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## Elementary Professional Development within a 'Practical' Action Research Effort to Improve Student Literacy

T. G. Ryan, A.M. Aquino , D. Berry, K. Clausen, R.L. Wideman

### Purpose

The purpose of this inquiry was to support and augment the action research efforts of elementary teachers who were attempting to enhance literacy outcomes in their respective classrooms. Included are elementary teacher insights, university-based facilitator views, and principal perspectives that together complete a picture of our professional development efforts. Together the data provide an overview of an action research effort, wherein praxis was noted as a necessary element to assume 'practical' investigative roles. Praxis herein is the deliberate, informed, planned, and systematic action which is the critical underpinning of all action research efforts. The action in this case was directed towards improvement and implementation of an instructional initiative. This outcome brings with it an immense level of significance in that all educators seek to improve educational outcomes personally, professionally, and politically; therefore a report such as this may be viewed as an essential tool to refine educational practice.

What follows are several rudimentary understandings within the action research landscape. Specifically, a discussion of what it means to be a reflective teacher is followed by discussion of group action research that leads into the context of this inquiry. The questions raised and our methods to address these probes are detailed within our methodology. The analysis and interpretation of evidence guide us to an informed view of professional

development. Finally, our conclusion is laid out as are the future plans for this enterprise. Ultimately, all participants agreed to work together to realize increases in student literacy.

### Introduction

#### A Reflective Teacher

Reflective professional development is never complete; there is always something else to consider, and often the process of reflection within action research is a social enterprise, as Carr and Kemmis (1986) point out:

Action research is simply a form of self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own practices, their understanding of these practices, and the situations in which the practices are carried out. (p.162)

Self-reflective teachers will improve and change if something doesn't meet their expectations. It seems logical to make changes until you are satisfied with the outcomes, engaging in particular actions in order to ensure desired outcomes. These actions combined with reflection become praxis, the fundamental concept of action research. Praxis—deliberate, informed, planned, and systematic action—is a critical underpinning in all action research efforts. Action is usually aimed at improvement and, at the same time, may be intended to implement a new theory, program, or initiative. The teacher acting as “the action researcher is interested in the

improvement of the educational practices in which s/he is engaging. He [sic] undertakes research in order to find out how to do his job better—action research means research that affects actions” (Corey, 1949, p. 509). Admittedly, a teacher's action may be solely individualistic within his or her classroom and aimed at improving some aspect of practice; yet there are many school and social implications of such change which can impact the larger community of teachers in a school.

### **Reflective Teachers: A Group Endeavour**

When a group of teachers undertake substantive actions in order to achieve better results, as is often the case in some ‘team’ oriented schools, momentum and commitment build within a school and the larger community. Yet, we need to be reminded that “action research combines a substantive act with a research procedure; it is action disciplined by inquiry, a personal attempt at understanding while engaged in a process of improvement and reform” (Hopkins, 1993, p. 44). Indeed, it is informed action that underpins the very nature of action research (Altrichter, 2005).

Action research is, therefore, a deliberate way of creating new situations and of telling the story of who we are. Action research consists of deliberate experimental moves into the future, which change us because of what we learn in the process. (Connelly & Clandinin, 1988, p. 153)

Perhaps action research is “best thought of as a large family, one in which beliefs and relationships vary greatly . . . [I]t is a group of ideas emergent in various contexts” (Noffke, 1997, p. 306).

### **Our Inquiry**

In our project we embraced the elementary classroom practice of literacy development and revisited several issues (i.e., assessment/evaluation, instruction, planning) during our interviews and daily praxis. Our work was led by classroom teachers and merely supported and facilitated by both local school

administration and university-based faculty. Our social practice was aimed at improvement and our actions were cyclical so as to plan, act, observe, and reflect recursively. As we collaboratively acted, we understood that each of the participants may realize greater understanding and control of their learning. We also realized that our efforts could give way to deeper commitments. As McNiff, Lomax, and Whitehead (1996) argue,

To be action research, there must be praxis rather than practice. Praxis is informed, committed action that gives rise to knowledge rather than just successful action. It is informed because other people's views are taken into account. It is committed and intentional in terms of values that have been examined and can be argued. It leads to knowledge from and about educational practice. (p. 8)

Therefore, without praxis (informed, committed action), classroom practice may stagnate and remain ill-conceived and narrow. One of our goals as professors was to nurture, support, and enhance teachers' development as they attempted to improve literacy and outcomes in their classroom while addressing three questions:

1. Can a group of teachers engaged in a practical action research project improve student literacy?
2. Can a group of educators maintain the necessary praxes required to enhance literacy and development in classrooms?
3. What unexpected outcomes will surface as a result of our efforts to complete a practical action research project?

