

FOSTERING STUDENT WELL-BEING: INVESTIGATING THE RELATIONSHIP  
BETWEEN STRENGTHS-BASED TEACHING STRATEGIES AND  
STUDENT ATTITUDES TOWARDS LIFE AND LEARNING

by

AMY MORROW

Bachelor of Education, University of Victoria 2000

Knowledge Translation Project

Submitted in Partial Fulfillment of the Requirements for the Degree of

MASTER OF ARTS IN EDUCATIONAL STUDIES – SPECIAL EDUCATION

in the

SCHOOL OF GRADUATE STUDIES

TRINITY WESTERN UNIVERSITY

September, 2022

© AMY MORROW, 2022

### **Abstract**

“If our only knowledge about students is limited to the negatives in their lives – low test scores, low grades, negative behaviour reports, and deficit-oriented diagnostic labels – then our ability to differentiate learning effectively is significantly restricted” (Armstrong, 2012b). In contrast, a strengths-based approach to learning focuses on student’s gifts, interests, and passions in order to create inclusive and engaging classroom experiences for all of the diverse learners in the school community (Lopez & Louis, 2009). The purpose of this study was to investigate the relationship between strengths-based teaching strategies and student attitudes toward life and learning. Through a systematic review of the literature, three attitudes that may be impacted by this approach to learning were identified: student well-being, student mindsets, and student engagement. In addition to this, specific practical strengths-based teaching strategies and resources were identified. Despite the many benefits of strengths-based teaching strategies, there have been limited systematic research documenting its impact. This study concludes by suggesting further areas for future research and recommending the need for continued educator training in the implementation of a strengths-based approach to learning.

## Acknowledgments

It really does take a village...

The completion of this project was made possible because of the encouragement and support of many individuals over the last few years.

I am grateful to Dr. Lara Ragpot for her guidance and inspiration throughout each step of this journey. For welcoming me so cheerfully to our first Zoom class and encouraging me on to completion even in the midst of a global pandemic. I appreciate her positive outlook and her willingness to take the time to answer all of my many questions.

To Dr. Andrew Shutsa for the insight, support, and encouragement that you provided to me in the planning, writing, and editing process of this project.

To Dr. Adrienne Castellon, Dr. Matthew Etherington, Dr. Barbara Hofmann, Dr. Julie Lane, Dr. Yu-Ling Lee, and Dr. Ken Pudlas, thank you for providing me with a variety of opportunities to learn and grow through research and collaboration with others.

Thank you to the members of my cohort who encouraged me and answered my many questions. I am thankful for the collaboration and all I have learned from each of you.

Thank you to my many colleagues in my school community who have cheered me on in this process while listening to me share the “next exciting thing.”

Thank you to my parents who fostered within me a desire for continued personal growth and a joy for life-long learning.

To my three children Landon, Malia, and Cameron, thank you for being my study buddies and being willing to make your own dinner on more than one occasion. I appreciate the way you believe in me and how you have supported me in this journey.

To my loving husband, Ryan, thank you for being my inspiration and my sounding board. Thank you for encouraging me to persevere and for bringing me coffee during all of those online classes. You are the best!

All glory to God, the Almighty, who loves each of us with a never-ending love.

## Table of Contents

<b>Abstract</b> .....	2
<b>Acknowledgements</b> .....	3
<b>Table of Contents</b> .....	5
<b>Chapter 1: Introduction and Methodology</b> .....	8
Introduction .....	8
Research Question .....	9
Research Aims and Objectives .....	10
Rationale .....	10
Theoretical Framework .....	11
Methodology .....	12
Research Design .....	12
Sample .....	14
Organization and Analysis of Data .....	14
Ethics and Validity .....	18
Limitations .....	18
Generalizability and Transferability .....	19
Significance of the Study .....	19
Closing Remarks .....	20
<b>Chapter 2: Literature Review</b> .....	21
Introduction .....	21
Student Attitudes .....	22
Well-Being .....	22
Mindsets .....	24
Engagement .....	26
School Culture and Educator Mindsets .....	28
Educator Mindsets .....	28
A Culture of Collaboration .....	31

Continued Educator Training .....	32
A Strengths-Based Approach to Learning .....	34
Theoretical Foundation .....	35
Benefits of a Strengths-Based Approach .....	36
Universal Design for Learning .....	37
Conclusion .....	38
<b>Chapter 3: Strengths-Based Strategies and Resources .....</b>	<b>40</b>
Introduction .....	40
Results .....	40
Student Well-Being .....	41
Benefits .....	41
Teaching Strategies and Resources .....	42
Strengths Assessments .....	42
Strengths Wall .....	44
The Respecting Diversity Program .....	45
Student Mindsets .....	46
Benefits .....	46
Teaching Strategies and Resources .....	47
Not Yet .....	47
Inspiration Boards .....	48
Growth Mindset Brag Time .....	49
Student Engagement .....	49
Benefits .....	49
Teaching Strategies and Resources .....	50
Project Based Learning .....	50
Assistive Technology and Software .....	52
Mentors and Expert Professionals .....	53
Conclusion .....	54

<b>Chapter 4: Conclusion and Recommendations</b> .....	55
Summary of Project .....	55
Outstanding Issues .....	56
Implementation Benefits .....	57
Recommendations .....	58
<b>References</b> .....	60
<b>Appendices</b> .....	65
Appendix A. Research Methods Utilized in Key Articles .....	65
Appendix B. Annotated Bibliography of Research Articles .....	66
Appendix C. Research Matrix .....	76
Appendix D. Mind Map .....	78
Appendix E. Strengths-Based Resources and Teaching Strategies .....	81

## **Chapter 1: Introduction and Methodology**

### **Introduction**

Recognizing and addressing emotional and behavioral needs is an important part of supporting students and families. Historically, the traditional western educational system has focused primarily on academic learning (Sanford et al., 2012). Educators were expected to teach pre-determined prescribed learning outcomes, and learning was primarily directed by the teacher. Educators chose what was to be learned, how the knowledge was to be communicated to the students, and how the students would be assessed (Sanford et al., 2012). Currently, members of the educational system in British Columbia are continuing to become increasingly aware of the importance of supporting students not only academically but also socially and emotionally. The Ministry of Education has continued to prioritize social and emotional learning in the development of the New BC Curriculum with the growing focus on a wide variety of curricular competencies including the Personal and Social Core Competency (Province of British Columbia, 2020). As educators seek to not only support students academically but also foster student well-being, fresh perspectives and new approaches of instruction are being utilized (Armstrong, 2012b). One method that can be employed to promote positive student attitudes and emotional well-being is the implementation of a strengths-based approach to learning (Armstrong 2012b).

A strengths-based educational approach can improve both student well-being and academic achievement. “The strengths perspective is based on the idea that everyone has strengths and that everyone has the potential to use these strengths to achieve personal goals” (Brownlee et al., 2012, p. 3). A strengths-based intervention can also change the way that learners perceive themselves, and the potential they see in themselves (Brownlee et al., 2012).



This approach also promotes a caring, pro-social, and inclusive classroom environment (Brownlee et al., 2012). The purpose of this study is to investigate the relationship between the implementation of strengths-based learning strategies and student attitudes towards life and learning.

This first chapter of the study focuses on providing a brief background on the benefits of strengths-based learning strategies. I will argue that it is valuable for educators to move away from a deficit-based model of education towards a strengths-based perspective. In the deficit model, programs and services focus first on diagnosing student needs and deficits (Anderson, 2005). In contrast, a strengths-based approach encourages educators to begin by identifying student strengths in order to leverage their passions and interests to develop personal growth and achievement (Armstrong, 2012b). Since the focus of this study is a literature review, I have chosen to include the methodology section of my report in this first chapter. This will serve to set the stage for the detailed literature review to follow in Chapter 2. In Chapter 1, the research questions and rationale will then be followed by a description of the research methodology consisting of the research design, data collection, and analysis. The research process utilized will be described in detail providing readers with a thorough summary of the steps followed in the investigation of this topic. I will also discuss the ethical considerations, validity and reliability, and potential limitations of this study. I will then provide a brief outline of the remainder of the study, describing what is to follow in subsequent chapters.

### **Research Question**

My research question is “How are the attitudes of students related to the implementation of a strengths-based approach to learning?” I want to investigate this topic to further understand

the relationship between strengths-based learning strategies and student attitudes in the secondary school setting. From this, there are two critical questions that emerge:

- What strength-based learning strategies are successfully being utilized in schools?
- What are the student attitudes that may be impacted?

I will also investigate the role of educator mindsets and school culture in the successful implementation of strengths-based learning strategies.

### **Research Aims and Objectives**

This study aims to present a summary of current literature on the implementation of strengths-based learning strategies in the school setting. This main research aim has the following supporting objectives:

- To gather current information regarding the implementation of strengths-based learning strategies, specifically in relation to its impact on student attitudes
- To identify both internal and external factors that may impact the successful implementation of a strengths-based approach to learning
- To share strengths-based strategies that can be utilized successfully in the classroom to promote positive student attitudes toward life and learning

### **Rationale**

My motivation for digging deeper into strengths-based learning strategies stems from my view of each child being created unique and valuable. I am currently an educator at an independent secondary school in the Fraser Valley in British Columbia, and I have a strong passion for giving students voice and choice in their learning. As I have been exploring the literature highlighting the importance of strengths-based learning, I am discovering a variety of teaching strategies that I believe are beneficial for students. I am also interested in further

exploring the relationship between the implementation of strengths-based strategies and student attitudes, including positive self-identity. Through investigating this topic, I will be able to gain a stronger understanding of how strengths-based approaches to learning can be successfully utilized in the classroom. As a result of this study, I hope to be able to identify and share strengths-based teaching resources that can be implemented in order to benefit students in a classroom setting. I argue that the implementation of strengths-based learning strategies will have a positive impact on the attitudes of students.

### **Theoretical Framework**

Strengths-based learning is an application of positive psychology principles which closely link student wellbeing with academic achievement (Galloway et al., 2020). Strengths-based learning is also rooted in neurodiversity as the “strengths perspective is part of a much larger movement” (Brownlee et al., 2012, p. 3). Neurodiversity is an approach to learning and disability that argues diverse neurological conditions are a result of normal differences in human genetics (Griffiths, 2020). Everyone is included within the spectrum of neurodiversity, and “learning differences are a normal part of human variation” (Griffiths, 2020, p. 57). I appreciate this perspective as it parallels the Biblical worldview that God created all people in His image and that all are equally valuable. I will be conducting the study within this theoretical perspective.

“Universal Design for Learning (UDL) is a framework that can help practitioners think and work from a neurodiversity lens rather than the deficit view” (Rappolt-Schlichtmann et al., 2018, p. 867). UDL acknowledges that variability in education is the norm, not the exception. The basic premise of UDL is that barriers to learning occur as students interact with the curriculum – they are not solely found within the abilities of the learner (Rappolt-Schlichtmann

et al., 2018). Just as architectural buildings are designed universally to accommodate individuals with a wide variety of mobility needs, UDL tools and teaching strategies offer all students a range of options to access and engage with learning (Burgstahler, 2012; Rappolt-Schlichtmann et al., 2018). A strengths-based approach to learning utilizes UDL teaching strategies in order to seek to provide opportunities for all of the students in the classroom, including those with diverse learning needs, to thrive and grow.

## **Methodology**

### **Research Design**

This research study is a literature review as an end in itself (Mertens, 2020) as it seeks to provide a deeper understanding of what is known about the topic of strengths-based learning strategies and to inform educational practice. A meta-analysis approach was used to combine the findings of multiple relevant studies in order to reach conclusions (Mertens, 2020) regarding the impact of the implementation of a strengths-based approach on student attitudes towards life and learning. As part of this process, I examined both literature reviews as well as primary research reports in order to discover more about this topic of study. The literature review in my study is mixed methods as it contains both quantitative and qualitative data from a variety of sources. I chose a mixed methods approach as the “quantitative data might provide insights into the effectiveness of interventions, but the qualitative data can answer questions such as what is the nature of the problem, what causes it, and how is the intervention being implemented” (Mertens, 2020, p. 115).

The approach used to select and analyze data was modeled loosely after the research of Augestad (2017) and Koller et al. (2017) in their literature reviews. In these studies, the authors used online databases to identify published articles using specific search terms. The authors then

followed a distinct procedure for identifying, selecting, and evaluating academically important data for use as part of their research. As part of the data extraction Augestad (2017) recorded the author's name, publication year, and a brief summary of the main results. This is similar to the approach that I utilized to create an annotated bibliography of key articles for this study.

Augestad (2017) and Koller et al. (2017) also evaluated the studies using specific rating criteria before systematically analyzing the results. This study differs from these two studies in that I also selected a variety of known works authored by experts in the field of study, such as Armstrong (2012), in addition to peer-reviewed journal articles found through online searches. I searched for themes across a wide range of media including whole authored books, websites, and peer-reviewed journal articles. The results of my search included quantitative, qualitative, and mixed methods studies as well as relevant personal narratives, articles, and websites from a variety of educational settings.

The reason that I include a broader range of sources in addition to peer-reviewed articles is that I wanted to be able to include relevant information regarding a variety of strengths-based teaching strategies and activities that can be utilized with students within the school setting. For example, Project Based Learning is discussed at length on websites focused on the subject such as PBL Works (Buck Institute of Education, 2022), and Universal Design for Learning strategies are highlighted on relevant websites such as the CAST (2022), Center for Applied Special Technology, website ([www.cast.org](http://www.cast.org)). Many current educational websites contain valuable and practical lesson ideas, used in real-life situations, that can be transferred to other educational settings. These sources were necessary in order for me to create a larger sampling of current, relevant, and useful strengths-based learning strategies and activities that can be implemented in the classroom setting.

