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“Just Let Me Go at It”: Exploring Students’ Use and Perceptions of Guided Inquiry

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Abstract

Guided Inquiry (GI) is an emerging pedagogy based on the Information Search Process (ISP), a research-based information-literacy model identified by Carol C. Kuhlthau (1985, 1988a, 1988b, 1988c, 1989b) and operationalized by the Guided Inquiry Design (GID) process (Kuhlthau, Maniotes, and Caspari 2007, 2012, 2015). This study investigated perceptions and use of GI by Year 9 students at an Australian independent private school engaged in an inquiry unit in their Personal Development, Health, and Physical Education class focused on “Overcoming Adversity.” Two academic researchers and the school librarian collaborated on this mixed-methods study collecting data from survey questionnaires, focus-group interviews, and students’ work in digital inquiry process journals and final product presentations. Findings indicate students understand important elements of the GID process, including its independent nature, structure, and pacing through stages, and the element of choice. However, they differ on whether these aspects have a positive or negative effect on their learning and research process. An implication for GI practice from this study is a greater focus on allowing students independence and to proceed at their own pace, as expressed in a student’s comment and the title of this paper: “Just let me go at it.”

Introduction

Background

Our collaborative study is set in the context of the theory and practice of Guided Inquiry (GI) in the school library with particular focus on how students use and perceive GI processes and scaffolding to impact practice. Emphasis on inquiry learning is timely, given the global need for

21st-century skills incorporating information literacy, critical thinking, creative solutions, and the skills of working in teams. In his *Tucker's Lens* blog from the National Center on Education and the Economy, President Marc S. Tucker described these skills:

These are not new skills. What is new is the determination of a growing number of nations to teach them to all of their students. Even though these are not new skills, they will not be widely found among a nation's students unless the education system of that country, taken as whole, is driven by standards, curriculum, assessments and teacher education systems fundamentally different from those that were previously used to drive that country's mass education system. (2012)

The combination of a focus on 21st-century skills and the movement to rigorous, standards-driven curriculum, delivered by teachers following research-validated pedagogy such as GI, is also timely for its adoption in national standards and curricula. Worldwide, education systems are leaning to a focus on inquiry learning to foster 21st-century skills in countries like Australia and the United States. For example, a review of the Australian curriculum by Mandy Lupton revealed the prevalence of inquiry skills in all subject areas, but also the absence of a framework to support learners in developing these skills (2014). In the United States, the Common Core State Standards are visionary in their approach to literacy, citing "close, attentive reading that is at the heart of understanding...[students]...reflexively demonstrate the cogent reasoning and use of evidence that is essential to both private deliberation and responsible citizenship in a democratic republic" (Common Core State Standards Initiative 2010, 3). Further, the American Association of School Librarians recently released the *National School Library Standards for Learners, School Librarians, and School Libraries* (2018), firmly placing inquiry learning as the pedagogy of choice. David V. Loertscher noted that the standards will "amplify the guided inquiry material published by Leslie Maniotes" (2018, 4).

In addition to the timely nature of studying inquiry, the collaboration of researchers on our study team also bridges the academic and practitioner perspectives, as the team includes an academic researcher with experience as a school librarian, a former school librarian recently turned post-secondary educator and researcher, and a practicing school librarian and action researcher with over nine years of experience teaching GI. Ross J. Todd (2009) has suggested a framework for research designed and used by school librarian practitioners and academic researchers to carry out and use evidence-based practice (EBP) in schools; this framework is particularly applicable to our research. The framework is adapted here to present our paper as follows:

- *Evidence for practice* creates the foundation for research, and includes patterns and trends in the academic literature as presented in our literature review.
- *Evidence in practice* refers to the process of research, covering the GI unit itself and our methodology.
- *Evidence of practice* details the findings and outcomes of the research and includes our interpretations of the findings.

The present study replicates our earlier research (FitzGerald and Garrison 2016; Garrison and FitzGerald 2016) on GI at an Australian urban independent school with Year 7 girls. Limitations on that study included sample attrition, incomplete participation from the teachers and school librarians, and lack of experience and unfamiliarity with GI on the part of students, teachers, and school librarians. Our current study sought to overcome these limitations.

The students and educators at the school where the research was conducted have a longer history with and deeper understanding of GI. Students at the school have experienced GI many times, starting in primary school. For this reason, the two academic researchers asked the school librarian to collaborate on this research. She is an experienced educator who has worked with GI as it emerged from the Information Search Process (ISP) across the K–12 range. Further, she is an active action researcher, and has published and presented on her research in practitioner journals and at conferences (Sheerman 2011a, 2011b, 2014). Additionally, it was clear that working with the school librarian in designing the study and analyzing the data would help to address the limitations from the earlier study.

Purpose of the Study

Though a large range of academic research on the ISP exists, this research seeks to address a gap in empirical research around GI and the framework created to support GI, the Guided Inquiry Design (GID) process. The purpose of this study is to explore students' perceptions and interpretations around using GI, particularly what they think about the process and how they believe it helps or hinders their learning and research processes.

Our research question is:

How do students use and perceive the Guided Inquiry process while engaged in research projects?

Using this question as a guide, our literature review explores further themes with ISP, GI, and GID in relation to our study and to building a foundation for using *evidence for practice* (Todd 2009).

Literature Review and Evidence for Practice

Introduction

As described by Todd (2015), *evidence for practice* is “existing formal research...[that]...provides the essential building blocks for professional practice” (2015, 9). A formal literature review in the areas of ISP, GI, and GID, including elements of our study, identified the following themes:

- unique processes of GI, including the ISP and GID; and
- key characteristics of GI, including:
 - its independent nature,
 - the structure and pace of the process, and
 - the impact of choice as part of the GI process.

ISP and GID Processes

GI is a developing educational practice based on ISP, which originated with Carol C. Kuhlthau's renowned research studies of information behavior throughout the late 1980s (1985, 1988a, 1988b, 1988c, 1989b). (See Kuhlthau 1989a for a summary of these studies.) Underpinning the

ISP are classic educational theories around constructivist learning from scholars such as Jean Piaget, Lev Vygotsky, John Dewey, and Jerome Bruner (Callison 2015, 60). The ISP is:

...a complex learning process involving thoughts, actions and feelings that takes place over an extended period of time, that involves developing a topic from information in a variety of sources, and that culminates in a presentation of the individual's new perspective of the topic. (Kuhlthau 1989a, 1)

More recently, the ISP was revisited in a 2008 study by Carol C. Kuhlthau, Jannica Heinström, and Ross J. Todd (2008) that showed the model to be as relevant as ever, especially in the digital environment. During the 1990s and the first decade of this century, Kuhlthau (2004) continued her work on the ISP, beginning the process of creating GI pedagogy. This effort at crafting GI pedagogy was assisted by Todd's research (2006) and the refining of GI theory and practice by Kuhlthau and her colleagues Ann K. Caspari and Leslie K. Maniotes (2007, 2012, 2015) as they defined and developed the GID process. The GID process is a practical inquiry model based on ISP, which underpins GI.

