





## ***Policy STA – 9 Action Research***

The following material has been adapted from a package or resources originally created by Cassie Hallett in 1999, who was acting at that time as the Pauqatigiit Coordinator. The NPIC wishes to thank her for her work in this area.

### ***What Is Action Research?***

Simply put, action research is classroom – based, teacher-directed research aimed at improving the quality of one’s teaching and of one’s students’ learning. It is directly tied to what we do as educators on a daily basis. It is a teacher or group of teachers asking a question about teaching and learning and then setting out to find some answers through research in their own class(es), schools, and communities. Action Research is professional development! Action research encourages reflective practice as educators and improves teaching. Action research helps us work as ‘designers’ who are creating and re-creating an effective learning environment for our students and an enriching teaching environment for ourselves.

*‘To carry off the concept of self-directed professional development, we, as teachers, must begin to think of ourselves as designers.’*  
(Clark, 1994, p.77)

### ***NPIC Support for Action Research***

Meaningful professional improvement is determined, owned, organized, and directed by, with, and for educators. Action research projects are a fine example of educator-led PI. Educators need time to question, think, reflect, observe, discuss, learn, plan and work individually and collectively on goals established for their professional lives. Taking on an Action Research Project is one way to create some supported ‘*questioning and thinking*’ time.

If you decide to pursue an Action Research project, you may be eligible for a grant of **\$ 2,000.00** from the Nunavut Professional Improvement Committee (NPIC) as well as assistance from the PI Coordinator. This section contains information that will assist you in conducting an Action Research project. We hope to hear from you.

The deadline for applications is March 1<sup>st</sup> and research must be completed at least two weeks before your last day of school.

## ***Application For Action Research Grant***

### **Proposal Format:**

#### **Introduction**

- Project Title: provide a title that easily identifies your project

#### **Applicant Information:**

- Your name(s), school, contact information (phone, fax, email), and a statement regarding how this project relates to your professional growth goals and, if possible, to school goals.

#### **Project Synopsis**

- Question / Topic: *clearly state the question that is the focus of your study.*
- Method and Materials: *provide a brief description of the main activities and consumable materials required to implement the project*
- Budget: *provide a cost estimate for the project; you should consider the following possible costs: release time (substitute teachers), printing/photocopying, translation services, and communication.*
- Participants: *list the students, community members, and/or colleagues who are likely to be involved in the project.*
- Time line: *provide a projected time line for the project.*
- Outcomes: *Describe what you expect will be different as a result of this research.*

## Section 7 – Action Research



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Comité de perfectionnement professionnel du Nunavut  
Nunavut Professional Improvement Committee

### Final Report

- Your final report must contain the following components and be submitted to the PI Coordinator at least two weeks before your last day of school.
  - Introduction
    - *Project Title,*
    - *Applicant Information*
    - *Acknowledgments*
  - Project Synopsis
    - *Question/Topic,*
    - *Participants,*
    - *Method and Materials,*
    - *Outcomes and Results,*
    - *Budget,*
    - *Recommendations including possible areas of related inquiry*
    - *Reflection: what worked and why? What would I do differently another time? Why?*
    - *Works Cited*

*Any photos or video footage would also be greatly appreciated as they would help convey a more complete picture of the research you and your students were engaged in.*



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Nunavut Professional Improvement Committee

## **Action Research Grant Contract** for

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(name of educator(s), printed)

Project Title:

Funding Allocated:

1. The project's main purpose is to explore a classroom instructional question with the intention of improving my/our teaching.
2. The project will follow the proposal previously submitted to the PI Coordinator
3. I/we will participate in brief monthly check-ins with the PI Coordinator (or committee member(s)) and notify them should any major challenges or change in plans arise.
4. A final report based on guidelines provided will be submitted to the PI Coordinator no later than \_\_\_\_\_ ( a minimum of 2 weeks before the last day of school.)
5. I/we consent to the copying and distribution of my/our research report within Nunavut schools, by the NPIC.

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Signature of teacher-researcher (1)

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Signature of teacher-researcher (2)

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Signature of teacher-researcher (3)

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Signature of teacher-researcher (4)

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Signature of PI Coordinator

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Signature of Principal, if not a researcher

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Date

## ***A Guide for Planning an Action Research Project***

Things to consider include:

- Reflecting on your teaching
- Identifying a topic
- Question starters
- Working with your question
- Refining your research plan
- Developing your research plan
- Creating a support system
- Effective use of resources, time, and logistics
- Handling ethical issues
- Deciding on evidence
- Gathering evidence/data
- Managing data
- Analysis and interpretation



**Identifying a Topic Using Question Starters**

- When teaching, I am excited by....
- My students seem to really enjoy...
- Some students seem unhappy about...
- I get really frustrated when...
- I wonder about...
- I am perplexed or confused by...
- What would happen if...?
- How could the experiences of ... be applied to...?
- A school goal that I am very committed to is...

