HARKNESS AND ACTION RESEARCH: ACTIVITY AND AFFECT

by

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Abstract

This study will explore how action research could be used as a tool to improve a discussionbased teaching philosophy (Harkness) at an independent school as well as improve student skills in both Harkness and research. Action research was chosen as the methodology to implement change at the school, while a thematic analysis will be used to then explore the ways in which action research affected the participants in the group. It was found that through participation in an action research project, participants developed an increased sensitivity to Harkness, research skills, and were able to explore the learning environment they were engaged in through democratic discussions with one teacher-researcher. This research will then open avenues to explore further in subsequent action research projects which could focus on the culture, competition, and other community aspects in co-operation with the students at the school.

Lay Summary

This study tells the story of an action research group focused on improving a discussion-based classroom environment at their school as guided by Harkness pedagogy, a teacher facilitated discussion focused experiences where students lead conversations and queries around learning experiences. Students assumed the role of co-researchers in this action research study and as a group collectively aimed to improve Harkness at the school. This study focused on participants' perspectives and their interpretations, learning, and overall experience within the group.

Preface

Research was conducted both as an action research project within the school. Data were obtained through interviews, journals, and meeting minutes and were further analyzed by the lead researcher. The action research process took place over six months with a group of eleven students who collaborated with a teacher-researcher with an intent to improve Harkness at the school. All resultant data were transcribed and coded, followed by thematic analysis. This research was approved by BREB on October 27th, 2017 (ID: H17-020326).

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List of Abbreviations

- ARG Action Research Group
- PAR Participatory Action Research
- WA-Working Agreement
- Y-AP Youth Adult Partnership
- YAR Youth Action Research

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Chapter 1: Before the Beginning

This journey began during the 2016 Senior Girls basketball season. I was returning by ferry from a basketball tournament in Victoria, BC, when I first heard students speak of their ideas, frustrations, and opinions of/in participating in Harkness. This conversation occurred just a few years into implementation of Harkness at the school. I shared some of my own frustrations, joys, successes, and concerns, with the students, and we had a very productive conversation. I realized then that students need a voice in decision making within their classrooms and their personal educational experience.

I am a secondary school teacher at an independent school located in South Surrey, in the province of British Columbia (BC), Canada. My school adopted the Harkness Method/Approach/Philosophy (Harkness) in 2012 to align with the Senior School Educational Program (SSEP). The SSEP is focused on attitudes, knowledge, and skills that encourage students to ask questions and to build character by being challenged both inside and outside the classroom. Harkness is a discussion-based pedagogical approach that promotes student learning through collaborative discussions and was implemented to promote the skills (critical thinking, communication) and attitudes (optimism, curiosity) of students in the senior school. Teachers employing Harkness continue to deliver content knowledge through rich conversational, democratic experiences. To develop a well-rounded senior school experience, the school is focused on four pillars; Arts, Academics, Athletics, and Service.

This thesis serves as an opportunity to tell the story of a research group of eleven students and one teacher (myself, the author) who came together through action research with a goal to improve Harkness at the school. The story is written in a manner using the past, present, and

future tense to guide the reader through the process of the research, a point in this thesis in real time, to depict the complexity and rewards of action research.

1.1 Organization of this thesis

This thesis is organized into six chapters. Chapter 1 presents before the beginning and describes the study. Chapter 2 will guide the reader through some current research in both Harkness and action research. Chapter 3 will then describe the research setting providing insight into both the school community as well as the action research group (ARG) and will set the stage for the data collection and research methods. Chapter 4 will describe the action taken by the group and guide the reader through some key moments which unfolded with the action research group. Chapter 5 will present the findings and results, describing many important aspects using the students' insights as well as my own as a teacher-researcher. Chapter 6 will conclude the action research by highlighting subsequent steps needed to continue to improve both Harkness and potentially, action research at the school.

Chapter 2: Literature for the Start

The goal of the research was primarily to improve Harkness at the school. A literature search was conducted, and action research was discerned to be the most appropriate methodology for the study's goal and for the participants. Before I present the literature on action research, I will discuss Harkness. I will then present action research through the literature on Participatory Action Research (PAR) and Youth Action Research (YAR), highlighting how the selected literature influenced the shaping of my action research project. Through this literature review, I also explore how action research can be a mechanism of change.

2.1 Harkness Method

Harkness is a pedagogical method that promotes student learning through collaborative dialogues, group tasks, and peer interactions. This discussion-based teaching and learning method was founded at one of the oldest secondary schools in the United States, Phillips Exeter Academy, in Exeter, New Hampshire. In the Harkness classroom, the conference table apparatus, is symbolic of collaborative learning driven by conversation, led by the students and facilitated by teachers (Williams, 2014). Students and teachers are seated together around the table and education becomes a conversational and dialogical experience relying on the interactions, questions, and discussions that occur at the table.

The teacher is encouraged to move away from lecturing at the front of the classroom and instead, they integrate themselves into the learning experience by sitting with the students in a democratic partnership. The democratic partnership is realized both in the planning and implementation of classroom activities. Students are encouraged to ask questions to further their own understanding, bring problems to the table, and offer their own solutions when working through new material with their peers. Ideally, curricular content is discovered through

questioning and answering between students, rather than simply being transmitted from teacher to student. By encouraging students to engage in discussions around a certain topic, the goal is to evoke several views to allow students to express themselves, challenge themselves and one another, and examine a diverse range of perspectives (Brookfield & Preskill, 2005). According to Pérez-Andreu, (2015):

Topics are discussed around the table, and it is there that you have an opportunity to try to establish connections and verbalize your thoughts while others around you try to do the same. Through that process, by wondering, by sharing, by asking, by thinking out loud, everyone can benefit and learn. (p. 51)

In Brookfield and Preskill's (2005) book, *Discussion as a Way of Teaching: Tools and Techniques for Democratic Classrooms*, the authors speak at length about why discussion needs to be democratic and how they are inseparable ideas (2005, p.XVII, p. 1-20).

Democratic discussion is a way of speaking that allows for a wide range of views and ideas that can be used to change the way we look at a topic, subject, issue, or data (p. XVII). In my experience, when collaborative discussion is effective around the Harkness table, democracy and student voice are evident, multiple ideas are shared and the learning atmosphere is extraordinary. According to Brooksfield and Preskill (2005), "To see a topic come alive as diverse and complex views multiply is one of the most powerful experiences we can have as learners and teachers" (p. 3). An expectation has been set that students come to class prepared for productive and collaborative discussions. They are tuned into their classmates' views on the subject and can be seen working through problems and challenges together, the collective goal being that everyone has a deep understanding of the subject matter. Encouraging students to be

engaged in their sense making, by being engaged in critical thought through discussion, allows for the creation of a dynamic and exciting classroom.

Harkness is a discussion-based pedagogy and should be unpacked further through the lens of democracy in the classroom. In an increasingly diverse society, we must continue to build "vigorous communities of inquiry" (Parker & Hess, 2001, p. 273). These "vigorous communities of inquiry", as Parker and Hess outlined, include a space where activities such as listening, evaluating evidence, critically looking at one's own beliefs against others, are explored through dialogue (p. 275). A democratic discussion is more about listening as opposed to talking (Brooksfield & Preskill, 2005). Within a classroom context, the teacher should provide the introduction and summary of the lesson or discussions, but student knowledge and opinions should form the core of the instructional activities. No one member at the table owns the discussion, rather, the conversation is contributed to and constructed by all members of the group and is deemed a form of democracy where students learn to participate fully. In this light, students growing as members of a democratic society are built into the discussion-based methodology.

If we can encourage democratic discussions, we will be able to shape students' attitudes and mentalities towards education and foster democracy in the way they approach learning in other contexts. Dewey (1937) states that unless democratic 'habits of thought and action' are part of the "fibre" of a people, democracy is insecure (Dewey, 1937, p.457). Developing these 'habits of thought and action in ways that encourage critical thought and collaboration will continue to weave a strong 'fibre' of democracy as students bring these skills to their futures. Many aspects of what Dewey wrote in 1937 still ring true today; school is a place where a person develops attitudes and dispositions towards others, themselves, and their communities. By using ideas like

John Dewey's notions of fostering, nurturing, and cultivating democracy in education, my school is aiming to do the same, by using students' group discussions as a vehicle for democracy and sharing of ideas, opinions, solutions, and worldviews.

Many aspects in Fielding's work (2001) *Students as Radical Agents of Change* highlight the benefits of dialogical relationships between students and teachers within action research, but also extend to the dialogical nature of the classrooms we are trying to create. Shifting power, opening the space to converse with teachers and students, and a radical look at structures, which are already in place are required for these dialogical relationships. Given a brief overview of Harkness and its strengths within aiming to develop a democratic, discussion-based classroom environment, I will now show how some key features are shared with action research. Action research is democratic in nature, can involve a multitude of voices, and strives to improve an educational or work setting. In the following sections, I will discuss action research.

2.2 Action Research

The democratic and participatory dimensions of action research have long been supported by research in the field with the understanding that action research is by necessity tethered to ideas of improvement and reform (Groundwater-Smith & Mockler, 2015, p.159). In his historical account of action research, Adelman (1993) writes, "Action research was the means of systematic enquiry for all participants in the quest for greater effectiveness through democratic participation" (p.7). Action research has roots in raising voices of marginalized members to help them seek "independence, equality, and co-operation [Lewin, 1946]" (Adelman, 1993, p.7).

When Kurt Lewin first developed action research in the late 1930's, there was an established value and merit in allowing democratic rather than autocratic workplaces (Adelman, 1993, p.9), through having participants take part in a cycle of "fact finding, planning, exploratory

action and evaluation (Lewin 1948, 202-6)" (Somekh & Zeicher, 2008, p.7). This cyclical process can be seen in many action research guides. For example, the *Action Research Guide for Alberta Teachers* and the *Sage Handbook of Qualitative Research* and could be used for the planning foundation of this ARG.

Action Research has been used in a variety of situations and communities since the initial development in 1940s and spanning from implementation in factories and workplaces, regarding social policy in the United Kingdom and United States, and finally in education settings in the 1970s (Adelman, 1993). Action research "mixes discourses" (Somekh & Zeichner, 2008, p.6) and allows multiple people to act and generate knowledge at the same time. When discourses are 'mixed', there is an opportunity for many voices to contribute and develop research designs outside the dominant research method. This multitude of voices led to many different types of action research, each one serving as a solution to a unique problem with a unique group of individuals (Kemmis, 2014, p.4).

The context of this study includes many voices which makes action research a suitable methodology for my research. Indeed, in educational research, students who are experiencing educational problems are often excluded from the research about the problem, resulting in them having little agency to enact change or contribute their voices. Thus, in studying the problems of the Harkness method, I will be confronting this problem together with the people who are expected to learn from Harkness-based instruction (i.e., the students). This could lead to a 'mixing of discourses' and will allow for students to contribute towards improving their own learning environment.

The main themes of action research are clearly articulated in many recent works and are best summarized by Kemmis (2014) in *The Action Research Planner*. Two features of action research are:

- 1. The recognition of the capacity of people living and working in particular settings to participate actively in all aspects of the research process; and
- 2. The research conducted by participants is oriented to making improvements in the practices and their settings by the participants themselves (p.4).

As part of my literature review, I explored Participatory Action Research (PAR) (Cammarota & Romero, 2011; Flutter & Rudduck, 2004; Kemmis, 2009, 2014; Miller & Maguire, 2009) and Youth Action Research (YAR) (Jardine, 2012, Hadfield & Haw, 2001, Goodnough, 2014, Zeldin, Christens & Powers, 2012).

2.2.1 Participatory Action Research

Participatory Action Research (PAR) is a methodological philosophy that reflects the desire of the researchers to give more control to the research participants (Flutter & Rudduck, 2004). Giving students the ability to do research for themselves is an aspect that only PAR can offer (Kemmis, 2014) and is similarly outlined by Petrie, Fiorelli and O'Donnell (2006) who state, "participatory research is not a separate method, but, rather, a methodological philosophy that reflects the desire of the researchers to give more control to the research participants" (p.36). The authors further argued that participatory research is "interactive" rather than "extractive" in design, including the people instead of using them as a data source. The reciprocal nature of action research is also expressed by Bennet et al. (2004):

This means that researchers try not to use people taking part in research only as sources of information, but to establish relationships with them and also give them something back, with a view to achieving positive change (p. 5).

Participatory Action Research (PAR) is about researchers giving more control to the research participants. I will now discuss Youth Action Research (YAR) as this approach aligns and resonates with PAR.

2.2.2 Youth Action Research

Complementary to PAR is Youth Action Research (YAR). YAR provides an avenue for youth to experience growth on a personal level (Goodnough, 2014), as well as participate in a research project outside their regular classes. "Youth move beyond simply being the recipients of reform to adopting more empowering roles of being responsible for and effecting change" (Goodnough, 2014, p.364). The similarities between PAR and YAR are within the systematic inquiry and cyclical practice, with the focus being on youth engaging in this process *supported* by adults and their peers (Goodnough, 2014).

In the same light, Zeldin and Powers (2012) elaborate on the YAR to enhance the understanding its importance in the educational research realm. The authors write:

Youth and adults are challenged to bring their own perspectives, experiences, and networks into the partnership. By doing so, they can potentially promote community change by stimulating critical discourse, skill development, participatory inquiry, and collective action. (p.386)

In sum, the collective intention of any action research is to explore and build our practices, the understanding of our practices, or the conditions under which we practice by making it more rational and reasonable, more productive and sustainable, and more just and inclusive (Kemmis, McTaggert, & Nixon, 2014). To achieve this balance of voice to promote change, I will further explore the "student voice movement" (Mager & Nowak, 2010) in the next section.

2.2.3 Youth in Action

Several studies address the student voice movement through 'student voice' and 'student power' beginning in the 1960s and 1970s. Today in 2019, there is a general understanding and acceptance of the importance of student participation and their development as citizens (Mager & Nowak, 2011). Interestingly, in a 2011 literature review, Mager and Nowak did not include PAR. The authors deemed "students as researchers" as not a part of the student voice directly involved in the everyday decision-making process at the school (p.41). This decision was likely because one of the authors' main criterion was: students could not make decisions with any other group (i.e. teachers, university students), and most PAR would likely be realized through an academic research initiative.