## **Sample**

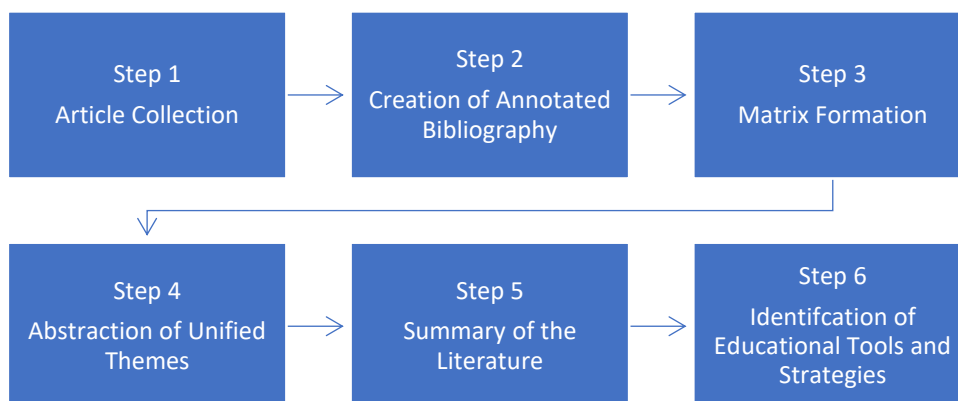
For this study, I used the databases located on the Trinity Western University library including ERIC (<https://eric.ec.gov>), JSTOR (<https://www.jstor.org>), and larger search engines such as Google Scholar to gather information. Descriptive terms and keywords such as strengths, strengths-based, inclusive education, teaching strategies, well-being, and engagement were used to locate relevant data. I then used selection criteria to further refine the search. In addition, I dug deeper into specific areas of my research by investigating key chapters from books authored by recognized professionals in the field. For my research, the literature had to meet the following criteria:

- a) offer information regarding the implementation of strengths-based learning strategies in the K-12 setting
- b) preferably have a publication date during the last 10 years
- c) if possible be published in Canada or the United States

As well, the reference sections of key sources were utilized to find additional sources for review. The extensive search process yielded a variety of relevant literature from qualitative, quantitative, mixed methods, case studies, book chapters, and website contents (see Appendix A). This wide-ranging set of data, listed in the reference section, makes up the foundation for the literature review (Chapter 2) and recommended resources (Chapter 3) in the subsequent chapters.

## **Organization and Analysis of Data**

The data from the literature was organized and analyzed systematically, beginning with the identification and selection of relevant articles. The research process that I utilized is illustrated in Figure 1.1.

**Figure 1.1***Data Organization and Analysis Process*

Step 1 (as shown in Figure 1.1) included the gathering and selection of relevant articles for this study. As mentioned previously, I primarily used databases located on the Trinity Western University library to access current, peer-reviewed articles. Initial searches were done by reviewing the abstract and introductions provided in order to determine whether the article would offer relevant data for the topic of research. During this first reading, key words and phrases were highlighted for future reference. Pertinent articles were then downloaded and saved to organized folders.

Step 2 involved the creation of an annotated bibliography (see Appendix B) in order to provide a quick snapshot summary of key articles. For this part of the process, ten relevant articles were chosen as a starting point for my research. Each article selected contained information related to the driving question of my research: how are the attitudes of students impacted by the implementation of strengths-based learning strategies? For each article selected, an annotated bibliography was created including the following elements:

- Citation
- About the Author(s)

- Format and Audience
- Main Argument
- Research Methods
- Conclusions
- Connection to Research Topic
- Questions and Wonderings
- Relevance Rating out of 10

This step was beneficial in making the lengthy discussion of literature more accessible and manageable. It also provided me with an opportunity to take an in depth look at several of the key articles.

I then proceeded to move on to Step 3 which included creating a matrix (see Appendix C) in order to plot common themes that emerged. As I examined the annotated bibliographies, I noticed that the research also highlighted the importance of positive educator mindsets with regards to the successful implementation of strengths-based strategies (Kozleski et al., 2015; Garwood & Ampuja, 2019). I decided to refine my driving question to incorporate this aspect into my research: how are the attitudes of students impacted by *educator mindsets* and the implementation of a strengths-based approach to learning? I identified nine common themes that were found in several of the articles: theoretical foundation, strengths-based learning strategies, neurodiversity vs. deficit model, student well-being, Universal Design for Learning (UDL), student and teacher mindsets, educator training, student engagement, and school culture and collaboration. I then created the matrix by identifying which articles related to each of the themes. It is also important to note, that although I began with ten articles in my annotated



bibliography, I added several additional relevant articles to my matrix as I continued my research.

Step 4 involved creating a mind map (see appendix D) to group and categorize these nine themes under each of three subtopics from my driving question:

- Subtopic 1: Student Attitudes
  - Impact on Student Well-Being
  - Impact on Student Mindsets
  - Impact on Student Interest and Engagement
- Subtopic 2: Educator Mindsets
  - Educator Mindsets Matter
  - Neurodiversity vs. Deficit Model
  - Importance of Collaboration and School Culture
  - Need for Continued Educator Training
- Subtopic 3: Strengths-based Approach to Learning
  - Theoretical Foundation of Strengths-based Approaches
  - Neurodiversity vs. Deficit Model
  - Universal Design for Learning (UDL)
  - Strengths-based Learning Strategies

In addition, I composed a short explanation of how each subtopic and supporting themes are relevant to my research question. I included supporting details from a variety of the selected articles to further explain my rationale and reasoning. This helped provide a focus and outline for the next two chapters of my research. In Chapter 2, I write a literature review (Step 5) focusing on the three subtopics and supporting themes listed above. Chapter 3 focuses on

providing educators with a resource of various strengths-based learning strategies (Step 6) that have been shown to be beneficial for students.

### **Ethics and Validity**

Although I recognize that I the author am passionate about strengths-based learning strategies, there is no conflict of interest in conducting this research. Other ethical considerations that were taken into account include that all sources of information and data used in this study are properly referenced. The intention of the study is to represent findings from the literature in an accurate and logical manner. The research process is valid as it is outlined in a detailed manner so that it has the potential to be replicated by other researchers (Mertens, 2020). The thorough manner in which the study is explained also provides the reader with evidence of the choices and decisions that were made throughout the research process. Also, no studies were included, or excluded, based on my own bias, as I took an inquiry approach to this study with the attitude of wanting to learn from the literature, rather than applying the literature to support my own preconceived ideas.

### **Limitations**

There are limitations to this small-scale study. First of all, the literature gathered is by no means an exhaustive sampling of current research on the topic of strengths-based learning. It should also be noted that I recognize that there may be potential bias with regards to which sources were selected as I am both researcher and educator. As a Canadian, I chose to focus primarily on research in conducted in Canada and the United States, although I did find it necessary to go beyond this setting to find additional sources. The study also relies on sources that were available at the time that the research was conducted and does not take into account any new relevant sources published thereafter. As well, there may be external variables, such as

the outcomes of internet search results, that could impact the results of the study. Although I recognize that there are limitations to this type of study, I believe that the results will be useful for educators seeking to investigate the impact of strengths-based teaching strategies on the attitudes of students.

### **Generalizability and Transferability**

Although the literature sample size is not exhaustive, it is extensive and thus an appropriate sampling of the current literature on the topic of study. Since I, the author, focused on current resources published primarily in Canada and the United States, it is possible that other sources from a wider range of geographical locations were not included as part of this research. However, as there is some variance in the geographical origins of the publications, I believe the themes found to be relevant beyond a North American backdrop. Although there are limitations to this investigation, the study is transferable as it can be replicated for use by researchers in a variety of settings. As well, the readers of this study may be able to apply the findings and results to their own unique situations (Mertens, 2020).

### **Significance of the Study**

It is valuable for researchers to continue to explore how strengths-based approaches contribute to enhanced student wellbeing (Joët et al., 2011). The results of this study may benefit educators (teachers and support staff) and school leadership teams (heads of school, principals, and vice-principals) by highlighting the advantages of a strengths-based approach to learning and providing suggestions for implementation in a classroom setting. School leadership may gain insight into the need for education to continue to move away from a deficit view of students and towards a strengths-based perspective. They may also be provided with opportunities to reflect on the need for continued educator training regarding the implementation

of strengths-based strategies in the classroom setting. This may also generate conversations regarding the benefits of collaborative school cultures where school leadership and staff work together within a shared vision. The suggested instructional strategies in this research may also encourage individual educators to incorporate strengths-based activities into the classroom setting. These activities could potentially benefit all of the students in the classroom, including those with diverse abilities, by providing them with opportunities to celebrate their unique gifts and talents in inclusive learning environments. It is my hope that through this research, educators may engage in meaningful conversations that may then effect positive change within the school setting.

### **Closing Remarks**

Strengths-based learning strategies have been shown to benefit student well-being and achievement (Quinlan, 2015). “School-based strengths interventions may influence individual perceptions of class climate, engagement, and student relatedness in addition to individual well-being” (Quinlan, 2015, p.88). Despite these findings, there remains few studies regarding strengths-based approaches (Galloway et al., 2020). In addition, in this research study I explored specific strengths-based teaching strategies that can be utilized with students in a classroom setting. It is my hope that by recognizing their unique strengths each student will be able to realize their potential and feel confident in who they are created to be.

## **Chapter 2: Literature Review**

### **Introduction**

This chapter focuses on providing the literature review of the study. The chapter is divided into three topics of discussion. Firstly, I present current information on the role of student attitudes in relation to both learning and social emotional health. My motivation for focusing on this topic stems from my view of each child being created unique and valuable not only for what they can achieve, but also for who they are. I will be highlighting three main areas: well-being (Rappolt-Schlichtmann et al., 2018), mindsets (Lopez & Louis, 2009), and engagement (Larmer et al., 2015). I will discuss the importance of each of these areas as well as their impact on student achievement and self-esteem.

The second section of this chapter presents the literature on the role that educator mindsets and school culture play in regard to student success and well-being. An educator's mindset can directly impact student attitudes towards learning (Joët et al, 2011). It is important for educators to adopt a neurodiversity approach by moving away from the deficit model which focuses primarily on student needs and embracing a strengths-based model which utilizes student gifts and passions to promote positive mindsets and well-being (Rappolt Schlichtmann et al., 2018). This is most effective within the context of a school-wide approach where collaboration amongst all members of the school community is fostered (Griffiths, 2020). It is also important for educators to receive the necessary training and professional development needed in order to create strengths-based schools (Armstrong, 2012a).

The final focus of this chapter includes a discussion of the literature on the benefits of the implementation of a strengths-based approach to learning. It contains a definition of strengths-based approaches and highlights the theoretical foundation of this paradigm. This approach

encourages educators to move away from the deficit model of learning by adopting a neurodiversity view of learners (Brownlee et al., 2012). Strengths-based approaches are beneficial not only for students with exceptionalities, but for all of the diverse learners in the classroom (Galloway et al., 2020). The final portion of the chapter will also describe how the implementation of Universal Design for Learning (UDL) strategies can be used to provide opportunities for all students to access the curriculum and feel engaged in their learning (Armstrong, 2012a).

### **Student Attitudes**

It is essential for educators to not only focus on academic learning, but to also support the social and emotional development of the students in the classroom by promoting positive mindsets, well-being, and student engagement (Lopez & Louis, 2009). The most important question a teacher can ask is “Who is this child, and how can I nurture his or her gifts?” (Palmer, 2003, p. 377). It is necessary for schools to be intentional about not only engaging minds, but also nurturing the hearts of the students within the school community (Palmer, 2003). In order to do this, school staff must develop a holistic view of their students in which each learner is valued and celebrated not only for what they can do but for who they are. Educators need to get to know their students as individuals and encourage each one to develop their unique strengths and passions (Armstrong, 2012a). “By changing from a deficit orientation to a diversity perspective, and by creating positive ecosystems within which students with learning differences can learn according to their strengths rather than their weaknesses, we can help these students become who they were truly meant to be” (Armstrong, 2012a, p. 16).

### **Well-Being**

It is essential for educators to consider the emotional well-being and the heart of each student that we walk alongside (Palmer 2003). Every student has unique challenges and gifts, and it is important to support not only the physical and intellectual development, but also the emotional, and I would add spiritual, growth of each child. Students need an encouraging network of supportive human beings who can advocate for and foster their students' emotional well-being (Armstrong, 2012b). Inclusive school environments where “persons with disabilities are not excluded from the general education system due to disability, but rather can fully and equally participate in education and as members of the community” (Heyder et al., 2019, p. 1) must promote both academic and social inclusion (Sokal & Katz, 2015). In a socially inclusive setting, each child is viewed as a full and respected member of the classroom. All students have a sense of belonging, are cared for, and each one is seen as a valuable member of the learning community (Sokal & Katz, 2015). In these learning environments, the primary goal of the educator is to help students become confident learners filled with purpose as they seek to reach their potential (Lopez & Louis, 2009).

Unfortunately, students may not always feel that they are a valued member of the learning community. For example, some students with learning disabilities may be negatively impacted by socially devalued stereotypes (Rappolt-Schlichtmann et al., 2018). Students with exceptionalities may report “feelings of shame or humiliation and actively conceal their disability among peers and teachers so as to avoid association with those negative stereotypes” (Rappolt-Schlichtmann et al., 2018). These student concerns are valid as research indicates that unfortunately some teachers are more likely to view students more negatively, consider them less capable, when told they have an exceptionality (Rappolt-Schlichtmann et al., 2018). This can result in students feeling demoralized, disillusioned, and unmotivated (Anderson, 2005). In

addition, primarily focusing on students' deficits can not only reduce motivation but may also put students at risk of academic failure and depression (Bianco et al., 2009). It is important for educators to shift away from this deficit view in order to provide meaningful learning opportunities for all students in the classroom. Teachers who are able to create pleasant and safe learning environments that lower student anxieties may facilitate a healthier climate for learning (Joët et al., 2011). Furthermore, research has shown that student well-being is closely linked to academic achievement (Galloway et al., 2020; Quinlan et al., 2015). In this way, educators are able to support students in developing positive self-identities and seeing themselves as life-long learners (Rappolt-Schlichtmann et al., 2018) while honouring and celebrating differences (Armstrong, 2012a).

It is essential for school environments to foster mutual respect and trust among all members of the school community. In this setting, everyone is able, valuable, and responsible, and should be treated accordingly. An environment where respect is a core value results in dramatic decreases in suspension and exclusion and encourages students to invest positively into the school culture (Stanley et al., 2004). When students and teachers trust each other, they are more likely to work collaboratively to build and maintain safe and successful schools (Stanley et al., 2004). Furthermore, supportive relationships have a positive impact on student success and well-being (Sheras & Bradshaw, 2016) and promote appreciation of the value of all members of the school community (Brownlee et al., 2012). When students feel safe, respected, and valued, they will be able to interact positively with school staff and peers as they learn and grow together in community (Brownlee et al., 2012).

### **Mindsets**

A student's mindset, or belief about the degree to which they can experience growth in their abilities, greatly impacts behaviour and success within educational environments (Lopez &



Louis, 2009). Students with a fixed mindset believe that personal abilities are constant and are not very malleable regardless of effort. In contrast, students with a growth mindset “adhere to the belief that personal abilities are responsive to developmental efforts; such students often view the exertion of effort as a prerequisite for developing their abilities and therefore something to be embraced” (Lopez & Louis, 2009, p. 6). A student’s mindset has a direct correlation to their view of the role of effort in their learning experiences. Furthermore, intentional growth mindset training can support students in moving away from a deficit model toward a strengths-based approach to learning (Garwood & Ampuja, 2019). Students who display a growth mindset are much more likely to embrace challenges and persevere because they optimistically believe they possess untapped potential and can grow their knowledge, skills, and abilities (Stanley et al., 2004).