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### **Working With Your Question**

1. What question do you really want to seek an answer to? (Hint: Start with “How” , “Why”, or “What”. Use “When”, or “Who” or “Where” if you need qualifiers. Avoid “Does”, “Can”, or any other phrase that produces a “yes” or “no” answer.)

2. How will answering this question benefit your students?

3. How will answering this question improve your practice?

4. How is this question directly related to your priorities as a teacher?

5. How is this question related to your school’s goals?

6. By answering this question, what end result will you achieve?

7. What will happen if you don’t respond to/research your question?

**Refine your Action Research Plan**

1. State the question that is the focus of your inquiry/research in **one sentence**.

2. Highlight or underline every meaningful word or key phrase in the sentence.

3. Write the highlighted words in the blanks on the left. Beside each word, write out the thoughts that come to mind when you think of the words consider what you really or specifically mean when you use the word.

_____	_____
_____	_____
_____	_____
_____	_____

4. Take a break. Leave this task for a day or so!

5. Now, re-write your question and try to incorporate your more specific comments into your sentence(from the right hand side of the column above).

***Developing your Research Plan***

1. What is the specific question that is the focus of your inquiry/research?

2. What do you already know about the issue?

3. What do you think you need to learn about this issue? (*Brainstorm or web*)

4. What specific information will help you answer your question?

5. From whom do you need to gather evidence to answer your question?

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### **Developing Your Research Plan (cont.)**

6. What methods might help you gather evidence? Brainstorm an initial list.

7. Who can help you learn more about different research strategies (so that you can decide which method(s) will work best for you?

8. Do you need help gathering the evidence? If so, who can help?

9. When do you need to gather evidence/data if it is going to be truly helpful?

10. What do you need to do before you can get started? Make a list, then go back and number it in chronological order.

**Note: This worksheet will form the basis of your grant proposal!**

*'Sometimes training isn't necessarily the answer. At our school I have received excellent peer support.'* Nunavut educator, Pauqatigiit survey (1994)



## Section 7 – Action Research

### **Creating a Support System** (cont.)

- *Who might be interested in collaborating with you in finding the answers to the question?*
  
- *Who might be able to provide feedback, especially constructive suggestions during your study?*
  
- *Who could help plan your study?*
  
- *Who might be able to help gather data?*
  
- *Who can you delegate some of the research work to?*
  
- *Who might be able to help fund your study?*  
**The Nunavut Professional Improvement Committee(NPIC)**
  
- *Who might be able to help you share and/or publish your results?*  
**The PI Coordinator, the NPIC & educators around Nunavut...**
  
- *Who will you celebrate with when you finish your action research project?*

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**Effective Uses of Resources, Time, and Logistics**

*Re-state the question that is the focus of your inquiry/research.*

1. How can you make time to work on your action research project?
  
  
  
  
  
  
  
  
  
  
2. What are you willing to give up or re-prioritize to get your research done?
  
  
  
  
  
  
  
  
  
  
3. How can you keep your study focused and manageable?
  
  
  
  
  
  
  
  
  
  
4. What are the key milestones (things you need to achieve) in your study?

Milestone	Target Date for Completion



## Tips for Reducing Bias & Dealing with Ethical Issues

### Ethical Issues:

- **Inform** your principal, parents, and students about research plans
- **Respect** your participants' rights to anonymity and confidentiality
- Don't let research demands interfere excessively with the **classroom program**
- Remember your **obligation** to report conclusions that differ from personal views
- **Share** your findings with participants and others who have helped you

### Avoiding Bias:

- Seek out research studies or colleague that present **different perspectives** on the issue in question.
- **Share and discuss** your data gathering strategies with a colleague
- Use **multiple** gathering techniques , sources, or assistants
- **Don't pre-judge** the data
- Keep a reflective journal to **record your observations** about the research process
- Consider '**disconfirming**' **evidence** seriously

## Section 7 – Action Research

### **Handling Ethical Issues and Situations**

1. Clearly identify who your participants (the subjects of your study) will be
2. Seek and obtain permission from your school administrator to conduct the action research project.
3. Determine how you can negotiate involvement of participants with the appropriate people (i.e. administration, parents and/or students).
4. How will you protect your participant's anonymity and confidentiality?
5. How will you arrange permission from your participants to share work samples and other sources of data with others?
6. How will you obtain permission to do any taping or recording? What will you do if a person refuses to grant you permission?
7. How will you keep your participants and others informed of your progress?
8. How will you ensure participants' right to withdraw from the study at any time?