Cammarota and Romero's (2011) work is an example of a study founded in a similar "youth in action" approach. The authors claimed that "PAR facilitates students' engagement in their social context and acquisition of knowledge to initiate personal and social transformation" (p.489). This 2011 study is focused on a "unique social science program emphasizing participatory action research (PAR) for Latina/o high school students" (p.489). The goal of this study was to help students enhance their "critical consciousness" (p.489) through a deep analysis of their own social context. Significantly, the authors noted that a missing piece in the political and educational system when creating policy and curriculum is student knowledge. This disconnect between student and adult thought is also covered by Mitra (2004) who explained, "...students possess unique knowledge and perspectives that adults cannot fully replicate"

(p.653). In Cammarota and Romero's study, PAR is employed not as a methodology for the research, but rather, as a pedagogy to promote critical reflection and action. In this regard, Cammarota and Romero used "funds of knowledge" which the students share, and PAR as a "bridge" to encourage students to have an impact on policy, promote waivers for schools needing bilingual instruction, educate how to display appropriate cultural symbols, and expand the racial diversity within Advanced Placement (AP) programs. The authors further noted that "Although transformation at the institutional level is always uncertain for students, personal changes do occur from their involvement in PAR" (p. 503).

In another study, Goodnough (2012) employed YAR, coupled with Wenger's (1998) community of practice, to examine the first year of a functioning YAR group where student participants developed their own questions around smoking on school grounds. The YAR group shared the goal of making their school a safe and healthy place. The study revealed that when collaboration between students and teachers in learning communities is valued, the result is positive outcomes for both the teachers and students (Goodnough, 2012). Beneficial outcomes of participating in action research for students included enhanced decision making and leadership skills, sense of ownership and accomplishment, and insight into how to effect change (Goodnough, 2014). Beyond the attempt to develop their school community and address the problems they set out to research, the ability for both teachers and students to work towards a shared goal collaboratively "contributed to the effective functioning of the community" (p. 376). The literature reveals the student voice movement was an attempt to give students the power to voice their knowledge from their own perspectives.

2.3 Research for Change

At the beginning of any action research project, there is an identification of a problem or a desire to implement change, and with this, comes a step into the unknown, raising new questions and creating new risks and situations over time (Balakrishanan & Cornforth, 2013). PAR aims to change "practices", understanding of "practices", and analyze the conditions in which we "practice" (Kemmis, 2009, p.463); it should be noted that Kemmis often referenced "participant practices" within *The Action Research Planner* (which I used as a main resource for this action research),

From the roots of action research, the aim to change is based on people coming together and having conversations about those changes (Kemmis, 2004, p.4). These include, for example, promoting marginalized student voices (Bland & Atweh, 2007), smoking on school grounds (Goodnough, 2014), building student capacity in an alternative school (Lind, 2013), and promoting mental health (Lind, 2007). Changing a social practice through social practice is what sets action research apart from other research methods. As mentioned before, participants take ownership during this type of research as they are main stakeholders in the process, and through their 'insider' information, they can reveal aspects that may not be discovered with a third-party researcher (Fielding, 2001). This 'insider' information can inform a "ground-up" change where members of the action research group (such as my students who interact with Harkness on a daily basis) can begin to initiate change through action research. Action research can transform three aspects of 'practice' (outlined below) and provides people as a group the opportunity to explore, change, and realize the current situation they are researching. Speaking to these transformations, Kemmis (2009) writes: Action research is a critical and self-critical process aimed at animating these transformations through individual and collective self-transformation: transformation of our practices, transformation of the way we understand our practices, and transformation of the conditions that enable and constrain our practice. Transforming our practices means transforming what we do; transforming our understandings means transforming what we think and say; and transforming the conditions of practice means transforming the ways we relate to others and to things and circumstances around us. (p.463)

2.2 Chapter Summary

The goal of the proposed research was to improve Harkness at my school. After reviewing the Harkness method and aspects of Action Research it is clear to me the best approach is through Participatory Action Research (PAR) as a mechanism for change. The following chapter will describe the setting for this Action Research Group (ARG).

Chapter 3: The Setting

This chapter provides a description of this study's place, persons and the people. The research setting will be first explored, through a brief description of the school (pseudonym used: SchoolA) and then through the school's interpretation of Harkness. I then will move towards an exploration of my position as teacher and teacher/researcher within the group and demonstrate what and how I shaped my methodological decisions. The chapter will conclude with the study's recruitment phase and how the initial research question took shape. I will also discuss the research methods I planned to employ once the ARG was completed.

3.1 The School

SchoolA is an independent school opened in 1995 and located in South Surrey, BC. Independent schools in BC reside partially outside of the public system and families must pay a set tuition as part of the entry requirements. SchoolA is accredited by two independent associations, the Independent Schools Association of British Columbia (ISABC) as well as the Canadian Accredited Independent Schools (CAIS) association. The student population is comprised of fewer than 750 students from K-12. The Junior School (K-7) is IB (International Baccalaureate) accredited. The Senior School (8-12) offers both SSEP (Senior School Educational Program and AP (Advanced Placement) courses. The classroom foundation and pedagogy in the Senior School is based on Harkness.

3.1.1 Harkness at the School

Harkness was brought to the school seven years ago in 2012, as an experiment in offering an alternative way to teaching and learning and slowly gained momentum within the first two years. A few teachers visited Phillips Exeter, which resulted in those teachers rearranging their classrooms to emulate the round-table discussions they experienced visiting and observing Exeter classes. In the week prior to the 2012 school year, 'expert' teachers from Phillips Exeter visited the school to lead a three-day "Harkness Institute". Teachers were invited to participate in multiple classes to simulate how students would interact and learn in that environment.

Following participation in the "Harkness Institute", our teachers were encouraged to continue integrating Harkness into their teaching practice. As Harkness spread throughout the school and become accepted as 'best practice', the characteristic round 'Harkness' tables were purchased and adapted for our classrooms to accommodate the teachers' different pedagogical interpretations, and classroom organization. For example, the tables could be separated for small group work and were spill/chemical resistant, suitable for the chemistry lab. Further teacher training over the years has enabled teachers to sharpen their Harkness facilitation skills and is often the focus of many staff meetings and professional development days. Currently in 2019, the school still follows many aspects outlined by Phillips Exeter in terms of class size, introductory exercises, and assessment practices based on their experience on Harkness, but the school has also been able to develop its own interpretations of many of these aspects.

3.2 My Position as Teacher, and Teacher as Researcher

The nature of Action Research is complicated given the different roles employed by learners and teachers both individually and simultaneously. I will first explain my position as a teacher and then as a teacher/researcher at SchoolA,

3.2.1 I as Teacher

There is no denying I wish Harkness to continue to grow and evolve at the school, with the possibility of extending the approach within SchoolA and possible beyond to other schools. I was fortunate to start my teaching career in the year the school hosted the "Harkness Institute": I

have only taught in a Harkness classroom and believe in its ability to stimulate rich conversations around subjects to engage students in their learning.

I previously taught the majority of the Grade 12 (class of 2018) students at the school when they were in Grade 8. The students in junior science rotate through each science specialist; hence, all Grade 12 students who were potential participants, had some experience in my classroom prior to this study. I also taught forty of these students in the previous year in Chemistry 11. Being both a coach and a teacher, I built connections with many of the students, and specifically the Grade 12 group. Another aspect that makes this Grade 12 group unique is they were the first students at the school to "live" the initiation of Harkness. They experienced the growth of Harkness for their full five secondary years at the school. I arrived at the school during the first year (two years prior to these students) of the implementation. Due to our overlapping years of implementing Harkness, the students and I could share similar perspectives on the successes we experienced with Harkness and we also had struggles in adjusting to a classroom with this mode of instruction.

I did not have the same relationship with the Grade 11 students as I did with the 12's. However, through my involvement in coaching many athletic teams at the school, I interacted with a small group from this year (class of 2019). Thus, I knew many of them beyond the formal classroom setting, and consequently we developed a strong rapport. Informal conversations about learning took place after class, during our travels for athletics, and during outdoor education trips. I enjoyed these conversations, as the experience allowed me to understand the students' perspectives on education, which have always been important to me.

I believe the teachers at my school could facilitate more democratic discussions in classrooms that are based on skills, thoughts, questioning, and analyzing information, rather than

memorizing information. Based on my experiences conducting this literature review and research study as well as my graduate studies, the connections between Harkness, PAR and YAR are clearly apparent to me.

3.2.2 I as Teacher and Researcher

I will explore how to balance my role as teacher and researcher in this study and how it influenced my approach to action research. Much of this section is written in the future tense as I bring the leader along my journey in real time. My intent is for you to live the naissance of this study as we experience in-the-moment action research.

I proposed the research plan for this study to the Head of School and was given permission to run the action research group at the beginning of the 2017-2018 school year. I presented the research as an opportunity for the school to improve the learning environment by engaging with students to discover what they struggle with and how we might assist one another in making it better. This study/thesis is the by-product of the improvement(s).

The ability to be both a researcher and teacher is an integral part for my own Action Research. Being within the Harkness community and practicing Harkness daily allows me to have a better grasp of the students' concerns and ideas regarding the action research. I am able to offer advice as the ARG develops the research process; we discover new things about ourselves, the school community, and Harkness. However, tensions arising from these roles need to be attended to, and biases must be acknowledged and resolved. Keeping this in mind, I will closely examine my roles as the 'Teacher' and the 'Researcher', and the ways I will address potential conflicts or biases through the action research.

The first potential bias I am aware of is the relationships I formed with many of the students, and the potential for affecting the selection process. To minimize this possibility, I plan to recruit from the entire group of Grade 11 and 12 students.

The intersection of my roles as a teacher and researcher made me aware of another form of potential bias in the "Hawthorne effect"; Hawthorne effect generally refers to the tendency of test subjects to attempt to please researchers, and the resultant positive effect of researchers on a subject's performance (Chiappone, 2009, p.390). However, as a teacher and researcher I plan to take advantage of the Hawthorne Effect as proven by Schwartz et. al (2013) who believed for purposes of solving problems, the Hawthorne effect implies that participants can be motivated to participate in action research, and their involvement will enhance buy-in, which facilitates implementation and promotes sustainability (p.1).

Since it is the first time an ARG is being formed at the school, I believe reflection-inaction (discussed in-depth later in this chapter) will be the best way for the group to flow naturally while still allowing me to anticipate next steps. A certain balance between "leading the group" and "experimentation" (Schön, 1983, p.141) is required for this type of reflection to maintain democratic movement of the group. This balance of "leading the group" juxtaposed with full "experimentation" is also a balancing act I undergo in the classroom. Finding the line between allowing the students to have full control over their own learning, designing labs, and discovering content is always balanced with my guidance to ensure we stay on topic and in a safe environment. This approach will be extended into the research, as I must constantly remind myself to allow students to lead the discussions, design interview/survey questions, and choose the direction of our questioning, all the while maintaining a standard of research that would be both 'safe' for the student body and garner sufficient data to be studied.

3.2.3 Recruitment

Kemmis et al. (2013) recognize the contradiction within Action Research that you cannot identify who will participate in this "public sphere" until you know *what* you want to investigate, but you cannot know what to investigate until you know *who* will participate in the "public sphere" (Kemmis et al., 2013, p.91). In this case of this study, I chose to recruit the students before identifying "what to investigate".

To address Kemmis et al.'s (2013) contradiction, I plan a presentation using a generic title "Improving Harkness" for all students in Grade 11 and 12 describing the commitments, including: a minimum involvement of one hour per week (running from November - April); a willingness to work collaboratively and discuss views about Harkness; and taking time to reflect on the process. Included in the presentation will be recognition of the participants' time and contribution to the study including service hours; occasional breakfasts; research experience; and reference letters.

After the presentation, the plan is to ask all who expressed an interest in participating to provide further details through criterion-based sampling (Turner, 2010) by completing a survey (See Appendix A.2). The survey will ask for their availability, a probe their current opinion on Harkness, level of participation within class, and views on the learning environment. To recruit the final group of students, their ideas and opinions will be analyzed before inviting them to be part of the ARG, as a shared concern needs to be established before the action research can proceed; this constituted an important criterion for selection. As Kemmis et al. (2013) outlined, "you need to work out both things together [what will be investigated and who will be investigated], iteratively, by going back and forth between talking to possible participants and identifying possible concerns with them" (p.91). The target number is between five to 15

participants for an action research group as recommended by Borrows et al., (2012), Goodnough (2014) and Jardine and James (2012).

3.3 The ARG Plan

The general outline and plan of our ARG is based on two main resources: *The Action Research Planner: Doing Critical Participatory Action Research* by Stephen Kemmis (2014), and the *Action Research Guide for Alberta Teachers (ARGAT)* (2000). A detailed look at the full research cycle is provided in Chapter 4. At the beginning of the *ARGAT*, the following quote from Hamilton (1997) is used as the summary of action research: "Action Research is a process of systematic inquiry into a self-identified teaching or learning problem to better understand its complex dynamics and develop strategies geared towards the problem's improvement (p.3).

Additionally, Hamilton (1997) states: "The action research process can generally be described as a series of four steps: planning, action, observing and reflecting" (p.12). The process can also be described as a "self-reflective spiral" as once one cycle is complete, there is a chance that there becomes a need to *re*-plan, *re*-act, *re*-observe and so on (Kemmis, 2014, p.18).

Based on these descriptions of the action research process, I intend for the entire action research to be student driven. As much as I am able, I want to avoid steering the group into any particular direction. My anticipating what is to happen within each research section is difficult to determine prior to beginning the meetings. As is well known; "action research is rarely as neat as this spiral of self-contained cycles of planning, acting and observing, and reflecting suggests" (Kemmis, 2014, p.18). Knowing these stages could change, exchange places, as well as need to be revisited, I outlined some aspects which I anticipate could be carried out in specific phases but may not be carried out in the end.

3.3.1.1 Planning

There were two main aspects I want to ensure are covered during the planning phase(s) of the research project. The first is to make certain we establish a "shared concern" (Kemmis, 2014) as the students for this project were recruited through several strategies including a survey. However, I believe the processes of identifying a shared concern is important to establish early in the action research, so that we are all aware of why we joined this group, which also becomes the underpinnings for the research. My goal within the first few meetings is to "briefly say why we think [our] chosen shared concern is a significant *educational* concern raising questions of theoretical and practical educational interest" (Kemmis, 2014, p.104). This shared concern may potentially change during the course of our research, as we start to enter "actions" and "observation" phases and will be revisited as necessary.

The second aspect for the planning stage is to establish a working agreement (Kemmis, 2007), which will be described in greater detail in Chapter 4. A working agreement is necessary in order to have a document outlining the group's expectations. "Participation" and "Ethics" are two headings I plan on including in the working agreement, but I anticipate leaving space for students to contribute their own ideas and needs to the document. In this way, the working agreement could be seen as being jointly constructed by the team.

3.4.1.2 Action and Observation

Given that this project will be conducted by students who have no prior qualitative research experience, the action phase will likely consist of students collecting information from their peers either through informal conversations, surveys, or class observations. The research aspect will also be limited to our observations and data within our own school. The flexibility within action research will allow us to change our plan during the action research itself, in order

to accommodate unforeseen incidences, to respond to insights that continually emerge from the discussions, and to ensure we pursue our overarching goal. Kemmis (2014) similarly highlighted the importance of being flexible in knowing things may have to change, in order to adapt to new questions that may arise, or once new feedback comes in during our implementation.

