

2014

# Encouraging Independence During Learning in Depth Sessions to Allow for Individual Conferencing

## An Action Research Study

Learning in Depth (LiD) is a program promoting longitudinal self-guided inquiry into specific topics of study. This research study aimed to address the difficulties experienced by emergent readers in an immersive second language environment to work independently, which, in turn it was hoped, would allow for one-to-one conferencing. The study was conducted in a second grade French Immersion classroom at a British Columbia elementary school. In trying to respect the nature of Learning in Depth and to foster independent work skills, activities generated were based on explicit teaching using work examples followed by opportunities for students to work on tasks with scaffolds and supports in place. The research explored changes in pacing of lessons and work time, use of scribing, transcribing and translating, and peer coaching. Although students demonstrated progress in the ability to work more independently, the research challenged beliefs concerning the importance of one-to-one time versus mediating understanding and learning in the large group. Assertions regarding the value and importance of each are presented. The process and results are offered in the hope that teachers embarking on inquiry based learning environments, especially with younger learners, might recognize action research as a possibility for effecting positive change within such learning environments.

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## Lydia's Story

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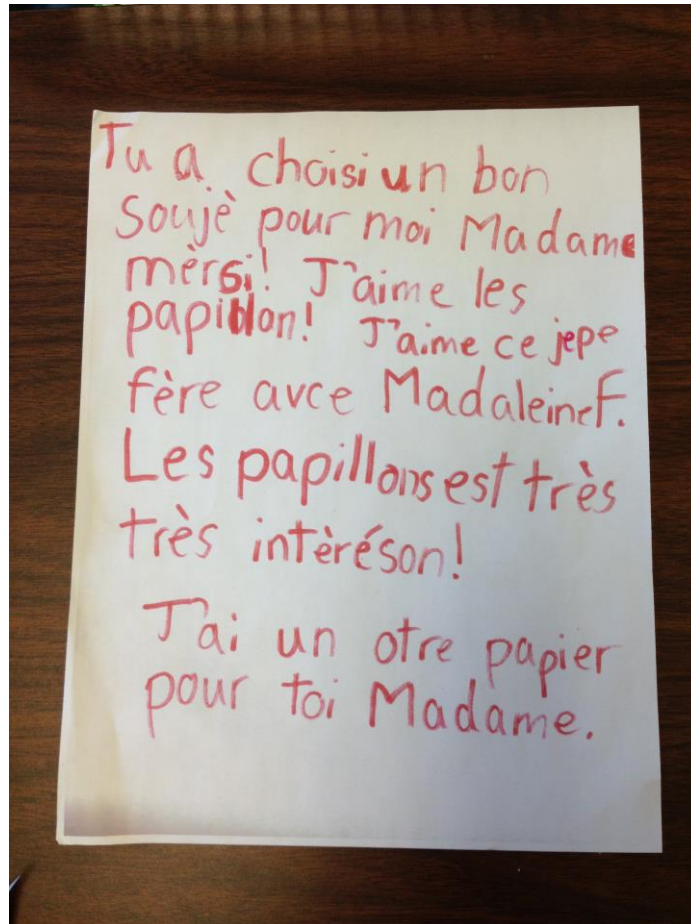
*Lydia puts her bag in the cloakroom and just as I finish greeting all my other students at the door, she comes to me, a huge smile on her face, without even having taken off her jacket or changed her shoes, to show me the papers she carries in her hands. She hands me a note. It says, "Madame, thank you for choosing a good topic for me. I really like it. Butterflies are really interesting." The excitement is apparent on her face and she pursues in sharing with me that when the caterpillars are in the cocoon, they turn into goop and the goop turns into butterflies. She can't stop smiling.*

*Lydia then proceeds to explain that her mother had helped her find some cool stuff about butterflies, but it's in English. So, she asks me if I would help her write it in French. My response is, "Most definitely. How exciting!! Go put your papers into your portfolio and we will find time to write it in French. For now, get out your agenda and copy the homework from the board."*

This little scenario occurred three weeks ago. I could not believe that three weeks had passed and I had not yet sat with Lydia and translated her work into French. I made it very apparent to her how I proud I was for her for having found out the information on her own and how much I liked her note, but so much time had lapsed that she must have been wondering why I'd not helped her; why it was taking so long; would I ever help her? She may have been hoping that it doesn't get lost. For a child at 7 years of age, three weeks feels like forever.

*Today, I am teaching the students how to write a poem using the words from our word bank. After the lesson and during the work period, I ask Lydia to come over and work with me at the table. She comes over happily and I proceed to conduct an interview about how things are going for her during our LiD sessions. She answers them energetically and cooperatively, but after the third question, she interrupts me to ask, "Okay, but when are we going to write my words in French?"*

Lydia must have really wanted to translate her words into French. She liked her topic and wanted to add to her portfolio, but I, as a teacher, was just not getting to help her achieve this. She must have felt very frustrated. Was I, as her teacher, doing justice to her pursuit of knowledge, her desire to add to her topic portfolio and to meet her initiative to have her work be in the language of instruction at school? How many of my students must have been feeling this way? How many of my students might have been ready for more knowledge and facts, but I was too busy managing the group to tend to their learning needs? These and other questions concerning the program of Learning in Depth and its optimal implementation were the stimulus leading me to conduct an action research study with my students.



## What is Action Research? Why Action Research?

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“Research is a form of disciplined enquiry leading to the generation of knowledge. The knowledge that your research generates is derived from a range of approaches. [The] approach to research may vary according to the context of [the] study, [the] beliefs, the strategies ... [employed], and the methods [used]. (Koshy, 2010. p. 1)

Action research is a method of conducting research which aims to improve practice. Professionals and practitioners in the field of education conduct action research studies with the intention of implementing data collection methods and a cyclical research methodology which allows for a reflection on ways in which they can provide good quality education. They aim to transform teacher related activities, thereby enhancing student learning.

Traditional scientific (one could say the positivist) approaches to research have been in the pursuit of making knowledge and accomplishing goals in predictable ways. The process of systematizing knowledge, controlling variability, conducting controlled experiments that lead to an analysis of causality and collecting large scale data for analysis are key characteristics of the positivist scientific approach to research. These processes result in a research methodology, which allows for efficiency and efficacy. This, in turn, allows research results to make a greater impact into the wider world and increases the applicability of research results to a wider range of contexts. Such traditional scientific methods are oriented to control, predictability, generalizability and universality.

Can such methodologies be applied to research in a classroom? Depending on the goal of such a study, these could be effective means by which to gather knowledge within an educational setting. However, classrooms are not linear, predictable and sequential entities. Within any classroom, there are multiple variables that interact in dynamic and non-sequential, non-linear ways. The general behaviour of these variables is unpredictable. The classroom is a complex system of which the boundaries are open, vague and shifting; “the nature of the interaction between variables is more significant than the variables themselves and they are therefore resistant to reductive analysis.” (Radford, 2007 p. 23) As explained by Radford, schools and classrooms are messy places, but through the careful application of particular research procedures, they can be tidied up and made amenable to practitioner control.

Action research is a research methodology that allows for and anticipates the unpredictable nature of the complex classroom and teaching environment. The reflective and active natures of action research recognize the subjective particularity of situations. With an action research model, the practitioner researcher begins with a question – a particular idea designed to improve practice. The practitioner researcher investigates that idea with a particular group of students within the bounded space of the classroom. Clear stages are defined, guiding the researcher to remain focused on the specific question to be addressed. (Radford, 2007) As Koshy states:

Research is about generating knowledge. Action research creates knowledge based on enquiries conducted within specific and often practical contexts. ... [T]he purpose of action research is to learn through action leading to personal or professional development. (Koshy, 2010 p. 4)

It is a cyclical and reflective process allowing for difficult questions to be asked throughout the research. The participatory nature of action research involves planning a

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change, implementing means by which to effect that change, acting and observing the process and consequences of the change, reflecting on these, replanning and on it goes. As Koshy explains, the description above is not, in reality as clearly effectuated. The process of action research is more fluid, open and responsive.

As a practitioner, I witnessed in my classroom, difficulties that sparked a desire to improve the way in which I was implementing a program called Learning in Depth (LiD), created by Kieran Egan (philosopher and professor at Simon Fraser University). (Egan, 2010) I will further explain LiD later on in this report. My student, Lydia, was engaged with her topic of study and demonstrated initiative and an internal motivation to know more about it. However, I was not able to meet her needs for increasing her knowledge base in the language of learning in our classroom environment. Something needed to be changed. There must be a better way to meet, not only her needs, but those of the other students as well.