Kuhlthau, Maniotes, and Caspari aligned the stages of ISP with GID, demonstrating that ISP has a mirror image in the GID process (2012). This alignment is shown in table 1.

Table 1. Connecting the Information Search Process to Guided Inquiry Design.

What Students Are Doing in ISP	Stages of ISP	Stages of GID
Initiating the research project	Initiation	Open
Selecting a topic	Selection	Immerse
Exploring information	Exploration	Explore
Formulating a focus	Formulation	Identify
Collecting information on focus and seeking meaning	Collection	Gather
Preparing to present	Presentation	Create and Share
Assessing the process	Assessment	Evaluate

GID is different from other inquiry learning models in its emphasis on delaying the creation of a topic focus (i.e., an inquiry question) until the student is engaged by the topic and has some idea of its scope. This delay allows for broader coverage of the initial curriculum topic. Emerging themes from our study center around other important aspects of GI including:

- the independent nature of GI, which encourages students to engage in a more individual way to a topic than in teacher-led instruction;
- the structure and pace of engaging with GID to complete the final product; and
- the impact of choice on engagement with GI.

Independent Nature of GI

One of the fundamentals of GI is achievement of curriculum objectives by pursuing independent research. A curriculum topic may be “learned” by students, teachers, and school librarians, who can form an inquiry community to investigate the topic. Fostering this independent research includes dividing students into inquiry circles to simultaneously allow them to follow an aspect of the topic in which they are interested and for educators to subdivide the topic into component parts. Independent exploration of a personally interesting aspect of a topic is critical to GI. Motivation and interest are key elements. In GI, students:

...form their own questions through experiences, reflection, conversation, and writing in the early phases of the inquiry process...Students gain a sense of ownership and accomplishment in the work they are producing that gradually leads to competence, independence, and expertise. (Kuhlthau, Maniotes, and Caspari 2015, 4)

Shelley Buchanan (2016) studied middle school students involved in an autonomous student-driven inquiry unit. Six themes emerged from that study including: joy in study immersion; appreciation for autonomy; satisfaction with self-selected topic; enthusiasm for learning; considerations of time management; and student stress in project completion. GI is student-driven inquiry, but it is possible that constraints arising from scaffolding and scheduling (pace) affect student independence and satisfaction.

Structure and Pace of GI

The structure of GI is not negotiable. The way an inquiry task is structured in GI is based on the ISP, observed and supported in many studies by Kuhlthau (1988a, 1988b, 1988c, 1989a, 1989b). The stages by which researchers of all ages carry out research (if they are doing so with commitment and interest) are Initiation, Selection, Exploration Formulation, Collection, Presentation, and Assessment (Kuhlthau 2004, 29). These steps have been adapted into the GID process model as shown in table 1. “GID is a pedagogical and experiential model for designing and implementing inquiry units. It also incorporates the ISP and comprises the following seven stages: 1) Open, 2) Immerse, 3) Explore, 4) Identify, 5) Gather, 6) Create and Share, and 7) Evaluate” (Lupton 2015, para. 6). This structure guides the pacing of the inquiry unit as well.

According to Kuhlthau, Maniotes, and Caspari, employing a GI approach helps students “gain deep understanding of curriculum content and also internalize an inquiry process that they can use in academic settings, the work world, and everyday life as they apply the same inquiry strategies” (2012, 1). These scholars further noted that by “consistently learning through the phases of the GID process, students gain competence and independence for taking responsibility for their own learning process” (2012, 169). It is likely that, as students experience more GI units and internalize the ISP/GID processes, GI can move to more student-directed learning, such as might happen in independent research projects in the senior years of secondary school. An example is the New South Wales Ancient Historical Investigation in Australia (NSW Education Standards Authority 2017).

Impact of Choice

A highlight of GI is the “Third Space,” where the curriculum topic meets the world of students’ interests, allowing a choice of topic that the student is particularly motivated to pursue (Maniotes

2005). The impact of the Third Space on curiosity is evident in the work of Leslie K. Maniotes (2013) and of Leslie K. Maniotes and Jannica E. Heinström (2016); those authors have emphasized the essential beginning phases of GID as being critical to raising curiosity. However, research shows that testing, especially in the secondary years, can have an adverse impact on students' curiosity and engagement (Polesel, Dulfer, and Trumbull 2012). In Leanne Bowler's 2010 study on the impact of curiosity on information behavior, she explored the effects of boundaries around curiosity, such as deadlines, finding credible sources, and writing an essay. While such boundaries are necessary, she concluded that task design should focus on early engagement of curiosity as a countermeasure.

In Todd's EBP Model, *evidence for practice* serves as the foundational dimension underpinning school library practice by identifying important themes and research published by the profession. This literature review set the foundation for our methodology. We view our research as an example of Todd's next dimension, *evidence in practice* (2009).

Methodology and Evidence in Practice

Overview

Evidence in practice enlists school librarians to be "reflective practitioners integrating available research evidence with deep knowledge and understanding derived from professional experience" (Todd 2009, 89). This transformational dimension is at the core of the process of EBP and describes the methodology of our study in designing the research and GI unit. We used mixed methods to support our research question investigating students' perceptions around using GI in research projects and replicated previous research in a similar setting (FitzGerald and Garrison 2016).

Setting

The setting for this study is a private coeducational Christian school in an Australian suburban area. The school serves students in Kindergarten through Year 12. The GI unit was implemented in four Personal Development, Health, and Physical Education (PDHPE) sections and was titled "Overcoming Adversity." (See Appendix A for the full unit.) The school librarian researcher created the unit and process journals with feedback from the collaborating PDHPE teachers and the other two researchers. In this unit, students considered the overarching inquiry question: Is adversity good for us and can it help us to grow? For their final projects, students chose a person who has overcome some form of adversity, and then investigated and profiled that person. Some students chose people in their families who have overcome difficulties; others chose people famous in the media for living with adversity.

Roles of the Researchers

As previously noted, the school librarian at this school is one of the researchers of this study. She has been working since 2008 to implement GI at the school and is an active action researcher, constantly reflecting and improving her practice (Sheerman 2011a, 2011b, 2014). Her favored method demonstrates Michael Fullan and Maria Langworthy's "positive contagion" (2014, 10) through continuous cycles of action research, and encourages teachers and students to demonstrate what they have learned through individual GI units. The ongoing aim in her effort is

to encourage teachers to alternate their traditional teaching pedagogies with the use of an inquiry framework.