At some point, after our action is implemented, there will be a period of observation. This will include analyzing results/our action and deciding if another action research cycle will be needed. This observation period is consistent with the cyclical nature of action research and how it can require taking multiple paths through different stages.

In the next section, I will proceed to lay-out my data collection and analysis plan.

3.4 Data Collection and Analysis Plan

3.4.1 Data Collection

I intend to collect the following four sets of data for analysis: (1) General meeting notes; (2) journals and reflections from both the students and myself as the researcher; (3) studentparticipant interviews (transcribed); and (4) the pre-ARG survey information. These data sets represent the different aspects of the research. Collectively, these data highlight the action research activities, students' feelings during the actual research, methodological decisions and my responses during the action research process, and the students' and my reflections after the research (Lincoln & Guba, 1985). The multiple data sources will represent an interplay between my voice as the lead researcher, my voice as a co-researcher, the voices of the students as coresearchers, and will be able to capture different time periods during the action research. Collectively, these will provide a rich data set and the ability to triangulate (Mathison, 1988) can be employed from a second order perspective.

3.4.1.1 General Meeting Notes

General meeting notes will be used throughout the entire process to keep the group on track. Firstly, the students can assist in taking notes, adding resources if needed, and take their own time to analyze the data we are collecting as a group. Secondly, the notes will also serve as a document to refer to at the beginning of meetings, to stimulate recall of past meetings, and thus seamlessly connect to subsequent meetings. This 'efficiency' will be important as meetings are typically scheduled for an hour or less before school. The meeting minutes will also serve as a way to look back and track the research cycle, enabling me to analyze the entire progress of the group.

3.4.2 Reflecting, Journals, Interviews

At the end of each action/observational period, there will be opportunity to reflect on our results and decide if we accomplished what we set out to do within our research question. Reflecting as a group will be a necessary part of this stage of the research, asking further questions and deciding as a group if we will be able to move onto the next stage or end the research. Students will also be asked to reflect and journal during their entire action research experience, as time permits. The implementation of participant interviews at the end of the entire action research is a common practice and questions will be prepared based on the overall experience and how the research took shape.

3.4.2.1 Student Journals

Reflective journaling is to be offered as an optional exercise for the students taking into consideration students' regular workload. While the importance of reflective journaling is often cited (Burrows, Thomas, Woods, & Dole, 2012; Kemmis, 2009), the goal is not to overburden the students.

3.4.2.2 Lead Researcher's Journal

As the lead researcher, I will make my own journaling mandatory to help in my own analysis of the research process, as well as to keep myself on track with both understanding where the group is going, and in my positionality within the group. I will start my journal beginning with my proposal to the head of the school and maintain it until the conclusion of the project. I will use reflective journaling, informed by reflection-in-action (Schön, 1983) while sustaining awareness during the entire process. As Kemmis (2014) claimed, it is important to track the evolution of thinking, so that things which may seem insignificant at the time are able to be looked back upon and quoted if necessary (p. 175).

Journaling will position my "activity" and "affect", as well as the students' activity. I intend to complete the journaling at the end of every session, using "Resource 5: Keeping a Journal" (Kemmis, 2014) and differentiate between "activity" and "affect" as outlined by Burrows, Thomas, Woods, Suess, and Dole (2012). The journal will help me guide the process of my own learning and show where I engaged with my own growth as a researcher as well as an educator (Kemmis, 2014). Each post-meeting reflection will be broken into an informal reflection piece, based on my own general observations and notes, and I further organize my reflections into a more formal grid (See Appendix A.1). I will reflect on:

- (1) The language of the meeting;
- (2) The table activity (general notes of the table energy/environment);
- (3) My social relationship and "affect" on the group (further discussed in the analysis section);
- (4) Key observations and changing structure of the group dynamics;
- (5) Key struggles and how the team was doing in the action research process; and
- (6) Successes, failures, and future steps.

3.4.2.3 Student Interviews

Towards the end of the action research, individual face-to-face semi-structured interviews with the students will be conducted at the students' convenience. Interview questions will be formulated and distributed to the students before the interviews, so they can think over the questions prior to the interview to dispel concerns over the types of questions they will be asked.

Consistent with semi-structured interviews, the interview approach will focus on the question themes, as opposed to strictly reading the questions consecutively. Thus, lines of inquiry relevant to their experience, their interpretation of the ARG, their thoughts of the progress made, and general ideas of Harkness will be pursued through discussion when necessary. This will provide me with more information from the students and their direct interpretation of the ARG. In other words, the questions will focus on the students' experiences and interpretations of the ARG. For example, the questions could probe for their overall experiences working in the ARG, how they perceive democracy, the group decision-making process, what they learned, and how (and if) their understandings of Harkness changed (see Appendix A.5 for details).

The interview transcripts will be used as the key source of the data analysis as they will provide rich insights and draw directly from the students' perspectives. To focus on the purpose and goals of the interviews, I will employ Brinkmann's (2013 four recommendations that semi-structured interviews should fulfil an understanding of (1) the purpose/s, (2) descriptions, (3) participants' life worlds (students' experience), which is followed by an (4) interpretation of meanings ascribed to the participants life worlds. I will explore each of these further below:

- (1) The *purpose* of the interviews is two-fold. First, the interviews offer a final chance for students to have their opinions of the ARG heard. I believe this will be an important piece of data for me as I intend to look to the future of ARG's at the school and would like to explore the possibility of running this in future years. Second, the interviews will function as an opportunity to collect more data about student opinion on Harkness and to track any changes or realizations they had during the process.
- (2) The *descriptions*, according to Brinkmann (2013), allow interviews to provide descriptions of the phenomena as opposed to more abstract philosophies (p.21). Aspects of the phenomena (i.e., the action research process) include the students' experiences and perceptions of their time commitment, democracy, Harkness, and the action research process. Using a semi-structured interview approach will allow for casual yet-in-depth conversations to take place between structured questions; knowing that the interviews generally exist on a continuum between 'structured' and 'unstructured' (Brinkmann, 2013), semi-structured interviews will allow me to pursue lines of inquiry and gain a better understanding of the students' utterances. This supports the consequent construction and refinement of the themes (Braun & Clarke, 2012). Providing interview questions beforehand will also allow the participants to prepare prior to the meeting.
- (3) Students' Experience will be explored by having students describe their own experiences. Both the action research process and how it influences the students will be probed. The latter will include, for example, how students approached class after a meeting. Any other artifacts which deal with the students' day-to-day conceptions of their experience will also be pursued through similar lines of inquiry.

(4) The *interpretation of meaning* refers to the meanings participants ascribe to how they describe their life worlds and experiences in this action research process. Thus, elaborations and clarifications, including terms and phrases students used, will be probed for as students describe their experiences. I will also pay attention to their feelings as they share their experiences.

These interviews are intended to be a primary source of information for this study, as the students will have the choice whether to participate in the journaling.

3.4.3 Data Analysis

Using Braun and Clarke (2008), Brinkmann (2013), Miles et al. (2014) as guides, thematic analysis will be the method for analyzing all data. I selected this data analysis method because the process: captures patterns that cut across the data set; accommodates different student perspectives (voices); and allows for an in-depth exploration of the meanings' students' ascribed to their utterances. The literature in this area confirms the ameliorative choice of thematic analysis. For example, Braun and Clarke (2008, p.79) described thematic analysis as "a method for identifying, analyzing, and reporting patterns (themes) within data", and could account for data captured in the form of different voices, forms, and are collected over several months. Miles et al. (2007) further explained that "*Codes* are labels that assign symbolic meaning to the descriptive or inferential information compiled during a study" (p.7). Thematic analysis thus allows for researcher flexibility with data, but also allows the researcher to combine different sources and points of data to illustrate/support specific content (Braun & Clarke, 2008).

As with any action research project, flexibility is needed as the types of data are subject to change. Using thematic analysis will allow me to use all documents and artifacts collected at the end in a productive way to analyze the ARG fully. The diversity in both the types of data and the voices, will enable me to gain understanding of what transpired during the ARG process and allow me to build a narrative from the constructed themes. Through this process I will be able to tell a deeper story than what could be evoked by simply analyzing quantitative data collected before and after the ARG. Relaying the ARG narrative from the students' perspectives, including how they experienced participating in a group like this, and any realizations, changes, or responses, should be captured in an authentic way and reported using their 'voice' (thus the inclusion of interview excerpts when constructing the narrative).

I was conscious of the following advice from Braun and Clarke (2008), "an associated pitfall is the using of data collection questions (such as from an interview schedule) as the "themes" (p.94). Although the themes are like the strands of inquiry framing the interviews, the coding is specific to words, symbols, and thoughts evoked from those strands. The analysis will be based on gathering these themes, checking them against the data set (Miles et al., 2014), and locating them in the literature of action research. Themes will be constructed based on multiple data sources of data to ensure the interpretations were true to the participants' thoughts in the ARG throughout the entire process, not just within the interviews.

Another aspect of thematic analysis to be addressed is the concept of 'giving voice'. As Braun and Clarke (2008) described "As Fine (2002) argues: even a 'giving voice' approach 'involves carving out unacknowledged pieces of narrative evidence that we select, edit, and deploy to border our arguments" (p.80). As thematic analysis is based heavily on 'giving voice', it is important to acknowledge that I matched the theoretical framework (Harkness) and methods to what I wanted to explore through implementing this action research; all of which aligned with notions of democracy. That is, if YAR could serve as a model for promoting a more democratic form of inquiring into teaching practices that involved the learners themselves in the process, it

must be through this democratic process of action research that we continue to inquire, learn, and develop our democratic teaching pedagogy. Thus, consistent with my choosing of democracy and student agency as key underpinnings of the action research, I will likewise include multiple quotations to support the description of themes and the claims I am making; it is important to highlight the students' thoughts and feelings above my own arguments, especially when pertaining to their interpretations to their own experiences in Harkness classrooms and the ARG.

3.4.4 Thematic Analysis: Coding and Construction of Themes

As with any thematic analysis, a cycle of coding will be needed to begin to group ideas and potential themes together. Using a multiplicity of data sources means there are different aspects to look for (Miles, et al., 2014).

The initial coding will be done with the interviews and meeting notes, with the student journals and my own journal to follow. Nvivo v. 12 software coding will be used for the analysis as it will allow for the students' own terms and language to be initial sources of the codes (Miles, et al., 2014, p.8). Using Nvivo will facilitate more codes to be generated from descriptions provided by the participants instead of summarizing an entire paragraph into one distilled code, the latter being practiced in *descriptive coding*. The goal is to break the data set into "chunks of data that go together" (Miles et al., 2014, p.8), which would prompt deeper reflection as these "chunks" started to form and lead to a second round of coding. Consistent with the coding, I will iteratively read the transcripts, journals, and meeting notes without student names and coded based on language alone (that is, the utterances).

Nvivo coding will be followed by a round of sub-coding or "second cycle" coding (Miles, et al., 2013, p.13). Sub-coding is a descriptive style of coding which will then require some further interpretation to code some of the more general codes which were identified in the first cycle. The second cycle of coding is undertaken to take large data sets and create 'units' or 'themes' through the identification of patterns, recurring ideas and repeated words or phrases. According to Miles and colleagues (2013), "First cycle coding is a way to initially summarize segments of data. Pattern coding, as a second cycle method, is a way of grouping those summaries into a smaller number of categories, themes, or constructs" (p.18). As Braun and Clarke mentioned (2008), it is important to recognize that themes do not simply "emerge" from the text, but from our own theoretical positions and values that allow them to be classified, grouped, and analyzed. This same approach will be used for all data sources, and a third round of coding can be implemented to consolidate codes which cut cross the data set. This consolidation of similar codes will lead to the generation of themes.

3.4.5 Thematic Analysis: Verification and Refinement of Themes

Following the initial generation of themes, these themes must be verified, refined and readjusted whenever necessary (Miles et al., 2014). Theme verification entails examining the constructed themes (including meanings) across multiple utterances, different participants, and different data sets. Sandra Mathiason (1988) quoted Miles and Huberman (1984) when talking about triangulation, stating that:

...triangulation is a state of mind. If you self-consciously set out to collect and doublecheck findings, using multiple sources and modes of evidence, the verification process will largely be built into the data-gathering process, and little more need to be done than to report on one's procedures. (p.235)

With this in mind, I will ensure that multiple sources were collected and fruitfully drawn upon in the verification process. Thus, once the themes were established, I will check them against all data sources collected and relevant literature in the field(s). The themes will be (re)adjusted and

refined as is deemed necessary. The full story of the action research group will be outlined in Chapter 4, including the findings emerging from the thematic analysis conducted.

3.5 Ethics

As part of the research process, ethical considerations were addressed. I successfully applied to the UBC Behavioural Research Ethics Board (BREB) for approval (ID:H17-020326). In accordance with BREB procedures, all participants received a "Consent to Participate" letter outlining the principle investigator(s) and the conditions for participating in and withdrawing from the study.

To maintain privacy and confidentiality, pseudonyms were used for the school and all participants in all reports related to the research. All collaborative documents including meeting minutes, student reflections, and my own reflections were kept on an encrypted, password protected, hard drive and no hand-written notes were taken during the process.

All students will be reminded regularly of the importance of confidentiality within the ARG and while they can withdraw from the study at any time without giving a reason, they are bound by confidentiality.

3.6 Conclusion

The stage is set, the participants and plan is in place, the data collection and analysis is ready, it is time for the action.

Chapter 4: The Action

This chapter serves as an overview of the action research. It lays out the course of action undertaken and tells the story of the students' experiences as well as illustrates the action research cycles. I draw upon my own journal writing as well as the meeting minutes as a reference to what was completed and in what order. To enrich the narrative presented here, excerpts from the students' journal are also included.

Eleven students were selected to form the Action Research Group (ARG). The first two meetings focused on ensuring the students were comfortable with the group, establishing our "shared concern", giving a brief introduction to action research, as well as creating a working agreement (which will be discussed in further detail in the next section) (Balakrishnan & Cornforth, 2013; Kemmis, Chapter 5, 2014).

We began the first meeting by introducing ourselves and sharing our reasons for joining the group. Students were generally aware of "Harkness skills" such as active listening, listening posture, waiting to speak, and posing questions to others as opposed to the teacher. The group immediately 'self-regulated', where they began collectively examining the strengths and weakness of the Harkness pedagogy as were experienced in their classrooms. I mentioned in my journal "Group dynamics were good, some students were able to get their opinions in, and people were also not talking over one another or engaging in side conversations" (DiPietro Journal, 2017). As planned, I initiated a discussion on the importance of creating a working agreement (WA) and through the discussion, we decided our second meeting would start by discussing and establishing a working agreement.