A positive mindset also promotes higher student self-efficacy. In the educational field, self-efficacy refers to the beliefs students have regarding their capabilities with regards to learning (Joët et al., 2011). Students with greater self-efficacy are able to persevere longer, dig more deeply into learning tasks, display strong motivation, and demonstrate higher academic achievement in the school setting (Joët et al., 2011). In addition, strong self-efficacy beliefs have been found to result in lower anxiety in teens as well as decrease the risk of dropping out of high school (Joët et al., 2011). It is also important to note that self-beliefs formed within the school setting are likely central to the formation of subsequent efficacy beliefs throughout life (Joët et al., 2011).

Students with emotional, behavioral, and learning disabilities often experience frustration around learning and may develop negative academic self-concepts resulting in the underestimating of their own abilities and potential (Garwood & Ampuja, 2019). When students

demonstrate a fixed mindset, they are more likely to give up when faced with challenging tasks (Garwood & Ampuja, 2019). This can also result in learned helplessness, the belief that one has no control over what happens to them (Garwood & Ampuja, 2019). Educational strategies for learning that reduce negativity when approaching challenging tasks can help redirect students' thinking away from self-doubt and towards skill building and growth (Joët et al., 2011).

Furthermore, studies have shown that the implementation of interventions designed to teach students to develop growth mindsets have resulted in improved classroom engagement, student behavior and academic achievement (Garwood & Ampuja, 2019; Joët et al., 2011; Stanley et al., 2004).

### **Engagement**

Classroom engagement is essential for student learning and achievement (Quinlan et al., 2015). Rather than teaching being viewed primarily as something that adults perform, it is beneficial for students to be active participants, not merely recipients of information, in the learning process (Kozleski et al., 2015). An understanding that students should be actively participating in learning changes the role of the teacher and student, as now the two form a partnership in which they learn alongside each other. This shift in thinking by all members of the community will impact how students, including those with diverse needs, are supported in the classroom (Kozleski et al., 2015). Student voice and engagement must be continually fostered by educators as learning is maximized in supportive and engaging educational settings (Sheras & Bradshaw, 2016). The more students are actively involved in their learning, the more their creativity and individual gifts can be utilized to help them reach their full potential (Kozleski et al., 2015).

It is important for educators to take into account their student's passions and interests when creating lessons, research projects, and thematic units (Bianco et al., 2009). The High School Survey of Student Engagement surveyed over 275,000 students in the United States from 2006 to 2009 (Larmer et al., 2015). "It found that 49 percent of students in grades 9 through 12 reported being bored in at least one class every day; another 17 percent were bored in every class every day" (Larmer et al., 2015 p. 3). Students provided various reasons as to why they were bored. The top three were:

- "Material wasn't interesting" (81%)
- "Material wasn't relevant to me" (42%)
- "No interaction with teacher" (35%)

The students were also provided with an opportunity to describe which teaching methods engaged them the most. The top four responses were:

- Discussion and debate (61%)
- Group projects (60%)
- Projects and lessons involving technology (55%)
- Student presentations (46%)

The results of this survey clearly show that there is a need for instruction that is more engaging and tailored to the learning strengths of the students (Larmer et al., 2015).

It is equally important for educators to create classroom environments where students are valued as active participants in their learning. School staff need to show students that their contributions are appreciated and to stress that the classroom is a dynamic, connected, encouraging community, of which they are all an essential part. (Garwood & Ampuja, 2019). Educators must also take the time to learn about students as individuals, show respect for their

uniqueness, and recognize each learner's preferences (Larmer et al., 2015). Motivation for learning will also increase as students are given the freedom to express their own ideas and opinions (Larmer et al., 2015). When students are given opportunities to utilize their talents and interests in their learning, they become more optimistic and confident as learners (Anderson, 2005).

### **School Culture and Educator Mindsets**

Historically, educators were often viewed as the keepers of knowledge who would impart their expertise to the students (Sheras & Bradshaw, 2016). However, in our current educational climate, the role of the teacher is no longer to focus solely on curriculum content, but rather on engaging and supporting students in their personal growth and learning (Sheras & Bradshaw, 2016). Teachers are not only expected to teach course content to students, but they are also encouraged to learn alongside the students in the classroom. In this approach to education, teachers are often referred to as coaches or guides as they seek to walk alongside their students and partner together with them throughout the learning process. When teachers develop a coaching attitude, "their classrooms become learning environments that foster creativity, encourage student voice and choice, and promote equity by rebalancing the traditional student-teacher power relationship" (Boss & Larmer, 2018, p. 162). In order for educators to flourish, it is important for educators, school leadership, and the broader community to all work together to promote common values and a shared vision. It is also necessary for school staff to be engaged in continued educator training in order to develop the knowledge and skills needed to implement strengths-based strategies that will help school communities achieve their goals (Kozleski et al., 2015).

### **Educator Mindsets**

Educators are key to successful inclusion and are important partners in the continued journey to create inclusive learning experiences for all learners in the classroom (Sokal & Katz, 2015). Unfortunately, one of the most significant barriers to inclusion is negative attitudes in teachers, parents, and administrators (Sokal & Katz, 2015). When obstacles such as large class sizes and limited funding (Naylor, 2005) appear insurmountable, it can be tempting for educators to simply continue to maintain the status quo. There can be a feeling that despite best efforts, circumstances will never be able to change. In her book, *Mindset: The New Psychology of Success*, Carol Dweck (2006) describes this limited kind of thinking as a fixed mindset. People with fixed mindsets are more likely to avoid challenges and give up easily, because they believe that change is impossible (Dweck, 2006). Fixed-minded teachers may think of themselves as finished products whose role is simply to impart their knowledge to their students. (Dweck, 2006). In contrast, people with growth mindsets embrace challenges and persevere to reach their goals. In fact, people in a growth mindset don't only seek challenges, but thrive in challenging situations. (Dweck, 2006). The first step for educators to take when approaching challenges may in fact be a change of mindset. If school staff and administration do not believe that people and circumstances can change, then it is most likely that the situation will remain the same.

How then, can schools promote growth mindsets among staff and students? Although this is not an easy endeavor, there are several ways that schools can begin to work towards this goal. A key first step is to foster a school culture that promotes growth. A significant component of this is changing the meaning of failure (Dweck, 2006). Failing does not mean that the person is a failure (Dweck, 2006). When a growth mindset is encouraged, staff and students view mistakes as learning opportunities and ways to improve. "Students understand that there is no single 'right answer' or preferred way to do the project and that it is OK to take risks, make

mistakes and learn from them” (Boss & Larmer, 2018, p. 14). In this way, students are encouraged to persevere through challenging tasks and are able to develop perseverance and resilience (Boss & Larmer, 2018).

It is equally important for school leadership to seek to model a growth mindset themselves. Growth-minded leaders start with a belief in human potential and development – both their own and others (Dweck, 2006). Instead of using the school as a means for their own prominence, they use it to encourage growth for themselves, staff, students, everyone (Dweck, 2006). Leaders in education should not seek to control others but to help each one reach their potential (Couros, 2015). This same principle applies to staff working with students. It is important for adults to model to students that learning does not only take place in school, but rather that learning is a life-long process.

Educators can also promote a growth mindset with students by modeling it in a classroom setting. For example, school staff can work to provide encouragement and feedback directly to students in a way that promotes the development of perseverance and resilience. Praising a person’s intellect or aptitude sends a fixed-mindset message. Rather it is important for educators to focus on the processes used by the students – their strategies, effort, or decisions (Dweck, 2006). Teaching students by example to be self-starters and to constantly reflect on how they might improve helps them learn how to be effective learners (Couros, 2015). It is essential for educators to view each student individually and to work to create learning environments that inspire and support learners in reaching their potential.

Once staff believe that circumstances can in fact change, the school community can collaborate together to achieve a common goal. It is imperative to establish structures and routines for regular communication. “In an open culture, the opportunities for learning and

relationships are endless. The biggest winners of this sharing revolution are our students” (Couros, 2015, p. 179). Educators are no longer required to figure things out on their own but are supported by a collaborative network of colleagues. This results in school staff becoming more confident and better equipped to work towards realizing the school’s vision for student success and growth (Couros, 2015).

Working in partnership with members of the broader school community to achieve school goals can be very beneficial. Many parents and stakeholders are highly supportive of the school and desire to be involved in a variety of ways. It is imperative to keep the lines of communication open and to involve parents in a collaborative manner (Greene, 2016). When appropriate, it is also advantageous to give students themselves the opportunities to be included in having a voice in meeting school goals. Educators must ensure that students’ concerns are heard and validated, and the solutions are agreed upon by all involved (Greene, 2016).

### **A Culture of Collaboration**

It is important for school staff to be united with a common vision for creating and maintaining an inclusive school environment. Successful school policies must be widespread and multidimensional while seeking to positively impact the whole social fabric of the school (Stanley et al., 2004). It is also beneficial for school leaders to implement universal, school-wide programs intended to develop social and emotional competencies (Sheras & Bradshaw, 2016). Social and Emotional Learning (SEL) involves encouraging the development of children’s social and emotional competencies within the school setting (Gresham, 2018). “Universal SEL programs have positive effects on increasing prosocial behaviors, reducing conduct problems, decreasing emotional distress, and increasing academic performance” (Gresham, 2018, p. 69). When universal approaches are integrated into classroom curriculum, school staff and students

are provided with a common language that can be used to dialogue within a wide variety of social situations (Gresham, 2018).

It is also evident that positive and thoughtful interactions within the community play a key role in developing inclusive school and classroom environments. In order to encourage the social and emotional development of students, educators must foster caring and trusting relationships in supportive and engaging educational settings (Sheras & Bradshaw, 2016). It is also important to note the significance of a common vision within the entire school community. “When everyone in a school behaves in ways that communicate to others that each person in the school is significant, able, valuable, and responsible and is to be treated that way, schools will be safer and students will be more successful” (Stanley et al., pp. 308-309). By taking the time to care for students as individuals and implementing school-wide approaches to fostering inclusive environments, educators will be able to play a positive role in nurturing the hearts of the students in the classroom.

Educators must also take the time to get to know each student individually in order to understand their unique challenges and strengths. It is necessary for the school-based team to adopt a holistic approach to supporting learners that includes community professionals, school staff, parents, and students in the process. Children will benefit from enhanced human resources and the creation of a rich network of individuals who support the growth and development of neurodiverse students (Armstrong, 2012b). By creating inclusive classroom environments that promote accessible communication and social experiences, educators can provide authentic opportunities for positive social emotional development for all students, including those with diverse abilities.

### **Continued Educator Training**



Educators have an important voice in the actualization of academic and social inclusion for all students, including those with diverse abilities. “Children with disabilities perceive educators as playing a critical role in influencing the quality of social inclusion in the classroom” (Koller et al, 2017, p. 4). Early participation in inclusive school programs is highly beneficial and may lead to continued inclusive educational experiences for students as they progress (Koller et al., 2018). Teachers can also have a positive impact on students by incorporating teaching strategies that directly promote cooperation between students and foster constructive social experiences within the classroom (Koller et al., 2018). It is important for both pre-service and in-service teachers to receive training in inclusive education through continuing professional development (Sokal & Katz, 2015). Educators are key to successful inclusion and are important partners in the continued journey to create inclusive learning experiences for all learners in the classroom (Sokal & Katz, 2015).

It is essential for educators to receive not only training in inclusive education, but also experience in creating inclusive learning environments. Currently, not all pre-service teachers receive specific training in working with students with exceptionalities (Sokal & Katz, 2015). If pre-service and in-service teachers are not exposed to training through continuing professional development, “we are not challenging their predetermined beliefs and not effectively utilizing one of the main change mechanisms by which inclusion can become accepted and enacted by teachers” (Sokal & Katz, 2015, p. 50). It is also important to note that attitudes of educators about inclusion are primarily shaped by their level of experience (Keller et al., 2018). Research has shown that the number of years of training correlates to improved attitudes toward inclusion. As well, educator understanding of and experience with students with diverse learning needs has

been shown to enhance teacher self-efficacy and effectiveness in inclusive classrooms (McCrimmon, 2015).

Mandated training for pre-service teachers and continued professional development for in-service teachers in inclusive education is necessary for schools to continue to create learning environments where all students have opportunities for social and academic growth (Sokal & Katz, 2015). Educators need adequate training that can encourage positive attitudes and foster a sense of efficacy (Koller et al., 2018). It is also important for teachers to have continued access to resources that promote inclusive experiences in the classroom (Koller et al., 2018). The use of effective teaching strategies can significantly enhance a student's ability to participate in class activities (Koller et al, 2018). Educators also have an important role in fostering and developing authentic friendships among children with diverse abilities, as they promote the creation of positive social connections within the members of their school communities (Koller et al, 2018, p. 5).

### **A Strengths-Based Approach to Learning**

A strengths-based approach to learning can positively impact the attitudes and mindsets of both students and educators. By moving away from the deficit model of learning towards a neurodiversity approach, educators will be able to identify the individual strengths and gifts of the students. The focus is no longer on what a student *can't* do but rather on what they *can* do. A strengths-based educational approach benefits all students in the classroom, including those with diverse abilities (Armstrong, 2012b). Furthermore, the implementation of a Universal Design for Learning (UDL) framework is also advantageous as it encourages educators to identify and remove barriers in the classroom in order to create learning experiences that are more accessible for all.

## **Theoretical Foundation**

Strengths-based learning has been developed in part as a response to the deficit remediation model used in education (Brownlee et al., 2012). In the deficit model, programs and services are dedicated to supporting students by first diagnosing student needs, difficulties, concerns and deficits (Anderson, 2005). Based on the diagnosis, students are often placed in remedial programs to address these deficits. In contrast, strengths-based learning focuses primarily on student strengths (Armstrong, 2012a). Armstrong (2012a) puts it this way. “We don’t look at a calla lily and say that it has petal deficit disorder; we appreciate its beautiful shape” (Armstrong, 2012a, p. 12).

A strengths-based approach to education emphasizes the positive aspects of student work and accomplishment, as well as student strengths (Lopez & Louis, 2009). This approach includes identifying student (and educator) strengths, and creating individualized learning experiences (Lopez & Louis, 2009). Students are also encouraged to create connections with others through strengths, as opposed to deficits (Lopez & Louis, 2009). As well, there is continued intentional development of strengths, and students are given opportunities to apply their strengths through experiences both within and outside the classroom. (Lopez & Louis, 2009). When school staff develop a learning environment where students are able to recognize both their own strengths and the strengths of others, they help to foster a school culture that demonstrates appreciation of differences, values teamwork and collaboration, and highlights the importance of relationships and community (Lopez & Louis, 2009).