Fortunately, in working towards my MEd, my next course had action research as its focus. Through the process of learning about action research, I quickly realized this was the best means by which to improve my practice within this specific context. Koshy (Koshy, 2010) believes strongly that the quality of educational experiences provided to children will depend on the ability of a teacher to stand back, question and reflect on their practice, and to continually strive to make the necessary changes. Action research allows for practitioners to reflect and self-evaluate in a meaningful way. I would undertake this enquiry with rigour and understanding so as to refine my practice. I believed that the evidence-based outcomes that emerged would contribute to my continuing professional development and, I was certain, would generalize to other facets of my practice.

## Background and Rationale

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*Dylan receives his topic of study for our Learning in Depth study amidst all the excitement of the topic ceremony and is carried along with the enthusiasm and the buzz that seems to permeate the classroom. A quiet, soft-spoken boy, Dylan does not stand out in either being very enthused about his topic, or in being disappointed. He goes under the radar until his mother expresses at a parent-teacher conference that he is not very excited about his topic. He had been wishing for another. However, with encouragement and support from home and me, he participates in all our activities thus far without complaint. He is one of the students that I never get to. Through observation of his participation in discussions and his work, I can see that he is not really gaining any knowledge about his topic of reptiles.*

*Being an emergent reader, he is not reading well enough to research on his own yet. Being a student in French Immersion with French not being his native language, he is not yet proficient enough to understand all that he reads.*

I wanted to help Dylan find information and increase his ability to research himself, but class-management issues and being needed by so many, so much of the time prevented me from getting to him one on one. How many other students would benefit from my focused attention? How many others are simply coasting? How could I help them and facilitate their search for knowledge about their topics? Could the large group just work on their own for a period of time so that I could connect with individual students?

At the time of this study, I was teaching a grade two class of students aged 7 to 8 years old. These students were part of the Early French Immersion (FI) stream at our school. I was interested in finding ways by which the students could work more independently during Learning in Depth (LiD) time in order to allow time for me to conference with others one on one. My hope was that both working independently and conferencing one on one would, together, lead to a deeper and fuller engagement with and understanding of their topics.

First and foremost, what is Learning in Depth (LiD)? LiD is a program conceptualized by Dr. Kieran Egan of Simon Fraser University designed to address the concerns that schools, although rather successful at providing breadth of knowledge, are



not successfully providing an education, which fosters depth of knowledge. Students gain a superficial understanding of numerous content areas without ever learning any of them in depth, therefore never gaining a true appreciation for the nature of knowledge itself. Egan (Egan, 2010) proposes that, in Kindergarten, each student is assigned a topic of inquiry which he/she will investigate throughout their entire school career (from K-12). This topic will be researched and explored from multiple perspectives and disciplines allowing for in-depth knowledge building. The more they learn, the more they will want to learn.

I found this program to be very intriguing for two reasons. First of all, being that the new BC curriculum has a heavy emphasis on inquiry-based learning and is attempting to address deeper learning of content across multiple disciplines, I was interested in finding a means by which both these emphases could be addressed in my teaching. Secondly, I was in the midst of my Master's program in Imaginative Education. One of our courses focused on the Learning in Depth program. I saw that LiD proposes to grapple with these issues in today's education system and to maneuver students through the construction of deeper knowledge while developing an understanding of the nature of knowledge.

I implemented LiD in October of 2013. Knowing that my students would not be pursuing the study of their topics after their year with me (no other teachers in the school were involved in implementing LiD), I proposed this as a year long study. The students were going to become "experts" in their topics during their grade two year.

Up until the point I began my action research, the students had been very excited, enthused and engaged (for the most part) with their topics. We had been working on

whole group activities to help foster and develop the conceptual nature of their topics. It was my belief that the students were gaining good insight into the concept of their topic and were now ready to build more knowledge, facts and information. In essence, they were ready to do more research. The challenges that presented themselves were:

1. These students were still operating from a very oral engagement with their world and were only at the beginning stages of shifting to literacy. For some, this shift was occurring at a good pace, yet for many, reading and writing proved to be very challenging. The students were not yet at a level of literacy proficient enough to sustain them through the process of reading for research purposes. This was combined with the fact that being young, they did not yet have the ability to sustain attention devoted to research for lengthy periods of time. Hence, it was not yet feasible for me to expect them to delve into their resources, either in books, or online for sustained periods of time.

2. French was not the first language for any of the students. They were learning French as a second language through the immersion program. This provided an additional element to the difficulty of doing independent research as, not only did they need to be able to read and write to do so, but they needed to be able to comprehend the information they were accessing. Finding resources in French is a challenge in and of itself, but finding such resources at a basic, beginning level of literacy adds to the challenges. In addition to this, all of their resources outside of school were in English.

The LiD program proposes that the teacher facilitate access to people and to resources in the school and in the larger community. In practice, this is very difficult for those working and learning in the French Immersion program. These young students struggle with reading and writing enough that even if they do interview someone, go to a museum, watch a documentary, etc. they do not yet have the means to translate new found knowledge into French. Most parents of French Immersion students do not speak French. One could argue that knowledge is knowledge regardless of the language it is understood in. This is true, yet this factor still impedes the ability of the student to work independently during class time which is intended to transpire entirely in French. The teacher needs to provide guidance and mediation, not only with content and information, but also with the language in order for students to accomplish gathering of factual

information. This is a daunting task for one teacher with a class of 24 students, each with their own topic.

Kieran Egan states that during LiD sessions, students will be so engaged with their topics that they will absorb themselves into their research and work independently allowing the teacher to facilitate, guide and serve as a sounding board. Since this was not the case in my situation at all, I had to attempt finding/creating my own version of LiD that would hopefully be more conducive to a primary French Immersion class. The original concept of LiD presupposes a certain capability of the students and also an unproblematic relationship between school language, first language, and language of inquiry. As such, modification in order to respond to contextual needs was deemed necessary.

Upon reflecting on all this, the focus for my action research was formulated:

**What kinds of activities, materials and guidance/mediation will help students work independently for short stretches, allowing more conferencing time with individual students?** The heart of my research topic was meaningful self-guided inquiry and exploration of the concept of each student's topic in a context of limited functional literacy and immersive second-language learning.

## Researcher Perspective

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It was crucial to situate my own perspective in order to ensure that I strived to be as objective as possible during a potentially very subjective journey. I have been skeptical of the idea that students, especially younger students, will create learning and develop knowledge if left to discover it on their own, or with minimal guidance. I have supported and believed in the value of independent exploration and research, yet questioned the effectiveness of this for deeper, meaningful learning if students are left to their own means. Through my M.Ed. studies, the work of Lev Vygotsky (Kozulin, 1986) really resonated with me. The theory of mediating student learning and progressing students by meeting them at their level and moving them to the next level/phase by providing explicit teaching, structured guidance and then opportunities for practicing and applying their new knowledge/skills has become an integral component of my approach to teaching. In addition, I believe strongly in the need for such mediation in a second language immersive context.

My frustrations with the lack of applicability with the LiD program combined with my faith in its potential value led to this exploration of adapting it to fit my context. I had apprehensions right from the onset about its claims and visions of students working independently and in a minimally-guided manor.

## A Background on Educational Theories and Research Literature

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In the desire to generate activities which would help students to work independently for short stretches, despite the challenges of being at an emergent literacy stage and working in an second-language immersed class environment, it was crucial that I research the possible methods and theories behind various inquiry-based instructional approaches. My research proved fruitful in giving me a background on which to base the design of what I hoped would be effective activities.