In addition the university facilitators asked:

1. Can we realize the development of action theory (new understanding) and action practice (application) as it relates to teacher development and student growth?

2. Can we nurture recursive cycles of theorization/reflection and application in order to professionalize practice?

We believed from the onset that “action research is one way of restoring and enhancing professional confidence . . . . [W]e must, however, be aware of problems associated with too prescriptive a framework for action and the values that are embedded within it” (Hopkins, 1993, p. 56). What seems fundamental to action research is that it involves participants talking about everyday things in the life of education and unpacking them for their historical and ideological baggage (Connelly & Clandinin, 1988; Noffke, 1995; Woolhouse, 2005). The conversation can be considered the action since “conversation can play a significant role in the establishment and sustention of collaborative action research groups, and . . . can lead to the generation of new knowledge and understanding” (Feldman, 1999, p. 129). Our position was that most studies derive most of their action and knowledge from participants’ conversations and not so much from the actions in the classroom. The conversations themselves were the “glue’ for maintaining the integrity of the group” (Feldman, 1999, p. 129) and facilitated openness to new possibilities. Communication was critical to significant action in the future, as the participants used their new understanding to develop new praxes.

## Methodology

### Our Context and Action Research

One can argue that the educational context should define the nature of praxis, and similarly, the educational context should define the nature and conduct of the action research group. Action research roles are embedded in social contexts by the very purpose of the action research. As the context or setting changes, so can the purpose of the inquiry and the way it is conducted. Therefore, the role and commitments of the participant and facilitators are very much tied to context, setting, and purpose. Our study was located in a Catholic school of approximately 250 elementary students from a residential area of Central Ontario. The school contained nine

classrooms, including a kindergarten classroom, Primary Learning Assistance Centre (LAC) for students with severe exceptionalities, library, gymnasium, and large schoolyard. Staff, including teachers, assistants, office, and custodial, totaled 29, and the teachers had a wide range of teaching experience and qualifications.

### Participants and Data

Participants included two classroom teachers and one school principal. Within our inquiry, it was important to note that at the classroom level, assessment methods in all grades included variety of strategies such as observation, self- and peer evaluation, projects, portfolios, presentations, and classroom tests. As well, provincial testing was completed annually by the EQAO (Education Quality Accountability Office), which annually assesses Reading, Writing, and Mathematics for all students in grades three and six. Results were sent to our school each Fall. Students were assigned a score between level one (the lowest) and level four (the highest). Students performing at level three are meeting provincial expectations. Details are noted in the conclusion.

It is important to include such contextual information since any effort to reduce and decontextualize the social world is to misrepresent the situation that is the focus of the study, argument, or question (King, 1988). The real strength of action research is its capacity to recognise the complexity and uncertainty of educational contexts.

The following descriptions, using pseudonyms, were extracted from interviews to provide academic background for Ann, Pam, and our principal (Ruth).

#### Teacher: Ann

My experience is mainly in grade six. I have taught for four years now—[grades] one, five, six, two years of six/seven and this is my first year of a straight six. So my experience remains in six and [I] worked with some split grades. This is my first year at this school. I’ve been in High Bay. I have had a lot of identified students. I’ve had maybe ten that weren’t

[identified] out of twenty six. So a lot of experience in special needs but no formal training, no Special Ed aside from teachers' college. My qualifications ... I have my junior, intermediate, and senior qualifications. My teachable subjects are English and History. I intended to go into high school, but I took my junior in the spring and then got a job, and I've really enjoyed Elementary. My areas of enjoyment are language and when a student gets it, like the moment that you see that they have comprehension and they get it, that's my favorite part about teaching. (Interview, October, 14, 2004, p.1)