The neurodiversity approach to education promotes the celebration of differences and upholds a strengths-based attitude towards learning (Armstrong, 2012a). Through the lens of neurodiversity, all students are valued not for what they can do, but simply for who they are. By

focusing on strengths rather than diagnoses and labels, teachers can develop better ways of helping all learners grow (Armstrong, 2012a). Armstrong encourages educators to construct *positive niches* “advantageous environments that minimize weaknesses and maximize strengths and thereby help students flourish in school” (Armstrong, 2012a, p. 13). This approach also emphasizes the importance of developing positive relationships between teachers and students, while providing students with voice and choice in their learning. In this way, students are able to identify their strengths and passion areas and are provided with opportunities to help them begin to realize their full potential. (Armstrong, 2012a).

### **Benefits of a Strengths-Based Approach**

The strengths-based learning approach benefits students with exceptionalities. Traditionally, the special education system has often focused on student deficits. However, “exclusive focus on students’ deficits not only reduces motivation to learn but also puts students at risk of academic failure and depression” (Bianco et al., 2009, p. 214). In a strengths-based approach *disability* is replaced with *diversity* (Armstrong, 2012b). Labels are no longer the focus, as the emphasis is placed on student strengths and passions (Griffiths, 2020). As well, strengths-based accommodations provide opportunities for all students to access and demonstrate learning (Rappolt-Schlichtmann et al., 2018).

Strengths-based learning strategies benefit all students. Strengths-based approaches enable children to feel capable by identifying what they do well and what they learn quickly. (Brownlee et al., 2012). Students are given autonomy as they recognize their own strengths, make learning choices, and set personal goals (Quinlan et al., 2015). As well, students learn how their gifts and talents can benefit the classroom community (Lopez & Louis, 2009). Strengths-based learning also increases student engagement and academic achievement (Galloway et al.,

2020; Quinlan et al., 2015). By using whole-class techniques, educators can work to establish “neurodiversity-friendly classrooms” (Griffiths, 2020, p. 57).

It is necessary for educators to get to know the students as individuals to assess not only their unique challenges, but also their assets and gifts. One of the most important tools that educators can use to support students is their understanding of student strengths (Armstrong, 2102a). In this way, students are able to utilize their strengths in order to develop their skills and aptitude for learning. It is also beneficial for school staff to continue to focus on the individual passions and gifts of the student when creating individual educational plans to support the physical, emotional, and academic needs of the students. The inclusion of specific and personalized goals that focus on what students can do and are passionate about, provides increased opportunities for student engagement and success (Armstrong, 2012b).

### **Universal Design for Learning**

It is also beneficial for educators to adopt a Universal Design for Learning (UDL) approach in order to promote inclusion and independence. UDL is a framework that can help educators approach learning through the lens of neurodiversity rather than the deficit view. (Rappolt-Schlichtmann et al., 2018). UDL refers to the process of removing obstacles to learning for students with diverse needs in ways that also improve everyone’s capacity to learn (Armstrong, 2012a). Three main principles provide the framework of UDL (Rappolt-Schlichtmann et al., 2018). Learning experiences should be designed in such a way that opportunities are provided for multiple means of a) representation, b) expression and action, and c) engagement (Rappolt-Schlichtmann et al., 2018). “Design for all or universal design aims to ensure accessibility and usability by a wide range of users, regardless of disability, age, size, culture, ethnic background or class and without the need for adaptation or specialized design”

(Hersh & Mouroutsou, 2019, p. 3331). In this way, all students in the classroom are provided with a variety of options for accessing the curriculum and demonstrating their learning.

“Universal” does not refer to a one size fits all approach. Rather, universal implies that learning opportunities and resources are designed with the goal of accommodating the greatest range of learner preferences and needs (Rappolt-Schlichtmann et al., 2018). Learning experiences designed using a UDL framework provide space for students to become actively involved in their own learning. Students are also guided in their learning experiences through regular feedback and check-ins (Rappolt-Schlichtmann et al., 2018). Although students are supported and assisted when needed, it is equally important for educators to promote independence by gradually withdrawing support systems as students become more confident and better equipped to take ownership of their learning (Rappolt-Schlichtmann et al., 2018).

Pedagogy that is effective with children with diverse learning needs is also effective with other children (Sokal & Katz, 2015). Smaller class sizes, co-teaching classrooms, and personalized technology are structures that can improve the learning experiences for all of the students in the classroom (Sokal & Katz, 2015). As well, a wide range of assistive technologies exist that can help all students gather information, demonstrate knowledge, and increase their enthusiasm for learning (Armstrong, 2012b). For example, audiobooks, word processing programs, and speech to text software are technologies that can be utilized in the classroom and can benefit all students, including those with diverse needs (Armstrong, 2012b). In this way, strengths can be leveraged to increase motivation for learning and help students achieve their learning goals (Rappolt-Schlichtmann et al., 2018).

## **Conclusion**

In Chapter Two, I have discussed the current literature on the impact of educational approaches on student attitudes. Although the literature clearly defines strengths-based learning and provides a rationale for why its implementation is beneficial for students, there are few research studies focusing on evaluating the impact of specific tools, strategies, and activities on the attitudes of students (Galloway et al., 2020). The following chapter will present a variety of strengths-based learning strategies that can be utilized by educators to encourage student well-being, positive mindsets, and engagement in the classroom. By continuing to explore and implement a variety of strategies that foster inclusive classroom environments, educators will be able to create authentic opportunities for academic and social growth for all students, including those with diverse abilities.

## **Chapter 3: Strengths-Based Strategies and Resources**

### **Introduction**

This study was conducted in order to explore the relation between the implementation of strengths-based learning strategies and the attitudes of students towards life and learning. To accomplish the primary objective of the study, the following critical questions of the study were highlighted (see Chapter One for full discussion).

- What are the student attitudes that may be impacted?
- What strength-based learning strategies are being successfully utilized in schools?

This chapter will include a discussion of the findings of the systematic literature review identifying the student attitudes that have been found to be impacted by strengths-based approach. Also, a variety of recommended targeted teaching strategies for each student attitude will be described with the intent of providing educators with a resource of strengths-based activities that can promote positive student attitudes toward learning.

### **Results**

The first focus question of the study was used to identify which student attitudes may be impacted by strengths-based teaching strategies. The literature presented a wide variety of attitudes that may be affected, but through the systematic analysis of the data, three main categories of attitudes were most frequently noted (see Appendix C). First, the literature emphasized the relation between a strengths-based approach to learning and student well-being (Armstrong, 2012a; Anderson, 2005; Bianco et al., 2009; Brownlee et al., 2012; Galloway et al., 2020; Joët et al., 2011; Lopez & Louis, 2009; Quinlan et al., 2015; Rappolt-Schlichtmann et al., 2018; Sheras & Bradshaw, 2016; Sokal & Katz, 2015; Stanley et al., 2004). Secondly, the literature reviewed highlighted the connection between a strengths-based approach and student



mindsets towards learning (Anderson, 2005; Garwood & Ampuja, 2019; Joët et al., 2001; Kozleski et al., 2015; Lopez & Louis, 2009; Rappolt-Schlichtmann et al., 2018; Sokal & Katz, 2015; Stanley et al., 2004). Thirdly, the literature discussed the impact of a strengths-based approach on student interest and engagement (Anderson, 2005; Bianco et al., 2009; Garwood & Ampuja, 2019; Kozleski et al., 2015; Quinlan et al., 2015; Sheras & Bradshaw, 2016). The relationship between these three attitudes and a strengths-based approach to learning were discussed in more detail in Chapter Two of this study.

The second focus question of this study focused on exploring the specific strengths-based learning strategies that are currently being utilized by teachers within the educational system. Discussion of the importance of school culture (Brownlee et al., 2012), positive educator mindsets (Lopez & Louis, 2009), and the need for continued training (Galloway et al., 2020) can be found in Chapter Two of this study. In this chapter, I will describe strategies that can be used to target the three main attitudes identified previously in this study: student well-being, mindsets, and engagement (See Appendix E). In order to find resources in each of these areas, I needed to widen my research base beyond the original articles that were utilized for my literature review. This led to the inclusion of a wider variety of resources, including websites, books, etc. in order to locate current and relevant teaching strategies that are effectively being used by educators in the classroom setting.

## **Student Well-being**

### **Benefits**

It is important for educators to not only provide opportunities for academic growth, but to also support students socially and emotionally (Brownlee et al., 2012). One way that schools can contribute to student well-being is by adopting a strengths-perspective model for learning

(Brownlee et al., 2012). The benefits of a strengths-based approach are discussed in detail in Chapter 2 of this study. From the literature review, three key benefits emerged with regards to the relation between strengths-based approaches to learning and student well-being:

- 1) Strengths-based teaching approaches contribute to enhanced student well-being and learning (Armstrong, 2012a; Bianco et al, 2009; Brownlee et al., 2012; Galloway et al., 2020; Lopez & Louis, 2009; Rappolt-Schlichtmann et al., 2018).
- 2) The identification of strengths can produce positive emotions and increase self-efficacy (Anderson, 2005; Galloway et al., 2020; Joët et al., 2011; Quinlan et al., 2015; Sokal & Katz, 2015).
- 3) A strengths-based intervention may have benefits for classroom climate and relationships (Quinlan et al., 2015; Sheras & Bradshaw, 2016, Stanley et al., 2004).

### **Teaching Strategies and Resources**

Strengths-based teaching strategies have been found to have a positive impact on student well-being (Brownlee et al., 2012). A strengths-based approach to learning may enable children to feel competent, experience autonomy, and gain a sense for relatedness by working with others on various strengths-related activities (Galloway et al., 2020). Educators become intentional in supporting the values, self-concepts, and identities of all learners in the classroom including those with diverse abilities (Rappolt-Schlichtmann et al., 2018). “When schools and educators begin to tap the strengths of their students and to shift thinking from deficit to strength, students may begin to realize their potential within the school” (Brownlee et al., 2012). The following strengths-based teaching strategies and resources can be utilized by teachers to encourage student well-being.

#### ***Strengths Assessments***

One of the important first steps in implementing a strengths-based approach in the classroom is to provide students with opportunities to identify their personal strengths and talents (Brownlee et al., 2012). There are several assessments recommended in the literature including the Strengths Assessment Inventory (S.A.I.) (Brownlee et al., 2012) and the Clifton StrengthsFinder (Anderson, 2005; Lopez & Louis, 2009; Quinlan et al., 2015), which can be used to help students identify their individual strengths and provide recommendations for potential career paths. Although there are many benefits to utilizing these standardized strength assessments, this option may not always be available or may not be relevant for younger students. There are many viable alternatives including discussions about strengths with students (self-report) as well as involving other individuals such as caregivers, educators, etc. “The importance of drawing others into this discussion about an individual’s strength, rather than solely relying on self-reporting, is that often other people will recognize characteristics, capacities, and resources that individuals do not realize about themselves” (Brownlee et al., 2012, p. 6).

The Strengths Assessment Inventory (SAI) is a questionnaire created specifically for the purpose of assessing a wide range of student’s individual strengths (SAI, 2022). The Strengths Assessment Inventory – Youth (SAI-Y) is a 124-item measure that offers a thorough assessment of individual strengths in youths between the ages of 10-18 (SAI, 2022). The SAI covers areas of day-to-day functioning (peers, family and home, school, employment, and community) as well as personal developmental domains including personality, personal and physical care, leisure and recreation, spiritual and cultural development, and current and future goals (Brownlee et al., 2012). These domains are assessed by the student’s self-report as well as by any significant people in the student’s life, such as a caregiver, family member, educator, educational assistant,

or spiritual mentor (SAI, 2022). When schools seek to identify the strengths of students and staff there becomes a deeper “discovery and appreciation of the intrinsic value and importance of all members of the classroom, and the school community” (Brownlee et al, 2012).

The Clifton StrengthsFinder is an online tool that combines assessment with additional information and learning activities in order to help each individual student recognize their unique gifts and inherent value. Don Clifton, the creator of the parent company Clifton Strengths, states his vision as “Our greatest contribution is to be sure that there is a teacher in every classroom who cares that every student, every day, learns and grows and feels like a real human being” (Gallup, 2022). There are three featured Clifton Strengths solutions developed specifically for educators. First of all, the Clifton Strengths for Students, previously known as Strengths Quest, is designed for college and pre-college students. Secondly, the Clifton Strengths Explorer is designed for children ages 10-14 and provides students with the chance to discover their natural talents and what makes them unique and special (Gallup, 2022). Thirdly, there are various Clifton Strengths resources and professional training courses designed to support school leaders in developing thriving and engaging faculty, school staff, and teams (Gallup, 2022). Strength identification encourages students (and staff) to become confident, efficacious, lifelong learners (Lopez & Louis, 2009).

### ***Strengths Wall***

One way that educators can provide students with an opportunity to reflect on their strengths throughout the school year is through the creation of a strengths wall (Brownlee et al., 2012). At the beginning of the year, encourage students to self-identify strengths and then post these next to their name on the strengths wall or bulletin board display. Initially students may have the tendency to focus primarily on external skills and talents (good basketball player, great

at dancing, etc.) rather than internal character strengths (kind, giving, brave, etc.). It is beneficial for the educator to publicly model pointing out both external talents and student character strengths and then add these to the strengths wall. As well, students should be encouraged to point out their peer's strengths with concrete examples. The strengths wall can become a dynamic part of the classroom culture "promoting students' self-reflection, self-esteem, and self-image" (Brownlee et al., 2012, p. 7).

### ***The Respecting Diversity Program***

The Three-Block Model of Universal Design for Learning (Katz, 2012) includes programming that encourages students' self-concept, valuing diversity, belonging and social inclusion, in addition to academic inclusion (Sokal & Katz, 2015). This model of learning was developed by Dr. Jennifer Katz and has been implemented in schools across multiple provinces and states (Katz, 2022). The Three-Block Model includes Block One: Social & Emotional Learning, Block Two: Inclusive Instructional Practice, and Block Three: Systems and Structures (Katz, 2012). SEL (Social and Emotional Learning) involves building caring learning communities in which all learners feel secure, appreciated, and have a sense of belonging (Katz, 2022). One of the main SEL strategies used in the Three-Block Model is the Respecting Diversity Program (Katz, 2022).