My first step was to read more about discovery-based instruction and whether it enhances learning or not. There has been much disagreement as to what constitutes effective discovery-learning methods and how/when such methods should be applied. Unfortunately, there has not been any systematic meta-analysis done on this, so much remains unclear. Harriet Tenenbaum and her team conducted a study entitled, “Does - Discovery Based Instruction Enhance Learning?” (Tenenbaum, Alfieri, & Aldrich, 2011) What I have understood from the work of Tenenbaum is that discovery based learning is based on the learner finding target information or conceptual understanding independently and only with the provided materials. The methods by which this is achieved can provide intensive or minimal guidance. In this study, Tenenbaum refers to Bruner’s attempts to caution that a learner’s insights into a domain of study cannot be made “a priori or without at least some base of knowledge in the domain in question.” (Tenenbaum, Alfieri, & Aldrich, 2011 p. 2) Therefore, mediation for learning skills and content is necessary, but this mediation should be provided in the form of teaching, then

opportunities for practice. In other words, direct instruction serves as a basis for subsequent discovery. This direct instruction will facilitate constructivist learning by reducing task ambiguities and learning times, while, at the same time, improving process comprehension and potential generalization. (Tenenbaum, Alfieri, & Aldrich, 2011)

This article shed light on my questions regarding the frustrations I felt at seeing that my students were not able to work independently on their LiD topics. I now saw that young learners possibly benefit the least from discovery learning methods due to the fact that they have comparatively limited amounts of organized, pre-existing knowledge and schemas to be able to integrate new information effectively. Also, they lack the metacognitive skills required to monitor their cognitive processes. This, combined with the factors of which I was already aware – the minimal literacy abilities and the second-language immersed environment – shed dawn on the fact that my students would not benefit from an “Okay, now get to work on your topics,” approach.

In essence, Tenenbaum’s study revealed that enhanced forms of discovery learning are superior to unassisted forms. She refers to Bruner’s explanation that the learner’s mind needs to be prepared for discovery and that discovery does not simply mean acquiring new knowledge, but rather it is the result of the learner gaining new insights which transform the knowledge base. (Tenenbaum, Alfieri, & Aldrich, 2011 p. 13) “Bruner (1961), like Vygotsky (1962), suggested that the narrative of teaching is a conversation that is appropriated by the learner who can subsequently use that narrative to teach himself/herself.” (Tenenbaum, Alfieri, & Aldrich, 2011 p. 13)

So, how did this apply to my action research? There were several implications for my work and for teaching in general with this information. First of all, unassisted

discovery for my students most likely would not be conducive to learning. It would be preferable for me to provide worked examples and timely feedback. Secondly, I would need to provide scaffolding tasks that have supports in place. Also, my activities should elicit explanations which require learners to explain their own ideas, thought processes, etc.

Another very informative journal article I read was entitled, “Supporting Guided Inquiry Instruction”. (Palincsar, Magnusson, & Cutter, 2002) This article presented the kinds of challenges that students with special needs may face specifically regarding science education and proposed interventions in inquiry-based instruction that support these challenges. This article proposed that the classroom operate as a community of inquiry based on the premise that inquiry proceeds through cycles of investigation which are guided by specific questions. All members of the community function such that inquiry by all is supported.

The following chart is a summary of the challenges and interventions outlined in this article:

Kind of challenge	Proposed interventions to aid in inquiry based learning
Cognitive/Linguistic Challenges	Before public sharing, a teacher helps to: a) <u>debrief</u> – teacher and student share thoughts in effort to monitor student’s thinking b) <u>rehearse</u> – practice voicing thoughts c) <u>revoice</u> – teacher helps to articulate expressed ideas more clearly to be understood by others
Print Literacy Challenges	1. <u>Glossary of high utility words</u> - provides technical terms specific to topic and synonyms for these words (used in everyday language) 2. <u>Writing prompts</u> - help to jump start writing Eg. I now believe... I am wondering.... I don’t agree with... I think .....

	3. <u>Use of transcribers</u> - teachers or other students - the scribing of student's initial thinking helps as they then sometimes find it easier to add more themselves (the act of writing is less daunting)
Social/Interactional Challenges	1. <u>Small groups</u> - being thoughtful in grouping students - teachers role play of how to be a good partner in specific contexts - supervise and monitor groups - sometimes allow for individual investigation 2. <u>Peer coaching</u> 3. <u>Put students in the role of teaching others</u>
Attentional Challenges	1. Slow down the pace for investigation time. 2. During the reporting phase, assign roles as audience members

This information was very fruitful for me as I had to contend with all of these challenges to varying degrees in my class. Keeping these interventions in mind when planning my activities would, I hoped, be helpful.

The last detail to contemplate before beginning to plan my activities was to refine in my own mind what inquiry is. There is much emphasis in the new BC curriculum regarding inquiry-based instruction and LiD is an inquiry-learning based program, but what exactly is inquiry? In my review of many pieces of literature, I found one definition that seems quite complete. It comes from an article entitled, "Folding Inquiry into Cookbook Lab Activities" by Julia Gooding and Bill Metz (2012). They cite the National Research Council (1996) in its *National Science Education Standards*:

Inquiry is a multifaceted activity that involves making observations; posing questions; examining books and other sources of information to see what is already known; planning investigations; reviewing what is already known in light of experimental evidence; using tools to gather, analyze, and interpret data; proposing answers, explanations, and predictions; and communicating the results. Inquiry requires identification of assumptions, use of critical and logical thinking, and consideration of alternative explanations. (p. 23) (Gooding & Metz, 2012 p. 43)



This is a very comprehensive definition, however it would need to be simplified and modified to be more applicable to primary students at beginning literacy stages in a second-language immersed classroom for the purposes of my action research study.

Based on my research, I attempted to generate activities and materials and to provide mediation/guidance to help students work independently for short stretches. The following is a summary of the factors I took into account when designing and planning the activities for my action research:

- I would explicitly teach what independent work looks like/sounds like and implement strategies that students could use to help themselves work more independently.
- I would encourage the development of a word bank for each student's topic. This would serve as a list of high frequency words the students would then have access to for subsequent research and work.
- During conference time, I would scribe for students needing this support.
- I would implement a system by which students could seek help from each other as opposed to only from the teacher (peer coaching).
- My activities would begin with a short lesson/teaching session, an example using my own topic and ample time to complete work.
- Some activities would engage the use of transcribers in the form of our big grade 6/7 buddies who would help to research, scribe, organize work, etc.

Having put these elements into place in the planning of LiD activities, my intention was that these activities would help develop language skills along with helping to further develop the conceptual understanding of each student's LiD topic. They would be manageable enough for my students to work independently, subsequently allowing for more conferencing time with individual students during which I would mediate their inquiry skills.

## Data Collection and Methods

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Prior to beginning my action research, I needed to follow research ethics procedures in creating and collecting consent forms. (Appendices A & B) I also needed to assess what new teaching and evaluative materials, assignments, or data collection instruments I would need. I knew that, during our LiD sessions, I would need to create and design new activities for the students to work on after a mini-lesson. It would be during work time on these activities that I would conduct one-to-one conferences. To foster self-reflection, I created a rubric for students to reflect on their own ability and success at not only working independently, but also at using French in their speaking and writing. (Appendix R) I also generated a collection of activities/lessons that fostered and encouraged independent work. (Appendices D-L) The creation/selection of these activities was based on the principles presented in my research and literature review. The implementation of these strategies and principles in my planning would hopefully optimize the benefits of inquiry-based instruction. Realizing the need to assess the effectiveness of each activity, I created a rubric focusing on the how each activity succeeded in: keeping students engaged, aiding their ability to work independently and sustaining their attention. (Appendix S)

The following summarizes the type of data I needed to collect:

### 1. Baseline data

Before beginning my action research, I asked my principal to come into the library and conduct an observation. The goal of the observation was to tally the number of interventions were needed by the teacher during work time. This was a tally of

behaviours such as misbehaviour, teacher re-direction, students off-task, students speaking too loudly, questions to teacher interrupting a conference, etc. I prepared a tally chart for my observer to use. (Appendix N)

Also, at the beginning of the study, I interviewed 3 students asking the following questions (Appendix P):

- How do you feel about LiD time?
- How do you feel about your ability to work independently?
- How well do you think you are able to stay on task?
- What helps you to stay on task?
- What makes it difficult for you to stay on task?

These interviews were audio-recorded.

## 2. Through the course of the study

In order to assess on an on-going basis, the level of the students' ability to work independently and the use of French, the students filled out a self-assessment at the end of each session: (Appendix R)

- I worked on my topic and portfolio the entire time.
- I worked independently.
- I asked 3 friends before approaching Madame.
- I spoke in French.
- I wrote in French.

I also used observations and video recording of some sessions, especially at the beginning of the study, in the middle and near the end.