4.1 The Action Research Problem Takes Shape

To restate, the goal of the action research was to improve Harkness at the school. After the first meeting a general pattern emerged where the students voiced their concern of "too many dominating voices" within the Harkness classrooms making it difficult for other students to become involved in the conversations. Using this concern as a point of departure, our group agreed to this "guiding problem" in the early stages of the research, and as a launching point for conversations during the first few meetings.

4.2 Working Agreement

To promote the collaborative and democratic culture within the group, we developed a working agreement together, based on Kemmis's (2007) assertion about the need for collaboration, ethics, respect, and punctuality. Students were asked to include their own thoughts and concerns during this session, and we concluded the meeting by each signing the working agreement (Appendix B). Special attention was made to ethics, as the students will be observing their peers, meeting to speak about their community, and possibly divulging information that is often left unspoken, such as certain instances where another student or teacher was taking over a class, or specific students who may be "better" or "worse" at discussion, or academically, than others. The group agreed to talk as generally as possible, without mentioning specific people, including names of specific teachers or students. Additionally, anything said within the ARG must be kept confidential. The students were reminded they can withdraw from the study at any time without giving a reason, but they will continue to be bound by confidentiality.

The working agreement also served as another tool to establish myself as part of the group, as opposed to simply being the researcher. The agreement stated, "we the group" and included all of the names of participants, myself included. It also functioned as an important

initial step to begin the orientation on our group's perspectives on Harkness; as one student mentioned in their journal, "We established the working agreement today and it was great to see we all already share similar views on what is required and important at the Harkness table" (Kate Journal, 2017). Once the working agreement was created, we agreed to attempt to define Harkness to gain individual and group understanding as part of the process in addressing the problem.

4.3 Defining Harkness (Plan)

During the first few meetings (about the first month), we created definitions of what we believed Harkness is, how it had been implemented at the school and what is considered 'participation'. We then moved into describing things that we enjoyed (positives) and disliked (negatives) about being in the Harkness classroom that eventually evolved into our struggles. The students were articulate in their views of this pedagogy. These initial meetings were some of the livelier ones, with every participant wanting to include their perspective and things they witnessed as well as their successes and failures using Harkness.

Those aspects of Harkness students enjoyed were labeled as "positive experiences/aspects" and were divided into three categories, classified as "personal growth, effective learning style, and democracy". Overall, we focused on how Harkness has the potential to develop students into independent thinkers, promote questioning, curiosity, self-advocacy, democratic academic discourse, and encourages learning from others.

The dislike or "negative" aspects were associated with lessons that were sometimes not productive or did not reflect their idea of Harkness as well as those classified by "inexperience, quality vs. quantity, and classroom dynamics". This process was very similar to what Kemmis (2007) called creating a collective plan or understanding the conditions in which one works. The

three categories of "negatives" all stemmed from the original shared concern of inequality in the balance of voices within the classroom. One student reflected on this process, alluding to the energy in the room during the first few meetings:

I also really enjoyed the atmosphere of this discussion and as an action research group because as we were brainstorming pros and cons, I felt very comfortable sharing my ideas and we were all so actively bouncing our thoughts on one another. It felt like many of us had a lot to say and although our "cons" list turned out longer than our pros, the passion in the room was contagious and it was an awesome way to begin the project. (Kate Journal, 2017)

We realized we are in control of these positives and negatives and could start to think about how to solve them. The students recognized the areas where we could improve Harkness and started to brainstorm different kinds of data to be collected. They began anticipating the changes that could take place to improve our school.

4.4 Reconnaissance I (Action & Observation)

Although the group members could potentially "experience Harkness" up to five times a day, we share the understanding the process is not universally practiced in every class, every day, as some activities, for example lab work, physical education, or independent reading, do not necessarily fall into Harkness. Thus, the ARG explored the possibility of informally observing Harkness-framed classes. Through discussions about the usefulness of observing classes, we collectively decided our first course of action would be to gain some insight into what was occurring in classrooms outside our own schedules. The objectives set by the group was to informally observe at least two classes within the following two weeks and to take notes including students' body language, side conversations between students, ability to question,

ability to stay on topic, how often the teacher is involved in the discussion, and any other general observations. Then, ARG members would engage students in the observed class in informal post-class conversations, with the purpose of gaining some insight into how the students thought the class went. To further the reconnaissance, the students in the ARG created an informal, anonymous student survey to gather more information (see Appendix A.3)

Based on our findings, we narrowed the points to explore in the next reconnaissance phase. The observational data and the results from the survey were tabulated and discussed, resulting in six questions/paths of direction to address the problem of having too many "dominating voices" within Harkness at the school.

- 1. Developing student "skill" at the Harkness table
- 2. How can we (teachers and students) make Harkness more students driven?
- 3. How does the topic of discussion affect the discussion?
- 4. Why are we taught in one medium but assessed in another?
- 5. What are the short and long-term goals of action research?
- 6. Should we be mentoring students as an action?

We discussed each question in detail. The dominant theme that emerged pertained to practical aspects of implementing the reconnaissance, such as "Could we research them within the allotted time?", and "How would we measure the success of our action?" Through these discussions, we decided to explore the development of student skills at the Harkness table. This exploration was supported by the conclusion by the ARG that although students who were surveyed were able to comment on what important aspects lead to a good Harkness discussion (e.g. "no side conversations", "listening", "collaboration and Harkness rules"), unfortunately, many of the observed classes did not display these aspects.

The ARG hypothesized that if we helped to develop students' skills at the Harkness table, we could, in turn, enhance the discussions at all levels and address the problem of having too many "dominating voices" within the classroom. It was decided that the ARG would implement another reconnaissance phase to determine if the students in the school would be interested in developing their Harkness skills. As noted in the post-class survey responses, some students were seeking to develop their Harkness skills.

It should be noted that this was an important step in the democracy of the group, as we collaboratively decided to pursue the next line of action in accordance to what the student body actually wanted; instead of making a quick decision to pursue action for the sake of having something to "do". It was also an avenue that I did not anticipate following, nor was it what I interpreted as a priority in fixing the outstanding 'issue'. However, the students felt passionately about it, and I was easily convinced to follow this path of research. Moreover, I wanted to maintain the fact that they were running this research,

4.5 Reconnaissance II and Planning II

The second reconnaissance and planning stage was the longest stage of research. Between Meeting 7 and Meeting 12 (about six weeks, meeting one hour per week), the group took the time to reflect on the work we have done so far, gathered more information about students wanting to develop their Harkness skills, and then proceeded to plan our next action. During this stage, there was another mini-cycle of gathering data (using anonymous response surveys sent to the student body, combined with more informal conversations with peers), analyzing data (through discussions and student-led organization and analysis), and then planning our culminating action. When the survey was initially sent out, the group was focused on (1) if students would be interested in improving their Harkness skills and (2) what support

they would need to improve. During this second round of reconnaissance, the group noticed that 57% of the 201 students surveyed said they would like "More guidance, support, and feedback" to improve their Harkness skills. The group then moved to planning how, as a group of 11 people, we could carry out an action that would be consistent with what we learned through the survey.

Another important distinction needs to be made here, regarding Harkness philosophy/method (for teachers) and Harkness as a skill (student interpretation). When talking about Harkness "skills", students were relating to the ability for themselves to be part of productive discussions within a classroom, where Harkness was a part of the teacher's pedagogy (which in our case, is the majority of teachers). Students were taught about "Harkness traits" through many of their courses, adapted and talked about as "skills" by some teachers at the school (Included as an excerpt from the Harkness textbook in Appendix C, Heal, 2015, p.200). Many teachers in the school have an adaptation of this excerpt posted in their classroom. They would take time at the beginning of every year to discuss these skills with their classes alongside an introductory activity to engage students in using these skills.

4.6 Culminating Action

It was decided by the group that the final action would be to run "mock" Harkness sessions, where students in the ARG would practice giving feedback to their peers by leading the discussion sessions, assessing their skills, offering personalized advice, and suggesting areas of improvement for students who wished to practice the skills outside of the classroom.

Consequently, a presentation was given by self-selected ARG members, and students interested in improving their skills were invited to sign up for topics they would want to discuss during a 'practice' discussion. A rubric was created by the group, primarily drawing upon all the information we gathered and discussed through our time together (See Appendix D). The skills included:

- "preparation" evidence of having thorough notes prepared and able to support claims with readings;
- "listening" engaged with conversation, refers back to and builds upon others' opinions;
- "questioning" drives the discussion forward with questions, establishes meaningful connections;
- "etiquette" included body language, encouragement, and valuing others opinions;
- "quality vs. quantity" looked at how dominating any one person was during the discussion.

All the feedback provided and subsequent sessions were implemented by the students for the students. The overarching goal was to run "Harkness classes" on fun topics so the students could interact in a way that would not be assessed academically, and they could simply work on their ability to get involved in conversation.

After the mock sessions, the ARG sent their feedback, which included filling out the rubric for each student who attended the session and a few sentences for each skill, based on what they did well and what they could improve. This, being our 'action', had many moving parts to organize, and the students arrived prepared to give their peers feedback in a professional and honest manner. They were committed to this 'action' as they felt it was a step in the right direction towards improving Harkness at the school. This action gave a larger number of students the opportunity to critically think about their experience in a conversation. Additionally, students

who participated as 'leaders' as well as students who were 'practicing Harkness' all walked away from the session with a deeper appreciation of discussion-based learning, as well as an understanding of areas in which they can improve in their position at the table. This was a chance for the students to self-improve, pushing themselves and their peers into a direction that would help to shift away from "dominating voices"; ARG members provided honest and personal feedback. This session ended with a 'meta-analysis' implemented by the ARG students. They focused on what students participating in the mock sessions were thinking and feeling during discussions.

4.7 Post Action

After the ARG sent out the completed rubrics with recommendations to the students, we had one final meeting to discuss the effectiveness of our action, as well as reflect on the ARG as a whole. After the last meeting, the ARG was asked to share any final thoughts through their journal reflection and an interview. Interview questions were sent to all the ARG members and all students signed up for a conversation to talk about, and analyze our time together in the ARG. The semi-structured interviews took between thirty and sixty minutes, and each student participated in one interview.

Included in Figure 1 is a diagram which shows the activities plotted against the action research cycle of plan, act, observe, reflect. It shows the two cycles and can be used as a summary of the group. The next chapter will focus on my analysis of the data collected during the ARG, as well as the post-ARG interviews with the students.

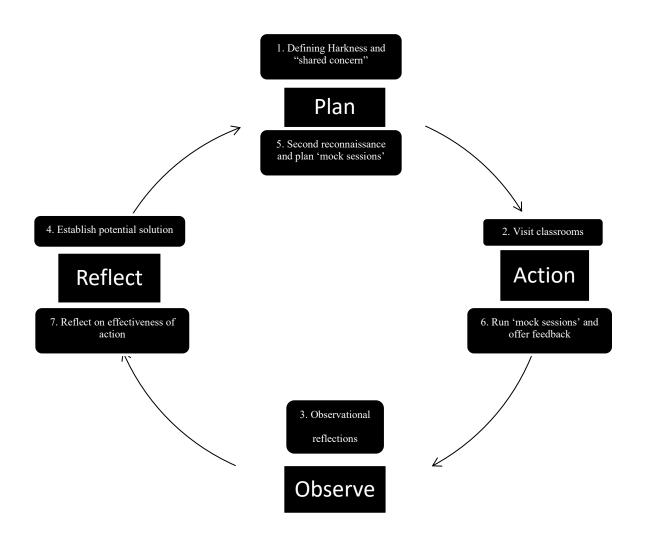


Figure 1: The ARG Cycle

Chapter 5: The Findings and the Students

The ARG consisted of myself as the teacher and researcher and students as coresearchers, working together to solve a problem which was our "shared concern". This chapter represents the students' findings based on my analysis of the interview transcripts, meeting minutes, student journals, and personal observations. All materials were documented, and transcribed, and emergent themes were identified and coded. I will now discuss how I coded the data and the emergent themes.

5.1 Coding Continued

As mentioned in Chapter 3, multiple cycles of coding were enacted on each data set. I read through the entire transcript set to orient myself with the language and voice of the students. Starting with the interview transcripts, the process of using Nvivo software for coding followed by a second coding allowed me to break the data set into "chunks of data that go together" (Miles, et al., 2014, p.8), which prompted deeper reflection as these "chunks" started to form. An example of this initial coding process can be seen in this student interview, the italicized words are examples of words that were initially highlighted and coded;

I thought it was *a lot of fun*, and I liked everybody *gathering together* and we *share* our ideas about, like our *opinion on Harkness* and how it like *impacts us* and how *we feel* about it and then using what *we know*, and what our *attitudes and opinions* towards this

thing, and try to improve it. (Nina Interview, 2018, italicized for coding example) This process was inductive (Braun & Clarke, 2008) and data-driven, meaning I started without codes. I highlighted instances where students shared an opinion, made a claim, or talked about the group. Descriptive words and actions were initially focused on, and after the first Nvivo coding, the large amount of data was paired down into smaller, more focused codes. As

Brinkmann (2013) notes; "Data-driven coding implies that the researcher starts without codes and develops them upon reading the material. In principle, anything can be coded depending on the research interest" (p.82). Following this, after multiple readings of the interviews, patterns started to emerge.

The same approach was used to code the meeting notes and collected data; however, as the initial coding of the interviews had been done, the general meeting notes were coded to complement or support the initial themes that were identified in the interview transcripts. Based on a deductive method to the analysis (Braun & Clarke, 2008), similar codes were thus identified with few exceptions, such as the focus on the position of the teacher and assessment closer to the initiation of the group.

For the coding of my own journal, a mix of Nvivo and "descriptive" approaches were taken, as it was my own writing I was coding. I did not want to read too far into what I was trying to say at the time when I started the first cycle of coding. As I did with the interview transcripts, however, it is impossible not to look back on the writing and remember why certain things were mentioned; so some instances were summarized using the descriptive coding approach to simplify the coding. It is evident that in a shared experience, much of the same codes were present (i.e., power, dynamics, time, collaboration, assessment, inexperience).

5.2 Themes

I used three main points from Braun and Clarke (2008) to guide my decision making regarding what I discerned as a theme. First, the themes had to "capture something important about the data in relation to the research question" (p.82). Looking through the codes there was an opportunity to directly examine aspects of the research question through codes like "growth", "opinion", "enjoyable" as they related to the students experience in both Harkness and action

research. Through the second cycle of coding, codes started to group together in greater "chunks"; for example, utterances of the word "opinion" started to show a definite pattern that students valued the opportunity to have their opinions heard. As Braun and Clarke (2008) argued, the researcher always plays a role in identifying patterns/themes. The themes do not just "emerge" from the data. Rather, these themes 'reside' within us as we read through the data, and we (the researcher) create the links as we understand them. Second, just because a code appeared often, it did not "*necessarily* mean the theme itself is more crucial" (p.82), I did not choose themes based on frequency, but on the third aspect the authors outlined, which is 'keyness'. The authors wrote that "the 'keyness' of a theme is not necessarily dependent on quantifiable measures, but rather, on whether it captures something important in relation to the overall research question.

