing materials using a coded participant list to help protect participant identity.

Information required from school or board records: Schools will be asked to identify their grade four, five, and six classrooms. Schools will also be required to provide access to participant's scores on the Canadian Cognitive Achievement Test (CCAT) (often housed in student's OSR).

- 6. Data collection instruments. Please list the questionnaires and other instruments to be used and attach copies of non-standard measures to this application.
  - 1. Canadian Achievement Test, Third Edition, mathematics subtests only (standardized measure of achievement in mathematics)

#### 7. Participants

a. How many students will directly participate? List by grade. Indicate the amount of time required, and whether the students participate individually or as a group.

Number of Students	Grade	Time required	Individual / group	
150	4	30 min.	Group	
150	5	30 min.	Group	
150	6	30 min.	Group	

b. If your research involves direct contact with students on TCDSB premises, will a TCDSB staff member be present in the room when you collect your research data? Please describe.

The regular classroom teacher will be present when I administer the CAT-3 to GDSB students in their regular classroom.

 How many teachers will directly participate? List by grade. Indicate the amount of time required.
 Approximately five grade four, five grade five, and five grade six teachers will be required to participate. Collecting consent forms and distributing testing materials should take approximately 1-2 hours total over the course of pre- and post-testing.

d. How many other school personnel will directly participate? Indicate the amount of time required. No other school personnel will be required to participate directly.

e. How many schools will you need to conduct your study? Indicate names of preferred schools or criteria for school selection.

I estimate that I will need approximately three schools to participate in order to get the sample size needed to conduct a valid study. I need to recruit students in the Toronto and/or Scarborough area, as this is where I will be recruiting participants for the experimental group (Aacme Tutoring Inc students). Larger schools are preferred, as there will likely be multiple grade four classrooms in a larger school.

8. Timelines

	Month / Year
When will you start collecting data in the schools?	October, 2008
When will you finish data collection?	April, 2008
When will you submit a report to the TCDSB Research Department?	July, 2008
If you propose to collect data on multiple occasions, please describe and indicate dates.	Pre-testing: October 15, 2008 Post-testing: April 15, 2008

- 9. Describe the procedures for informing schools and parents and for providing feedback.
- a. Informing the principal. Principals will be informed of the study via a recruitment letter. Principals will be sent a copy of the final thesis project and results but will not have access to individual student's results.
- b. Provisions for preparing and debriefing participants. I will prepare students by giving them a brief explanation of the purpose of the study in language suitable for their academic level. For example, I will say, "I'm doing a research project that looks at children's math skills. To do this study, I need to give a math test to a whole bunch of children in grades four, five, and six. These tests are not for your report card, but I still need you to try your best on every question. Does anyone have any questions?" Students will also be asked to sign an assent form. Following testing, students will be debriefed in a similar way.
- c. Method of obtaining informed parental consent. Consent forms will be sent home to parents. Contact information for me and my supervisor will be available on the consent form for parents requiring more information or clarification.
  - 10. Describe the direct benefit to students and/or staff or school board, for example, through presentation, materials, feedback etc.

Students with significant difficulties in mathematics will benefit from this study because this study will determine the effectiveness of the Aacme Tutoring Inc mathematics program. The results of this study will be provided to principals, who will be charged with the task of informing teachers, and I will create a handout for the parents of participating students regarding the identified benefits (if any) Aacme Tutoring Inc. With greater teacher and parent knowledge of effective remediation programs, children with significant difficulties will be more likely to get the help they need and develop the essential life skill of mathematics.

#### **Student Applicants**

Please have your sponsoring professor or department chair sign below:				
This is to certify that the above described research proposal has been evaluated for its academic soundness. We hav also given consideration to <b>ethical, legal and moral</b> questions arising from the proposal and where necessary, ethica review has been completed.				
Sponsoring Professor (please type name and sign)	Date:			
Chair of Department (please type name and sign) D	Date:			
Your endorsement indicates that you would be willing, with the principal investigator, to at conduct of this research, if requested.	ttend a meeting to discuss the			

#### **Research Agreement**

This agreement is made between the researcher (insert name) and the Gophertown District School Board (the Board).

The researcher has requested access to the following records containing personal information in the custody of the Board:

The researcher understands and promises to abide by the following conditions:

- 1. The researcher will not use the information in the records for any purpose other than the following research purpose, unless the researcher has the Board's written approval to do so. (Describe research purpose below.)
- 2. The researcher will give access to personal information in a form in which the individual to whom it relates can be identified only to the following persons: (Name persons below.)
- 3. Before disclosing information to persons named above, the researcher will enter into an agreement with them that they will not disclose it to anyone other person.
- 4. The researcher will keep the information in a physically secure location to which access is given only to the researcher and the persons named above.
- 5. The researcher will remove all identifiers in the information by:
- 6. The researcher will not contact any individual to whom personal information relates, directly or indirectly, without the prior authority of the Board.
- 7. The researcher will assure that no personal information will be used or disclosed in a form in which the individual to whom it relates can be identified without the written authority of the Board.
- 8. The researcher will notify the Board in writing immediately upon becoming aware that any of the conditions set out in this agreement has been breached.

Signed at	, this	day of	, year			
Signature of Researcher						
Please provide typed/printed name of researcher, address and phone number.						
Signature of GDSB Official						
Please provide typed/printed name of officia	I, address and	phone number.				