On the part of the teacher/practitioner (myself), I used the rubric (Appendix S) I created to gauge the effectiveness of the activities themselves. Throughout this study, I kept a reflective journal to record how things transpired, share vignettes, and to think about surprising moments/moments that incited feelings of success, my questions, my

difficulties, etc. I added to this journal after every LiD session and reread it on an on-going basis.

### 3. Near the end of the study

At this point, it was of utmost importance to gather data for comparison purposes:

- I asked my principal to come back and keep track of the number of interventions necessary again. (Appendix O)
- I interviewed the same three students asking them similar questions as at the beginning of the study. (Appendix Q)

Once the study was completed, all the data collection methods and instruments mentioned above required interpretation and review. The following summarizes how the collected data was interpreted:

- I reviewed the assessment rubric gauging the effectiveness of activities after each session in order to aid in the planning of the next activity.
- I reviewed students' self-assessments on a weekly basis.
- The videos were reviewed as soon after the session as possible. This was, again, to aid in planning the next session.
- A comparison of the intervention data collected at the beginning of the study and that collected at the end of the study was undertaken once the study came to closure.

This research study was not conducted and effectuated solely by myself as practitioner and researcher. Participants and collaborators of the research process were:

- myself
- my students
- our big buddies
- the teacher of our big buddy class
- my principal (doing the before/after observations)
- my group of critical friends specifically my MEd cohort colleagues

## “Highlights / Lowlights”

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### The journey begins...

*For our first tentative steps towards working independently, I ask the students what this would look like or sound like on the part of the students and on the part of the teacher. Initially, the students are not able to offer any thoughts on this and one even asks, “What does independent mean?” After explaining what it means and after a couple of prompts, we come up with a list of items which we write in a chart entitled “We work independently”. Here is a picture of the chart and what the chart states (in English):*

LeP	
On travaille d'une façon indépendante	
l'élève	le professeur
- reste à une place	- travailler avec les enfants
- des questions	- se promène parmi les enfants
- parle au sujet	
- chuchote	
- travaille sur le sujet	
- parle en français	
- écrit en français	

### Learning in Depth We Work Independently

The student	The teacher
<ul style="list-style-type: none"><li>• Stays in one place</li><li>• Asks questions</li><li>• Talks about the topic</li><li>• Whispers</li><li>• Works on the topic</li><li>• Speaks in French</li><li>• Writes in French</li></ul>	<ul style="list-style-type: none"><li>• Works with students</li><li>• Circulates to help the students</li></ul>

*I also introduce a “3 avant moi” rule (3 before me). They seem very receptive and express an awareness of the difference between asking a friend for help and using this as an excuse to socialize. The students take turns role playing an effective use of this strategy and ineffective uses. We conclude with an effective use demonstration.*

*I show them a yellow tag paper card folded in half. The purpose of this is to put it standing up at their workspace to let me know that they’ve asked three friends and still need help, they want to share something with me, or that they just need Madame.*



*Lastly, we review the self-assessment booklets and how to use them. These are added to their portfolios with the knowledge that they will be completing a self-evaluation after every LiD session.*

## Baby Steps...

*Before our first actual LiD session in the library, I decide to make some organizational/management changes to help things function more efficiently:*

- 1. Students will carry their own portfolios to the library instead of my asking four students to carry two big boxes as this created more confusion: They all want to help and some are disappointed if not chosen; some go ahead and don't come back; once in the library, they all still need to get their portfolio, etc.*
- 2. I create a bag of books for each student with books on their topic. This will eliminate students having to search for their books through the big bins. They will each just go and grab their bag (still a bit chaotic, but not nearly as much so).*
- 3. I ask our big buddies' teacher if she could send a student to my class every Thursday afternoon for the sake of helping my vision impaired student. This way, my student can have someone sitting with her one-to-one the whole session. The gr. 6/7 teacher agrees.*

*After a mini-lesson on how to create a word bank and its usefulness, the students seem to settle into their task relatively quickly. Apart from one little girl who does not even open a book until there are only five minutes left (not out of the ordinary for her), most students manage to get some words written into their word banks. Some write up to 20, some only about 4-7 by the end of the session. About six to seven yellow cards pop up pretty quickly. I believe they forgot about the "3 before me" rule.*

I called Steven up to conduct my pre-study interview. I could tell he wanted to say something, but wasn't sure if he should. I reassured him that I would like him to be truly honest and after that, he had lots to say. Interestingly, he explained that the key reasons that it was difficult for him to work independently were that friends kept talking to him. Before beginning another interview, I went and helped a few students who had their yellow cards up. The next interview was with Lydia who also was very forthcoming

in expressing that it was hard to work independently because it was too noisy and she would get headaches. Again, I helped a few students after the interview with Lydia.

During the interviews, I had two requests to go to the bathroom and one student who forgot about the yellow card and wanted to share something with me. These were the only interruptions!! At the end of our session, I only managed to conduct 2 interviews and I could see one student looking disappointed and frustrated at not getting my help despite having his yellow card up. We read each self-assessment statement aloud together while they checked off the appropriate column, cleaned and packed up.

Interestingly, I assumed the students would be able to complete a ten-word list in the twenty minute work period, but this was not possible for most. This activity proved to be challenging for my emergent readers who comprised the majority of the class. The act of skimming through a text and pulling out key words needed more time and more guidance. The other challenge faced by many of my students was their inability to focus for longer periods of time both because of individual challenges (some special needs and some not) and because of their young age/maturity. This scenario exemplified the information shared in the article, “Supporting Guided Inquiry Instruction” (Palincsar, Magnusson, & Cutter, 2002) in that the pace of investigation needs to be slowed down for some students. Hence, instead of broaching the next planned activity for our consequent LiD session, I would need to allow another full work period to complete these lists.



## Let's try again

*Before beginning work, I remind the students of what a word bank is and model the act of skimming through text and thinking about whether this word is significant to my topic. After a quick reminder while referring to the chart generated last time of what independent working looks and sounds like and a quick reminder of the use of “3 before me” and the yellow card, students get to work.*

I decided it would be important for me to conduct the final pre-study interview. As I asked Dylan the first question and waited for his response, I glanced up and everyone was quiet and working with their books and portfolios!! This was indeed a rare occurrence in my class. I was able to capture some video of this session after the interview was completed. During the interview, three students interrupted: one needing to go to the bathroom and two who wanted to ask a question (I gently reminded them of the “3 before me” rule and the yellow card). As soon as I finished the interview, I went to the yellow cards that were up. I was fascinated to see how their lists were coming along. The calls for help varied in nature:

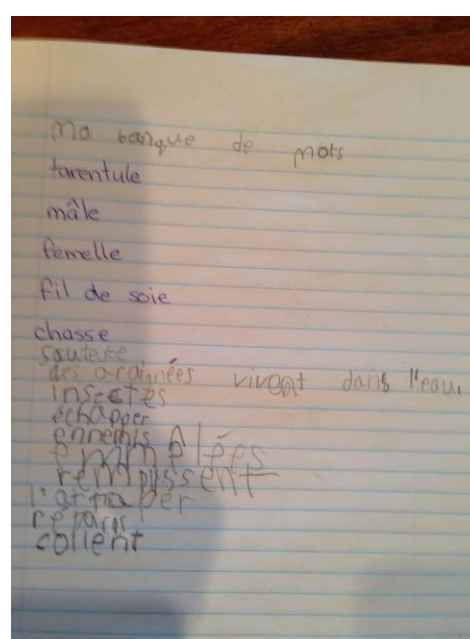
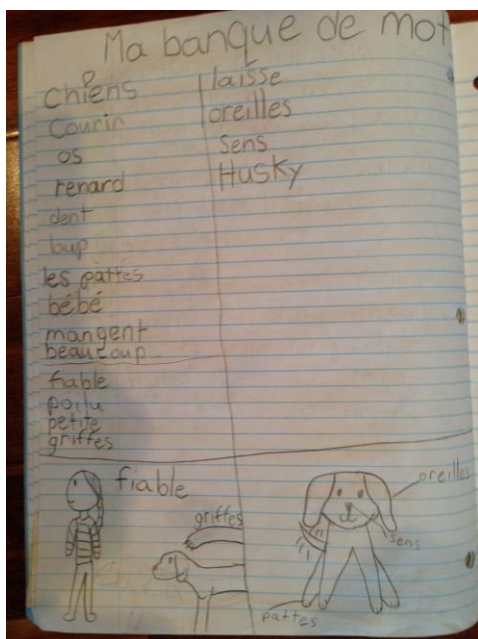
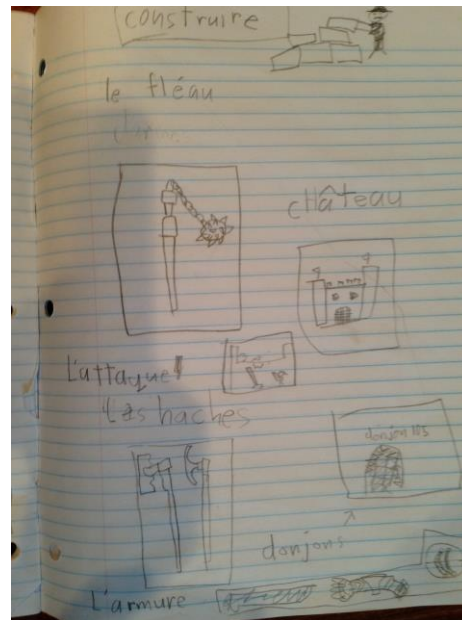
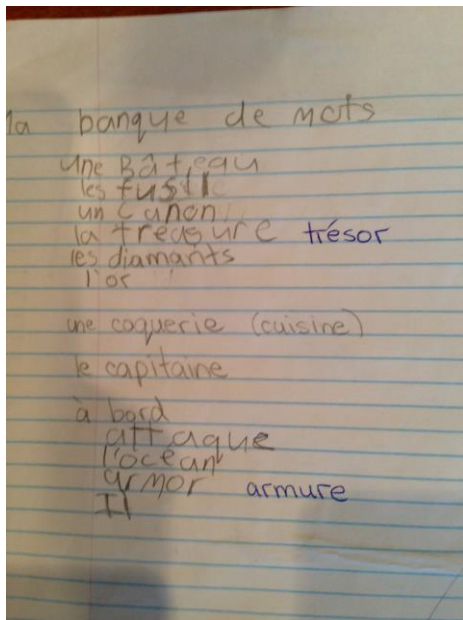
- Some children needed clarification of what words meant.
- Some couldn't figure out which words to select.
- Some had English books (resources are so limited in FI) and needed translating.
- Some just needed a gentle redirection.

It felt very productive to circulate around and help add to lists. As I helped add words to word banks, I was able to read the sentences with the students and ensure they understood what they were reading. This process, in my opinion, helped them to gain

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knowledge about their topics as well as helping to build vocabulary. Had I been conferencing, these mediation and guidance moments would not have occurred and many students would have compiled a list not even knowing what the words meant.

In the end, I still had about 9 students who had not yet finished their word lists despite working on this for two sessions now.



These samples of word banks show the diversity in abilities. The top left was a student who required some guidance and help with spelling. The top right is that of a student who began to draw a picture to accompany his words on his own accord. The bottom left belongs to a student who worked on her own, then took the advice of drawing pictures when that strategy was shared with all. The bottom right was a student who needed much guidance, help getting going and a re-teaching of how to look for words. He was also among the weakest in terms of reading ability.

Among my many questions as researcher at this point, the key one was: Is running one-to-one conferences more helpful or is circulating and connecting with students in order to help them wherever they are at with the activity? The first will help build facts/knowledge and the second helps execute what the activity entails. The first allows for connecting with two students per session if I'm lucky and the second allows for connecting with several.

All in all, I felt that we had made significant progress with working independently. There were far fewer interruptions and considerably less noise in the class. There was a quiet buzz, but it was a productive buzz. At this point, I wondered:

- is this improvement as a result of the activities being introduced?
- is this improvement as a result of better class management strategies being implemented?
- is this improvement because they are more aware of their behaviours with knowing that they will be filling out a self-reflection at the end of each session??

I pondered these questions for some time, and then posted them for my critical friends to comment on. With their help, I came to gain valuable insight which I've explained in the "Assertions and Conclusions" section of this report.

"Well," I thought, "let's keep going and see what next week brings."

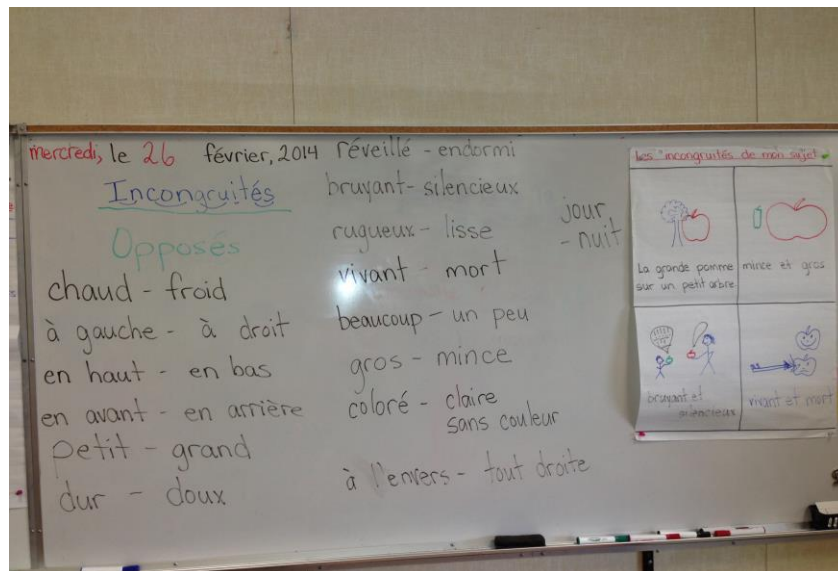
## **Flexibility is key...**

*Well, as it turned out, only 5 students hadn't finished their 10 words for their word banks. As such, I decide to go ahead with the next activity, but plan to connect with these students to finish up their word bank list during my prep period and while the rest of my students are at music class. Flexibility and adaptability - key personality requirements of teachers..... :-)*

## Let's plug onwards

The goal of Activity #2 was to create a list of words demonstrating oppositions and then using them to illustrate humorous incongruities related to each topic.

*During the brainstorming, I notice that the students are having a tough time coming up with opposites, but after some prompting, we manage to generate quite a list (see photo and Appendix F). I decide to offer one partner and the students then quickly come up with its opposite. There are giggles and smiles as I demonstrate drawings of incongruities related to my topic of apples. I'm having as much fun as my students are.*



*Before getting to work, we review again the guidelines of what independent work time should look and sound like along with the “3 before me” rule and the yellow card. As I give the signal to begin working, there is an instantaneous hush in the class. A couple of students get up to check what others are doing, but most stay at their desks and draw. I can hear giggles as they laugh to themselves about their drawings. Drawings*

*appear and there are small butterflies with big wings, a tiny horse carrying a huge rider, a big bird with small wings and many other funny ideas.*



*Before filling out our self-evaluations, I give the students some time to visit with each other and share what they had come up with. As soon as I give the signal, they are eager to find someone to share with. This is fun and I try to quickly get some video of it. They are on task, engaged and speaking in French while sharing.*

I decided to circulate to help students or visit and see their creations instead of pulling students aside to conference because they seemed to be enjoying this activity and I didn't want them to miss out working on it while it was fresh on their minds. As I was circulating, I had 6-7 students come to me either to show me what they had drawn (in which case I asked them to sit down and put their yellow card up on their desk), or to let me know they had finished (in which case I asked them to begin coloring). I then decided to interrupt the class to announce that once they are done drawing, they can color and when they are finished with coloring, what they could work on.

I managed to see most of the incongruity drawings, but not all. We laughed together and I made some suggestions for other incongruities. I was still struggling with students who wanted to come to me when ‘finished’ their work instead of taking the initiative to find another way to delve into their portfolios and topics.

I felt that we were getting pretty good at working on a task without constantly seeking out the teacher. Perhaps my next step would be to encourage some thoughts and dialogue about :

- “What can I do when I’m done?”
- “How do I know if I’m done?”
- “Can I add more detail, information, etc. to this before I move on?”

They would again, need some more time (some of them) to finish up this work. I thought it may be worthwhile revisiting this activity and seeing what other incongruities they could come up with once they know more about their topics – maybe at the end of April or May?