The Respecting Diversity Program (Katz, 2022) is used at the start of the school year to help students to develop self-concept, respect for others, while setting the stage for an inclusive classroom environment. The program consists of nine lessons that introduce students to both their own and their classmates' learning profiles, while highlighting how diversity benefits a community (Katz, 2022). The Respecting Diversity Program is detailed in the book *Ensouling Our Schools: A Universally Designed Framework for Mental-Health, Well-Being, and*

*Reconciliation* (Katz, 2018). Lessons one through four focus on helping students identify their strengths by exploring the following questions (Katz, 2022):

- 1) What is smart? (Introduction to Multiple Intelligences)
- 2) How do I learn best? (Strengths Surveys)
- 3) What do I have to be proud of and contribute? (Class Brain)
- 4) What can I strive for? (Careers)

Lessons five through nine emphasize community building and include student-centered lessons on respecting diversity, empathy, interdependence, understanding disabilities, and class goal setting (Katz, 2022). The Respecting Diversity Program can help students develop a positive self-concept and appreciation for others, while potentially reducing challenging behaviors and creating inclusive learning environments that support the well-being of all learners in the classroom (Katz, 2022).

## **Student Mindsets**

### **Benefits**

A strengths-based approach to education can have a positive impact on student mindsets toward life and learning by focusing on student effort and achievement as well as student strengths (Lopez & Louis, 2009). “A foundational assumption of strengths-based education is that potential exists in all students and that educators do well to discover and implement the kinds of learning experiences that can help their students realize this potential” (Lopez & Louis 2009, p. 2). As well, this approach can be highly individualized by encouraging students to set goals based on their strengths and helping them to apply their strengths in their areas of passion (Lopez & Louis, 2009). From the literature review, three main advantages were identified with

regards to the relation between strengths-based approaches to learning and positive student mindsets:

- 1) Individualized and inclusive learning experiences (as encouraged in a strengths-based approach) promote positive student mindsets toward learning (Anderson, 2005; Kozleski et al., 2005; Lopez & Louis, 2009; Sokal & Katz, 2015).
- 2) Educational approaches that promote positive attitudes towards difficult learning tasks help students to redirect their focus from self-doubt to skill building (Joët et al., 2011; Rappolt Schlichtmann et al., 2018).
- 3) Students with growth mindsets tend to do better in school and be more successful in life (Garwood & Ampuja, 2019; Stanley et al., 2004).

### **Teaching Strategies and Resources**

A strengths-based approach to learning can promote positive student mindsets (Garwood & Ampuja, 2019). It is important to note that a good place for educators to begin is by defining mindsets and explaining to students the difference between a fixed mindset and a growth mindset (Garwood & Ampuja, 2019). Individuals who have a fixed mindset believe that intelligence is something that people are born with a certain amount of, and that this cannot really be changed, no matter how hard they work or practice (Dweck, 2006). In contrast, people with a growth mindset believe that with effort and practice, the brain can grow, and intelligence can be developed over time (Dweck, 2006). “Students with a growth mindset are more likely to see academic difficulty or errors as opportunities to learn and to develop their brains” (Garwood & Ampuja, 2019). The following strengths-based teaching strategies and resources can be used by educators to foster growth mindsets in the classroom setting.

*Not Yet*

One way that educators can foster growth mindsets is with regards to how feedback is given to students. Praise that is sincere and focuses on effort rather than ability can promote self-confidence and positive thinking (Joët et al., 2011). As well, it is important for educators to model the idea that learning is a journey. “As opposed to traditional, letter, number, or pass/fail grades, a grade of *Not Yet* conveys the message that learning is a process that takes time” (Garwood & Ampuja, 2019, p. 50). This can be especially beneficial for students with diverse learning needs who may associate poor grades with a sense of failure or disappointment. A comment of *Not Yet* feels optimistic and hopeful and communicates with students that the teacher and staff believe that with continued effort and practice they are capable of reaching their learning goal (Garwood & Ampuja, 2019). In this way, educators can encourage students to overcome deficit thinking about their own abilities by adopting a growth mindset (Garwood & Ampuja, 2019).

### ***Inspiration Boards***

To support students in developing their growth mindsets, educators can make use of visual displays in the classroom that can serve as ongoing reminders and encouragement (Garwood & Ampuja, 2019). An inspiration board could reference famous people who had to overcome adversity in order to be successful in their field. Another type of visual display could use interesting metaphors (such as crossing a ravine or climbing a mountain) to help students recognize that with practice and effort a skill can become easier. As well, students could collaborate to create an inspiration board containing growth mindset quotes from people who have demonstrated a growth mindset (e.g., “I have failed over and over again in my life, and that is why I succeed”; Michael Jordan) (Garwood & Ampuja, 2019). In this way, educators can



create positive learning environments that lower student anxiety towards learning and facilitate opportunities for students to develop self-confidence (Joët et al., 2011).

### ***Growth Mindset Brag Time***

It is also beneficial for educators to continue to remind students of the importance of a growth mindset throughout the school year. One teaching strategy that can be used to facilitate this is the implementation of Growth Mindset Brag Time (Garwood & Ampuja, 2019). During Growth Mindset Brag Time, students are encouraged to share or document times when they observed a classmate implementing growth mindset thinking. For example, “I noticed that Cathy did not give up when we were working together to learn the vocabulary for our upcoming science test”. Growth Mindset Brag Time is most effective when it is revisited regularly and becomes an expected part of the classroom culture. This could be part of a weekly routine and take place during class meetings or be displayed on a brag board in the classroom. As well, it is also beneficial for students to share specific examples of when they have observed school staff demonstrating a growth mindset towards learning (Garwood & Ampuja, 2019). When students understand the importance of perseverance and effort in learning, they may begin to adopt positive academic behaviors (such as completing assignments, engagement, etc.) which can have a positive impact on academic achievement and student attitudes towards learning (Garwood & Ampuja, 2019).

## **Student Engagement**

### **Benefits**

A strengths-based approach to learning can also promote student interest and engagement. When using this approach, educators seek to create lessons and units of instruction that are motivating, promote inquiry, and include a variety of opportunities for students to utilize

their strengths to demonstrate their learning (Bianco et al., 2009). “Strength-based instruction is designed around the student’s interests and includes interdisciplinary thematic instruction, the use of mentors, authentic learning, authentic assessments, and strength-based accommodations” (Bianco et al., 2009, p. 207). From the literature review, three main benefits emerged with regards to the relation between strengths-based teaching strategies and student engagement.

- 1) The implementation of strengths-based activities and curriculum promotes student engagement in learning (Anderson, 2005; Bianco et al., 2009; Quinlan et al., 2015).
- 2) Providing students with voice and choice in their learning experiences promotes student interest and engagement (Bianco et al., 2009; Garwood & Ampuja, 2019; Kozleski et al., 2015; Sheras & Bradshaw, 2016).
- 3) Strengths-based accommodations promote student engagement for all of the learners in the classroom, including those with diverse abilities (Bianco et al., 2009; Garwood & Ampuja, 2019; Kozleski et al., 2015).

### **Teaching Strategies and Resources**

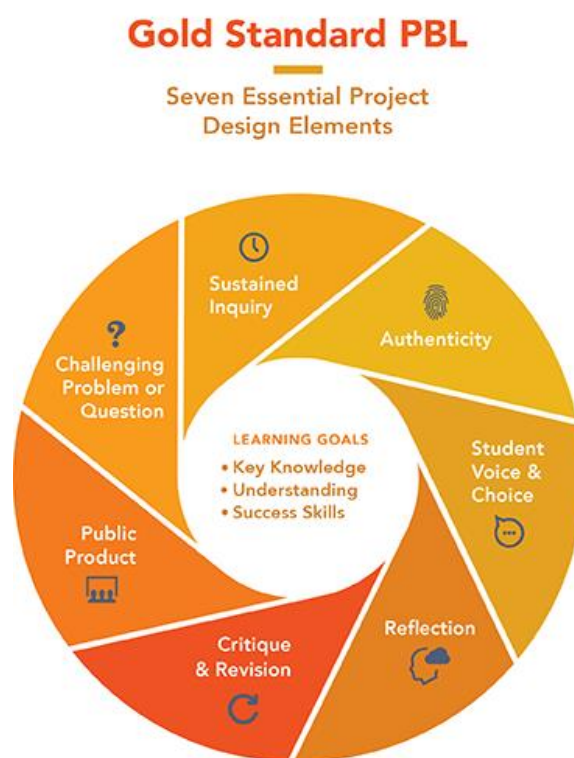
A strengths-based approach to learning can promote student interest and engagement. Educational planning should provide a stimulating learning environment that emphasizes creativity and problem-solving (Bianco et al., 2009). It is also beneficial for educators to consider the individual passions and interests of their students when creating lessons, projects, and thematic units of study (Bianco et al., 2009). When possible, it is also valuable for school staff to collaborate with students and parents during the planning process (Bianco et al., 2009). The following strengths-based teaching strategies and resources can be utilized to promote student engagement and foster joy in learning.

#### ***Project Based Learning***

Project Based Learning (PBL) is an instructional approach that “encourages both students and teachers to dig deeply into a subject, going beyond rote learning and grappling with the concepts and understandings fundamental to the subject and discipline” (Larmer et al., 2015, p. 35). With student learning goals in mind, educators create project that include the seven essential project design elements (illustrated in Figure 2): (1) a challenging problem or question, (2) sustained inquiry, (3) authenticity, (4) student voice and choice, (5) reflection, (6) critique and revision, and (7) a public product (Larmer et al., 2015).

## Figure 2

*Gold Standard PBL: Seven Essential Project Design Elements<sup>1</sup>*



<sup>1</sup> Note: Adapted from *Setting the Standard for Project Based Learning: A Proven Approach to Rigorous Classroom Instruction*, by John Larmer, John Mergendoller, Suzie Boss (ASCD 2015). Copyright 2020 by John Larmer/Buck Institute of Education.

In this way, Project Based Learning engages students in authentic tasks while collaborating with their peers to produce results that make a difference in the real world within the classroom and the world beyond (Larmer et al., 2015).

In the PBL model, educators are viewed as coaches who learn alongside their students (Boss & Larmer, 2018). This approach encourages student voice and fosters equity by rebalancing the traditional student-teacher power relationship (Boss & Larmer, 2018). Student inquiries play a key part in driving the project and product development process. As well, students and teachers reflect regularly together throughout the project to celebrate successes and progress. (Boss & Larmer 2018). Project Based Learning engages students by providing them with opportunities to take part in meaningful projects framed within a challenging problem or question (Larmer et al., 2015). In this way, students are no longer passive recipients of a curriculum, but are active participants providing opportunities for personal engagement and creativity to flourish (Kozleski et al., 2015).

### ***Assistive Technology and Software***

Over the past few decades, the vast expansion of emerging technologies has provided educators with many new tools for engaging students through differentiated instruction (Armstrong, 2012b). There are many software programs and assistive technologies that can help students use their strengths to access the curriculum (Bianco et al., 2009). One example of assistive technology that can benefit students is Clusive (CAST, 2022b). Clusive is an adaptive and user-friendly web-based reader developed to engage students in independent reading (CAST, 2022b). Clusive supports the growth of reading skills for students in grades 5 through 12 by transforming digital reading environments. Some of the features include choice of reading materials, read-aloud capabilities, social-emotional reflection opportunities, and progress-

monitoring tools (CAST, 2022b). Another beneficial tool that educators can utilize to help students visualize, organize, and learn using their visual strengths is Inspiration (Inspiration 2022). Students and educators can use this software to generate graphic organizers, concept maps, outlines, mind maps, and templates for any curriculum focus (Inspiration 2022). Utilizing assistive technology to create access points for learning prevents students' diverse abilities from becoming an obstacle to their learning and promotes authentic and engaging learning experiences for all students in the classroom (Bianco et al., 2009).

### ***Mentors and Professionals***

Mentoring and the use of professionals provides opportunities for students to focus on areas of strength and interest while developing self-confidence and discovering possible career pathways (Bianco et al., 2009). Using the internet to connect students with mentors can provide limitless possibilities for students to connect with experts anywhere in the world. Educators can create these opportunities informally through personal connections or may choose to take advantage of established mentor programs such as Mentored Pathways. Mentored Pathways has teacher resources and programming available for students in grades six through twelve.

Mentored Pathways virtually connects students with business leaders from around the world who act as personal mentors who support students in tackling real industry problems while providing them with opportunities to build a professional network and career plan for the future. (Mentored Pathways, 2022). Whether formally or informally, finding a mentor for students offers many educational, social, and emotional benefits, while engaging students through the creation of opportunities for a variety of authentic real-world learning experiences (Bianco et al., 2009).

### **Conclusion**

This chapter highlighted the results of the study. First, three main themes were identified regarding the relationship between strengths-based teaching strategies and student attitudes: student well-being, student mindsets, and student engagement. Secondly, the benefits of a strengths-based approach, as found in the literature review, on each of these attitudes was discussed. Thirdly, a variety of relevant and practical targeted teaching strategies and resources focusing on fostering the aforementioned attitudes were highlighted. The next chapter will present the conclusion and recommendations of the study.

## **Chapter 4: Conclusion and Recommendations**

### **Summary of Project**

Increasingly, there has been a push by educators, policy makers, and researchers to focus on promoting not only the academic success of students but also their social and emotional development (Gresham, 2018). Researchers are continuing to gain more knowledge about what kinds of interventions will help children develop those strengths and skills, and the impact that society can have on the social and emotional development of children (Tough, 2012). Educators have a unique opportunity to daily invest in students and foster positive self-concept and well-being (Joët et al, 2011). Recently, educators are moving away from the deficit model of education towards a strengths-based approach to learning (Armstrong, 2012b). Therefore, the primary purpose of this study was to discuss the relationship between student attitudes and the implementation of a strengths-based approach to teaching and learning. In addition, educators are provided with a variety of targeted teaching strategies and resources that can be utilized in the classroom setting to promote positive student attitudes toward life and learning.

Within a framework of positive psychology (Galloway et al., 2020) and neurodiversity (Armstrong 2012b) and utilizing a meta-analysis approach as the research design, the literature reviewed in this study focused on two main areas:

- 1) The attitudes affected by the implementation of a strengths-based approach to teaching and learning
- 2) Teaching strategies and resources that can foster the positive development of those attitudes.

Following a step-by-step procedure (see Chapter 1, Figure 1, p. 15) to gather, organize, and summarize the literature, three main attitudes emerged: student well-being, student mindsets, and

student engagement. Once these attitudes were identified further research was completed in order to select and highlight specific strengths-based teaching strategies and resources that can be utilized by educators to foster the aforementioned attitudes.