The role of the school librarian in this study was to manage the ten-week GI unit with the students as she normally would as part of her teaching duties and to collect the participating students' work used for data analysis. These products included their process journals and final products described later in this section. With the other two researchers, she also helped finalize the data-collection instruments (survey questionnaires and focus-group interviews), conduct the focus-group interviews, and analyze the data. As part of her school librarian role, this researcher used the information gained in this study to help hone her teaching craft and deliver more-effective services to students when engaged in GI units.

The academic researchers involved in the study were charged with many of the basic tasks in designing and delivering research, including developing the framework for the study, applying for ethics approval, creating and distributing recruitment information, and designing data-collection instruments and procedures for analysis. The academic researchers' experience in empirical research complemented the more-practical experience of the school librarian researcher and helped to ensure the validity and reliability of the data collected and analyzed. While the three researchers carried out different roles in the study, we maintained a strong collaboration in designing, collecting, and analyzing the data presented here.

Participants

The participants were Year 9 students undertaking the unit in the second term of 2017. Approximately one hundred students in four PDHPE classes at the school were invited by the two academic researchers to participate in this study. Twenty-two students (approximately 20 percent) volunteered to participate, seventeen boys and five girls. While having randomly selected students could strengthen the findings from the study, randomly selecting students was not possible due to ethical considerations when working with youth. Further, because of the strong qualitative nature of this research design and the importance placed on the participants' perspective in the data, having participants who were motivated to share their experiences and engage actively in the project supported the validity of the data collected and analysis. The participants were in three separate PDHPE classes based on their academic ability. All but one of the participants had engaged in the GID process previously. Some students in the sample have engaged in GI units numerous times since upper primary school. Participants chose their own pseudonyms for the study.

Data Sources and Analysis

Overview

We used four different sources of data in this study, including:

- process journals completed by the students during the unit,
- survey responses taken at three points in the unit,
- focus-group interviews at the end of the unit, and
- final products presented by students at the end of the unit.

Using multiple sources of data, including the personal perspective of the students in the surveys and focus groups and examples of their work in their process journals and final products, gives strong support in answering our research question. Each of these data sources is described in further detail below.

All of the students enrolled in the PDHPE classes, whether they were participating in our study or not, engaged in the topic and unit identically, completing the process journals, taking the questionnaires, and presenting their final products to their class. The only difference in engagement was that our study participants were in the focus-group interviews at the end of the unit. Researchers used only the process journals, questionnaire responses, and final products of students who had consented to participate in the study.

Process Journals

The process journals gave us a view into the participants' research process while engaged in the entire project. (See Appendix B for the process journal.) The process journals were accessed digitally by students and organized by the GID stages and weeks covering each stage. Within each week, students wrote down what they learned in their lessons and also "Ideas to explore further." We used the process journals of participating students to support the creation of the focus-group interview guide and follow-up questions to the students on their process. The collaborating PDHPE teachers marked the students' process journals as part of their class participation grade.

Survey Questionnaires

The survey questionnaires were designed in part using the School Library Impact Measure (SLIM) developed by Ross J. Todd, Carol C. Kuhlthau, and Jannica E. Heinström (2005) to investigate students' experiences when engaged in inquiry projects. (SLIM has been used in similar research studies; see for example, Oberg 2009; Todd 2006.) The surveys were administered at three points during the unit: Open (first stage of GID); Explore/Identify (third and fourth stages of GID); and Evaluate (seventh and final stage of GID). The survey included the same six questions each time: three questions on a Likert-scale rating of one to five and three open-ended questions. The questions are shown in table 2.

Table 2. Survey questionnaire.

Number	Type	Question
1	Likert-scale	How much do you know about this topic?
2	Open-ended	Describe in a few sentences what you know about this topic.
3	Likert-scale	How interested are you in this topic?
4	Open-ended	Describe in a few sentences what interests you about this topic.
5	Likert-scale	How confident do you feel about the GI process?
6	Open-ended	Describe in a few sentences how you feel about the GI process.

We analyzed the three Likert-scale questions using descriptive statistics and investigated these questions for each of the three stages as well as changes across the three stages.

Question two was analyzed using the coding method developed as part of SLIM (Todd, Kuhlthau, and Heinström 2005). In this method researchers determine the number of statements in an individual response and rate each as a Fact, Explanation, or Conclusion (FEC). In the FEC method, Fact statements are basic descriptions stating something quite simply; Explanation statements include more-complex descriptions about why or how something occurs. Conclusions are the most complex statements of all, including more evaluative and analytical comments to explore a concept (Todd, Kuhlthau, and Heinström 2005, 8). In similar research using GI, Lee FitzGerald (2015) further expanded the FEC method in creating three levels of conclusions: C defined as a straightforward expression with no justification or elaboration; C1 defined as including one justification or elaboration; and C2 containing more than one justification or elaboration. We used FitzGerald's expansion in analyzing the statements from question two.

Questions four and six could not be analyzed using the method described above because they target students' perceptions on the topic and GI. Therefore, these questions were used only to help create the interview guide and support final analysis of the findings.

Focus Groups

At the end of the unit, the three researchers conducted five 30-minute focus-group interviews with the twenty-two participating students. We used a semi-structured approach in designing the focus-group questions (Patton 2002) incorporating elements of SLIM (Todd, Kuhlthau, and Heinström 2005) and responses to the surveys and process journals. This approach to the interviews allowed us to engage the students using some of their specific reactions. Before the focus groups were conducted, one of us did a pilot test of the guide with a Year 7 student from a similar school also active in using GI. Based on this pilot test, questions were adjusted to improve clarity.

After transcribing the five focus-group interviews, the two academic researchers among us began the process of analysis using Patton (2002) and Vaughn, Schumm, and Sinagub (1996) as guides. (Due to time constraints, the school librarian practitioner was not involved in this level of the analysis but was consulted throughout the process.) This analysis included: 1) reading through the transcripts and making notes of recurrent themes or "big ideas" (Vaughn, Schumm, and Sinagub 1996, 105), 2) highlighting specific quotes from the students that informed the research question of how students perceive GI, and 3) putting these quotes into broad categories.

Next, all three of us met to discuss the categories derived from these first three steps and agree on code names, definitions, and examples. Next, the two academic researchers each separately analyzed one of the transcripts using the codes, and then met to compare and finalize the codes before analyzing the remaining four interviews. The final codes are shown in table 3.

Table 3. Codes from the focus-group interviews.

Main Code	Subcodes	Definitions
Independent Nature	Student-Centered	Any reference to the individualistic nature of GI being led by the student instead of the teacher.
	Teacher-Centered	
Structure and Pace	Stages	Specifically refers to the structure and/or stages of GID.
	Inquiry Process Journal	The role of the process journals in organizing and structuring the project.
	Product	The structure and pace of GI as related to the final product.
Choice	Passion and Interest	Students showing excitement about choosing their own topic.
	Finding Information	Issues with finding information on their chosen topic
	Time	Issues with time related to choosing their own topic.