## **Computer Fun with Big Buddies**

*Through the course of the next day or two, I give my students another session to finish up the drawings of their incongruities. Most finish, but, yet again, many do not. While they are working, I have to pull myself away with a small group of children to sort out issues of teasing, so am not able to conference, nor circulate around to check on and share their work.*

*During our next session, the plan is to create a word search with the help of our big buddies using the Puzzlemaker program at [DiscoveryEducation.com](http://DiscoveryEducation.com). After a quick description to the big buddies of how we have created word banks and how to work with*



*Puzzlemaker, I ask the big buddies to help the younger students to get into the website and to do some, not all of the typing. The students are having fun creating the word searches and all students complete them within the allotted time.*

Apart from the usual issues with technology (computers not logging on or not displaying the page, etc.), this activity went well. As a teacher, I was needed for tech-support, but not really for the activity itself. The big buddies were helpful and served as a good source of support to their younger buddies. The digital literacy challenge was overcome with the help of older students.

*Now, I wonder, “How can we actually have the fun of seeing the word searches being used?” I conclude by asking the students to put the word searches in their folder of work to share with parents during student-led conferences. How very rewarding it is for me as a teacher to see the pride in the students while watching and encouraging their parents to find the words, but also for the students to share with their parents something that is a direct result of their hard work and learning. I believe that the act of having a true audience engaging in the work of the students exemplifies meaningful and authentic learning.*

## **Independent Work Outside LiD Time?**

I believe that the skills already in place for working independently and staying on task must have transferred over to other areas and avenues of school life. These skills are not exclusive to working during LiD sessions, but apply to school life in general. The reason, as a researcher, to share this theory here, was that during this action research study, our classroom was being painted. We had to teach, learn and work amidst boxes,



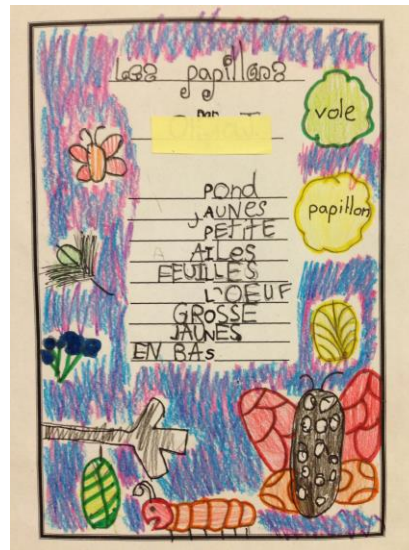
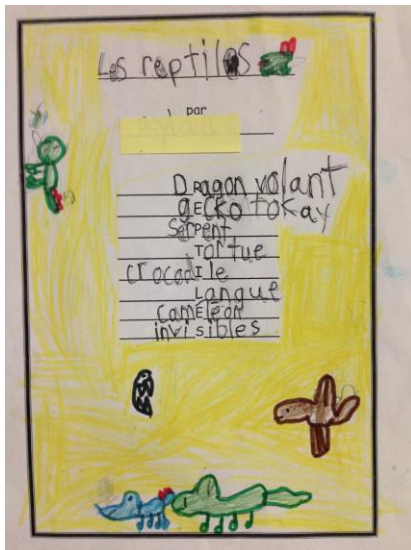
the classroom being packed up, moving from class to class to library to computer room (any empty or vacant space in building) during the three days that we were displaced from our classroom, and the classroom being unpacked and set up again. My students transitioned and demonstrated their adaptability and their flexibility in working anywhere and under circumstances that were so different from the normal classroom.

## Poetry Time

*The next activity will use our word banks again to create an acrostic style poem based on our topics. I demonstrate to the class how to use the words from my word bank and fit them into the letters of my topic that are written vertically. I put this on the overhead projector and ask for help to actually pick the words, thus writing the poem collectively. I then show them the poem I'd written by myself highlighting that there is no one recipe for the poem, but many versions are possible. I have created the templates for the poems for the sake of neatness and allowing my students to focus on the actual poetry writing vs. worrying about setting up the structure of it. (Appendix I) Once these are handed out and the students set to work, I call up three students for whom, at various points during the week, connections have been made or incidental information about their topics has been discovered. I want to help these students to get these tidbits of information written into their portfolio notebooks. I had begun to write notes to myself on Post-it notes to remind myself and to keep track of all these incidental tidbits of relevant information and who would need the help to enter it into their portfolios.*

The students set to work quickly on their poems. There was that quiet hum in the room again. I was able to scribe or help the three students to write themselves the

information. One bit of information was, for example, that during an assembly we found out beeswax was used to join parts of an instrument. Not only did I conference with these students with only one interruption (which was to go to the bathroom), but I also circulated in the class checking on the students. This activity was at just the right level for the students in all ways. They were able to find enough words from their existing word banks for their poems with only a couple of students needing help. The drawings they completed around the writing part of their poems and the effort they put into coloring demonstrated pride and the desire to produce quality work. All the students produced a beautiful piece of poetry (see photos). All but 3 students finished within the work period. This particular session of LiD epitomized in my eyes what all LiD sessions should look like and it was the prime example of success in response to the goal of this action research study.



## Time for some nitty-gritty information and research

*After experiencing the high of the acrostic poem activity, it is now time to challenge my students with some dictionary work. The students are to find their topic in the dictionary (I have already checked to ensure that all their topics are indeed included in our classroom dictionaries). The students are to indicate the page number, whether it is masculine or feminine, and to find that part of the excerpt which answers, “What is a pirate?” Again, I model this process, talking aloud to demonstrate my thinking and asking for help in finding which part of the dictionary blurb is the actual definition of my topic. With the usual reminder of what independent work time looks/sounds like, a reminder of the “3 before me” rule and the yellow card, the students set to work.*

The students worked very quietly and again, I conferenced with three students to add to their portfolios. The first was Lydia – I finally succeeded in sitting with her to translate her independent research into French. As it was a long piece, we managed to translate about half with the promise to finishing the rest up another session. The other two students had the topics of Reptiles and Jungles. They had made the connection that the snakes in the Amazon jungles grew to enormous sizes, so I helped them both to write this information into their notebooks. Once I had finished the conferences, I walked among the students and ensured that students had the correct part of the dictionary excerpt copied onto their page. Again, this was a reminder of the fact that circulating and checking on student work is of utmost importance. I needed to clarify with many students, “Does this sentence explain what your topic is?” The mediation and guidance

was necessary and could not be foregone in favour of conferencing one-to-one exclusively during a work period. (Appendix K)

Mon sujet dans le dictionnaire

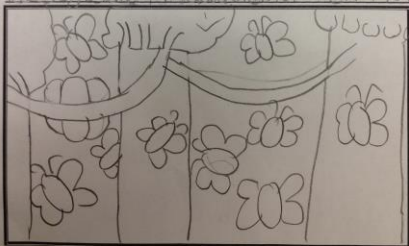
Mon sujet les papillon

Quelle page? 344

masculin ou féminin? masculin

Qu'est-ce que c'est? (la définition)

Il y en a de toutes les  
couleur les chenilles se  
transforment en papillon  
le coin de Madeleine et moi



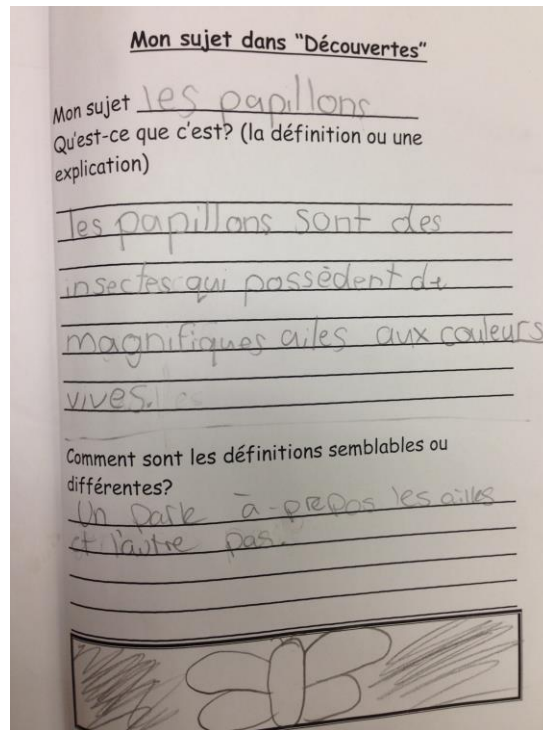
It was during this activity that I had asked my principal to come in and observe the work period. His goal was to tally the interventions needed based on the type of interventions. (Appendix O) I had already asked him to come and do the same observation prior to our first “what does independent work look/sound like” lesson as a pre-study observation. The results from the two observations can be seen in the “Data Analysis” section of this report.