In summary, this study provided information on the relationship between strengths-based teaching strategies and student attitudes toward life and learning. The study provided a rationale for the implementation of a strengths-based approach and highlighted its many benefits with regards to student academic and social emotional development. This study also gathered strengths-based teaching strategies and resources that educators can utilize in the classroom in order to develop positive student attitudes focusing on student well-being, student mindsets, and student engagement. These resources are described in further detail in Chapter Three of this study.

### **Outstanding Issues**

Some limitations of the study were already mentioned in Chapter One (p.18). One of the main issues with the study was that it focused primarily on strengths-based teaching strategies and the potential impact of these strategies on student attitudes. There are also a variety of other educational approaches that have been utilized to promote positive social and emotional well-being for students. As well, there are many external factors at play (school culture, individual student needs, etc.) in addition to the implementation of strengths-based teaching strategies in a school setting. As well, this research focuses primarily on three main attitudes that emerged from the study: student well-being, student mindsets, and student engagement.

Further research would benefit from taking a closer look at various attitudes that may be impacted by a strengths-based approach to learning including self-confidence and social skills. This perspective will provide additional information for educators with regards to the benefits of



this approach for students in a school environment. As well, further quantitative research is needed regarding the success of specific strengths-based interventions, as much of the research so far is qualitative in nature. As well, there were few research studies conducted within a Canadian setting, so additional investigation would be valuable for educators in Canada. There is also a need for further strengths-based teaching strategy resources to be developed and shared within the Canadian educational setting.

Finally, since this study is solely a literature review, research in the future could provide additional perspectives on the topic of study. This could include quantitative field studies where the researcher could measure the impact of strengths-based strategies on the attitudes of students in a specific classroom or school. It would also be advantageous to conduct longitudinal studies to determine the potential lasting impact of continued intervention. In addition, it would be beneficial to conduct case studies of educators within a variety of school settings in Canada to determine their current knowledge of and experience with strengths-based teaching and learning strategies. This could provide researchers with a starting point to determine what kind of resources and continued professional development would be most valuable for educators in Canada.

### **Implementation Benefits**

Strengths-based teaching strategies can have a positive impact on student attitudes towards life and learning (Brownlee et al., 2012). It is beneficial for educators to not only incorporate strengths-based lessons into their curriculum, but to also approach teaching and learning through a strengths-based perspective (Armstrong, 2012b). The resources highlighted in Chapter Three of this are by no means an exhaustive list of strategies, but rather a practical starting point for educators who are looking to continue to develop strengths-based classrooms.

Implementing a strengths-based approach to learning can improve student well-being (Galloway et al., 2020), student mindsets (Garwood & Ampuja, 2019), and student engagement (Sheras & Bradshaw, 2016). In addition to this, strengths-based teaching strategies provide opportunities for all students, including those with diverse abilities, to access the curriculum and be successful and valued members of the classroom community.

### **Recommendations**

This study has investigated the relationship between a strengths-based approach to learning and student attitudes. The following recommendations can help educators integrate a strengths-based approach to learning into their classroom settings. First of all, it is essential for educators to have an understanding of a strengths-based approach to learning and its many benefits for students. It is helpful for educators to recognize the need for school systems to move away from a deficit model of thinking by adopting a neurodiversity view of learners (Armstrong, 2012b). It is also important to acknowledge the significance of social and emotional development and the role that educators play in this process (Gresham, 2018).

Secondly, it is important for educators to view themselves as life-long learners alongside the students they interact with. School staff will also benefit from strengths-assessments and portfolios that allow each one to use their gifts and passions to encourage others within the school community (Kozleski et al., 2015). Continued professional development is also beneficial for educators as it enables them to better understand the benefits of a strengths-based approach within an inclusive classroom environment (Garwood & Ampuja, 2019). Encouraging educators to focus on individual learner strengths, rather than deficits, and providing them with the tools needed to get started can be very empowering (Griffiths, 2020). Given the range of teacher confidence with a strengths-based approach to learning, there is a case for the

development of a diverse range of professional training resources for school staff (Sokal & Katz, 2015).

Finally, in order for a strengths-based approach to learning to have the maximum impact on students, a school-wide approach is needed. School climate plays a key role in improving behavioural, academic, and mental health outcomes for students (Garwood & Ampuja, 2019). Programs that are implemented schoolwide can enhance the sense of the school as a caring, supportive environment (Sheras & Bradshaw, 2016). It is essential for all of the stakeholders within the school community to be onboard and to understand the vision and benefits of a strengths-based approach to learning. When all members of the school community are valued and celebrated, students will be given opportunities to develop positive attitudes towards life and learning while being encouraged to grow into who they are created to be.

## References

- Augestad, L. (2017). Self-concept and self-esteem among children and young adults with visual impairment: A systematic review. *Cogent Psychology*, 4: 1319652, 1-12.
- Anderson, E. (2005). Strengths-Based Educating: A Concrete Way to Bring Out the Best in Students – and Yourself. The Confessions of an Educator Who Got It Right – Finally! *Educational Horizons*, 83(3), 180-189.
- Armstrong, T. (2012a). First, Discover Their Strengths. *Educational Leadership*, 70(2), 10–16.
- Armstrong, T. (2012b). *Neurodiversity in the Classroom: Strengths-Based Strategies to Help Students with Special Needs Succeed in School and Life*. ASCD
- Bianco, M., Carothers, D. E., & Smiley, L. R. (2009). Gifted Students with Asperger Syndrome: Strategies for Strength-Based Programming. *Intervention in School and Clinic*, 44(4), 206-215.
- Boss, S. & Larmer, J. (2018). *Project Based Teaching: How to Create Rigorous and Engaging Learning Experiences*. ASCD.
- Brownlee, K., Rawana E. P., & MacArthur, J. (2012). Implementation of a Strengths-Based Approach to Teaching in an Elementary School. *Journal of Teaching and Learning*, 8(1).  
<https://doi-org.ezproxy.student.twu.ca/10.22329/jtl.v8i1.3069>
- Buck Institute of Education. (2022). PBL Works. *What is PBL?* <https://www.pblworks.org/what-is-pbl>
- Burgstahler, S. (2012). Universal Design of Instruction (UDI): Definition, Principles, Guidelines, and Examples. *DO-IT*. 1-4
- CAST. (2022a). *About Universal Design for Learning*. <https://www.cast.org/impact/universal-design-for-learning-udl>

CAST. (2022b). *Clusive: An Accessible, Digital Reading Platform*.

<https://www.cast.org/products-services/products/clusive>

Couros, G. (2015). *The Innovator's Mindset: Empower Learning, Unleash Talent, and Lead a Culture of Creativity*. Dave Burgess Consulting, Inc.

Dweck, Carol S. (2006). *Mindset The New Psychology of Success: How We Can Learn to Fulfill our Potential*. Ballantine Books.

Galloway, R., Reynolds, B., & Williamson, J. (2020). Strengths-based teaching and learning approaches for children: Perceptions and practices. *Journal of Pedagogical Research*, 4(1), 31–45. <https://doi.org/10.33902/JPR.2020058178>

Gallup. (2022). *Clifton Strengths*.

[https://www.gallup.com/cliftonstrengths/en/253862/cliftonstrengths-for-schools.aspx?utm\\_source=google&utm\\_medium=cpc&utm\\_campaign=canada\\_branded\\_cs\\_ecom&utm\\_term=clifton%20strengths&gclid=Cj0KCQjwgO2XBhCaARIsANrW2X3evqBL5ZUumE7upI8bueXeZYMnjRBprvKHNkEMo8eNcC1FgN0XtWMaApJEEALw\\_wcB](https://www.gallup.com/cliftonstrengths/en/253862/cliftonstrengths-for-schools.aspx?utm_source=google&utm_medium=cpc&utm_campaign=canada_branded_cs_ecom&utm_term=clifton%20strengths&gclid=Cj0KCQjwgO2XBhCaARIsANrW2X3evqBL5ZUumE7upI8bueXeZYMnjRBprvKHNkEMo8eNcC1FgN0XtWMaApJEEALw_wcB)

Garwood J. & Ampuja, A. A. (2019). Inclusion of Students with Learning, Emotional, and Behavioral Disabilities Through Strengths-Based Approaches. *Intervention in School and Clinic*, 55(1), 46-51. DOI: 10.1177/1053451218767918

Greene, R. W. (2016). *Lost & Found: Helping Behaviorally Challenging Students (and, while you're at it, all the others)*. Jossey-Bass.

Gresham, Frank M. (2018). *Effective Interventions for Social-Emotional Learning*. The Guilford Press.

- Griffiths, D. (2020). Teaching for neurodiversity: Training teachers to see beyond labels. *Impact (2514-6955)*, 8, 56–59.
- Hersh, M., & Mouroutsou, S. (2019). Learning technology and disability – Overcoming barriers to inclusion: Evidence from a multicountry study. *British Journal of Educational Technology*, 50(6), 3329-3344. DOI: 10.1111/bjet.12737
- Heyder, A., Südkamp, A., & Steinmayr R. (2019). How are teachers' attitudes toward inclusion related to the social-emotional school experiences of students with and without special needs? *Learning and Individual Differences* 77, 1-11  
<https://doi.org/10.1016/j.lindif.2019.101776>
- Inspiration (2022). *Visual Thinking Tools for Academic and Workplace Success*.  
<https://www.inspiration-at.com/>
- Joët, G., Usher, E. L., & Bressoux, P. (2011). Sources of Self-Efficacy: An Investigation of Elementary School Students in France. *Journal of Educational Psychology*, (103)3, 649-663.
- Katz, J. (2012). *Teaching to Diversity: The Three-Block Model of Universal Design for Learning*. Portage & Main Press.
- Katz, J. (2018). *Ensouling Our Schools: A Universally Designed Framework for Mental-Health, Well-Being, and Reconciliation*. Portage & Main Press.
- Katz, J. (2022). *The Three-Block Model of UDL*. <http://www.threeblockmodel.com/the-three-block-model-of-udl.html>
- Koller, D., Le Pouesard, M., & Rummens, J. A. (2018). Defining social inclusion for children with disabilities: A critical literature review. *Children & Society*, 32, 1-13.  
DOI: 10.1111/chso.12223

- Kozleski, E., Yu T., Satter, A., Francis, G., & Haines, S. (2015) A Never Ending Journey: Inclusive Education is a Principle of Practice, Not an End Game. *Research and Practice for Persons with Severe Disabilities*, (40)3, 211-226. DOI: 10.1177/1540796915600717
- Larmer J. (2020, July 22). *Gold Standard PBL: Essential Project Design Elements*. PBL Works. <https://www.pblworks.org/blog/gold-standard-pbl-essential-project-design-elements>
- Larmer J., Mergendoller J., Boss, S. (2015). *Setting the Standard for Project Based Learning: A Proven Approach to Rigorous Classroom Instruction*. ASCD.
- Lopez, S. J., & Louis, M. C. (2009) The Principles of Strengths-Based Education, *Journal of College and Character*, 10(4), DOI: 10.2202/1940-1639.1041
- McCrimmon, A. (2015). Inclusive education in Canada: Issues in teacher preparation. *Intervention in School and Clinic*, 50(4), 234-237. DOI: 10.1177/1053451214546402
- Mentored Pathways. (2022). *Connecting...Education to Careers!*  
<https://www.mentoredpathways.org/index.cfm>
- Mertens, D. M. (2020). *Research and Evaluation in Education and Psychology* (5th ed). Thousand Oaks, CA: Sage.
- Naylor, C. (2005). Inclusion in British Columbia's public schools: Always a journey, never a destination? BCTF Research
- Palmer, J. (2003). Teaching with Heart and Soul: Reflections on Spirituality in Teacher Education. *Journal of Teacher Education*, 54(5), 376-385. DOI: 10.1177/0022487103257359
- Province of British Columbia. (2020). *BC's New Curriculum*.  
<https://curriculum.gov.bc.ca/competencies/personal-and-social>

- Quinlan, D. M., Swain, N., Cameron, C., & Vella-Brodrick, D. A. (2015). How 'other people matter' in a classroom-based strengths intervention: Exploring interpersonal strategies and classroom outcomes. *Journal of Positive Psychology*, 10(1), 77-89.
- Rappolt-Schlichtmann, G., Boucher, A. R., & Evans, M. (2018). From Deficit Remediation Capacity Building: Learning to Enable Rather Than Disable Students with Dyslexia. *Language, Speech, & Hearing Services in Schools*, 49, 864-874.  
[https://doi-org.ezproxy.student.twu.ca/10.1044/2018\\_LSHSS-DYSLC-18-0031](https://doi-org.ezproxy.student.twu.ca/10.1044/2018_LSHSS-DYSLC-18-0031)
- SAI. (2022). *Strength Assessment Inventory*. <https://www.strengthassessment.ca/>
- Sanford, K., Williams, L., Hopper, T., McGregor C. (2012). Indigenous Principles Decolonizing Teacher Education: What We Have Learned. *IN Education: Exploring our Connective Educational Landscape*. <https://ineducation.ca/ineducation/article/view/61/547>
- Sheras, P., & Bradshaw, C. (2016). Fostering Policies that Enhance Positive School Environment. *Theory into Practice*, 55, 129-135. DOI: 10.1080/00405841.2016.1156990
- Sokal, L., & Katz, J. (2015). Oh, Canada: Bridges and barriers to inclusion in Canadian schools. *Support for Learning*, 30(1), 42-54. DOI: 10.1111/1467-9604.12078
- Stanley, P., Juhnke, & G., Purkey, W. (2004). Using an Invitational Theory of Practice to Create Safe and Successful Schools. *Journal of Counselling & Development*, 82, 302-309.
- Tough P. (2012). *How Children Succeed: Grit, Curiosity, and the Hidden Power of Character*. Mariner.