### **Teacher: Pam**

I have three years teaching. My first year was mixed with contracts and supply (part-time/substitute) teaching. I have had two years as a full time teacher. This is my second year here at this school. I had a contract for [grades] three/four at *Northern* Public School. As an LTO (Long Term Occasional/Part-time teacher), yes. When that ended at Christmas, I got on right away with both Boards [Districts] to supply [substitute teach]. Now I teach ... last year was four/five split grade, this year it's a five/six split grade. Most of the children are from last year, so it is okay. I have my special education (my specialist, my three parts). I have a Master of Arts in Education from *Central* University. I did that as a social worker. So prior to being a teacher I have a social worker background and I was also a banker. I was five years with the Bank of Canada. So I sort of have an eclectic background which I think is helping me big time in teaching for stress, organizing, and for pure enjoyment. I really did not think I could be a teacher until I had my daughter. When I had my daughter, I realized children are just little people like us and opened up the world of teaching to me, and I went back to school to teachers' college for a year, and here I am. (Interview, October 13, 2004, p. 1)

### **Principal: Ruth**

As a teacher, I had six years experience, junior kindergarten right through to grade eight, and my last four years of the six being in the intermediate. This is my first year as an administrator; therefore, I have special education experience, [experience as] a religious education specialist as well as a lot of experience and enjoyment in professional development like delivering workshops. I was a teacher prior to stepping into the administrative role. I am currently finishing my Masters of Education with action research in a different area. And that sums it up. (Interview, November 9, 2004, p. 1)

### **Our Questions and Protocol**

To illuminate literacy praxes, promote reflection, and inspire action, interview questions were 'Grand Tour' questions (Spradely, 1979) that invite a range of perspectives. This approach enabled teachers to describe their experiences in their own terms. For example, open-ended probes beginning with the words "tell me" to describe a "typical day" or "class" suggested to interviewees that a general or global response was expected. Additional prompts and cues allowed further depth and breadth to surface (Stringer, 1996, p. 67).

Context-specific questions helped to guide, simplify, and contextualize the action research effort. To ensure objectivity, interviewers avoided conflict, when possible, with interviewees (McNiff et al., 1996; Stringer, 1996). Transcriptions, teacher-researcher's notes, participant observations, and student-created artefacts provided further data. In addition, data were collected by tape recording discussion groups and general contextual notes were kept of school visits. All participants used written products (notes, memos, and day-books) to communicate and document their thoughts. Written products detailed the classroom teachers' reflections on their literacy praxes. These reflections included the formulation of ideas and changes in practice (Woolhouse, 2005). This inquiry revealed a

pattern of internal growth and transformation that was recorded and documented. A summative final visit produced a thirty-minute videotape of each classroom and teacher to augment data collection. "Videos, however, do not reveal 'the facts' or 'the truth', they still provide only partial information . . ." (Stringer, 2004, p. 83). Indeed, the multiple sources of collected data captured multiple images and enhanced the validity of the inquiry (McTaggart, 1996), as we pieced together change, images, and views.

### **Interviews**

Thirty-minute after-school interviews were essentially open and involved a coherent discussion of literacy praxes. A general framework of questions was used to ensure the ". . . deliberate establishment of an 'audit trail' of data . . ." (McTaggart, 1996, p. 13). In our second round of interviews during March of 2005, the questions listed in Appendix A were revisited. Generally, the openness of the interviews allowed extensive contextual data to be collected. Five interrelated contexts or situations were recognized: the classroom, personal, social, historical (teacher background), and political (King, 1988). As a result, greater sensitivity was achieved reflecting the uniqueness of each teacher's educational situation.

### **Data Collection**

Ruth, the principal in our study, and teachers entered the Practical Action Research Project to improve student literacy and change praxes which ultimately enhanced literacy in classrooms. Informal and formal meetings of teachers occurred monthly (totaling 10) throughout the year at the school level. Weekly communication generally occurred between teachers and researchers. University researchers provided assistance, facilitated, and supported the process each term as requested by school personnel or as planned. The interviews/meetings (two per term) involved the recording of interviews, sharing of information, identification of learning resources including authorities on literacy development, and periodic feedback that was

directed towards constructive and facilitative ends. The university researchers kept notes of meetings, and this data was shared via emailed transcripts and periodic conferences throughout the project.

It was understood by all participants that the school-based teacher-researchers would continue tracking students' literacy development using school board approved qualitative and quantitative assessment methods including the DRA (Developmental Reading Assessment) (Pearson Education, 2003) and the PM Benchmark Books (Ontario Ministry of Education, 2003). Each teacher conducted action research in their classroom, which included collecting and analyzing baseline data, identifying an area of concern and a research question, planning and implementing action to address the question, and collecting data to illustrate the impact of the project. Teachers, as noted earlier, recorded their action research experience through written products, classroom-teaching activities, student product analysis, and classroom-based assessment and evaluation activities.