Final Products

Each student had choice in how to present the final product, and a wide range of formats were chosen. For example, using the Scribeit recording app student C.E.M. made an online presentation on how young surfer Bethany Hamilton returned to surfing after losing her arm in a shark attack. Mynamajeff filmed a dramatic video representation of his grandfather's personal experiences with poverty and domestic violence during the Great Depression. Esteban performed an engaging slam poem about the intense hardships Oprah Winfrey overcame to become one of the most-influential media figures in the world. Because the school librarian recorded the presentations, all of us were able to view participants' presentations later and take notes. These final products were used to add further support to the overall analysis.

Findings and Evidence of Practice

Overview

Todd has described *evidence of practice* as "the measured outcomes and impacts of practice...derived from systematically measured, primarily user-based data" (2009, 89). This

section covers the outcomes of the research and includes our interpretations of the data. The following discussion of our findings reports the data collected and analyzed quantitatively and qualitatively.

Quantitative Findings

Quantitative findings were based on SLIM analysis of questions 1, 3, and 5. The data shown in table 4 include the mean questionnaire scores for the twenty-two participating students across the three stages and the changes moving across the stages. The Likert scores ranged from one to five.

Table 4. Mean questionnaire scores across the three stages.

Open			Explore/Identify			Evaluate		
Q1	Q3	Q5	Q1	Q3	Q5	Q1	Q3	Q5
3	2.4	3	3.75	3.25	3.8	4.4	3	4.3
From Survey 1 to 2 and 2 to 3			0.75	0.85	0.8	0.65	— 0.25	0.5
			From Survey 1 to 3			1.4	0.6	1.3

As shown here, the first question asking students about the level of their knowledge of adversity increased across each of the three stages, suggesting a growth in learning. This was the highest increase of all three questions. The third question asking students their level of interest in the adversity topic increased from the first to second stage, but decreased moving from the second to third stage, the only score to show a decline. The fifth question asked students to rate their level of confidence in the GI process; this score increased consistently across the three stages. These findings were similar (though on a small scale) to Todd's results (2006). It is interesting that students continue to focus on collecting large numbers of facts, possibly indicating a need for further teacher input into reading complex sources and synthesizing information.

The data in table 5 shows SLIM analysis of the second survey question asking students what they know about the topic of adversity. As noted in the methodology section, SLIM uses Facts, Explanations, and Conclusions to score the content of this open-ended question. The frequency of each rating overall for the twenty-two students across the three surveys from the beginning, middle, and end of the unit are also included in table 5. Blank responses were noted as "no response," and students who answered with responses like "nothing" or "I do not know" were scored a zero.

Table 5. SLIM analysis of survey question 2 across the three stages.

SLIM Ratings	Open	Explore/Identify	Evaluate
0	8	0	2
F-Facts	11	24	23
E-Explanations	6	3	13

C-Conclusions	0	1	1
C1- Conclusions1	0	2	0
C2- Conclusions2	0	1	4
Total Statements	17	31	41
No Response	4	8	3

Overall, a movement was perceived from initial fact-based, sparse responses in the beginning of the unit through to an increasing number of Facts with some move to Explanations in the middle of the unit, and finally to even more Facts, with some move to Explanations and Conclusions as students progressed through the stages of GI. There was limited but clear movement to Conclusions. These findings confirm Todd's findings using SLIM analysis where students measured more accumulation of facts in their overall knowledge of the topic they were researching than the complex understandings noted as conclusions (2006).

Students also had more to say in the latter stages of the process, moving from 17 total statements in the first survey to 41 in the third survey. While over a third (eight students) of the sample did not respond to the second survey, the statements in the second stage showed growth as well. These increases suggest an emergent, deeper understanding of the content and topics the students studied through the unit.

Qualitative Findings

Overview

Our qualitative findings indicate that students' perceptions of GI reflect critical elements of the approach. Contrasting attitudes about independence in learning revealed a surprising number of students who preferred the tried and true teacher-led "chalk and talk" method. Some participants felt that they need more guidance from teachers (and not just the school librarian) throughout the process of researching, and that being left to do this research entirely on their own makes them anxious—even though the librarian and teachers were available to answer questions.

A similar set of divergent attitudes to the structure and pacing of the inquiry unit emerged. Some students found the structure of the process booklet (underpinned by GID) useful and practical; others (particularly in the class considered the most able academically) found the structure restrictive and irksome.

The group was less divided about the impact of students being able to choose their own topic. Most participants liked selecting a research topic that related to their own interests. However, some students complained about having chosen their own topic through interest, but then discovering that finding deeper information about that topic was quite challenging.

The remaining discussion is organized by these three notable aspects of GI (the independent nature of GI, its structure and pace, and the impact of choice) and the students' comments around them.

Independent Nature

In the focus-group interviews and survey questionnaires, students often identified the independent nature of GI as a core element to the approach. Amy described it as "more self-guided" while Susie said it was "student-led." Matt said, "GI is independent learning so you do it all yourself, and you have some help from teachers, but it's mainly by yourself."

Students were divided on whether this independence was a positive or negative thing. Firenze spoke well about this dichotomy:

The independency can go both ways; it can mean you can either completely forget about [the project] and not keep on track or some people see this as an opportunity to actually stay on track, and keep on with the subject because it's something they can do however they want.

Students who preferred teacher-centered learning noted various reasons for this. Amy said she likes teacher-led learning better:

Because then, they give the information to me, and I don't have to do as much work, but I'm not lazy, but, like, I prefer, like, I just like it better, when I have a set thing of what I have to do and, like, the teacher is in charge.

Dinkie echoed Amy's comment saying, "[GI] is something where you do most of the teaching yourself, which I don't really like. I like it more when the teacher tells you...It's just easier."

Students identified time management and distractions as factors contributing to their preference towards teacher-led learning. Chuck noted, "You have to be really self-motivated to get work done in the GI process 'cause no one is forcing you to really do anything." Esteban also mentioned the distraction of his mobile saying that he finds it challenging "not getting distracted by every notification that pops up on your phone."

At the same time, students from all three class levels saw positive aspects in the independent nature of GI. Firenze said, "It's very good; it's spaced out enough for you to work on your own independently." Susie agreed it was a good thing to "pick your own topic, do your own research." Esteban said he "like[d] a little bit of self stuff."

Students recognized the issues that come with independence. Jeff41 acknowledged the independence in GI could be good if "the students choose to take, like, the initiative on it...and put their full effort in." Palpatine noted how "it really depends on how you manage your time. Like, if you put in the effort to do the research beforehand, everything else becomes so much easier because you're making your job so much harder if you just procrastinate."