### Appendix A: Research Methods Utilized in Key Articles

<b>RESEARCH METHOD</b>	<b>ARTICLE TITLE</b>
<b>Quantitative</b>	<ul style="list-style-type: none"> <li>• Joët et al. (2011) Sources of Self-Efficacy: An Investigation of Elementary School Students in France</li> <li>• Quinlan et al. (2015) How “Other People Matter” in a Classroom-Based Strengths Intervention</li> </ul>
<b>Qualitative</b>	<ul style="list-style-type: none"> <li>• Bianco et al. (2009) Gifted Students with Asperger Syndrome: Strategies for Strength Based Programming</li> <li>• Brownlee et al. (2012) Implementation of a Strengths-Based Approach in an Elementary School</li> <li>• Galloway et al. (2020) Strengths-Based Teaching and Learning Approaches for Children</li> <li>• Griffiths (2020) Teaching for Neurodiversity: Training Teachers to See Beyond Labels</li> </ul>
<b>Mixed Methods</b>	<ul style="list-style-type: none"> <li>• Kozleski et al. (2015) A Never Ending Journey: Inclusive Education is a Principle of Practice, Not an End Game</li> </ul>
<b>Literature Review</b>	<ul style="list-style-type: none"> <li>• Armstrong (2012a) First, Discover their Strengths</li> <li>• Garwood &amp; Ampuja (2019) Inclusion of Students with Learning, Emotional, and Behavioural Disabilities through Strength-Based Approaches</li> <li>• Lopez &amp; Louis (2009) The Principles of Strengths Based Education</li> <li>• Rappolt-Schlichtmann et al. (2018) From Deficit Remediation to Capacity Building</li> <li>• Sheras &amp; Bradshaw (2016) Fostering Policies that Enhance Positive School Environment</li> <li>• Sokal &amp; Katz (2015) Oh, Canada: Bridges and Barriers to Inclusion in Canadian Schools</li> <li>• Stanley et al. (2004) Using an Invitational Theory of Practice to Create Safe and Successful Schools</li> </ul>
<b>Opinion Piece</b>	<ul style="list-style-type: none"> <li>• Anderson (2005) Strengths-Based Educating: A Concrete Way to Bring Out the Best in Students – and Yourself</li> </ul>

## Appendix B: Annotated Bibliography

**Driving Question:** How are the attitudes of students impacted by the implementation of strengths-based learning strategies?

<p><b>Citation:</b> Armstrong, T. (2012a). First, Discover Their Strengths. <i>Educational Leadership</i>, 70(2), 10–16.</p>
<p><b>About the Author(s):</b></p> <ul style="list-style-type: none"> <li>• Thomas Armstrong is one of the key authors on the topics of Neurodiversity and Strengths-Based Learning.</li> <li>• He has authored over 15 books including <i>The Power of Neurodiversity: Unleashing the Advantages of Your Differently Wired Brain</i> and <i>Neurodiversity in the Classroom: Strength-Based Strategies to Help Students with Special Needs Succeed in School and Life</i>.</li> <li>• His website is <a href="http://www.thomasarmstrong.com">www.thomasarmstrong.com</a></li> </ul>
<p><b>Format and Audience:</b></p> <ul style="list-style-type: none"> <li>• Journal Article</li> <li>• The audience is educational leaders and stakeholders in the broader field of education</li> </ul>
<p><b>Main Argument:</b></p> <ul style="list-style-type: none"> <li>• The deficit-based model of education focuses on student disabilities rather than abilities (Armstrong, 2012a).</li> <li>• Neurodiversity celebrates student differences and focuses on assets rather than labels (Armstrong, 2012a).</li> </ul>
<p><b>Research Methods:</b></p> <ul style="list-style-type: none"> <li>• Literature Review – Open Piece</li> </ul>
<p><b>Conclusions:</b></p> <ul style="list-style-type: none"> <li>• It is valuable for educators to view students through the lens of neurodiversity (Armstrong, 2012a).</li> <li>• Educators should move away from a deficit model towards a strengths-based perspective in order to help students reach their true potential (Armstrong, 2012a).</li> </ul>
<p><b>Connection to Research Topic:</b></p> <ul style="list-style-type: none"> <li>• This article supports my research topic in several ways:             <ul style="list-style-type: none"> <li>○ Outlines the theoretical foundations of Neurodiversity and a strengths-based approach to learning</li> <li>○ Discusses “positive niche construction” (Armstrong, 2012a, p. 14) and the need for educators to create environments where all students can thrive</li> <li>○ Highlights the importance of the following: Strength Awareness, Universal Design for Learning, Strength-Based Learning Strategies, Positive Role Models, Enhanced Human Resources, Affirmative Career Aspirations, and Environmental Modifications</li> <li>○ Reviews the asset vs. deficit model approaches to learning</li> <li>○ The importance of diversity vs. disability</li> </ul> </li> </ul>
<p><b>Questions and Wonderings:</b></p> <ul style="list-style-type: none"> <li>• I wonder what resources are available for secondary educators regarding positive role models and career aspirations for students including those with diverse abilities.</li> </ul>
<p><b>Relevance Rating:</b> 10/10</p>

<p><b>Citation:</b> Anderson, E. (2005). Strengths-Based Educating: A Concrete Way to Bring Out the Best in Students – and Yourself. The Confessions of an Educator Who Got It Right – Finally! <i>Educational Horizons</i>, 83(3), 180-189.</p>
<p><b>About the Author(s):</b></p> <ul style="list-style-type: none"> <li>• Edward Anderson is the co-author of <i>StrengthsQuest: Discover and Develop Your Strengths in Academics, Career, and Beyond</i>.</li> <li>• He is a professor of educational leadership at Azusa Pacific University</li> </ul>
<p><b>Format and Audience:</b></p> <ul style="list-style-type: none"> <li>• Journal Article</li> <li>• The author highlights the need for strengths-based learning approaches and also promoting the implementation of the StrengthsQuest curriculum</li> <li>• Associated with The Gallup Organization, Princeton, NJ</li> <li>• The audience is educators and stakeholders in the broader field of education</li> </ul>
<p><b>Main Argument:</b></p> <ul style="list-style-type: none"> <li>• Outlines Anderson’s personal journey as an educator</li> <li>• Endorses Strengths-Quest as a tool for implementing strengths-based education</li> <li>• Argues that strengths produce satisfaction and enhance quality of life (Anderson, 2005).</li> </ul>
<p><b>Research Methods:</b></p> <ul style="list-style-type: none"> <li>• Opinion Piece</li> </ul>
<p><b>Conclusions:</b></p> <ul style="list-style-type: none"> <li>• It is important for educators to recognize the characteristics of “top achievers” (Anderson, 2005, p. 188).</li> <li>• Top achievers recognize their talents and develop them into strengths</li> <li>• Top achievers apply their strengths in roles that best suit them</li> <li>• Top achievers invent ways to apply their strengths to their achievement tasks</li> </ul>
<p><b>Connection to Research Topic:</b></p> <ul style="list-style-type: none"> <li>• This article supports my research topic in several ways: <ul style="list-style-type: none"> <li>○ Argues the importance of focusing on using strengths to promote achievement and positive self-identity</li> <li>○ Seeks to explain the differences between talents and strengths</li> <li>○ Reviews the strengths-based vs. deficit model approaches to learning</li> </ul> </li> </ul>
<p><b>Questions and Wonderings:</b></p> <ul style="list-style-type: none"> <li>• I am curious about the extent to which the StrengthsQuest curriculum is being utilized in secondary schools in BC, and whether it would be a beneficial tool for my school setting.</li> </ul>
<p><b>Relevance Rating:</b> 6/10</p>

<p><b>Citation:</b> Bianco, M., Carothers, D. E., &amp; Smiley, L. R. (2009). Gifted Students with Asperger Syndrome: Strategies for Strength-Based Programming. <i>Intervention in School and Clinic</i>, 44(4), 206-215</p>
<p><b>About the Author(s):</b></p> <ul style="list-style-type: none"> <li>• Margarita Bianco is an assistant professor of special education at the University of Colorado Denver</li> <li>• Douglas E. Carothers is an assistant professor of special education at the University of Hawaii at Hilo</li> <li>• Lydia R. Smiley is a professor of exceptional student education at Florida Atlantic University</li> </ul>
<p><b>Format and Audience:</b></p> <ul style="list-style-type: none"> <li>• Journal Article</li> <li>• Sage Publication</li> <li>• The audience is educators and stakeholders in the broader field of education</li> </ul>
<p><b>Main Argument:</b></p> <ul style="list-style-type: none"> <li>• Educational planning for gifted students with Asperger syndrome (AS) must include attention to student strengths and interests (Bianco et al., 2009).</li> <li>• Focusing on student deficits reduces motivation and puts students at risk of academic failure and depression (Bianco et al., 2009).</li> <li>• It is important for educators to identify the passions students have and provide opportunities for students to pursue these interests (Bianco et al., 2009).</li> </ul>
<p><b>Research Methods:</b></p> <ul style="list-style-type: none"> <li>• Qualitative Study – Literature Review</li> <li>• Opinion piece with some personal stories (use pseudonyms) of the lived experiences of students at teachers</li> </ul>
<p><b>Conclusions:</b></p> <ul style="list-style-type: none"> <li>• Gifted students with AS need educational planning that focuses on their interests and strengths.</li> <li>• Collaboration with school professionals and the student’s family is important in order to ensure success of these programs.</li> </ul>
<p><b>Connection to Research Topic:</b></p> <ul style="list-style-type: none"> <li>• This article supports my research topic in several ways: <ul style="list-style-type: none"> <li>○ Outlines the importance of student interest and engagement</li> <li>○ A strengths-based approach is good for all students (including “gifted” students)</li> <li>○ Reviews the asset vs. deficit model approaches to learning</li> </ul> </li> </ul>
<p><b>Questions and Wonderings:</b></p> <ul style="list-style-type: none"> <li>• The article refers to the schools “gifted and talented coordinator”. I wonder if this position exists at many schools in BC. In my experience, gifted students generally fall under the regular learning support services program and unfortunately not as much time is dedicated to supporting and challenging gifted students.</li> </ul>
<p><b>Relevance Rating:</b> 8/10</p>

<p><b>Citation:</b> Brownlee, K., Rawana E. P., &amp; MacArthur, J. (2012). Implementation of a Strengths-Based Approach to Teaching in an Elementary School. <i>Journal of Teaching and Learning</i>, 8(1). <a href="https://doi-org.ezproxy.student.twu.ca/10.22329/jtl.v8i1.3069">https://doi-org.ezproxy.student.twu.ca/10.22329/jtl.v8i1.3069</a></p>
<p><b>About the Author(s):</b></p> <ul style="list-style-type: none"> <li>• All associated with Lakehead University, Thunder Bay, Ontario</li> <li>• Keith Brownlee is the Director of Research for the Centre of Excellence for Children and Adolescents with Special Needs and Profess of Social Work</li> <li>• Edward P. Rawana is the Director of Excellence for Children and Adolescents with Special Needs and Associate Professor, Department of Psychology</li> <li>• Julia MacArthur is an MSW Graduate of the School of Social Work</li> </ul>
<p><b>Format and Audience:</b></p> <ul style="list-style-type: none"> <li>• Journal Article</li> <li>• Research is funded by the Ontario Education Services Corporation</li> <li>• The audience is educators and stakeholders in the broader field of education</li> </ul>
<p><b>Main Argument:</b></p> <ul style="list-style-type: none"> <li>• Schools can contribute to student mental well-being by adopting a strengths perspective model (Brownlee et al., 2012).</li> <li>• A school-wide approach is beneficial (Brownlee et al., 2012).</li> <li>• Strengths-based intervention not only transforms the way school staff interact with students, but also changes the way that students perceive themselves and their potential (Brownlee et al., 2012).</li> </ul>
<p><b>Research Methods:</b></p> <ul style="list-style-type: none"> <li>• Qualitative Study – Detailed Literature Review followed by two brief case studies</li> </ul>
<p><b>Conclusions:</b></p> <ul style="list-style-type: none"> <li>• A strengths-based model can positively impact the entire school community.</li> <li>• Strengths are assets that can be used to address academic and behavioural difficulties.</li> </ul>
<p><b>Connection to Research Topic:</b></p> <ul style="list-style-type: none"> <li>• This article supports my research topic in several ways: <ul style="list-style-type: none"> <li>○ Outlines the theoretical foundation of strengths and resiliency</li> <li>○ Highlights various strengths-based approaches that can be utilized in the classroom</li> <li>○ Reviews the asset vs. deficit model approaches to learning</li> </ul> </li> </ul>
<p><b>Questions and Wonderings:</b></p> <ul style="list-style-type: none"> <li>• I wonder if secondary educators can incorporate strengths-awareness inventories into their classes (Career Ed, English, other?)</li> </ul>
<p><b>Relevance Rating:</b> 10/10</p>

<p><b>Citation:</b> Galloway, R., Reynolds, B., &amp; Williamson, J. (2020). Strengths-based teaching and learning approaches for children: Perceptions and practices. <i>Journal of Pedagogical Research</i>, 4(1), 31–45. <a href="https://doi.org/10.33902/JPR.2020058178">https://doi.org/10.33902/JPR.2020058178</a></p>
<p><b>About the Author(s):</b></p> <ul style="list-style-type: none"> <li>• Rod Galloway is associated with George Street Normal School in Dunedin in New Zealand and has written several articles on the themes of positive psychology and strengths-based approaches that have been published in a variety of journals.</li> <li>• Bronwyn Reynolds and John Williamson are both associated with the School of Education, at the University of Tasmania in Australia.</li> </ul>
<p><b>Format and Audience:</b></p> <ul style="list-style-type: none"> <li>• Journal Article – Reports on the perceptions and practices of strengths-based approaches in a New Zealand primary school</li> <li>• The audience is educators in New Zealand as well as stakeholders in the broader field of education</li> </ul>
<p><b>Main Argument:</b></p> <ul style="list-style-type: none"> <li>• Early identification of children’s strengths is beneficial (Galloway et al., 2020).</li> <li>• Strengths-based teaching approaches contribute to enhanced student well-being and learning (Galloway et al., 2020).</li> </ul>
<p><b>Research Methods:</b></p> <ul style="list-style-type: none"> <li>• Qualitative Study in a New Zealand primary school</li> <li>• Data was gathered through semi-structured questionnaires, semi-structured focus group interviews, and document analysis</li> </ul>
<p><b>Conclusions:</b></p> <ul style="list-style-type: none"> <li>• Identifying strengths is beneficial because identification must happen before development can occur (Galloway et al., 2020).</li> <li>• The identification of strengths can produce positive emotions and increase self-efficacy (Galloway et al., 2020).</li> <li>• Further research is encouraged to continue to explore how strengths-based approaches contribute to student well-being. (Galloway et al., 2020).</li> </ul>
<p><b>Connection to Research Topic:</b></p> <ul style="list-style-type: none"> <li>• This article supports my research topic in several ways: <ul style="list-style-type: none"> <li>○ Outlines the theoretical foundation of strengths-based approaches to learning</li> <li>○ Connects a strengths-based approach to positive psychology</li> <li>○ Suggests that the implementation of strengths-based approaches can improve student self-efficacy</li> </ul> </li> </ul>
<p><b>Questions and Wonderings:</b></p> <ul style="list-style-type: none"> <li>• The article refers to “strengths-based learning time” being provided to students as “electives” (Galloway et al., 2020, p. 42). I wonder how BC educators can incorporate this kind of elective time into the current secondary school model of learning.</li> </ul>
<p><b>Relevance Rating:</b> 9/10</p>