The university researcher collected data once per term and informally via weekly communication with participants (i.e., email, telephone). Ruth (the principal) was interviewed as the study progressed, and similar communication modes were used to remain in contact. The university researcher then began to analyze the data and produce interim analyses.

### **Data Analysis**

Each of the three school-based educators was responsible for a different area in the school; each became a case study. The fourth case included the respective university-based facilitator cast in the role of action research participant, collaborator, supporter, associate, and consultant. Each case became a documented body of knowledge and, when possible, was triangulated using multiple sources of information. McNiff, et al. (1996) explain:

Because action research is case study research its usefulness is for others who can see its implications to their work. It is important that the effectiveness of action research is demonstrated in terms of an improvement in the quality of the lives of people whom it is supposed to be affecting. Case studies to show this are only just appearing in the public domain which shows the effectiveness of action research approaches in concrete terms. (p. 23)

In this action research, a systematic approach and careful consideration of literacy development were required to ensure that all participants' concerns were given due thoughtfulness. Indeed, as our action research process unfolded, it was clear that participants were committed to finding a better way to teach; they were self-motivated. With this in mind, the data reflected sincere reflection; participants were not motivated by certification, advancement, or economic reward. Moreover, the process was recognized and endorsed by the board and the school principal as a valuable professional development experience for participants.

As the data were transcribed, we began to skim the data set and reflect on what we had sensed during interviews, conversations, telephone calls, video, and emails. Further reflection brought to mind recurring key terms, concepts, and words that characterized our interactions. We used the word *term* to describe something that is unambiguous whereas the supporting words could be defined in several ways. The key terms (themes) were used to search through a transcript and highlight occurrences (see Figure 1). We could then assemble a frequency checklist that raised the profile of a key term to that of a theme. "Simply put, themes are recurring patterns, topics, viewpoints, emotions, concepts, events, and so on" (Bailey, 2007, p. 153), which informed and guided our research. We believed the conception of data analysis articulated by Sagor (1992) suited us best in this endeavour:

Data analysis can be most simply described as a process of sifting, sorting, discarding, and cataloguing in an attempt to answer two basic questions: What are the important themes in this data? and (2) how much data support each of these themes? (p. 48)

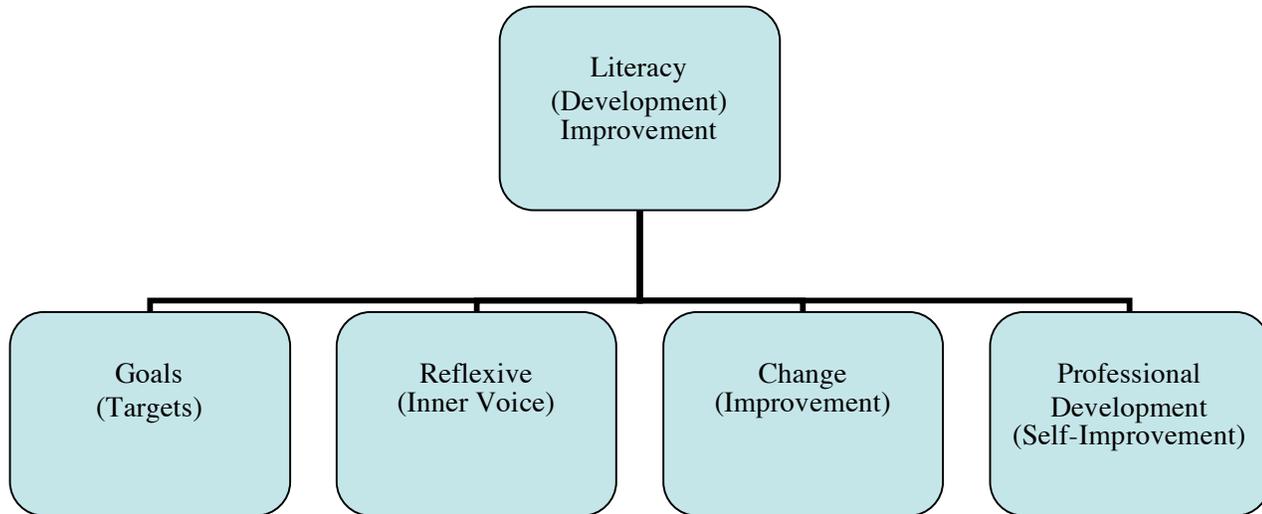
Key terms led to themes that were then used to label boxes in our diagram. Each key term was given a color as the data were skimmed, sifted, and sorted. A link to a key term often surfaced, and the data were highlighted in the corresponding color. In each box, coordinates were noted such as the date and page number. This way, if we were looking for data concerning "change", we could search the transcript to locate color and source. Data surfaced from one-to-one interviews, document analysis, casual visitations, and both informal and formal written and verbal communications. Located in a specific matrix box would be the source's location by date and page number so we could quickly locate the information. The summative video-tape was also used to capture a permanent record of summary evidence.