Based on the students' comments, it is clear they grapple with the issues and responsibilities that arise with independence.

Structure and Pace

Our data contained many references to the structure and pacing of GI, forming one of our codes for analysis. Students were divided on this element. Some found the scaffolding of the process journals and stages excellent, especially in creating a better product. In contrast, others found them tedious and limiting.

Some students noted finding the structure of GI with the various stages covered each week in their process journals as hindering their progress. Katniss thought that the stages can be "sort of a

downside because you feel like you have to stick to it, like stop at this point and then you can't continue on." Mynamajeff said:

I just like going through things at a lot faster rate, you could say, than other people...I just want to keep going and like sometimes I might even know, OK I know how to do this stage so why go through the motions of writing it all down or all that when I could just go straight to the next one?

These students wanted to progress on the work, to be left to "just go at it" as Taylor described in our paper's title or "do it out of order and probably have an easier time doing it" as Pablo mused.

At the same time, comments from students indicated they understood and could appreciate the basic structure of GID. Jughead said, "I like how GI just sort of like breaks everything down for you so instead of having to do everything at once, you can do everything in stages, and this is pretty helpful as we go." Matt described the structure as "a well-laid-out process." These students were often concerned with falling behind, which they noted was especially hard to do in a GI unit given the robust structure and pacing. Dom stated, "like it's really hard for a student to fall behind in their work." Fonzie depicted a learning path in his quote, "You actually have somewhere to go from with it, so there's actually a starting point to go from, so you know which direction to go into when doing it."

Other students spoke about the structure and pace of GI in connection with their process journals, which guided them through the research process, leaving them with space to stay organized and record notes and references. Kinsley thought, "The structure's good, and you feel, like, scheduled and stuff." Jeff41 asserted that he "really liked the format in this GI where we could take notes in the [process journal]" and that the journal was "straightforward" and "helpful." Annie agreed that "it works better and it helps you research information more and find the correct information and put it in where it's needed."

Students were also in agreement with the positive impact that the structure and pace of GI had on them as they created their final products. In his last survey response asking to describe feelings about GI, Bob said, "The GI helps me with building up the information to the end product needed." Kinsley concurred in describing how GI improves her final product: "I like it because it gets the most information out of all of like your work and stuff, like, it helps make your report, or whatever's at the end, more like, filled with information, and better."

The Impact of Choice

Though some students would rather just be given a topic, and get to the end fast, students in our study were mostly positive about the impact of being able to choose their topic. Dylan noted, "I just like being able to choose my own topic and research something that interests me. So I will be more inclined to actually research and get into it." Matt connected his passion in a topic he chose to his learning as he stated, "It, like, builds on your knowledge."

As previously mentioned, students had to choose and study any person who had suffered an adversity in his or her life, which could be someone known personally or a celebrity in the news. The sense of passion and interest participants had for their topics was quite obvious when in the focus groups we asked them each to describe their person. Students who investigated a person with a direct personal link to them such as a family member or friend were especially eager and animated in the focus-group interviews and in their final presentations.

Despite students' eagerness and enthusiasm for the chosen topics, two other issues surfaced with the topic of choice: finding information and time. Chuck said, "When you've really narrowed it down to something so specific," a hallmark of GI, "it's hard to, like, find information or answers to your question because there's just not that much out there." Bob agreed with Chuck in saying that he tends to "go off topic" in his search for information on his chosen subject. Dinkie and Jack connected this difficulty in finding specific information back to the issue of time as they reflected on the time it took for them to decide on their topics, which, as a result, put them behind the rest of the class.

Diverse Perceptions

The data reported in this section reveal students' diverse perceptions of GI. Students' survey responses noted mostly increases in knowledge, interest, and confidence in using GI. Their Facts, Explanations, and Conclusions scores using SLIM analysis ratings supported that they learned facts and deeper knowledge about the adversity topic throughout the unit. Students showed strong feelings towards the GI process in positive and negative ways. While some enjoyed the freedom and independence the process gives, others just wanted the teachers to lead the learning. While some appreciated the organized structure and planned pace of the unit with the stages guided by their process journals as students worked toward the creation of their final products, others felt limited in their ability to progress with their work. While the impact of choice was noted as increasing interest and passion in the topics studied, for some students these choices negatively affected time use and finding information. The following section delves further into these findings, making interpretations and connections to how they can connect to practice.

Interpretations of the Findings

In this study, students identified—without being prompted—important aspects of GI as they noted its independent nature, structure and pace, and focus on choice, as well as GI's ability to build engagement with a topic and the research process. At the same time, students indicated that these elements are not always what they want as learners. While they can appreciate something like the independence, they might not actually want to learn independently for different reasons. Even though some have had experience with GI since primary school, they still want a balance between independence and receiving direct input from the teacher. Esteban said this directly: "I do want a teacher to show me things, how to do it, 'cause if I'm doing something wrong, I'm not sure." Students were worried about going down the wrong path or doing an assignment incorrectly.

Further, their confidence is low. This low confidence was shown in the students' survey responses to the fifth question, when asked for their confidence levels in GI during the first stage of Open. While the average score then was a 3 (out of possible 5) and did move up to a 4.3 by the end of the unit, in the focus groups the students still voiced their lack of confidence. "I personally do not think I am good at research," Amy noted when asked what she learned about research through the overall process. Chuck gave a strong presentation about his person Nick Vujicic (founder of Life Without Limbs), kept on track with a well-organized process journal, and had the most comprehensive bibliography of all students. Nonetheless, he also was unsure of himself in our interviews, saying, "I am confident using [GI], I just am not confident on how well, like, how good it is in the end." We were left wondering why the students could feel this way.

The school librarian researcher noted that lack of confidence may be related to lack of feedback from teachers and peers during the unit. Marks for teachers' assessments of the process were returned to students three weeks after the conclusion of the unit. By then, students were studying a new topic. Also, there was not time for peer review in which students could see each other's work and offer feedback; peer review is usually included in this school's GI units. Feedback is an essential confidence-builder and needs to be delivered by teachers and peers while the learning is fresh—ideally, while the learning is in progress.

Further, the stress of being in a high-achieving school was visible in some of our learners. Amy, a student in our highest-achieving class, said in the focus groups and her survey responses that she prefers "teacher-oriented learning." Of the statements coded with the eleven codes representing a negative perspective on the independent nature of GI, over half the statements were made by students like Amy in our highest-achieving class. These students show elements of being *strategic students* as identified by Jannica E. Heinström and Ross J. Todd (2006) in a study investigating students' feelings, emotions, and motivations while engaged in an inquiry project. Such students showed anxiety and lack of self-esteem through the project, paralleling our high-achieving students here.