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### Things to Think About When Gathering Evidence

1. What Information do I want?

*Am I looking at perceptions and attitudes or actual behaviors, practices, and results?*

2. From whom should I gather the information?

*What is my target group? Students? Teachers? Community members?*

3. Why is this information important?

*How will this evidence help me respond to my research question?*

*Will it help me discover appropriate follow-up actions?*

*Are some sources of evidence more critical than others?*

*Are all the sources I've specified necessary to respond to my question?*

4. When do I gather my evidence?

*What are my priorities for gathering data?*

*Are some sources of evidence only available at certain times of the year?*

*Do I need to gather the data routinely, periodically, or one time only?*

*Do I need a baseline measure?*

5. Where can I find my evidence?

*In what settings might data be collected? My classroom?*

*Other areas in the school? On the land? In meetings? In students' homes?*

*In filing cabinets? At the community hall?*

6. How can I gather my evidence?

*Can I rely on one method or should I use several?*

*Which methods will provide complementary evidence?*

*Are some methods more practical and manageable than others?*

*What methods allow me to use and build on skills I already have?*

*What methods can I integrate most seamlessly (smoothly) into my current instructional program?*

**Deciding on Evidence**

- 1.What is the most important evidence you can gather to show change or improvement?
- 2.What is the most appropriate and feasible (manageable) way to gather it?
- 3.What multiple sources are available from which, you can collect data?
- 4.When you are gathering evidence, what specifically will you consider data?
- 5.What techniques, methods, and instruments will help you gather the data?
- 6.What technology could you use to help you collect and manage data?
- 7.How can you ensure the data you gather serves as good evidence?

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### **Managing Data**

1. Where will you store your data? How will you store your data?
2. Who will label and sort your data?
3. How can you use your data to provide evidence of your findings to others?
4. Where will you reflect on the data you gather and store?
5. How can you organize your data to facilitate analysis?

## Analyzing and Interpreting your Evidence

**1. Review** your data.

*Familiarize yourself with the data, doing one or more of the following:*

- *reading over notes, responses, documents, and/or transcripts*
- *listening to audiotapes, watching videotapes, examining photos or student work samples*
- *examine tables and graphs of results*

**2. Organize** your data

*Sort, collate, code, and group the data.*

**3. Examine patterns** in your data

*Make decisions about what's important by looking for consistencies, inconsistencies, comparisons, contrasts, associations, correlations, reoccurring themes, differences/similarities (between sub-groups) in your data.*

**4. Present** your findings

*Summarize your analysis in graphical or textual form.*

**5. Explain** your results

*Explain relationships and draw conclusions. What are the most obvious or strongest findings? What seems to be the most significant? What results are different than you expected? What findings still need further inquiry?*

**6. Determine follow up action**

*Relate the findings back to your teaching practice and student learning. What can be acted upon immediately? What can you continue to do that seems to be highly effective? What can be done differently? What further data do you need to gather?*

### **Analyzing and Interpreting your Evidence (cont.)**

Some more tips:

- Work collaboratively whenever possible to examine, organize, collate, and interpret your results.
- Keep your questions in mind when analyzing your data
- Consider how you will minimize bias as you collate, summarize, and interpret results
- Present and interpret your results: What do the the findings really mean to you? What conclusions can you find from the data?
- Ensure that all inferences you make are grounded in the data
- Decide what you can celebrate in the data
- Determine priority area(s) for action. You may need to revisit the data to learn more about suitable interventions or follow-up.

### **Questions to Ask**

What do these data mean in terms of **current student performance and results**?

What do these data mean in terms of the **current learning environment** (i.e. instruction, curricula, technology, school climate) and students' responses to it?

What do these data mean in terms of **student performances, behaviors, and attitudes we would like to see**?

What do these data mean in terms of **designing the learning environment**?

**Solving the Puzzle: Analysis of Data**

1. What improvements seem warranted by your data?

2. What have you documented (i.e. indicators, critical incidents, patterns, trends) in order to show that improvement has occurred or is warranted?

3. What evidence clearly supports your claim that your findings offer improvements to your current teaching practice?

4. How can you show what you think you have achieved as a teacher as a result of this action research study?

5. How can you ensure you haven't over-generalized your results or taken your findings out of context?

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**Solving the Puzzle: Analysis of Data** (cont.)

6. How have you considered and evaluated alternative explanations for your findings?

7. How did you document changes to your practice derived from your findings?

8. How will you ensure your conclusions are fair and accurate?

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### **Action Research Websites**

Action Research at Bath University:

<http://www.bath.ac.uk/~edsajw>

The Ontario Educational Research Council

<http://www.oerc.cyberus.ca/>

NETWORKS – An On-line Journal For Teacher Research

<http://www.oise.utoronto.ca/~ctd/networks>

Action Research: A Brief Overview

<http://users.andara.com/~jnewman/>

The Teacher Inquirer (BC Teacher's Association)

<http://www.bctf.bc.ca/inquirer>

WEB Links to Participatory Action Research Sites

<http://www.goshen.edu/soan/soan96p.htm>