The themes, codes, and frequency are shown in Table 1.1. Each theme is made up of multiple codes which were gathered into themes after multiple readings. They were grouped based on what I interpreted as the most important aspects alluded to through the data set, and ones which had the quality of 'keyness' as they pertained to the research question(s). The frequency of each code pertains to the number of instances of each code within all the data.

Theme	Codes & (Frequency)	
Building Student	Harkness growth/awareness/skills	(16)
Capabilities	(micro)	(10)
- Developing their	Learning about research	(7)
Harkness skills	Thoughts about Harkness (macro)	(3)
(micro)	Collaboration (micro)	(2)
- Understanding of	Better listener (micro)	(2)
Harkness at the	Building relationships	(1)
School (macro)	Students Play a bigger role	(1)
- Understanding	Discussion Practice (micro)	(1)
research		
Valuing Opinions	Acknowledgement of 'opinion'	(17)
& Democracy	Ownership	(7)
Having their voice	Equal representation	(5)
heard	Shared ideas	(1)

Table 1 - Themes, Codes, Frequency

I will use this chapter to outline the themes which emerged from the data and discuss each of them through examples from the participants. Once a theme is established and described, relevant literature and other instances will be discussed as an analysis to accompany each theme.

5.3 Theme One: Increasing Participant Abilities

There are two main facets to Theme One: Increasing Participants Abilities: (1) what I coined as an "increase in Harkness sensitivity" the members of the group developed; and (2) group members learning about research. "Harkness sensitivity" describes the ability for participants to understand the dynamics involved during a Harkness class on a deeper level. Being able to identify characteristics of a class, teacher, or student leads to successful discussions and to identifying patterns that could hinder successful discussion. Participants learning about research pertains to the ARG members having first hand experience with qualitative research

methodologies, such as survey design, data analysis, and the research cycle. It has been seen in other studies that:

Unlike many adult-organized initiatives for youth, YAR provides a means for youth to experience growth on a personal level, as well as effect change in schools and communities. Youth move beyond simply being the recipients of reform to adopting more empowering roles of being responsible for and effecting change (Fullan and Stiegelbaur 1991; Levin 2000). (Goodnough, 2014, p.364)

Following this concept that youth can "experience growth on a personal level" through participation in YAR, I looked to the data to find specific instances where the students grew, either pertaining to Harkness or within their research skills. The ARG was both an opportunity for them to "effect change" and to grow as people.

5.3.1 Increased Harkness Sensitivity

Within the first few meetings, there was an immediate sense the students were starting to have a heightened awareness of what could lead to successful Harkness discussions in the classroom. As one student wrote in their journal when thinking about the definition of Harkness:

I, for one, found it hard to push away the definition that has been ingrained in our minds for so long and I kept jumping back to all the common phrases that are used so often to describe it, discussion-based learning, collaboration, critical thinking... I tried hard to think of more description for it, before realizing upon quick reflection that these phrases were actually quite accurate for the role it has played in my life as a student. This for me, was a small indicator of such a method (despite its many problems as we ranted about later) was already a success on its own and the evident progress and positive impact that

this teaching style has made on me as a student is quite meaningful. (Kate, Journal entry, 2018)

This mention of "common phrases" connects well to the insider's perspective brought to a research project such as this one, but also alludes to how students often took "educational language" for granted. It was through having open, collaborative, conversations that these phrases were actually quite accurate. Through this opportunity to talk about Harkness from a participant in an action research study, students could start to analyze Harkness. They were finding success despite perhaps feeling disenchanted at times. Although most of the members considered themselves to be students who excelled in a Harkness classroom, it was evident after the first few sessions that the students were increasingly becoming more aware of the potential effectiveness of Harkness to promote learning. This insight was based on the data gathered as part of the recruitment regarding the question based on a 1-10 scale "I excel in a Harkness classroom"; the average for the participants was 8/10. Additionally, beyond the above excerpt, the students also gained greater insights to the factors and dynamics which affect their Harkness classroom environment.

My Harkness sensitivity was also heightened during this time. Having conversations *about* Harkness allowed me to gain deeper insight into the students' perspectives on Harkness, aspects they enjoyed, and aspects they found frustrating. I could identify with Kate's mention of the "common phrases" when talking in educational circles: many times these phrases are talked about, but rarely practiced. This realization offered me an opportunity to critically look at how I was running my own classroom, as well as the ARG, to ensure that many of these "common phrases" were being enacted, rather than simply talked about.

The "increased Harkness sensitivity" will now be broken down further into "macro" and "micro" aspects within the theme. These will help to illustrate the different ways the students were able to understand Harkness.

5.3.1.1 Macro

The "macro" (macroscopic, big picture) represented participants reflecting on Harkness at the school as a whole, how their opinions changed, and what they learned about the school and Harkness. These are broader ideas and realizations and were evident during the ARG, as well as at the end of the ARG when the students had time to break away and think about what we had accomplished during our time together.

During the ARG, for example, when discussing the ideas and topics involved in Meeting 4, one student mentioned in their journal "Some of them [ideas from meeting 3] sparked REALLY interesting questions. For example, classroom dynamics: can we really change or even influence an individual's personality? How does the school culture play a role into the common classroom dynamics?" (Kate Personal Journal, 2018). These questions turned the attention to the learning process in a holistic way, rather than an individually focused way, which I argue, will help to strengthen the collaborative nature of Harkness at the school. In rare instances (prior to these conversations), I had opportunities to hear students talk about the "culture" at the school, and in such a critical and inquisitive way.

The exit-interview process revealed the ability of students to improve Harkness together, as was noted by Nina, "I like the discussion part of it and just like using the idea of Harkness to improve Harkness" (Nina Interview, 2018). Mark also commented:

Before this research I thought, Harkness is more, controlled by, I guess teachers, but then if we were doing this [action] research and if were trying to improve it, I thought, okay, then, I guess the students, mostly, can play a bigger role in improving the overall Harkness experience at SchoolA. (Mark Interview, 2018)

The "macro Harkness sensitivity" discussed here illustrates the students' growth. It also demonstrates the students' realization that the potential for improvement is rooted in the student body. By being part of this exploration, students in the group began considering the potential of using "Harkness to improve Harkness". Crucially, the realization they can have an impact on their own learning environment started to be evoked, as is evident in Mark's statement regarding the movement of "control" from the teachers to the students in this shared experience.

Through the data analysis, it is apparent a new awareness of the aspects of school and classroom dynamics is coming into the forefront of the students' thinking, as opposed to strictly owning a self-centered outlook in being in class. This ARG offered an opportunity for the participants to identify and analyze the cause-and-effect relationships which shaped their school experience, on a scale that is greater than what they have direct control over. As Kim noted in her interview "I just think these issues are at the very core of the school and that there gonna be hard to change without everyone on board, including like all admin [administrators], and like teachers, you know what I mean?" (Kim interview (2018). Reflecting further on our action research's impact on the school community, she commented "the values at the school for the students' kind of don't overlap always with like the values of a good Harkness student and I think that would have been more valuable if we tried to solve that" (Kim Interview, 2018). The issue of "values not overlapping" will be explored further in detail in the concluding chapter.

There also appears to be movement towards students analyzing their educational environment, and them beginning to take note of the classroom dynamics in ways that allowed them to think about the impact they have as a collective student body on their learning. Talking

about Harkness outside of the classroom, Sabrina mentioned that her peers "say they hate it, more than they actually do, at the school, so I don't know if that's just a social thing...", and continued with "but I think it's something like for me when I saw the data results and how many people were actually interested in improving themselves" (Sabrina Interview, 2018). There appears to be a shift away from "all students say they hate it" to "many people were actually interested in improving themselves..." when students were given opportunities to speak with their peers.

As we progressed through the research cycle, students gained increasing sensitivity to what was going on around them. After the third meeting, one student wrote in their journal". As a student, after these few sessions, I have already began to see benefits. I have always been a conscientious student at the Harkness table, constantly reflecting on my actions and others'. I am now even more curious" (Sabrina Reflective Journal, 2018). The ability of this ARG to "spark curiosity" about Harkness and their peers' opinions and perspectives on Harkness should be noted; this will point towards the implementation of action research in this school in the future.

Being part of the ARG also encouraged students to be "constantly reflecting on my actions and others" (Sabrina Interview, 2018), which would increase students' empathy towards their peers and further improve the classroom discussions. Looking back at their initial thoughts and ideas about this research, when asked: "The part that appeals to me the most about this project is...", only three out of the eleven students came into the project wanting to improve their *own* abilities at the Harkness table. In contrast, by the end of the action research, many of the students had commented on how their own presence at the table was enhanced by being part of the ARG. It could be concluded that through participating in discussions about Harkness, a sensitivity and affinity to the discussion-based learning was formed. Having eleven students in

the school with an increased awareness of what is going on inside of their classrooms could be a precursor for further improvements; these students can now be the leaders in their peer groups.

Overall, being engaged in action research outside of regular class time allowed participants to gain a deeper understanding of the students' role on Harkness, sparked their curiosity about education and research, and catalyzed the sharing of the responsibility of Harkness between teachers and students. The students discovered how Harkness continues to support learning experiences and helped them connect with the philosophical underpinnings of Harkness (although students do not always discuss them as such). This discovery is evident in the ways they examined their roles in Harkness, and the factors which they control daily to enrich their own experience at the table.

As a researcher, I discovered that opening spaces for students to speak about their current learning environment promotes their reflection and coming to realize the aforementioned points. Moreover, opening spaces also allowed me as a teacher to better understand how the students were interpreting what is going on in the classroom, and begin to strategize ways to support their growth as learners and participants in Harkness. Hearing concerns and valuing perspectives allowed the ARG to continue to examine our "shared concern" in a way that was productive and orientated towards improvement.

5.3.1.2 Micro

The "micro" were instances more specific to students seeing improvement within *themselves*, as opposed to looking at Harkness as a school wide phenomenon.

The students developed on a personal (Harkness) level, where their introspection was enriched by "understanding their learning environment". For example, April described how "By seeing mistakes of others through our reconnaissance and breaking down the essential components of Harkness for our examination [observation], I was able to see the ways I could become a better listener and better inquirer at the Harkness table" (April Interview, 2018). April further described, "I think during this process [the ARG], the most I learned was about myself and how I could improve my own Harkness skills" (April Interview, 2018). In a similar vein, Sabrina added in her interview "This research team really helped me become more reflective on my own learning" (Sabrina Interview, 2018).

Trying to answer, "What is Harkness?" allowed the students to reflect on their understandings of Harkness and to identify essential components of Harkness. The students were able to further analyze the impact of these components on a classroom discourse. The insights, in turn, helped them to improve their own skills of becoming "a better listener and better inquirer". For example, Sabrina noted an improvement in her ability to articulate her ideas about education:

...how I think about learning, what I think about Harkness, and all that stuff, so I think this research team really helped me like, hear different perspectives from everyone and

that helped me come up with better definitions on my own (Sabrina Interview, 2018). She continued to talk about the instances where she should actively analyze her role during a lesson, saying to herself:

...what am I doing right now and I'd really stop and think about what I can do, should I ask that person what [they said] again, and bring them back in or something, or am I talking too much?...I think that really helped me in my own learning and probably helped the discussion in the classes I was in. (Sabrina Interview, 2018)

To tie in both the 'macro' and 'micro' levels of Harkness sensitivity, Kate said:

... you're really aware of what you're doing, and how you're affecting the Harkness conversation, and how you can make it better, and I think that comes with like, delving into Harkness deeper... (Kate Interview, 2018)

According to the students, the "delving into Harkness deeper" (excerpt above) can enhance students' understanding of the purposes of Harkness, the things that work, and the things that do not. In other words, the participants developed an increased awareness of their roles during a lesson discussion, as well as greater understandings of the kinds of participation needed for discussions to be productive and democratic.

This new 'sensitivity also led to some frustration among students. After class one day, Kim was obviously upset due to what happened within a classroom discussion I facilitated. It was not a very productive class, with many students speaking over one another, and I had to step in quite a few times to bring the discussion back to a productive place. Within my reflective journal, I wrote:

I talked to her after class and she was definitely frustrated, and I wonder if she is now taking on ownership of trying to get others involved because of her sense of frustration [with her peers] or, is it because she is involved in the AR group and has taken on this leadership role for herself? (DiPietro Journal, 2017)

As seen in the above excerpt, I also gained an increase sensitivity of students' frustration. Although I experienced the frustration before, the action research opened a space for me to dialogue with my students and to reflect on something I had not previously focused on in my teaching. When I asked, "What was one thing you learned?", Kim responded:

Honestly, like just to be a lot more aware, I found myself after discussing things [in the ARG] sitting in my classrooms noticing things that I never noticed before and it's like,

positive because I am making more of an active effort to be better like, Harkness student, but also its super frustrating. Because you're like oh my god, this is not the way it should be. (Kim Interview, 2018)

This sense of frustration was, at that time, an uncomfortable feeling. However, it shows a sense of growth within the student, and their increasing desire and motivation to improve her own learning environment. It is also a representation of some of the frustrations the students were having within their everyday classroom experiences, even though they were trying to learn using Harkness. Implications of this frustration and ownership of their own learning will be explored later in this thesis.

To summarize, the increased 'micro' Harkness sensitivity was observed in many of the participants throughout the time in the ARG, through their realizations and observations in their own classrooms, awareness of classroom dynamics, and in their own improvements to move the discussions in a productive manner. The students would often leave the action research meetings with a new-found responsibility, which at times led to frustration, but also fostered a new appreciation for Harkness.

5.3.2 Learning About Research

Another area of growth for the participants is located within their understandings of what is "research".

In their initial recruitment survey, many of the students showed interest in research; the students expressed their interest in doing research in the future or were generally curious as to what research entails. For example, Calvin commented:

I would always think like, even when I went to UBC for career day last year it was all like scientists looking through microscopes or like testing hamsters or something, so I

didn't like it [research], and it was only one person... (Calvin Journal, 2018) The above excerpt illustrates a commonly held view by students that research is conducted in a science laboratory. Many students also explained that they thought of research as comprising strictly of "numbers and graphs", that is, through a quantitative only lens. For example, Kate believed "...when I thought of research, I totally thought of like numbers and graphs and that kind of thing cause like as a science person, that's what I think of..." (Kate Interview, 2018).