## Results and Findings

During our inquiry the research landscape shifted and matured as we realized our goals. Findings were detailed in the themed sections. For instance, change was witnessed as goals were achieved, and these results encouraged participants to scrutinize and share practice insights recursively.

### Themes

Within each case study, we sought the frequency of key terms and colored these accordingly. For instance, 'goals' were mentioned often and became a centerpiece of discussion. Other key terms included "change", "reflexivity", and "professional development". The evidence that follows demonstrates that we had many findings. These following excerpts illuminate our themes.

**Figure 1.** Emergent themes as a result of action research praxis.

### Goals

The university facilitators were targeting two elements. First, “we were looking for the development of action theory (new understanding) and action practice (application) as it relates to teacher development and student growth. ... [Second], we hoped to realize a recursive cycles of theorization/reflection and application in order to professionalize practice” (Ryan, Journal September, 30, p. 2). In the autumn of 2004, interviews immediately revealed several themes. For example, during our first one-to-one interview, Pam addressed the need to seek goals in her classroom:

I usually use the group approach, and it works well because they help each other. So they are in groups all day long. Well, I am hoping that through modeling of a peer and from what they see going on in my teaching that they will get into this act of literacy and know where they are heading with the literacy center. (Interview 1, October 13, 2004)

Pam wanted students to support each other and, through her modeling, hoped that other goals would be realized. Similarly during the first interview with the principal, two themes - goals and growth - were noted.:

I really hope to cultivate a professional learning community through this process, and I think my interests and passions

have to do with [a] number [of things], one is literacy and two, is bringing the kids to their full potential, to make them believe in themselves and making sure that we’ve got programs and [that] our school is supported to move that learner along. (Interview 1, November 9, 2004)

Clearly our administrator was hoping to ‘cultivate’ literacy in order to realize the ‘full potential’ of each student in these classes. These administrative goals were viewed as essential to our action research efforts since support and team growth can only broaden and deepen the results of our work. Ann, a second teacher, wanted to diagnose areas of need and then move to address these needs as necessary. For example, Ann detailed her situation this way, “I’m just trying to work with individual students to determine where their weaknesses lie in literacy and how I can give them personalized activities so that they can grow” (March 3, 2005, p. 2). Ann wanted to nurture and support literacy and felt she needed to define needs before moving forward with literacy efforts. Her approach was linked to her need for strategy and organization in her classroom. Early in our inquiry Ann openly suggested,

I hope that I get to learn more about my strengths and weaknesses, areas where I can improve. But also maybe I’ll find something that can help my students that I wouldn’t have thought of before. I also

hope to be able to collaborate with others and find out things that they've learned and so on. So the other team members of this project, I hope to learn from them. (Interview, October 13, 2004)

This need to improve and grow was common and united our participants. Our efforts to develop a community of practice "may be the single most important way to improve a school" (Sergiovanni, 2000, p. 139). Participants applauded our efforts to support their work, explaining that they had not experienced professional development like this before.

### **Change**

Ruth, the principal, was also hoping to learn, grow, and change, and this complemented the professionalization that we hoped to facilitate through our project. As evident in the following excerpts, our situation was ideal given the position of our administrator.

I want to be able to learn how to be a better administrator and I think it's critical that the [role of the] administrator of a school, it's twofold: you're the manager of the building, but you're also the instructional leader. And I think what I'm trying to do here is put the instructional leadership first because what happens in the day, you get so busy doing other things that your time is consumed by everything else. (Interview 1, March 12, 2005)

And if we have to change our system, we have to change our system. It's not the kids that always have to change. We have to go and meet the child wherever they are. And I think that's been my whole passion, is bringing literacy to children, [bringing] children to literacy because you have to meet somewhere in the middle. (Interview 1, March 5, 2005)

Our efforts to reflect were not limited to self-analysis; we encouraged participants to share their own experiences in order to justify and construct images that could be understood by others. We know we learn from others; however, we also learn from ourselves by

talking and interacting with others (Bruner, 1990). The process of reflecting with others augments our ability to change and shape our educational philosophy, which then impacts pupil growth. Ann struggled to deal with change within our research effort and to define her next steps:

I just don't know where to go from here. I am continuing to collect and continuing to gather information and work towards their weaknesses to help strengthen them, but is there an end or should I just do what I can until the end of the year and then start again? How do I, through collecting data, like work samples and so on, is that enough? Where am I going next, that's kind of what it is. (Interview, March 3, 2005, p. 1)

This openness was key to our progress and professional development as we made public our concerns and inner voices. Ann continued to find her way and address student development by suggesting,

I think they [students] are always changing to a point. Just the awareness that most students really have specialized needs in a variety of different areas has really impacted me this year. Like I have been aware of different levels with IEPs and so on, but to have students not on IEPs with such a vast array of strengths and weaknesses and trying to just, like, choose certain things to work on, and how do I teach to the group when there is all these individual weaknesses or strengths that I need to draw on. (Interview, March 3, 2005, p. 2)

This self-questioning within a community of learners (action researchers) is the most basic element required for continual, substantive school improvement (Mitchell & Sackney, 2001). Each participant voiced their endorsement of the research process, with Ruth noting that "We need to continue this journey as I need to have input every day."

## Reflexivity

A reflexive educator cultivates an inner voice. In our study this emerged from discussions (both formal and informal). As we were attempting to improve literacy, we discussed how teaching is a time-deficit profession where most educators have high expectations. What exactly is reflexivity? Many have tried to define the term, and yet some of these definitions only lead us to questions. For instance, Nightingale and Cromby (1999) suggest,

[R]eflexivity requires an awareness of the researcher's contribution to the construction of meanings throughout the research process, and an acknowledgment of the impossibility of remaining "outside of" one's subject matter while conducting research. Reflexivity then, urges us to explore the ways in which a researcher's involvement with a particular study influences, acts upon and informs such research. (p. 228)

In other words, reflexivity is the condition of taking account of the personality and presence of the researcher within the investigation. May (1998) adds,

The concepts of reflexivity may be a way of bringing qualitative methods to account for themselves in a way that goes some way to satisfy the demands of scientific method. This is generally a matter of questioning how the processes of research and analysis have an effect on research outcomes. This whole process of self-examination has become known as "reflexivity." (p. 22)

In our inquiry we noted several instances where both the inner voice and the researcher role surfaced. For instance, Ruth explained,

I think I go about my own P.D. in a very public way, because I'm a very public learner . . . . Because I constantly question myself and I'm constantly looking for a better way to do things. When I'm sitting with kids and I'm listening to them read and I'm also looking at the text saying: Is this text appropriate for the child? And is

this text too hard? Not just in the words, but in the way they've set it up on the page and the way they've got their quotation marks—could they have changed the text to make it a little easier for the children. (Interview 1, November 9, 2004 )

This inner dialogue becomes buoyant and surfaces during conversation; that is the centerpiece of action research. Being reflexive is useful. When the thoughts are made public, growth and understanding become more visible than if a person simply archives his or her conversations, attitudes, and understandings. Another participant, Pam, explained,

I don't feel I am alone out there with this isolated question that I have. But yet I have a whole different group of children than what maybe these teachers have been working with, so that helps me in looking at what is good for the students here. What else is helping me is the students. They are giving me back lots of feedback, telling me if we're on the right track .(Interview, March 3, 2005, p. 1)

This reflective evidence was required in order for our learning community to move forward from the comments, insights, and questions. Our strategic and purposeful discussions led to change that was an essential aspect of our dialogic learning. Participants summarized this aspect of our study by suggesting that "within a group the risk of speaking about what is within is somehow diminished" (Video-record 1, March 22, 2005).

## Professional Development

Ruth suggested,

[It's] [m]y number one motivation, because I think action research is the sole professional development that I've been exposed to that's really increased my level of professional understanding and performance. And I really want to make other people fall in love with it. I want them to see that they have the answer within them. And to look at their profession in a positive way and to look at

their kids, at every child they see, not as a problem, but as an opportunity to learn. Because that's the way I view it. And if I can get other people on board, thinking that way, then we're going to have a powerful school. (Interview, October 14, 2004)

When leadership makes public a vision that the school will be a community where all are united by the need to learn and this need is made public, then we have ideal conditions for improvement of the school and individuals within this community (Barth, 2001). However, did the community retain a similar position with regard to learning? Ann put forward her stance regarding reflection:

My personal growth or professional development is important. I feel that I am very self-reflective, and I know this is a great avenue to really focus on something specific in my teaching day or my teaching practice and improve upon it and then I can work on other areas, of course. (Interview, October 14, 2004, p. 2)

The sense that this inquiry was an opportunity to meet with others and develop both self and the immediate learning community was present from the initial contact. Our work served to motivate, as Pam pointed out, being able to use this research, use this information and put it to good use in my classroom and in my practice. Like you said the other day, we do reflect, and it's just acting on the reflections, thinking about it, contemplating. Doing a few action-oriented items from my reflections, but I think this is really going to get me into it more. (Interview, October 13, 2004, p. 2).

Connecting, collaborating, and communicating are powerful variables that motivate and infuse action research with vigor. This empowerment leads to change and can be a source of democratic and dynamic energy (Woolhouse, 2005). At times my role was that of a critical friend responsible for new ideas, resources, feedback, and questioning. Pam continued to

develop professionally and characterized her spirit later in our project by explaining,

I get excited about everything, so let's see. I'm getting excited noticing that from the month of October to the month of February, tracking anecdotally the progress of my students, that there is a change in their attitudes towards math. I am, by asking them "Are you enjoying math? Why?", I am getting feedback from them telling [me] that yes they are enjoying it, and I would say out of 30 students, 28, it is always up there in the high 20s, are enjoying math, more than they ever did before. (Interview, March 3, 2005, p. 1)

Our efforts created a level of liveliness that otherwise may not have occurred. Our efforts were a means of improving problem-solving skills and impacting professional development vicariously through classroom-based changes. Increasing openness and confidence was another result.

## Conclusion

This action research effort energized participants and heightened professional identity via the embedded nature of our interactions (Altrichter, 2005). Emergent themes such as change, professional development, and targeting enabled participants to improve praxis and literacy results as classroom scores increased as did everyday reports of success as recorded by teacher-researchers. For instance, Ann captured a summative view by suggesting,

The fluency of their reading right now is exciting me because they are showing stronger comprehension, they're self checking a little better when they read to me orally, which means they are paying attention to what, they're taking in what they're reading and they know they have to go back. That's the most excited, how strong they are becoming, oral readers and comprehending what has been read. (Interview, March 3, 2005, p. 2)

We viewed the classroom level assessment outcomes together and concluded that self and peer evaluation results improved on average between 6% to 9% for each class while project completion increased from 82% to 100% overall. This fact alone was responsible for enhancing outcomes, and we believed it was critical. Another dividend included larger portfolios that were more complex in contrast to previous submissions. Classroom presentations and classroom tests showed enhanced results with all students moving into level three, which is the provincial standard, and a few more than last term realized level four. Reports of these outcomes were captured on video during concluding interviews and motivated classroom teachers to move forward. All participants believed that our project had boosted classroom energy, focus, and outcomes.

Participants were empowered as they collected their data and made research decisions while both the principal and university researchers were supportive and guided when necessary. Participants assessed students and deemed that improvements were made, and this was noted in many processes and products developed in the classroom. Our action research effort affirmed the professionalism of teaching and created an open dialogue that fostered progress.

### Future Plans

All participants indicated that they wanted to continue to improve and extend this research effort into the following school year. This would involve new students. The insights, skills, and growth achieved this year would support each participant's renewed efforts to realize continued improvement for students and participants.

