



Fostering the development of primary/elementary teachers' practical wisdom for teaching STEM (Science, Technology, Engineering, and Mathematics): Possibilities and challenges

Karen Goodnough, Faculty of Education, Memorial University (MUN)
kareng@mun.ca, 709-864-3032

October 1, 2016

Dear Parent/Guardian:

I am a former classroom teacher and currently a professor in the Faculty of Education (MUN). I am conducting a research study entitled *Fostering the development of primary/elementary teachers' practical wisdom for teaching STEM (Science, Technology, Engineering, and Mathematics): Possibilities and challenges*. This Newfoundland and Labrador research is funded through the Hibernia Management and Development Company. My study will examine and support K-9 teacher professional development in the area of STEM education so that teachers can foster active, inquiry-based K-9 student learning in STEM education. Through an ongoing series of professional development activities involving teachers and their students, teachers will have the opportunity to enhance professional practice and student learning in STEM disciplines.

Over the next few months, October to June, we will be working with your child's teacher in collaboration with other teachers. Your child's teacher will be implementing some new teaching and learning ideas/approaches in the context of science and/or mathematics while targeting prescribed curriculum outcomes.

If you choose to let your child participate in this study, I will need to:

- a) Examine some of your child's work (writing, projects, etc.).
- b) View videos of your child as she/he participates in class work. Short videos may be taken by the classroom teacher as students engage in classroom activities. These videos may be shared with other teachers in the teacher inquiry project at a password-protected site. The video and other student work (names will never appear on any student work, photos, or video) will be removed at the end of the school year. If video is used in a public presentation, children will not be identified.
- c) Record notes as we observe the teacher and students during teaching.

Please be assured that if you participate, as per university and school board expectations, all information gathered in this study is strictly confidential and will be kept in a secure location at the university. At no time will individuals be identified by name. Participation in the study is voluntary and your child may withdraw at any time. If you wish to withdraw from the study, please let your child's teacher know by telephone or email, or contact me, Karen Goodnough, at (709) 864-3032 or by email at kareng@mun.ca.

Any data collected from your child, over and above what would be collected by your child's teacher in the normal life of classroom teaching (tests, projects, etc.), will be destroyed. The findings of this study will be published for teachers and researchers in education journal articles and/or presented at conferences, but neither your child nor her/his school will be named. A web site has been established and may be viewed at www.mun.ca/tia. Data will be retained for a minimum of five years, as per MUN policy on Integrity in Scholarly Research. Within five years of completing the research, all data will be destroyed. Electronic data will be stored on password-protected devices and web sites.

If you would like your child to participate in this study, please complete and sign the attached form. Please detach and return the signed form to your child's teacher. Keep this letter for your records.

If you have any questions or concerns please do not hesitate to contact me (Karen Goodnough) at 864-3032 or e-mail me at kareng@mun.ca. Thank you for supporting educational research that is focused on improving teaching and learning in science and mathematics.

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research (such as the way you and your child have been treated), you may contact the chairperson of the ICEHR at icehr@mun.ca or by telephone at 709-864-2861.

Yours Sincerely,

Karen Goodnough, PhD



Fostering the development of primary/elementary teachers` practical wisdom for teaching STEM (Science, Technology, Engineering, and Mathematics): Possibilities and challenges

I hereby consent for my child (whose name is _____) to participate in this study. *Please Print*

Yes or **No** I agree to have the researcher examine some of my child`s work (writing, projects, etc.).

Yes or **No** I agree to have my child videotaped during classroom activity.

Yes or **No** I agree to have my child photographed during classroom activity.

Yes or **No** I agree that the researcher may record notes as she observes the teacher and my child during teaching.

I have been fully informed about the study entitled *Fostering the development of primary/elementary teachers` practical wisdom for teaching STEM (Science, Technology, Engineering, and Mathematics): Possibilities and challenges*, and know that I may contact the researcher, Karen Goodnough, for information or explanations at any time at (709) 864-3032, or Ms./Mr. _____ (*classroom teacher*).

I understand that:

- a) Participation is entirely voluntary and that my child and/or I can withdraw permission at any time between September 9, 2015 and June 30, 2016.
- b) Any information gathered (as noted above) will be used only for educational purposes such as published articles and conference presentations.
- c) All information gathered is to be kept strictly confidential and to be used only for purposes stated.
- d) Any video recordings, photographs or classroom observation notes will be stored securely.

_____ Signature of Consenting Parent/Guardian

_____ Printed Name of Consenting Parent

_____ Date