The ARG gathered data through surveys, conversations, observations, and analyzed data as a group endeavor. Through their communal efforts, their understandings of "what is research?" started to change. Mark commented, "I like to turn things into numbers. But this thing is more of a social science research, and I still found that really interesting" (Mark Interview, 2018). Sabrina similarly expressed that "…you can work as a team, you can discover really cool things" (Sabrina Interview, 2018). It is through participation in action research that some of the students' understandings have shifted; moving past the domains of 'hard-science' research to seeing the possibilities of social science research. As Kate commented:

This has really opened my eyes into the social sciences part of things and kind of looking at people from a different angle, cause when I first initially wrote the survey and like finished the questions I was thinking more of it like, I thought we were going to do research with like outside courses so kind of looking at things like psychologically and like what helps students learn best and that kind of thing...but this is a to more interacting with the students [them]selves which was surprising but I really enjoyed it cause it gave me a whole new perspective on what research could mean (Kate Interview, 2018)

The transition from thinking research is only a quantitative endeavor within a lab, or undertaken by individuals alone, to understanding research can be socially driven and could include working with many people, has given the students a new way to conceptualize research. As one student described when asked "Do you think you'd do research in the future?", he replied: "Definitely, now that I realize how accessible it is" (April Interview, 2018). It is my personal hope that this accessibility to research has allowed the members in this group to hopefully move to a post-secondary setting, get involved with research, and continue to share their voice if the opportunity arises. The following section is a response to this theme and will tie in with key ideas raised in the literature.

5.4 **Response to Theme One**

Kemmis (2009) writes of action research being a transformative experience, where participants are critical of their organization and self-critical, and would aim to transform not only as a collective, but also as individuals based on an understanding of our practices. It is evident within the "macro and micro sensitivity" that through participation, the participants in this ARG have undergone a transformative experience. The opportunity to be critical about our learning environment, as well as ourselves as participants in Harkness, directly impacted both our performance and ideas about Harkness and education. The instances above outline ways in which students were able to grow as self-critical students, looking at their own educational experiences, as well as themselves as learners.

In Fielding's *Radical Agents of Change*, one of the main conclusions made was that student participation in an initiative like this ARG (students as researchers) could support their metacognitive growth (Fielding, 2001). In analyzing Harkness through the lens of "using Harkness to improve Harkness", the students gained a better understanding of the goals of this

teaching and learning method which, in turn, developed a deeper understanding of their role at the table and in their educational experiences. The students also developed new skills within a research context and gained insight into the world of qualitative research.

Goodnough (2014) noted that having students involved in YAR provides an opportunity to grow on a personal level, as well as change their school and community. The ability for students in this action research to own the process of improvement of the school (running Harkness development sessions), and to examine firsthand the problems and potential solutions, aligns with critical aspects of YAR (Goodnough, 2014).

5.5 Theme Two: Students' Voice Being Heard

Theme one showed how the ARG developed many of the same skills and actions as other action research projects, and the second theme will continue to explore another aspect, the democratic aspect, which the students felt passionately about. Action research has been a "legitimate way of developing knowledge for social action" (Kilpatrick, McCarten, McAlister & McKeown, 2007, p.352), and allows students to share in the "democratization of knowledge". The second theme will also be presented using student voice, which, in my opinion, is even more critical to the students' overall experiences of the action research process.

The second theme was discerned through the students' perceived need for their voices to be heard. There were many different utterances of students, either feeling that they were having their voices heard in the ARG or feeling the need to have their voices heard in the school and in their education. The students mentioned many times they enjoyed participating in the action research because their voices were valued. In this vein, when asked "Do you think we were successful in progressing the Harkness method?", Kate responded:

... I honestly think like just by having an action research group, that already was a huge step in its own. Because like, since I've gone here, Harkness has always come from the teachers and it's always been something that we've sort of been put into... no one has asked the students for their feedback on the method, like teachers will say "we do reflections on the class, or on yourself" but no one has really asked like, as a school, how are we doing, in Harkness. (Kate Interview, 2018)

Kate touches on something very important for the future of Harkness at the school and -- I would argue -- for education in general. While student reflections are common pedagogical tools employed in education (i.e., "ask the students"), this does not necessarily translate to an equivalent amount of interest in how the students are actually doing. Framed this way, Kate's representative excerpt also communicates how the students commonly perceive their lack of involvement in the pedagogical-making processes at the school or in their classes. In contrast, the opportunity for them to express their own opinions and to hear the opinions of others, was valued by the ARG members. This can be viewed in excerpts from Nina and Kim:

I liked everybody gathering together and we share our ideas about [Harkness], like our opinion on Harkness and how it impacts us and how we feel about it, and then using like what we know and our attitudes and opinions towards this thing to try to improve it. (Nina Interview, 2018)

I think everyone was very open to everyone else's opinions and was doing their best to be respectful and as high school students, that's the best level of democracy I've ever seen in a group of people. Like, people actively going out of their way to make sure everyone else's opinions were heard, which usually doesn't happen. (Kim Interview, 2018)

The ability for students to voice their opinions and be heard by their peers created a heightened level of excitement about Harkness and education. As Kate explained:

I also really enjoyed the atmosphere of this discussion as an Action Research group because as we were brainstorming the pros and cons, I felt very comfortable sharing my ideas and we were all so actively bouncing our thoughts on one another... the passion in the room was contagious and it was an awesome way to begin the project (Kate Journal, 2018)

The students found value in discovering how students outside the ARG also shared the same concerns and perspectives. The group was able to identify problems and possible solutions, which contributed towards, and also constituted, the knowledge they developed through the action research. The findings thus strongly resonate with Mitra's (2004) assertion that through partnerships such as the one in this action research, teachers and administrators can begin to acknowledge, "that students possess unique knowledge and perspectives that adults cannot fully replicate" (p. 653).

It was equally important for the students in the ARG to find solidarity with voices that were outside of the ARG (i.e., with other students in the schools). Through their reconnaissance efforts, the students were able to identify that improving Harkness skills and having their opinions heard were shared desires that students in the ARG and their peers had. As Kate noted in her reflective journal:

I was surprised (and of course happy!) when I saw there was (sic) over 200 responses! Some of them are super interesting too, showing that students are way more passionate about Harkness than we originally thought. (Kate Journal, 2018)

Recognizing they were not thinking in isolation, that other students and teachers were also thinking about developing Harkness and addressing issues helped motivate the group. This kind of collaboration fuelled the group's desire to continually find ways to help others improve. The word 'opinion' was one of the most common words in the interview transcripts. Similarly, another common utterance in the transcripts pertains to the students' desire to speak out in class and have their own voice as a part of the conversation and decision-making processes around Harkness. Thus, I suggest that knowing these desires were shared across the student body would make students in the ARG "happy" (excerpt above).

5.5.1 Theme Two Analysis

The students within this ARG were clear in wanting their voices heard. As demonstrated through the student-participants' experiences and perspectives presented in theme two, giving students opportunities to express their opinions and be heard, and to collaborate as agents of change and to take charge of their own development, can be achieved through YAR (Zeldin, Christens, Powers, 2012). Central to YAR, and similarly central to this ARG, was we worked towards identifying the students' issues. We did not take the perspective of administration, or teachers, or education in general when tackling educational issues. Rather, in the ARG, students' perspectives and experiences were focused on, and there was recognition that students the ones most directly affected by changes to their learning environment. Thus, their opinions mattered. As a team comprised mainly of students (and one teacher-researcher), we posed the questions, researched the problem, and attempted to find answers and solutions (Goodnough, 2014). Worth noting is how these processes have always been at the core of integrating Harkness into our classrooms. It has been argued that being co-researchers (or peer researchers), students are able to "transcend the issues related to the exercise of power normally associated with relationships

between adults and young people" (Groundwater-Smith and Mockler, 2015, p.164). Indeed, students in this ARG had opportunities to exercise that power in the form of contributing their knowledge and implementing their own conceptualized action. The next step for a democratic classroom is illustrated through this process. Not only were the students seen producing the work (action), but they also maintained this work through their own motivation and interest.

As modelled by Goodnough (2014), I assumed a dual role (p.364) of both studying the experience of the students, as well as participating as a group member and teacher. I helped to facilitate the discussions when needed and offered the decision-making processes to the students to ensure they were feeling the democratic aspects of action research in an authentic way. This process suggests how through authentic, democratic dialogues, schools can "continue to overcome the asymmetries of power so persistent in our contemporary society" (Groundwater-Smith & Mockler, 2015, p.168). Balancing this power by giving students an opportunity to be part of the problem identification and potential solution development, we communicate to the students that we, indeed, can work together to improve our school environment.

As Kate mentioned in the interview, "since I've gone here Harkness has always come from the teachers and it's always been something that we've sort of just put into". Indeed, there is no sentiment more accurate that can describe the students' feelings towards how decisions are made at an administrative level; although there were best intentions to put the students at the center, many of the students still feel that they were not adequately consulted in the process. There are often people speaking presumptuously on behalf of students (Fielding, 2001). Thus, schools should continually implement ARG, such as the one in this study, to bridge the gap between what the school thinks is best for the students, and what the students think is best for themselves. As in Fielding's (2001) study, it was soon evident students had the sophistication

and insight to offer substantial information about how they can improve Harkness, and their concerns often mirrored those expressed by the school staff. It is also noted in Rudduck and Flutter (2000) that students do not have much to say about curriculum, but they often talk about forms of teaching and learning they find challenging or limiting. The authors refer to this scenario as "conditions of learning", "how these regimes and relationships shape their sense of status as individual learners and as members of the community and, consequently, affect their sense of commitment to learning in the school" (p.76). In my opinion, this is the form of knowledge unique to the students, that they contribute to an action research discourse.

Although it would be difficult to measure the impact of ARG on the school community at this point, we did uncover many important aspects about how students want to interact with the school community. They do care about Harkness, and they want to improve themselves and their classrooms. Their desires strongly resonate with the theme explored here, the need to make explicit and to seriously involve students in the action research process. In my opinion, this is a step in the right direction for the improvement of Harkness at the school and will definitely lead to more questions and more research.

Chapter 6: Researcher Reflections and The End

As the ARG ended, there was evidence that the members involved walked away knowing more about themselves as students, researchers, as well as Harkness and school learning environments, and the school culture. The participants in the ARG overwhelmingly cited it as a positive experience using words like "enjoyable", "unique", "interesting" when reflecting on the experience. They were also able to communicate on the areas of Harkness and the school which needed improvement. These constituted the implications for the study, drawing from key experiences of the action research. In the view that the implications are also aligned with utterances that the student-participants themselves mentioned, I deviated from how implications are typically presented in research studies and included quotes whenever relevant, to enrich the discussion of the implications. Thus, collectively, the implications also embody the group thinking and reflective processes we engaged in.

This chapter will summarize key aspects and insights that the ARG uncovered during the action research process. It will cover issues beyond the classroom that the group identified, and our discussions of how we might address them. I also provide a discussion of how the potential future of action research at the school could include more voices and covering how action research could be employed to inform Harkness. The chapter concludes with a summary and my concluding remarks, followed by a short introspective piece that brings the writing of this thesis to a close ("The End").

6.1 Issues Beyond the Classroom

As the culminating action chosen by the ARG was to work with other students to improve individuals Harkness skills, we could have done more to address deeper issues. There were some profound reflections in the student interviews and journaling that focused on how the students felt about what the ARG accomplished. Although there was a sentiment of growth from the students within the ARG and the students our group worked with, there were still "issues that are at the very core that are going to be hard to change without everyone on board" (Kim Interview, 2018). Kim explained:

I think there are bigger issues that we need to solve that we maybe should have thought a little more about, we kind of dismissed cause like, the values at the school for the student's kind of don't overlap always with like the values of a good Harkness student and I think that would have been more valuable if we tried to solve that, but also, it's a lot harder to solve, do you know what I mean? (Kim Interview, 2018)

In my interpretation, Kim was talking about how we were trying to promote values of a "good Harkness student", which are collaboration, discussion, democratic discourse, sharing, taking risks, and equal opportunity. These values contrasted with students being competitive with grades, needing to maintain a certain average for entrances into universities/scholarships, feeling pressure from parents, and pressure from peers. Although teachers at the school are trying to develop the Harkness student, this runs against the highly competitive and "selfish" educational school environment (and our greater society). This tension is felt directly by many of the students actively trying to collaborate in a discussion-based setting. Thus, the core of some of the problems we are facing in the school could be attributed to this disconnection between the school's intentions of bringing Harkness to the forefront of our classrooms, and what the students and even greater community, believe is the purpose of education.

These student-generated insights, emerging from the action research project, is consonant with assertions made by other action researchers where student perspectives guide our changing practices through action research, in order to ensure that the conduct and consequences of our

practices are more rational and reasonable (see e.g. Kemmis, McTaggert, Nixon, 2014, p.88, Kemmis, 2014, p.4, Lind, 2007). In being action researchers, the student participants in this study were able to be self-critical, looking at how they can collectively transform their learning environment (Kemmis, 2009). This insight has also allowed me to reflect on my own classroom environment, prompting me to think about: How often am I allowing competition to be the driving aspect of tasks? When true collaboration is happening, what is the level of competition? How can we balance competition with collaboration? This will continue to shape the ways I approach assignment structures, classroom activities, and assessments.

Another challenge that our ARG identified relates to our current research school having small enrolment, and many of the students spend countless hours in the same classes with one another. Mark commented on this view:

Implementing Harkness in a school like this should be able to maximize the exchange of ideas and discourse, both intellectually and culturally. However, as students move to older grades, distinct friend groups become increasingly clear. These groups are defined by common intellectual and extra-curricular interests, with some influence from cultural upbringings (Mark Journal, 2018).

Mark initially held an understanding of the potential of the "exchange of ideas and discourse", but he quickly moves towards knowing that this potential is up against cultural and social aspects ("distinct friend groups") that could hinder implementing Harkness to its full potential. In a larger school where more classes are offered, students could encounter classrooms with students they do not regularly interact with on a daily basis. Thus, the challenge of having distinct groups that might make certain conversations "exclusive" to the group and exclude other students in the discussion could be avoided. In SchoolA, most students are with the same cohort of students

within every class. This contrasted with our ARG where we mixed students from different grade levels, interests, and disciplines during the workshop; the fact remains that after the workshop implemented, students are expected to sit with the same group of people on a day-to-day basis and are expected to have deep conversations that would evoke multiple perspectives. In other words, the effectiveness of the workshops our ARG ran could be limited by the existing organizational structures of the school.

In this action research, we were able to uncover the cultural and social aspects that could hinder Harkness, such as competitive culture, students feeling overwhelmed by volume of work, parental pressures, and societal pressures. Although we were not directly addressing all these aspects through our action research, we believe the action research sensitized us to these challenges. As Cammarota and Romero (2011) explained, through the process of PAR, we can start to promote community activism and empathy for others through personal changes which occur through involvement in action research (p.503). Framed this way, our action research is the start of a process of change.