### References

- Action Research International Journal (1997) Action research defined. *Action Research International Journal*, 5 (2), p 32-34. Retrieved November 24, 2003 from <http://www.triangle.co.uk/ear/>.
- Altrichter, H. (2005). The role of the professional community in action research. *Educational Action Research*, 13 (1), 11-25.
- Baily, C. A. (2007). *A guide to qualitative field research* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Pine Forge Press.
- Barth, R. (2001). *Learning by heart*. San Francisco: Jossey-Bass.
- Bruner, J. (1990). *Acts of meaning*. Cambridge, MA: Harvard University Press.
- Carr, W. & Kemmis, S. (1986). *Becoming critical: Education, knowledge and action research*. London: Falmer Press.
- Connelly, F. M. & Clandinin, D. J. (1988). *Teachers as curriculum planners: Narratives of experience*. Toronto, ON: OISE Press.
- Corey, S. M. (1949). Action research, fundamental research and educational practices. *Teachers College Record*, 50, 509-514.
- Deshler, D. & Ewert, M. (May 25, 1995). *Participatory action research: Traditions and major assumptions*. PARnet Retrieved October 15, 1999, from <http://www.parnet.org/tools/tools>.
- Feldman, A. (1999). The role of conversation in collaborative action research. *Educational Action Research*, 7(1), pp. 125-144.
- Flores, E. & Granger, S. (1996). The role of the collaborator in action research. In S. E. Noffke & R. B. Stevenson (Eds.), *Educational action research: Becoming practically critical*. New York, NY: Teachers College Press.
- Hopkins, D. (1993). *A teacher's guide to classroom research* (2nd ed.). Philadelphia, PA: Open University Press.
- Kemmis, S. & McTaggart, R. (Eds.). (1988a). *The action research planner*. Victoria, Geelong: Deakin University Press.
- King, N. R. (1988). Recontextualizing the curriculum. *Theory into Practice*, 25(1), pp. 36-40.
- Mitchell, C. & Sackney, L. (2001). Building capacity for a learning community. *Canadian Journal of Educational Administration and Policy* (CJEAP), 19.

- McNiff, J. (1988). *Action research: Principles and practice*. Basingstoke: Macmillan Education.
- McNiff, J., Lomax, P., & Whitehead, J. (1996). *You and your action research project*. New York, NY: Routledge.
- McTaggart, R. (1996). Issues for participatory action researchers. In D. Nightingale & J. Cromby (Eds.), *Social constructionist psychology* (1999). Buckingham: Open University Press. Retrieved November 18, 2003, from [http://www.psy.dmu.ac.uk/michael/qual\\_reflexivity.htm](http://www.psy.dmu.ac.uk/michael/qual_reflexivity.htm).
- Noffke, S. E. (1995). Action research and democratic schooling: Problematics and potentials. In S. E. Noffke & R. B. Stevenson (Eds.), *Educational action research: Becoming practically critical*. New York, NY: Teachers College Press.
- Noffke, S. E. (1997). Professional, personal, and political dimensions of action research. In M. Apple (Ed.), *Review of Research in Education*, 22, (pp. 305-343). Washington, D.C.: American Educational Research Association.
- Ontario Ministry of Education. (2003). *Early reading strategy: The report of the expert panel on early reading in Ontario*. Toronto, ON: Author.
- Pearson Education. (2003). *Developmental reading assessment, grades 4–8, second edition*. Don Mills, ON: Author.
- Sagor, R. (1992). *How to conduct collaborative action research*. Alexandria, VA: Association for Supervision and Curriculum Development
- Sergiovanni, T. L. (2000). *The lifeworld of leadership: Creating culture, community, and personal meaning in our schools*. San Francisco: Jossey-Bass.
- Schon, D. (1983). *The reflective practitioner*. London: Maurice Temple.
- Stenhouse, L. (1975). *An introduction to curriculum research and development*. London: Heinmann.
- Stevenson, R. B., Noffke, S. E., Flores, E., & Granger, S. (1995). Teaching action research: A case study. In S. E. Noffke & R. B. Stevenson (Eds.), *Educational action research: becoming practically critical*. New York, NY: Teachers College Press.
- Stringer, E. T. (1996). *Action research: A handbook for practitioners*. Thousand Oaks, CA: Sage Publications, Inc.
- Stringer, E. (2004). *Action research in education*. Upper Saddle River, NJ : Merrill/Prentice Hall.
- Woolhouse, M. (2005). You can't do it on your own: gardening as an anthology for personal learning from collaborative action research group. *Educational Action Research*, 13 (1), pp. 27-41.
- Zuber-Skerritt, O. (Ed.). (1996). *New directions in action research*. London, UK: Falmer Press.

## **Appendix A**

Question 1: Your motivation in the first interview was \_\_\_\_\_. Has your motivation changed; and what learning has occurred?

Question 2: For Principal – Tell us, how you are facilitating this project? Are there any obstacles?

Question 3: For Teachers – Describe where are you now with your Action Research project? What is helping you with this study? What appears to be a barrier to your progress?

Question 4: Tell us, have you refined or changed your question?

Question 5: Describe what you are feeling towards this study. Are you excited or not?

Question 6: Describe any confusion?

Question 7: Have your views of literacy changed? If so - how so?

Question 8: You were employing certain strategies at the previous interview. Have you been refining them? Using new ones?

Question 9: What data are you collecting or planning to collect?

Question 10: Any other comments?