Similarly, in Lori L. Franklin's study on the everyday-life information-seeking practices of high school students from affluent families, she noted that these learners wanted detailed, explicit directions so that they could finish their assignments, and "specific instructions for accomplishing this" (2013, 59). If they are given more freedom, which students have in inquiry learning, the result is "panic" (2013, 59). Students in Franklin's study shut down creatively and asked for help before proceeding. They were familiar with the "testing culture" and wanted exemplary scores on assessments, with a concomitant tendency for pedagogical practices to freeze into hand-feeding them. Like the students in Franklin's study, our students may be feeling these additional pressures because they are in a school and family culture of high achievement.

As found in previous research (FitzGerald and Garrison 2016), the collaborating PDHPE teachers in this study gave us the impression that testing and pressure to cover content-heavy curriculum have a negative impact on time available for creative pedagogy such as GI, especially as Year 9 is a National Assessment Program—Literacy and Numeracy (NAPLAN) testing year in Australia. While the school librarian and teachers collaboratively designed the GI unit, teachers expressed anxiety about ensuring that the content of the syllabus would be covered and lacked confidence that students would be able to achieve curriculum outcomes through GI alone.

Our findings indicate that this anxiety is also being felt by students. To overcome these concerns, the teachers gave direct content input for ten minutes at the start of each lesson, and the students reflected in their journals on how this aspect of the unit affected their chosen research topics. While this direct instruction added to understanding and covered content, it also minimized the time left for personal research in each lesson period. Like us, Buchanan (2016) noted a concern for time available and time management as a theme in her study of students engaged in an inquiry unit.

Although our SLIM analysis revealed that students in the study did write some explanations and conclusions when asked what they learned about their inquiry topic, they overwhelmingly answered with facts. This finding is similar to what researchers have found in other studies using SLIM to investigate students' experiences in inquiry globally (Oberg 2009; Todd 2006). In the U.S. context, Ross J. Todd found students tend to subscribe to additive and integrative styles of knowledge construction, with more students adding Facts to their arsenal than Explanations and Conclusions (2006). Diane Oberg suggested similar results in her use of SLIM to analyze

secondary students' engagement in an inquiry unit in Canada (2009). These surface-level understandings are the exact opposite of the purpose of GI, which is intended to create a deep, engaging understanding of the student-chosen topic and inquiry question.

Connections to Practice

Connections in practice included practical, methodological, and design considerations in designing future research opportunities and collaborative GI units. First, as a practical consideration, careful attention must be paid to the design of the process journals as they guide the students from the beginning of the unit to the final product at the end. Process journals should be designed so that students need not repeat entries and can use the information they collect as strategically as possible in their learning towards their final product.

Next, students should be allowed to progress at their own rates through the GID process. An evident theme in our focus groups was that some students wanted to progress more quickly through the project. In contrast, others wanted to avoid the pressures of keeping up entries for the stages according to a timeline. To reiterate Taylor's request, "Just let me go at it." For students already familiar with the process, their experience should be used to greater advantage.

Including the student voice in evaluating practice is an important methodological consideration, although evidence voicing students' evaluations of practice can be challenging to collect. Vaughn, Schumm, and Sinagub noted that when using focus groups with youth, social issues can impact and limit participant responses (1996). But at the same time, "interactions among participants enhance data quality" (Patton 2002, 386) and can create an exciting environment in which to reflect on their shared experiences (Smith, Newman-Thomas, and Stormont 2015, 253).

When attempting to include students' voices in the research, having the entire research team conduct the focus groups was especially useful. Although the potential existed for the school librarian researcher's closeness to the school to bring bias into the research, her engagement was positive in the delivery of the research and unit, and in the conducting of focus groups because she knew the students and they knew her. The school librarian also brought the valuable perspective of a practitioner into this study. Her collaboration helped us avoid some of the limitations in our earlier research (FitzGerald and Garrison 2016) and also addressed a gap in such research relationships in the school library research identified by Rebecca J. Morris and Maria Cahill (2016).

Nonetheless, some issues with using GI persisted, including the teachers' embracing of GI, their lack of understanding and support for GI, and the pressure of covering the curriculum. Engaging students deeply in inquiry requires a lot of time, and time for this unit was limited. While all but one student came to this GI with the benefit of prior GI experiences, none of the teachers had used GI before. The planning and prior learning the classroom teachers did with the guidance of the school librarian was very important to the final results. Luckily, all of the teachers were keen to try a new methodology, and one teacher later expressed that GI would be perfect for a senior class she teaches in a related subject area. Since the study, the school librarian has assisted this teacher with setting up research-based work with that class.

It is clear from our research experiences here that collecting the teachers' voices in this research would have given our findings a deeper perspective relevant to the school library profession, the school librarian's collaboration with teachers, and EBP. How students use this learning to shape

further experiences can be observed only by the teachers in the classroom, and further studies could be done incorporating this observation of students' application of GI.

Further limitations on interpreting the findings from this study include the characteristics of the setting and the twenty-two voluntary participants. The setting of a private school where students may come from more-affluent and academically motivated backgrounds must be considered. Also, the sample size of twenty-two students with seventeen boys and five girls, while an appropriate size for qualitative data collection, is still quite small and homogenous, and, therefore, our findings may not be generalizable to other populations of young adults.

At the school, a second phase of our study is currently under way in history classes. In these classes, the same groups of students are studying the Industrial Revolution in England and Australia. We are using the same methodology and data-collection instruments with some alterations to the survey and focus-group questions. In this phase, we seek to understand how students approach GI in different subjects and across school terms. Further, we hope to analyze our findings in the context of the American Association of School Librarians' new *National School Library Standards for Learners, School Librarians, and School Libraries* released in November 2017. The new standards are especially useful for our study as they update elements of the original SLIM analysis process (Todd, Kuhlthau, and Heinström 2005).

Next Directions

The unique collaboration of this research team, a school librarian who routinely does action research and two academic researchers, gave us a wide-ranging perspective on designing our study, analyzing our findings, and making connections to practice. Local evidence is key in the efforts of school library researchers to identify best practices to improve student learning and make an impact in schools. As Todd asserted:

The challenge for the profession is to move beyond simply reporting state studies to crafting a compelling narrative that starts with local evidence of practice and links to the wider formal research evidence for practice. Local evidence narrative is the missing piece. (2015, 12)

It is our belief that our study can contribute to this narrative of research evidence for, in, and of practice.

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Appendix A: GI Unit: “Overcoming Adversity”

GUIDED INQUIRY AT WORK WITH THE AUSTRALIAN CURRICULUM

UNIT OVERVIEW - Year 9 PDHPE Overcoming Adversity

Context:

Students have examined factors that contribute to and shape the development of self and how it might vary in different contexts. They now explore the characteristics and qualities displayed by resilient people and strategies used to support themselves in different situations.