Within the same reflection entry, Mark offered some simple suggestions for teachers to consider. These included making seating plans based on knowledge of student friend groups, discouraging the use of rubrics that only count quantity of participation, and to include a broader range of students within the ARG. Of interest is how the action research allowed students to consider tackling the problems from the lens of a teacher, as is illustrated by Mark's suggestions above. By extension, further action research could focus on tackling issues of cultural and social gaps (in relation to Harkness in this context) (see Cammarota and Romero, 2011, Goodnough, 2014, Lind, 2013, Smit 2013), and to test student-initiated suggestions (such as those from Mark).

As I further reflected on the possibility of selecting students who are in different peer groups to participate in an ARG, I anticipate this may not be easy task as it might be difficult to identify or develop a shared concern (as is consistent the foundation of action research). However, if posed correctly and if the students see the value of engaging in action research, an effort could be made to integrate students into this collaborative endeavor. In this vein, including more students who reported a lack of success in Harkness may offer interesting insights.

6.2 Inclusion of more voices

The working definition of YAP by Zeldin et al. (2012), as previously outlined in this thesis, covers many of the aspects of this ARG. Specifically, this section will focus on the important notion of "Multiple youth and adults deliberating and acting together" (p.388). In future iterations, it would be recommended that the ARG would involve more adults (administration and teachers). Currently, students felt ownership over the action research direction and took the lead on many aspects of the ARG, including reconnaissance and research phases of the action research. By extension, it would be beneficial to include a different adult voice in the conversation. Indeed, Zeldin and colleagues (2012) underscored the importance of young people developing multiple relationships with adults, where the actions and division of labour are split amongst all participants and are not based on age, but rather, specific motivations and skills that individuals bring to the group (p.389). Although some dynamics may change, and potential conflicts may arise, the two adults could agree on their roles prior to joining the ARG and would necessarily share an understanding that the students need to be the driving force of the research problems.

There were times, as the only adult in the room, the students leaned on my perspectives for guidance. Although there was a conscious effort noted in my journaling to allow students to

direct the research, there were times I had to make decisions for the group. After the first cycle of research, I wrote, "With a deadline approaching and a school year which is starting to ramp up, there is a bit of a feeling that we need to rush this process. Probably mostly from me" (DiPietro Journal, 2018). Alongside the wish of having more than one adult to help make the methodological decisions and to keep each other in check (member checking), the excerpt above denotes my constant battle of wanting to spread the decision-making to the group. This experience and similar ones I experienced make profound Zeldin and colleagues' (2012) assertion of the need for splitting the labour, where members can all contribute based on their motivations and skills. In my opinion, this is consistent with the importance of promoting democracy within the ARG.

The ARG group also noted we need to include younger students into the conversations. It was initially my choice to only include Grade 11 and 12 students as they had the most practical experience in the Harkness classrooms. Yet the older students were very focused on developing younger students' abilities, and they believed that including them in the ARG would be beneficial. For instance, several students noted the following:

"...well first of all I would include more younger students..." (Calvin Interview, 2018) "...If you had more variation if you had two grade 8s in there, two grade 9s in there, it will spread to the point where it reaches the whole, like all of the students, that's what I think..." (Kim Interview, 2018)

"The process can potentially be more successful if we had involved more lower-grade students in the observations portion and the "action" portion" (Kate Interview, 2018). "...especially coming into grade 8, you might not enjoy it and stuff like that, I definitely think that's interesting too, I forgot about that, that we really had been emphasizing that, and then we kind of dropped it, and I'm wondering if that's something you guys can do moving forward" (Kim, 2018)

The school has implemented many strategies to ensure teachers are scaffolding the skills and level of participation expected from Grade 8 to 12. It is fitting that the mentorship aspect related to this study came directly from the group with an apparent desire to encourage and mentor younger students in the school in how to be successful in the Harkness classroom. The 'action' aspect within this study came from the students feeling they could have a direct impact on their peers, which would further improve Harkness in the school. Similar studies often focus on mentorship in the teacher-student relationship (Groundwater-Smith & Mockler, 2015, Goodnough, 2014), but do not touch on the mentorship taking place between students within the action research group. Perhaps mentorship within an ARG could begin as an initiating action, with students from the previous ARG sharing their experiences and offering advice to the students who joined the new ARG.

Along this line of reflection of including younger students, I identified a limitation of the current action research study, as is related to the unfortunate consequence of choosing Grade 12 students for this ARG. These students will no longer be part of the school culture and community the year after, and the skills and attitude they have developed towards Harkness are now being utilized outside of the school. (This also attenuates the running another cycle of the action research with the same group of participants, and thus "break the cyclical nature of action research.) Nevertheless, the students benefited from gaining new skills and perspectives, and the school graduated some excellent leaders and exemplars for Harkness.

Upon reflecting on this limitation, I am considering how it might be beneficial to give younger students the opportunity to develop their Harkness skills through the AR, as suggested

by students in the current ARG. Recruiting younger students has the advantages of being able to include their voices and opinions from the beginning of their time at the school, which can in turn shape their educational experiences and instill a sense of ownership over their learning. Moreover, as with the students in this study, these students might develop more holistic views of their own educational experiences, which contrast the narrowly-focused performance targets of traditional education (Flutter and Rudduck, 2004, p.135). A move away from goal performance and towards paying greater attention to students' own learning goals resonates with Flutter and Rudduck's (2000) assertion, that "…we need to tune in to what pupils can tell us about their experiences and what they think will make a difference to their commitment to learning and, in turn, to their progress and achievement" (p.75).

The younger student participants could also be part of the ARG for a longer period of time, which could consequently help to grow their attitudes and skills over a few years at the school, rather than only a few months before they graduate. This would also provide more opportunities for them to become leaders and influencers in their classrooms, and to contribute to improving student learning at the school.

As alluded above, the inclusion of younger students involves the issue of sustainability and succession, which has been discussed in previous action research studies such as Smit (2013). The author recognized the difficulty of changing the school culture through their action research study, where "follow-up stages could not take off due to an untimely end to the project" (p.569). Then, Fielding (2010) commented "New structures that have the power to invite and retain commitment seem more likely to arise from transformative practices (in this case led by students) that gradually generate a cumulative authenticity and robustness over time" (p.129). Both Smit and Fielding highlighted the importance of sustainable action research processes over

time. Thus, setting the goal of making further action research "transformative" and "slowbuilding" might help achieve a more sustained change.

6.3 Action Research Informs Harkness

In my experience, the ARG was an ideal situation to see Harkness in its "purest" form. It reminded me of one of the most inspirational experiences I have had in working with Harkness, where my colleagues and I simply conversed about Harkness, much like we did in this ARG. It was one of the most powerful ways to see how discussions can further one's understanding of a subject if the group is focused and motivated. Similarly, bringing eleven students together to discuss a problem over an extended period, working together for a shared goal, and to be able to sit back and observe deep conversations about learning, education, and youth-perspectives, were inspiring. My experience resonated with Mirra and colleagues' (2016) explanation that:

By asking young people to put academic skills to use in the purpose of researching and addressing real social problems instead of engaging in hypothetical or abstract academic exercises, YPAR (Youth Participatory Action Research) offers a different purpose for teaching and learning—one rooted in social change and the realization of students' capacities in all areas of life, not only those related to their economic success. (p.4)

Taking the practical application of "using Harkness to improve Harkness" is an example of taking students' previous academic skills and using it to research and address real social problems. Working together with students towards a common goal brought a level of commitment and ownership to the group. A direct application of "Harkness skills" and experiencing the democratic discussions (which were also not to be assessed) enabled students to learn more about Harkness. These understandings were further strengthened as the students shared them with other students at the school (via the workshops). Given the students'

experiences, as reported in the findings section of this thesis, it can be concluded that action research could help extend and inform Harkness pedagogy. This is consistent with how earlier studies have also demonstrated how action research could support learning, but a large portion of the literature focused on improving teaching rather than learning (thus the focal point was on teachers rather than student participants).

For our action research to inform Harkness, I began distilling features of our action research critical to achieving this goal. A prominent attribute of our ARG was we had a shared end goal, which was described on multiple accounts and during the final meeting when the group was taking a final look at what we accomplished. The students felt the shared goal was important to their motivation and interest. This was noted by some of the participants:

... I'm really interested in hearing what other people have to say about this kind of thing and relating with a lot of what other people had to say also improved my experience because I felt like all of us were on the same page and there were really just working together for a shared end goal. (Julie Interview, 2018)

We used Harkness to do something, but in class we use Harkness to learn, and I think that's completely different ...when we are doing it in a goal, we I guess, we want to see results. And in order to see the results, we need to be 100% focused and 100% into it, make sure like, everyone was analyzing the data, even announcing the data... (April Interview, 2018)

The importance of having a goal to work towards is also contingent on the group members, where the willingness to participate in the ARG might naturally select students who are more motivated. This could have contributed to the success of using ARG to improve learning through Harkness. For example, some students, even in the ARG, held the view that Harkness, as

practiced in the school setting, is not effective in connecting curricular content with deep discussions. Conversely, they felt the ARG was an ideal environment for Harkness because:

...we had a goal and we [are] trying to accomplish it, but in a real Harkness classroom there can be a lot of digressions and distractions...the people who signed up are first of all very active, and they're mostly, critical thinkers and they want to get involved, so most of the team are good at Harkness, you know? (Mark Interview, 2018).

In my analysis, this interpretation of an ideal situation relates back to the Mirra et al.'s (2016, p. 4) statement of students addressing a real social problem through action research. According to the students, there is a disconnection between the usefulness of a discussion-based classroom to obtain good grades, and the goals of using Harkness to promote deep thinking and learning. In my opinion, grade-centered achievement could be related to economic success (see Mirra et al., 2016, p.4), which could devalue and demotivate students. This disconnect raises questions of why students do their homework, take notes during class, or study for a test. Phrased differently, the authenticity of a democratic discussion suffers when the pedagogical aims are questioned.

6.4 Extension to Action Research

This ARG can hopefully serve as an example of an action research group where students assumed the role of a researcher (Fielding, 2001; Smit, 2013) to improve their own learning environment and themselves. As Rudduck and Flutter (2000) pointed out:

Pupils are observant and have a rich but often untapped understanding of processes and events; ironically, they often use their insights to devise strategies for avoiding learning, a practice which, over time, can be destructive of their process. We need to find ways of harnessing pupils' insight in support of their learning (p.82).

The findings of this action research project underscore how schools could tap into students' perspectives of their educational experiences in order to improve the learning environment. This assertion resonates with Rudduck and Flutter (2000), where "the next step [in education] is to build more opportunities for pupil participation and pupil voice into the fabric of the school's structure" (p.83). As alluded to by the students' utterances as well as the overall findings, moving towards offering a space where teachers and students can collaborate will require careful planning and implementation. It will take work to build a climate both students and teachers can critique one another in ways productive to teaching and learning (see also Rudduck and Flutter, 2000, p.83). The students are aware of strategies devised to "avoid learning" (Rudduck & Flutter, 2000, p. 82). However, during the ARG, they could also encounter many strategies that could contribute to a positive class environment.

A limiting factor in this study, and what I anticipate would be a limiting factor in many action research groups involving high school students, is time. Limitations included the school year calendar, students being involved in many other commitments in the school, and students graduating. These limitations, all related to time, made it difficult to have a continuous action research program running over an extended period. As mentioned earlier, time could prematurely terminate an action research (Smit, 2013), despite being essential to the development quality of action research (see Zeldin et al., 2013).

In my own reflections, I have theorized about the lack of time, where it suggests not only the lack of physical time, but the pressures of this constraint could affect the methodological decisions I made in the action research, guised as a tension between my role as a teacher and researcher. As a case in point, I took a "detour" as described below about how lack of time contributes to the tensions between my role as a teacher and researcher.

6.4.1 Roles and Tensions – Constraints of Time

Looking back through my own notes and thinking about the research group, I gained perspectives on what it is like to be both a teacher and researcher, thus extending my initial understandings of the roles, possibilities and tensions as were discussed earlier.

Overall, it was difficult at times to know when it was appropriate to push the group onto the next stage, or when to meddle in conversation for a while longer. At times, it seemed like the group was stuck in not knowing when to make a decision to move forward. As a teacher, you want to move the "class" forward, discover new things and progress their learning. Yet, within this research, I needed to consciously take steps back and ensure they were coming up with the problems, and solutions, on their own. There were instances in my journaling where I debated this teacher-researcher tension. For example, leading into the first reconnaissance stage I wrote,

[I] Really had to steer today, unfortunately I think I will be steering a lot, as they don't know much about some of the research principles. When I stay steer, I think I am saying lots, but I am mostly asking questions. The conversation often feels as if its directed at me. Hopefully when they come back with observations, THEY lead the conversation and I will take notes" (DiPietro Journal, 2017)

There were also times where I would have to offer the students potential "paths of research" for them to discuss, instead of them coming up with the paths themselves. This happened, for example, after our first observation analysis, and we were unsure of what the next stage would be. As I noted "There is definitely a feeling that we are not progressing both, from myself, and students within the group, some confusion of what comes next and if we will ever get there" (DiPietro Journal, 2018).

In introspection: struggling with progressing the group sometimes outweighed our ability to think deeper about what we were doing, and this made us lose sight of one of the most important aspects of action research. As outlined by Kemmis (2014), "... one of the most important things that happens in critical participatory action research is simply that participants get together and talk about their work and their lives". As the ARG began to focus on "what's next?", we may have under-emphasized the importance of simply having a space to talk. Without this space, we might have lost some of the creative ideas that could, otherwise, have been created. There were options suggested but many times, they had to be distilled (by me) into a few options in order to progress in a way that was "efficient". In reflecting now, maybe this desire for efficiency, mostly influenced by deadlines, hindered a more creative outcome. Of essence is how the real limiting factor is time.

6.4.2 My response to the Constraints of Time

In response to the limiting factor of time, I have included the goal of a sustained project in my action research plan for next year.

Although I have set a goal to continue action research, it is also difficult to say if, in the subsequent efforts to run an action research project, it will be met with the same student and teacher (myself) commitment, enthusiasm, and effort that it had in the first year. Indeed, this is an issue of sustainability that has been raised in literature, often cited as a key aspect to continuing action research and truly making changes (Kemmis, 2014). This comes from the ability to ensure these initiatives are both impactful for both the students and the teachers.