### Is it time to conclude already?

*It is difficult to believe that it is the last activity of the action research study on the last day of school before spring break during the last part of the day. “Hmmm, let’s see how this goes” is all I can think before our session in the computer lab with our big buddies. The goal of this activity is to access the French World Book database*

*“Découvertes” and to find again a definition or explanation of what each topic actually is. (Again, I’ve gone through the database and entered in every topic to ensure there is information on it before we actually get into the computer lab.) The next step is to compare the similarities and differences between the definitions found in the classroom dictionaries with those found in the database. Lastly, for those students that finish quickly, I ask the grade two’s to show their incongruities to their big buddies and to see what others they may be able to come up with together.*

Once again, the computers took forever to turn on, log in and to access the database, some much longer than others. As a result, there was some frustration amongst the students and for me as the teacher trying to troubleshoot. Even with the help of the big buddy teacher, it took time to get everyone going. Once logged in, some students needed help pinpointing which part of the information answered the “What is \_\_\_\_\_?” question. Most were fine with this part as the big buddies were very helpful. However, an interesting element was that when I asked a couple of students if they understood what they had written, they had no idea what some or all the words actually meant. This revealed to me that the big buddies were able to help the younger ones to write the correct information, but they, themselves, did not know either what it meant or to confirm if the younger ones understood. I, with the help of my colleague, ensured to connect with each student to read the sentences a section at a time and to confirm understanding. The language used in the database was far too advanced. The finding of similarities and differences also proved to be a challenge, so I did not insist this portion be completed. Yet again, this was another reminder that guidance and mediation during work time are essential. (Appendix M)



Needless to say, that by the time everyone actually managed to get the information down, there was no desire, nor energy left in the students, both younger and older, to come up with incongruities. We simply allowed the buddies to spend some unstructured time together before heading home for the spring break.

### So ends the study

And, thus, my study came to a close. A tremendous learning experience with many highs and lows, I was keen at this point to complete my data analysis and to see evidence of what I felt was a successful action research process.

## Data Analysis

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The feeling of successes and progress need, at this point, to be confirmed with an analysis of the data collected. I'd like to begin with the observations conducted by my principal on the number of interventions required during a 20-25 minute work period. These observations were done right before officially beginning the study and right at the very end. The table below shows the results of both observations:

<b>Nature/description of intervention</b>	<b>Pre-Study tally number</b>	<b>Post-study tally number</b>
Teacher redirects	5	1
Misbehaviour	1	0
Questions for teacher (verbal )	32	6
Questions for teacher (using yellow card) – counted in post-study observation only	n/a	8
Students off task	7	5
Students speaking too loudly	4	1
Other: bathroom, pencil sharpening, etc.	4	4

It is apparent that the explicit teaching of independent work habits, the strategies implemented to foster them and the planning of appropriate activities, in addition to other possible factors have led to a marked decrease in teacher interventions required during a LiD work session. Even if the questions to the teacher from both the verbal and yellow

card criteria are added up, the total is still less than half what it was during the pre-study observation.

The pre and post-study interviews also revealed some interesting insights. Each interview is summarized below:

Steven:

Question	Summary of response (pre-study)	Summary of response (post-study)
1. What do you think of our LiD time?	- a bit fun because you work hard and friends are here	We're doing more hard things. At first, it was easy. I like a challenge.
2. What do you think of your topic?	It's fun / very interesting. I didn't know anything before, but now I know lots.	I think it's...it's....I know a lot now.
3. How capable are you of working independently?	It's really hard because I have a lot of friends and I want to talk to them and they talk to me.	I think I can.
4. How capable are you of concentrating on your work during LiD time?	Medium – friends talk to me and it's hard to ignore.	I think it's easier because my friends are there and I'm sitting 'away from them'.
5. What would help you to work more independently?	If certain friends were not next to me.	It helps me to sit in the front.
6. What kinds of things make is difficult for you to work independently?	It's hard not to talk to friends. They want to show me their things and they talk to me.	People want to talk to me.

Lydia:

Question	Summary of response (pre-study)	Summary of response (post-study)
1. What do you think of our LiD time?	I like it but sometimes it's very noisy.	It's less noisy.
2. What do you think of your topic?	I like it.	Interesting
3. How capable are you of working independently?	I think I can.	Very well. Every day, I put check marks (self-evaluation).
4. How capable are you of concentrating on your work during LiD time?	It's easy.	Good. Very good. Better than before.
5. What would help you to work more independently?	Less noise.	I don't know.
6. What kinds of things make is difficult for you to work	The noise.	The noise of pages turning, pencils that scratch the paper.



independently?		
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Dylan:

Question	Summary of response (pre-study)	Summary of response (post-study)
1. What do you think of our LiD time?	Interesting	Fun. I like having ideas about [my topic].
2. What do you think of your topic?	I like it a lot.	Good.
3. How capable are you of working independently?	I can work without Madame.	Really capable.
4. How capable are you of concentrating on your work during LiD time?	Sometimes it's hard to concentrate.	Able to concentrate better.
5. What would help you to work more independently?	Less noise in the class.	Less noise.
6. What kinds of things make is difficult for you to work independently?	I talk to other people.	The noise. Same as before.

All three students showed an interest and engagement to their topic right from the beginning. A common factor to not being able to work independently was noise level and all three expressed that their ability to work more independently at the end of the study had improved because there was less noise and talking in the class.

~L'apprentissage en profondeur

	😊	🙂	😐	☹️
Aujourd'hui, j'ai travaillé sur mon sujet et mon dossier pendant toute la période.	✓	✓	✓	✓
J'ai travaillé de façon indépendante.	✓	✓		
Si j'avais besoin de l'aide, j'ai demandé à 3 amis avant de demander à Madame.	✓	✓		
J'ai utilisé mon français à l'orale.	✓			
J'ai utilisé mon français à l'écrit.	✓			

Mes commentaires:

J'aime les papillon et j'aime Lep  
 Mais je veut moins de bruit.

*In this self-evaluation, completed after the first session of the study, Lydia wrote, "I like butterflies and I like LiD. But I want less noise."*

Steven expressed that the placement of where others sit relative to him helped him as well. The fact that, at the end of the study, the noise of pencils scratching the paper and pages being turned bothered Lydia calls to attention that it must be quiet enough in the room for her to even hear those noises! Steven liked the challenge of the new activities students were engaged in during the study. The explicit teaching of independent work habits, the implementation of strategies such as the "3 before me" rule and the yellow card indicating a student needs the teacher's help, combined with a self-assessment at the end of every session, all contributed to a much more conducive environment to working independently.

As for the activities themselves, I completed a rubric after every LiD session in order to gauge the effectiveness of each activity based on three criteria: the activity kept the students engaged, the activity was conducive to students' abilities to work independently and the activity succeeded in sustaining students' attention. The first activity (creating a word bank of words related to topics) was either highly effective or

effective in all criteria except in being conducive to students' working independently. I believe this is directly related to the fact that my students are early emergent readers and finding words from texts in non-fiction books was not an easy feat. Many managed, but most needed help. All the other activities scored 'highly effective' or 'effective' in all three criteria.

I believe strongly that the literature review aided my understanding of how to generate activities that provided guidance, mediation and modeling through the lessons. The lessons allowed the students to have enough scaffolding from which they could execute the exercise independently. Teacher scribing, big buddy transcribing and mediation contributed to the grade two student successes with some of the more involved and complicated activities.



## Assertions and Conclusions

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**What kinds of activities, materials and guidance/mediation will help students work independently for short stretches, allowing more conferencing time with individual students?**

This action research study has been quite a journey full of questions, successes, re-evaluations, reflections and sometimes, pure confusion. In the pursuit of answers for my study question stated above, I have had to consider and weigh many factors.