Students initiate ways to support themselves and others. They identify organisations and key people who can assist in various ways. Students develop problem-solving techniques to work through challenges in a practical way. They recognise how their sense of self impacts on their decisions, behaviour and ideas about the world.

Christian World View Considerations

- Wisdom of Solomon in making sensible decisions
- Acknowledging that there will be tough times and through these we develop perseverance, character and hope.
- Placing hope and faith in things that will not fade
- Being assertive and courageous
- We are all built differently – react differently. Acknowledge our uniqueness.

Key Inquiry Question	Curriculum Skills
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<i>What if adversity is actually good for us and helps us to grow?</i>	
Learn about	Learn to
supporting yourself	<p>explain how thoughts can affect feelings and behaviour and practise strategies to manage unhelpful and unrealistic ways of thinking</p> <p>examine the role and impact of stress on health and rehearse a range of positive management strategies</p>
challenges and opportunities	<p>analyse and predict previous and future life challenges and identify opportunities for personal growth</p> <p>explore the social and cultural influences on the way people think about life challenges</p>
strengthening resiliency	reflect on a past situation which has required change; identify difficulties encountered and personal characteristics and skills which assisted in dealing with this change

The diagram consists of a central circle labeled "Successful learner, confident and creative individual, and active and informed citizen". Around this center are eight segments, each representing a general capability: Literacy, Numeracy, ICT Capability, Critical and Creative Thinking, Personal and Social Capability, Ethical Understanding, Personal and Social Capability, and Intercultural Understanding. The segments are arranged in a circular pattern.

- Literacy
- Numeracy
- ICT capability
- Critical and creative thinking
- Personal and social capability
- Ethical behaviour
- Intercultural understanding

Curriculum Skills (including general capabilities)

Outcomes

- 5.1 analyses how they can support their own and other's sense of self
- 5.2 evaluates their capacity to reflect on and respond positively to challenges
- 5.6 analyses attitudes, behaviours and consequences related to health issues affecting young people
- 5.7 analyses influences on health decision making and develops strategies to promote health and safe behaviours
- 5.11 adapts and evaluates communication skills and strategies to justify opinions, ideas and feelings in increasingly complex situations

discrimination, harassment and vilification	explore the impact of discrimination and difference on marginalised groups	5.15 students devise, justify and implement plans that reflect a capacity to prioritise, think creatively and use resources effectively. https://www.australiancurriculum.edu.au/f-10-curriculum/general-capabilities
mental health	challenge negative community perceptions of mental health and identify reasons why these have developed suggest positive strategies to deal with loss and grief	

Learning scenario

Students will research a case study of a person who has overcome adversity such as surviving a traumatic event, or living with a chronic condition, recognising that adversity can create an opportunity for growth.

They will create a product that requires them to include a:

- character profile of the person including characteristics and qualities
- analysis the role and effect of challenging life circumstances, including access to and use of support networks, services and strategies to manage health, social and cultural influence on the way the person approaches their life challenges
- reflection on the effect the person had on them and how they can implement these ideas, advice and management strategies into their lives.

<https://arc.bostes.nsw.edu.au/go/sc/pdhpe/activities/the-opportunity-of-adversity>

Students will share their learning through a creative medium (after the assessment date) – art, poetry, video, Prezzi, Picture book, etc. then evaluate and reflect on their experience of learning having documented the journey in ‘diaries’.

Assessment: Inquiry task – Overview – Description for students, with summary of key dates

Students will be assessed on their ability to:

- profile an appropriate person to interview or research as case study
- analyse a range of issues in relation to how the chosen person overcame their adversity
- reflect on the chosen person's adversities and discuss how this may affect the student's own life

Assessment **Due Term 2 Week 7** – Overcoming Diversity 'In Class'

8/06/17 – Class 9.3 and 9.4

9/06/17 – Class 9.1 and 9.2

Students will submit their **log books** containing weekly entries of learning and reflections and their '**mind map**' of planning for their final presentation which will be in Week 9 (Log format to be determined – Blog, Word doc, Google Doc, Microsoft 365 doc, wiki page)

GI Log Books: (From the syllabus)

When using diaries, journals and logbooks as an assessment technique, teachers could assess students on their ability to:

- identify their own personal development over time
- identify key indicators and evidence of their own learning
- show appropriate depth of analysis.

Guided Inquiry Stage	What the teaching team is doing - Strategies	What students are doing – Tasks
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<p>OPEN</p> <p>Teachers create a powerful open that invites students to engage in the inquiry topic.</p>	<p>Lesson 1</p> <p>Alinda introduce the research study and permissions/Students complete first research survey</p> <p>Alinda briefly revise the GI process</p> <p>Total – 20-30 mins</p> <p>Class teacher: Teacher introduce topic with video clips</p>	<p>First research data survey – Survey Monkey link</p> <p>Inquiry Journal</p> <p>What is Adversity? How is this relevant to me?</p> <p>Students make first journal entry with reflections of what they already know and how it applies to them personally – maybe a personal example from their circle of friends/family.</p>
<p>Resources</p> <p>Half empty or half full joke: https://www.reddit.com/r/Jokes/comments/2dznjt/glass_halfempty_or_half_full/</p> <p>Nick Vujicic video clip/s</p> <ul style="list-style-type: none">https://www.youtube.com/watch?v=zOzsjEmjjHshttps://www.youtube.com/watch?v=yAiTMaipAG8		

<p>IMMERSE</p> <p>Students build their background knowledge by immersion in the content.</p> <p>Students reflect on the content and select a topic for further investigation.</p>	<p>Lessons 2</p> <p>Teacher introduces first ‘learn to’: supporting yourself (activity?)</p> <ul style="list-style-type: none"> • explain how thoughts can affect feelings and behaviour and practise strategies to manage unhelpful and unrealistic ways of thinking • examine the role and impact of stress on health and rehearse a range of positive management strategies 	<p>Students search and select a person/adversity to research – using provided links from Diigo (or from personal knowledge and plan for interview/s)</p> <p>https://www.diigo.com/outliner/cx5mcz/Overcoming-Adversity?key=i4tzpsuv8b</p> <p>Students write a journal entry linking this person to ‘supporting yourself’ (Complete for homework)</p>
<p>Resources</p> <p>The opportunity of adversity: https://www.ted.com/talks/aimee_mullins_the_opportunity_of_adversity</p> <p>Twenty stories: https://www.humanrights.gov.au/twentystories/videos.html</p> <p>Tales of the one in ten; https://www.thesmithfamily.com.au/stories/tales-of-the-one-in-ten</p> <p>Australian story index: http://www.abc.net.au/austory/programs/default.htm</p>		
<p>EXPLORE</p> <p>Students browse and scan through a wide range and variety of resources to explore interesting ideas around their topic. “Go broad”</p>	<p>Lessons 3 & 4</p> <p>Teacher introduces ‘learn to’: challenges and opportunities</p> <ul style="list-style-type: none"> • analyse and predict previous and future life challenges and identify opportunities for personal growth 	<p>Students search and take notes on their selected person for research – using their log for noting relevancy</p> <p>Students write a Journal entry linking this person to ‘challenges and opportunities’ (Complete for homework)</p>