Collaborative teacher inquiry models, such as action research, could help teachers at the school to collaborate in supporting school initiatives, and in improving teaching and learning environments. Including more teachers in the process (as discussed earlier), sharing the insights

(knowledge dissemination, such as through this thesis), and continuing to collaborate with peers in education might encourage others to use action research. Others might also be encouraged to explore ways to implement action research principles into their classrooms, as opposed to running action research outside of formal curriculum time. Taking steps towards engaging in action research could help bridge the gap between the teachers and the students, and help teachers develop new activities, strategies, and re-look at the "internal workings of [our] institution" (Rudduck and Flutter, 2000, p.83). Teachers could also make use of resources, such as Fielding's (2013) "Level of student involvement in school self-review & school improvement", to prepare students to be "researchers" in the action research. In this regard, offering space for students to initiate the research question, engage with teachers and other students, and know that their contributions will be heard and valued, could help students to move from being "active respondents" to becoming "researchers" (Fielding, 2013, p. 136).

6.5 Summary and Concluding Remarks

When presenting my findings to the staff and board members at the school, I began the presentation explaining, "at the end of the day, my overall goal was to bring a group of students together to get us *talking about* Harkness, *using* Harkness". Implementing action research as the foundation of the research group allowed the students to take control of the direction of the research. Consequently, the students gained a deeper understanding of Harkness, research, and education. Allowing students to share in the research process to improve their school situation is a complimentary step in developing the Harkness culture at the school. It is evident in the findings that their voice is an important part of this process, where the students appreciated when their opinions were valued and had many ideas to share about their educational experience. The goal of allowing students to talk about Harkness using Harkness was successful and with action

research as the complementary method, students were able to grow as individuals and help develop the school.

This ARG was able to develop students "Harkness sensitivity", and in the end, eleven students were able to go back to their classrooms and encourage others to speak up when they are not being listened to. They also helped to manage conversations and worked at contributing to a democratic classroom culture that is needed for Harkness to be successful. These constituted the prolonging effects of the 'action' the students engaged with in the action research project. The students were also able to have an authentic research experiences where they were involved in the cyclical, democratic decision-making process, involving action research-based data collection, analysis, recruitment, and culminating in action; the students engaged with all these processes with an overall goal of improving their learning environment and school culture. Of significance is how they were able to see research in a new light and have an enjoyable experience, giving them an optimistic outlook on research for the future.

The ARG was also able to continue to bridge the gap between teacher and student, which is a necessary part of democracy. Underscored through this action research study is how listening to what students have to say about their education will become increasingly important if we want to continue to push towards democratic teaching and learning. What they think about how the classroom is set up, what they are learning, and why they are learning will become vital to having vibrant and engaging discussions. If we continue to simply force curriculum and dated activities into the Harkness classroom, students might continue to clash with Harkness and have frustrating experiences. The students were highly aware of what Harkness can be and have many ideas on how we can get there if teachers were willing to listen. This compels reflection on how

students' experiences and opinions are crucial to pedagogical making processes, where action research could be a vehicle to support the inclusion of students' perspectives.

Progress happened within all participants in the action research. Sharing experiences with students and coming to the mutual realization we have the same desires and concerns mirror Fielding's (2001) sentiment that when students and teachers are brought together and share, these matters have a profound significance to both parties.

Reflecting on my overall experience of the action research project, being involved in this process has also allowed me to grow as a teacher. Working with these eleven students has offered me a glimpse into the perspectives of the students I work with every day in a way that is authentic and honest. In conversing with them once or twice a week about the problems they are having, the scenarios that they are finding success, their ideas for the future, and questions about research, I was able to learn about our community on a deeper level. Sitting at the Harkness table and working on a common project added another dimension of democracy and collaboration neither the students nor myself experienced before. The dimension of a shared experience in the research was something we could not obtain during class, which continued to enhance the Harkness relationships with the students involved.

The power dynamic within class is often grounded in the perceived ownership of knowledge, but within the action research, we were all seeking novel and unexplored knowledge together. At times, it was difficult to put a research project, which I intended to research for this thesis, in the hands of eleven 16-18 year old's. However, the potential, maturity, and commitment of these students were beyond all expectations, and there is much potential left to tap in to. In addition to this, being in a constant state of reflection through journaling, has opened another avenue for myself to develop as a teacher. Through reflection, I have personally gained

many of the same "sensitivities" to the school culture and to Harkness within the classroom. Strategies to enhance my classroom, by putting the student experience above all else, have been gained from working with this group of individuals.

Continuing to run the ARG will allow both the staff and students at the school to have open communication and learn from one another. Slowly improving how we are using Harkness and why we are using Harkness in a way that brings both parties who are involved (students and teachers) can bring real change through authentic research and actions. Improving the Harkness culture at the school will be the focus of the ARG in the future. A diversity of voices, ensuring there are multiple adults and students, as well as different levels of comfort with Harkness will be a requirement.

Therefore, a different recruiting method may be needed. Students who are very opposed to Harkness, or who are really struggling in class, may help deepen current understandings of the challenges associated with Harkness. Teachers might also help to spread the student voice within the staff; in this ARG, their voice was limitedly communicated through me.

More research is needed within many aspects of this ARG. The potential to improve student skills, the movement towards democracy, and authenticity of student voice through an experience like this can continue to be monitored over an extended period. True democracy in the classroom at this point is a lofty goal, will we ever be able to truly sit with students and learn based on their own interests if the goals of the teacher informed by curriculum is still in place? Will we see the effects of this ARG next year or will the progress we made be lost with the graduating students over the summer?

Based on the positive experiences of the action research project, and the insights drawn from this cycle of the action research, the ARG has been improved for next year. I will be starting the recruitment for the next action research cycle starting in September 2019.

6.6 The End

Now looking back at the entire process, I recognized the space between the end of the ARG and the data analysis was filled with uncertainty. There were times where I reflected and wondered if we really changed anything about Harkness. I can now say though, this process of looking through what the group accomplished in a short amount of time was a defining time in my educational career. To see the progress the students made, as students, as researchers, and as people through our few meetings was exceptional. In attempting to include students in the process of the research with a collective view to achieve positive change, we were able to form reciprocal relationships where, through this collaboration, we could all walk away from the process with an improvement in ourselves and start to think about how we can change the school. Giving students another opportunity outside of class to have an authentic voice was ultimately the goal. Looking to the future, this goal will be the guiding light of action research at the school.

To keep the conversation open whether in Harkness, action research, or any relationship should be the goal. Only though listening to other perspectives, can we truly start to learn.

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Appendices

Appendix A - Resources and Surveys

A.1 Journal Grid

This is the journal template used for my own journaling and tracking

Date:	Attendance:
Content (language):	Table (Changing Activity):
Reflections (Social Relationships & my relationship, Affect):	Key Observations (Changing structure):
Key Struggles (How is the project being viewed, how are we doing in CPA):	Successes and future steps:

A.2 Recruitment Survey

- 1. Weekly, I am involved in athletics for (include all involvement in school, out of school, practices and games):
- 2. Weekly, I am involved in service initiatives:
- 3. Weekly, I am involved in arts (band, art club, media club):
- 4. Weekly, I am tutored or tutor others:
- 5. Is there anything else you are involved in that I missed? Please include how many hours per week.
- 6. I excel in a Harkness classroom: (Scale from 1-10)
- 7. During a typical class, I participate in the discussion... (Scale from Always to Never)
- 8. What are some aspects about the Harkness method you would like to research?
- 9. What are some aspects about the Harkness method you really enjoy?
- 10. What are some aspects about the Harkness method that you think need to be improved?
- 11. What are some aspects about the Harkness method you struggle with?
- 12. The part that appeals to me the most about this project is...
- 13. What do you believe the purpose of this research is?
- 14. How do you think you can contribute to this research team?
- 15. What interests you about research in general?
- 16. I am unavailable at lunch/after school/mornings: (Days)
- 17. I am able to get to school at: (Time)

A.3 Reconnaissance Survey

- 1. Which class is this feedback for? (Grade, Subject)
- 2. How would you rate your discussion today (1-10)
- 3. What was the best and/or worst part of the discussion?
- 4. What could made this discussion better?
- 5. Do you feel supported in developing your Harkness skills?
- 6. Please explain.
- 7. What is the most important aspect of a successful Harkness class?

A.4 Second Reconnaissance Survey

- 1. What grade are you in?
- 2. In your opinion, what are the essential parts of a Harkness classroom?
- 3. To me, success at the Harkness table means...?
- 4. How would you rate your Harkness skills?
- 5. Do you currently feel supported in developing your Harkness skills?
- 6. Do you want to improve your Harkness skills?
- 7. If yes, why do you want to improve your Harkness skills?
- 8. From the following list, how would you like to improve your Harkness skills?
 - a. Being mentored by a teacher
 - b. Being mentored by a grade 11 or 12 student
 - c. Having a grade 11 or 12 student in my classroom on a regular basis
 - d. Having resources on Harkness skills such as resources or guidelines
 - e. Shadowing classes of higher grades
 - f. 'Practice discussions' on fun topics outside of class
 - g. More guidance, support, and feedback after discussion

A.5 Post Research Interview Questions

- 1. Describe your overall experience in working with the Action Research group.
- 2. How did you find the time commitment?
 - a. Were you able to balance school, action research, and extra-curriculars?
- 3. Will you participate in research in the future?
 - a. Did you learn anything about research?
- 4. What is democracy to you?
- 5. How do you feel our group functioned with regards to decision making?
- 6. Did you feel you had a fair say in our decision making?
- 7. What did you learn about Harkness?
- 8. Did this research change your opinion about the Harkness method?

Appendix B - Working Agreement

We, the Harkness Action research group conducted by Mr. DiPietro at SchoolA in Surrey, British Columbia have discussed and agree with the following principles and guidelines for the extent of our meetings and research

"In order to learn, or to understand the viewpoint of another, we must learn to listen-and, where necessary, to open spaces for others to contribute" (Kemmis, 2014, p.44)

Collaboration

- Be cooperative when discussing and resolving dilemmas put forward
- Take others' opinions and suggestions with an open mind
- Be encouraging and supportive with others' ideas
- Openness and honesty, all opinions are welcome, all opinions are valued
- We can challenge one another's ideas, comments, and concerns respectfully
- We can revisit this document and change when necessary

Respect

- Listen and be listened to during discussions
- Create a comfortable and collaborative environment

Ethics

- Avoid using students and teachers' names
- Any conversations had in the research group stay in the research group
- You can leave the group, consequence free, at any time

Punctuality

- Honor the commitment we made at the beginning of the year (time and effort)
- Give notice if you are going to be late or absent
- Make every effort to be here at the start time
- Comment on the shared document when absent, we can only move forward with everyone's participation

Appendix C 22 Traits

22 Traits of A Harkness Classroom

Appears in A Classroom Revolution: Reflections on Harkness Learning and Teaching (Cadwell and Quinn, 2015)

By: Jim Heal, 2015, Page 200

- 1. Students regularly participate without 'prompt questions' from the teacher.
- 2. Students refer to the reading/prep during discussion.
- 3. Students use evidence to support their assertions.
- 4. Students stay on topic and help others stay on topic.
- 5. Students incorporate ideas gained from independent reading and thinking into class discussions.
- 6. Students listen closely to the comments of others, considering carefully their points before speaking.
- 7. Students address comments to the class (instead of to the teacher).
- 8. The course readings and discussions inspire students to find out more through further reading, thinking, and discussion.
- 9. Students refer to the comments of others, using their names.
- 10. Students make eye contact when speaking.
- 11. Students are able to summarize information to make connections between others' points and their own.
- 12. Students are able to make connections between various aspects of course content, and between course content and their own knowledge.
- 13. Students make their voices central to the learning environment
- 14. Students prepare for class by having all materials.
- 15. Students further the discussion with their input, avoiding repetition.
- 16. Students prepare for class by reading, annotating, thinking about and generating ideas for discussion.
- 17. Students avoid dominating discussions.
- 18. Students create opportunities for others in the discussion to contribute or make connections to what each is saying.
- 19. Students actively influence the learning of the group.
- 20. Students are willing to ask questions and/or to challenge others constructively to deepen understanding.
- 21. Students stay engaged throughout the discussion, even if they aren't the ones doing the talking.
- 22. Students work with fellow students to find the answers rather than relying on the teacher.

Appendix D Rubric

	AREAS TO IMPROVE	PROFICIENT	OUTSTANDING
PREPARATION	Came into the conversation without any apparent preparation No evidence of notes or citing the articles within discussion Did not do any extra research	Shows evidence of having made some notes Prepared some questions Shows evidence of looking up extra information Some citation of resource	Evidence of having thorough notes and evidence to support claims Cites resources when sharing opinions Prepared questions and points before session
LISTENING	Very frequently distracted and not paying attention to the distraction Frequently involved in side conversationsoften looks engaged with the conversation Rarely distracted, able to pull themselves back to the discussion Rarely connect to other'sengaged with the conversation Laptop is closed and/or out Frequently refers back to an upon others' opinionsVery frequently distracted and not paying attention to the distraction Frequently involved in side conversationsoften looks engaged with the conversation Rarely distracted, able to pull themselves back to the discussion Sometimes makesengaged with the conversati Laptop is closed and/or out Frequently refers back to an upon others' opinions Rarely/never speaks over of participants		Rarely/never speaks over other participants Rarely/never involved in side
QUESTIONING	<i>NO</i> questions asked Questions stop the discussion Questions are distracting and side- track the conversation Questions are previously asked/answered	Questions are about facts Questions are about others' opinions Questions are easily <i>Googleable</i> Questions that could have been prepared before the discussion	Questions drive the discussion forward Questions establish meaningful connections Questions are insightful and profound
ETIQUETTE Negative Attitude Cutting others off Uncooperative and unaccepting to ideas of others Yelling or shouting Uninterested body language Makes disrespectful comments that may disrupt the discussion		Body language, tone of voice, and eye contact display a somewhat engaged attitude, but are easily distracted The individual attempts to encourage others and comments are usually respectful Attempts to make meaningful comments that could drive the discussion forward	Body language, tone of voice, and eye contact display an engaged and attentive attitude The individual encourages others to be included and involved in the discussion Makes respectful and meaningful comments that value everyone's opinions and demonstrates an open- minded approach to each idea

QUALITY vs. QUANTITY	Frequently dominates discussion, making it impossible for others to express their ideas Contributions are often repetitive or irrelevant to the discuss	Sometimes dominates discussion, making it difficult for others to express their ideas Some contributions made are insightful	Never dominates the conversation; allows and encourages others to shares their opinions Consistently contributes unique and insightful ideas to the discussion
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	Additional comments
Preparation	
Listening	
Questioning	
Etiquette	
Quality vs. Quantity	
Overall	

Appendix E - Research Cycle diagram

The Plan, Action, Observe Reflect I the middle of each section represents the general cycle of action research. The numbered sections represent what happened during this ARG and how it fits within the research cycle.