I noticed mid-study that a lot of what my activities were focusing on was exploration of the topic through becoming more familiar with the language involved with each topic and, even more so, the expanding of vocabulary and developing language. I feel that the students' vocabulary has increased and the fun had with the creation of the word searches, the exploration of opposites and incongruities have fostered language development. I witnessed success in mediating their abilities to work independently and helping them to execute skills necessary for particular activities. However, if one were to assess the amount of facts written in their portfolios, I did not experience much success at increasing the amount of factual knowledge of their topics. Perhaps this is a matter of time and the length of my AR is not sufficient to get to the core of developing independent research skills in the pursuit of increasing factual knowledge. Perhaps this will come more post-study. I do believe, however, that some incidental learning about the topic did occur through the execution of the activities.

I am proud of the results experienced, but am worried that I did not get enough results in the second part of my AR research question: the goal of increasing one-to-one

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conferencing. I found that it was difficult to pull students away from an activity because they were engaged with it and enjoying it. Other times, I needed to circulate among the students and be a source of help, guidance, mediation, or simply an enthusiastic listener to their discoveries. Should I have prepared activities which required even less time/energy on the part of the teacher in order to more fully conference? Or would this be preparing ‘busy work’ which is not as meaningful? Should I have attempted to conference more, or was it alright to support student learning and work during work periods? I may not have been conferencing, but I was connecting with more students in guiding, helping, listening to them sharing their excitement during the time they were actually working on the activity’s goal.

At the point (described in “Highlights / Lowlights”) when I was wondering which factor or combinations of factors were contributing to the progress made, I received some wonderful feedback from my critical friends. Based on their feedback, I needed to look at the whole as a sum of its parts vs. focusing on particular elements. This process perhaps needs to be viewed as a journey: in order to get to the stage where students are working independently in the pursuit of gaining factual knowledge and generating further wonder into what else is unknown about their topics, they need first to travel through developing the work skills and the foundation of the language. LiD is meant to be a long-term program and, as such, a teacher can see where the skills being developed in the present may lead to in the future. My situation with LiD is unique in that I am the sole teacher in the school doing LiD and odds are that the students will not be able to continue their journey past this year. The simple fact that the students are enjoying and engaged during LiD sessions alone is such a positive and evidence of learning taking place.

I need to reflect on what my hopes/goals are for my students in this one year journey. My action research is only the step before the leap (Radford, 2007). Perhaps my post-action research endeavor will be to explicitly teach research skills now that the independent work skills are in place.

Towards the end of this study, I was feeling as though my students were just getting the hang of working independently. As this part of the goal was close to being achieved, I realized that the time I could have used for conferencing was being consumed by the need to conduct post-study interviews and data collection. As a teacher, researcher and practitioner, I believe that this is an indication of being able to conference more in the near future. The work towards achieving this goal in its entirety will go well past the scope and timing of this action research study.

Late in the study, I experienced some confusion of where the study was going, but it sure was interesting to see its organic nature. The cyclical nature of action research really presented itself to me. At one point, I'd begun questioning the necessity of conferencing one-to-one during LiD time. If the students were actively engaged in the activities taught and presented during a session while I circulated around helping, mediating, answering questions, listening to their sharing, etc., then should I be removing them from the activity to conference?

### **Full circle...**

As I wondered how necessary the conferencing was and if students really needed it, Lydia's question was posed to me. Her story, shared in the vignette at the beginning of this report, occurred. This was a clear reminder that conferencing is necessary; be it for

the sake of helping students translate, helping them to research and find facts, or simply scribing their thoughts for them. An insight for me at this point was that some students are ready for more and need what conferencing can offer to them. Others are thriving and experiencing meaningful learning whether it is about the language, the topic, or the topic through developing language.

As a practitioner, I need to acknowledge that some students need to take the step to independent study while others need the collaborative experience and are content with the progression of their LiD topic discovery through the teacher guided/mediated activities. In essence, I need to create a flexible pedagogy to meet all these needs. During LiD times, if I can continue with promoting independent working skills with planning activities conducive to this and combine this with opening up the possibility for those needing conferencing to receive it, then LiD sessions will be most profitable. As with any classroom environment, the learning needs and abilities are diverse and the teacher needs to find the means to recognize, acknowledge and meet them.

### **A forest, you say?**

LiD sessions represent a complex system. As with any classroom environment, the learning needs and abilities in a LiD classroom are diverse and the teacher needs to find the means to recognize, acknowledge and meet them.

A forest exists as the sum of its parts as does a LiD classroom. There are no elements within a forest that are more essential than others to survival and the perpetuation of its existence. Similarly, the LiD classroom cannot be broken down into its parts with each part being assessed as to its value to the optimum functioning.

The students are the trees in the forest. They grow, spread their branches, are ever changing and reaching to new heights. Some grow more quickly while others grow more slowly and steadily. Some have growth spurts while others pause in their growth at times. As students add to their repertoire of skills, cognitive tools, factual knowledge, etc., they add to the rings and expand their trunks. None of these are ever lost, nor do they fade away, but are incorporated into who they are and into their essence.

The teacher is the forest floor providing students with the nutrients they need to grow and thrive. The teacher exposes students to new skills and strategies, rules and routines while providing nurturing and support. All of these are the foundations from which learning becomes meaningful and student progress develops.

The knowledge each student gains about their topics, the activities they work on, the management strategies the teacher uses and the self-reflections students engage in are represented by the animals in the forest. These animals come to the trees and some stay and become part of the tree, by building their nests/homes, while others come and help the tree grow and visit time and again. Yet still others come and have nothing to do with the tree, never to return. Such would be the case for those activities, strategies, reflections, etc. that students do not connect with.

The LiD program, itself, is represented by the sun. It is the overall theory and guide, but each forest ecosystem finds its own means by which to exist, survive and function under a sun that varies in its intensity, duration through the days and seasons.

With respect to this action research study, I have gone full circle with knowing that independent work time is necessary to allow for one-to-one conferencing to questioning how necessary one-to-one conferencing is to being reminded that although it



may not be a necessity for each student, one-to-one conferencing is needed for some students. The dynamic nature of the LiD class which builds and encourages independent work skills, fosters an environment conducive to learning through the implementation of routines and structure and allows for each student to function at his/her own optimal potential is the perfectly balanced forest ecosystem at work.

## References

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- Council, N. R. (1996). *National Science Education Standards*. Washington: National Academics Press.
- Egan, K. (2010). *Learning in Depth: a simple innovation that can transform schooling*. Chicago: The University of Chicago Press.
- Egan, K. (2013). *The LiDKit: Resources for Implementing the Learning in Depth Program*. Vancouver, BC: Pacific Educational Press.
- Gooding, J., & Metz, B. (2012). Folding Inquiry into Cookbook Lab Activities. *Science Scope* , 35 (8), 42-47.
- Hess, K. K. (2010). Using learning progressions to monitor progress across grades. *Science & Children* , 47 (6), 57-61.
- Hodge, J. K. (2006). The Top Ten Things I Have Learned About Discovery-Based Teaching. *Primus: Problems, Resources and Issues in Mathematics Undergraduate Studies* , 16 (2), 154-161.
- Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why Minimal Guidance During Instruction Does Not Work: An Analysis of the Failure of Constructivist, Discovery, Problem-Based, Experiential, and Inquiry-Based Teaching. *Educational Psychologist* , 41 (2), 75-86.
- Koshy, V. (2010). *Action Research for improving educational practice*. London: Sage Publications Ltd.
- Kozulin, A. (1986). *Lev Vygotsky: Thought and Language*. Cambridge, Massachusetts: The MIT Press.
- Leonard, J., Boakes, N., & Moore, C. M. (2009). Conducting science inquiry in primary classrooms: Case studies of two preservice teachers' inquiry-based practices. *Journal of Elementary Science Education* , 21 (1), 27-50.
- Palincsar, A. S., Magnusson, S. J., & Cutter, J. (2002). Supporting guided-inquiry instruction. *Teaching Exceptional Children* , 34 (3), 88-91.
- Radford, M. (2007). Action Research and the challenge of complexity. *Cambridge Journal of Education* , 37 (2), 263-278.
- Tenenbaum, N. J., Alfieri, L. B., & Aldrich, P. J. (2011). Does Discovery-Based Teaching Enhance Learning? *Journal of Educational Psychology* , 103 (1), 1-18.

Wing-mui, W. S., & Kong, S.-c. (2007). Approaches of inquiry learning with mulitmedia resources in primary classrooms. *Journal of Computers in Mathematics and Science Teaching* , 26 (4).

Wolfgang, C. N. (2009). Managing Inquiry-Based Classrooms. *Science Scope* , 32 (9), 14-17.