	<ul style="list-style-type: none">explore the social and cultural influences on the way people think about life challenges	
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Resources:

IDENTIFY Students develop an inquiry question or questions and form a focus for their research. The question or questions will frame the rest of the inquiry.	Lesson 5 Teacher introduces 'learn to': strengthening resiliency <ul style="list-style-type: none">reflect on a past situation which has required change;identify difficulties encountered and personal characteristics and skills which assisted in dealing with this change	Students complete the second Survey (CSU research) Students compose a personal research question relating it to the Key inquiry question 'What if adversity is actually good for us and helps us to grow?' Students write this in their journal. Students write a journal entry linking this person to 'strengthening resiliency' (Complete for homework)
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Resources

GATHER Students collect detailed information from a variety of	Lesson 6 Teacher introduces 'learn to': discrimination, harassment and vilification	Students plan how they will present their work to share and begin to gather using their log of sites. (make a Mind Map for assessment)
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information sources – “Go deep”	<ul style="list-style-type: none"> • explore the impact of discrimination and difference on marginalised groups 	Students write a Journal entry linking their person to ‘discrimination, harassment and vilification’ (Complete for homework)
Resources		
CREATE Students organise their gathered information to create their product – “Tell the story”	Lessons 7 & 8 1 st lesson Teacher introduces ‘learn to’: mental health <ul style="list-style-type: none"> • challenge negative community perceptions of mental health and identify reasons why these have developed • suggest positive strategies to deal with loss and grief 2 nd lesson Teacher guides presentations and gives advice after reading reflections.	1 st lesson Students begin to create their presentation Students write a Journal entry linking their person to ‘mental health’ (Complete for homework) 2 nd lesson: Students continue to create their presentation Students write a Journal entry writing a personal reflection about aspects of their learning today as it all comes together (Complete for homework)
	Lesson 9	

SHARE	Teachers organize this activity Book theatrette?	Students present their work to teachers and peers Students write a Journal entry writing a personal reflection about another student's work that has had an effect on their thinking about this topic (Complete for homework)
Resources		
Assessment – Evaluate Students reflect on their content learning and the progress through the inquiry process.	Lesson 10 Culmination conversation (teaching team) Teachers lead class forum on the topic area with students commenting with their own examples in different learning areas.	Culmination conversation (Students) Students take part in the Class Forum discussion. Final survey monkey for CSU Research Study completed online.
Evidence Strategies / Assessment (Formative / Summative; Informal, formal)		

Appendix B: Inquiry Process Journals

Inquiry Process Journal:

Each lesson you will be required to work on both your Inquiry Journal and your Inquiry Reading Log.

You will be assessed in Week 7 on these three aspects of your work:

- profile an appropriate person to interview or research as a case study
- analyse a range of issues in relation to how the chosen person overcame their adversity
- reflect on the chosen person's adversities and discuss how this may affect your own life

Inquiry Journal

To: Reading Log

Week 1 Open Stage	Stop and Jot: What is Adversity? How is this relevant to me?
	What did I learn this lesson?
	Ideas to explore further (Notecatcher) Why should I care? How do I understand adversity? What particular forms of adversity am I familiar with?
Week 2 Immerse Stage	Stop and Jot: “Supporting Yourself and others”
	What did I learn this lesson?
	Ideas to explore further (Notecatcher) Walk a mile in their shoes: In what ways could I develop the resilience to be able to support this person? How could I help him/her?
Week 3 Explore Stage	Stop and Jot: “Challenges and opportunities”
	What did I learn this lesson?
	Ideas to explore further (Notecatcher)

	Hidden opportunities: Has my person found many challenges and opportunities through his/her disability? Could I imagine myself making this situation an opportunity? What qualities of mind do I need to develop to be as strong as my person?
Week 4 Explore Stage	Stop and Jot: "Strengthening resiliency"
	What did I learn this lesson?
	Ideas to explore further (Notecatcher) The human spirit is stronger than anything that can happen to it: What qualities does my person have that makes him/her so brave and resilient? Could I imagine myself living with this disability?
Week 5 Identify Stage	Stop and Jot: "Discrimination, harassment and vilification"
	What did I learn this lesson?
	Ideas to explore further (Notecatcher) Do you see me, or my disability? Has my person suffered from discrimination, harassment or vilification? What could I do to stop such unfair treatment happening in his/her life?
Week 6 Gather Stage	Stop and Jot: "Mental health"
	What did I learn this lesson?
	Ideas to explore further (Notecatcher) Attitude is everything: How has my person developed and maintained such tenacity and mental strength? Could I have been so strong? What can I do to develop my own mental toughness and sensitivity?
Week 7 Create Stage	Assessment Week - Inquiry Circles: Join with 4 others and discuss your research: What did I learn from them?
	Ideas to explore further (Notecatcher)

Week 8 Create & Share Stage	Stop and Jot: Reflection on your presentation
	What did I learn this lesson/from others?
	Ideas to explore further (Notecatcher)
Week 9 Share Stage	Stop and Jot: What did I learn in this lesson from others?
	Ideas to explore further (Notecatcher)
Week 10 Evaluate Stage	Stop and Jot: Evaluate one other presentation. Name of person: Praise points: Question/s from you: 'Polish' ideas:
	What did I learn this lesson?
	Ideas to explore further (Notecatcher)

Inquiry Reading Log**(To Journal (top))**

Resource Links: <https://www.diigo.com/outliner/cx5mcz/Overcoming-Adversity?key=i4tzpsuv8b>

Week 2: Immerse Stage Skim and Scan then select an adversity and an affected person. Decide from two examples.

Adversity / Person	Notes and points of interest	Relevance
1.		

2.		

*My selected ‘person of interest’ is:

*Adversity:

Weeks 3 & 4: Explore Stage - Skim and Scan

(Note sources and relevance)

Source	Notes and “quotes”	Relevance

Week 5: Identify Stage

- Write a Research Question related to: *What if adversity is actually good for us and helps us to grow?* (Have this question checked before proceeding)

Week 6: Gather Stage - Read deeply, determine importance, locate main ideas, find evidence

(Note sources and relevance)

Source	Notes and “quotes”	Relevance

Week 7: Create Stage - Organise your information into a presentation

Bibliography: Present your Bibliography of resources used in your presentation here:

Week 8: Share Stage - Present the ‘product’ of your research to the class

Week 9: Evaluate - Your own work; A peer’s work; Complete a final survey

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