<p><b>Citation:</b> Griffiths, D. (2020). Teaching for neurodiversity: Training teachers to see beyond labels. <i>Impact</i> (2514-6955), 8, 56–59.</p>
<p><b>About the Author(s):</b></p> <ul style="list-style-type: none"> <li>• Dominic Griffiths is associated with Manchester Metropolitan University (UK)</li> <li>• (There is not much information provided about the author)</li> </ul>
<p><b>Format and Audience:</b></p> <ul style="list-style-type: none"> <li>• Journal Article</li> <li>• The audience is educational leaders in the UK and educators and stakeholders in the broader field of education</li> </ul>
<p><b>Main Argument:</b></p> <ul style="list-style-type: none"> <li>• It is important for educators to be equipped with the knowledge, skills, and attitudes to teach from a perspective of neurodiversity (Griffiths, 2020).</li> <li>• It is also beneficial to measure the success of training programs in order to make revisions as necessary (Griffiths, 2020).</li> <li>• The study seeks to investigate the effectiveness of the Teaching for Neurodiversity program in the UK (Griffiths, 2020).</li> <li>• The goal of the training program was to provide educators with a better understanding of neurodiversity in learning and a basic toolkit for teachers (Griffiths, 2020).</li> </ul>
<p><b>Research Methods:</b></p> <ul style="list-style-type: none"> <li>• Qualitative Study</li> <li>• The team used three surveys to evaluate the impact of Teaching for Neurodiversity training events</li> </ul>
<p><b>Conclusions:</b></p> <ul style="list-style-type: none"> <li>• Encouraging teachers to focus on individual learner strengths and offering them a toolkit can be really empowering (Griffiths, 2020).</li> <li>• This type of training is needed and would also be beneficial for preservice teachers (Griffiths, 2020).</li> <li>• Since there is a wide range of teachers' confidence and skills in this area, it would also be beneficial to offer different levels of training packages (Griffiths, 2020)</li> </ul>
<p><b>Connection to Research Topic:</b></p> <ul style="list-style-type: none"> <li>• This article supports my research topic in several ways: <ul style="list-style-type: none"> <li>○ Outlines the theoretical foundation of neurodiversity (quotes Armstrong)</li> <li>○ Reviews the asset vs. deficit model approaches to learning</li> <li>○ Highlights the negative impact of labelling students</li> <li>○ Emphasizes the need for continued educator training in strengths-based approaches to learning</li> </ul> </li> </ul>
<p><b>Questions and Wonderings:</b></p> <ul style="list-style-type: none"> <li>• I wonder what strengths-based training programs (both online and in-person) are available to educators in British Columbia.</li> </ul>
<p><b>Relevance Rating:</b> 7/10</p>

<p><b>Citation:</b> Joët, G., Usher, E. L., &amp; Bressoux, P. (2011). Sources of Self-Efficacy: An Investigation of Elementary School Students in France. <i>Journal of Educational Psychology</i>, (103)3, 649-663.</p>
<p><b>About the Author(s):</b></p> <ul style="list-style-type: none"> <li>• Gwenaëlle Joët and Pascal Bressoux – Department of Educational Sciences, University Pierre-Mendes-France, Grenoble, France</li> <li>• Ellen L. Usher – Department of Educational, School, and Counseling Psychology, University of Kentucky</li> </ul>
<p><b>Format and Audience:</b></p> <ul style="list-style-type: none"> <li>• Journal Article</li> <li>• Publication of the American Psychological Association</li> <li>• The audience is educators and stakeholders in the broader field of education</li> </ul>
<p><b>Main Argument:</b></p> <ul style="list-style-type: none"> <li>• It is important for educators to develop Bandura’s theorized sources of self-efficacy (Joët et al., 2011). <ul style="list-style-type: none"> <li>○ Mastery Experience, Vicarious Experience, Social Persuasions, Physiological and Emotional States</li> </ul> </li> <li>• Self-beliefs formed in elementary school impact future self-efficacy (Joët et al., 2011).</li> <li>• Praise can boost self-efficacy (Joët et al., 2011).</li> </ul>
<p><b>Research Methods:</b></p> <ul style="list-style-type: none"> <li>• Quantitative Study</li> <li>• Seeks to assess the sources of third-grade elementary students’ self-efficacy in Mathematics and French</li> </ul>
<p><b>Conclusions:</b></p> <ul style="list-style-type: none"> <li>• Teachers who provide opportunities for success for all students have students with higher self-efficacy.</li> <li>• It is important to lower students’ anxieties in order to promote growth.</li> </ul>
<p><b>Connection to Research Topic:</b></p> <ul style="list-style-type: none"> <li>• This article supports my research topic in several ways by focusing on the attitudes portion of my driving question: <ul style="list-style-type: none"> <li>○ Outlines Bandura’s theorized sources of self-efficacy</li> <li>○ Discusses the importance of growth mindsets in learning</li> <li>○ Reviews the importance of self-concept</li> <li>○ Explains the importance of social cognitive theory</li> </ul> </li> </ul>
<p><b>Questions and Wonderings:</b></p> <ul style="list-style-type: none"> <li>• This article focuses primarily on Bandura’s theorized four sources of self-efficacy. I wonder if there are other additional sources of self-efficacy that play an important role in a child’s development of self-concept.</li> </ul>
<p><b>Relevance Rating:</b> 6/10</p>



<p><b>Citation:</b> Lopez, S. J., &amp; Louis, M. C. (2009) The Principles of Strengths-Based Education, <i>Journal of College and Character</i>, 10(4), DOI: 10.2202/1940-1639.1041</p>
<p><b>About the Author(s):</b></p> <ul style="list-style-type: none"> <li>• Shane J. Lopez is the architect of the Gallup Student Poll, and he directs the annual Gallup Well-Being Forum. He is also the research director for the Clifton Strengths Institute.</li> <li>• Michelle C. Louis is a postdoctoral fellow at the Noel Academy for Strengths-Based Leadership and Education at Azusa Pacific University.</li> </ul>
<p><b>Format and Audience:</b></p> <ul style="list-style-type: none"> <li>• Journal Article</li> <li>• The audience is educators and stakeholders in the broader field of education</li> </ul>
<p><b>Main Argument:</b></p> <ul style="list-style-type: none"> <li>• Strengths-based education is beneficial to students (Lopez &amp; Louis, 2009).</li> <li>• It is also important for educators to identify their own areas of strength.</li> <li>• Students and teachers should both be engaged in the process of setting and working towards personal goals.</li> <li>• The authors present five key principles of strengths-based education: measurement, individualization, networking, deliberate application, and intentional development (Lopez &amp; Louis, 2009).</li> </ul>
<p><b>Research Methods:</b></p> <ul style="list-style-type: none"> <li>• Qualitative Study – Literature Review</li> </ul>
<p><b>Conclusions:</b></p> <ul style="list-style-type: none"> <li>• It is also beneficial for educators to identify their own strengths (Lopez &amp; Louis, 2009).</li> <li>• Results are best when colleagues work together to support strength development within the entire community (Lopez &amp; Louis, 2009).</li> <li>• It is beneficial for educators to create individualized learning experiences by thinking about and acting on the strengths of each student.</li> </ul>
<p><b>Connection to Research Topic:</b></p> <ul style="list-style-type: none"> <li>• This article supports my research topic in several ways: <ul style="list-style-type: none"> <li>○ Outlines the theoretical foundation of strengths-based education</li> <li>○ Provides a definition of a strengths-based educational model</li> <li>○ Offers suggestions for tools that can be used to help students identify their strengths: Clifton Strengths Finders administered through <i>Strength Quest</i> (Lopez &amp; Louis, 2009)</li> <li>○ Highlights the importance of mindsets</li> <li>○ Identifies the importance of strengths being the “qualities that establish connections between people” (Lopez &amp; Louis, 2009, p. 4).</li> </ul> </li> </ul>
<p><b>Questions and Wonderings:</b></p> <ul style="list-style-type: none"> <li>• I wonder what the significance would be of having secondary educators identify and share their strengths with their colleagues and students.</li> </ul>
<p><b>Relevance Rating:</b> 8/10</p>

<p><b>Citation:</b>  Quinlan, D. M., Swain, N., Cameron, C., &amp; Vella-Brodrick, D. A. (2015). How 'other people matter' in a classroom-based strengths intervention: Exploring interpersonal strategies and classroom outcomes. <i>Journal of Positive Psychology</i>, 10(1), 77-89.</p>
<p><b>About the Author(s):</b></p> <ul style="list-style-type: none"> <li>• Denise M. Quinlan – Educational Assessment Research Unit, University of Otago College of Education, New Zealand</li> <li>• Nicola Swain – Department of Psychological Medicine, Dunedin School of Medicine, University of Otago, New Zealand</li> <li>• Claire Cameron – Department of Preventive and Social Medicine, Dunedin School of Medicine, University of Otago, New Zealand</li> <li>• Dianne A. Vella-Brodrick – Graduate School of Education, University of Melbourne, Australia</li> </ul>
<p><b>Format and Audience:</b></p> <ul style="list-style-type: none"> <li>• Journal Article</li> <li>• Routledge Publication</li> <li>• The audience is educators and stakeholders in the broader field of education</li> </ul>
<p><b>Main Argument:</b></p> <ul style="list-style-type: none"> <li>• Interventions that help students identify and develop character strengths have been shown to benefit academic achievement, engagement, and well-being (Quinlan et al., 2015).</li> <li>• Strengths-based interventions may influence individual perceptions of well-being, class climate, and engagement (Quinlan et al., 2015).</li> </ul>
<p><b>Research Methods:</b></p> <ul style="list-style-type: none"> <li>• Quantitative Study</li> <li>• A six-session program was trialed with 9-12 year-old students in order to examine the effects of a classroom-based strengths intervention on class cohesion, engagement, and well-being</li> </ul>
<p><b>Conclusions:</b></p> <ul style="list-style-type: none"> <li>• A strengths-based intervention may have benefits for classroom relationships and well-being.</li> <li>• Further research is needed using more robust research designs.</li> </ul>
<p><b>Connection to Research Topic:</b></p> <ul style="list-style-type: none"> <li>• This article supports my research topic in several ways: <ul style="list-style-type: none"> <li>○ Outlines the theoretical foundation of strengths-based learning strategies</li> <li>○ Highlights that strengths-based interventions may have a positive impact on student attitudes and well-being</li> <li>○ Reviews the asset vs. deficit model approaches to learning</li> </ul> </li> </ul>
<p><b>Questions and Wonderings:</b></p> <ul style="list-style-type: none"> <li>• This study focuses on students aged 9-12. I wonder if the findings are relevant for secondary students.</li> </ul>
<p><b>Relevance Rating:</b> 8/10</p>

<p><b>Citation:</b>  Rappolt-Schlichtmann, G., Boucher, A. R., &amp; Evans, M. (2018). From Deficit Remediation to Capacity Building: Learning to Enable Rather Than Disable Students with Dyslexia. <i>Language, Speech, &amp; Hearing Services in Schools</i>, 49, 864-874. <a href="https://doi-org.ezproxy.student.twu.ca/10.1044/2018_LSHSS-DYSLC-18-0031">https://doi-org.ezproxy.student.twu.ca/10.1044/2018_LSHSS-DYSLC-18-0031</a></p>
<p><b>About the Author(s):</b></p> <ul style="list-style-type: none"> <li>• Gabrielle Rappolt-Schlichtmann – Ed Together, Research &amp; Innovation, Boston, MA</li> <li>• Alyssa R. Boucher – Harvard Human Development and Psychology, Graduate School of Education, Cambridge, MA</li> <li>• Miriam Evans – Boston University Speech, Language &amp; Hearing Sciences, MA</li> </ul>
<p><b>Format and Audience:</b></p> <ul style="list-style-type: none"> <li>• Journal Article</li> <li>• Publication of the American Speech-Language-Hearing Association</li> <li>• The audience is educators and stakeholders in the broader field of education</li> </ul>
<p><b>Main Argument:</b></p> <ul style="list-style-type: none"> <li>• It is important for educators to adopt a neurodiversity view of dyslexia (Rappolt-Schlichtmann, et al., 2018).</li> <li>• Strengths-based and Universal Design for Learning (UDL) approaches can be used to support the overall well-being of students with dyslexia (Rappolt-Schlichtmann, et al., 2018).</li> </ul>
<p><b>Research Methods:</b></p> <ul style="list-style-type: none"> <li>• Qualitative Study – Literature Review</li> <li>• Focused on the history of the deficit view of dyslexia, the neurodiversity view, abilities related to dyslexia, and UDL strategies</li> </ul>
<p><b>Conclusions:</b></p> <ul style="list-style-type: none"> <li>• A deficit view of students undermines their capacity to be successful</li> <li>• A neurodiversity view of dyslexia is beneficial in building capacity and helping students thrive in learning and life</li> <li>• A strengths-based model can also be used to support the well-being of students with dyslexia</li> <li>• Recommend further research to explore strengths associated with dyslexia</li> </ul>
<p><b>Connection to Research Topic:</b></p> <ul style="list-style-type: none"> <li>• This article supports my research topic in several ways: <ul style="list-style-type: none"> <li>○ Provides a detailed literature review on both the deficit model and neurodiversity view of education</li> <li>○ Highlights the need for educators to move from deficit to difference</li> <li>○ Emphasizes the need for educators to shift their mindsets</li> </ul> </li> </ul>
<p><b>Questions and Wonderings:</b></p> <ul style="list-style-type: none"> <li>• The article refers to school-based speech language pathologists (SLPs). In my experience, I have had SLPs only visit on occasion. I am wondering if other schools in BC have access to school based SLPs.</li> </ul>
<p><b>Relevance Rating:</b> 7/10</p>

## Appendix C: Research Matrix

**Driving Question:** How are the **attitudes** of students impacted by **educator mindsets** and the implementation of a **strengths-based approach** to learning?

Article	Themes								
	Strengths-Based Learning Strategies	Neurodiversity vs. Deficit Model	Impact on Student Attitudes and Well-Being	Theoretical Foundation	Universal Design for Learning	Student and Educator Mindsets	Need for Continued Educator Training	Student Interest and Engagement	Importance of Collaboration and Culture
Anderson (2005) Strengths-Based Educating	X	X	X			X		X	
Armstrong (2012a) First, Discover Their Strengths	X	X	X	X	X				X
Bianco et al. (2009) Gifted Students with Asperger Syndrome: Strategies for Strength Based Programming	X	X	X		X		X	X	X
Brownlee et al. (2012) Implementation of a Strengths-Based Approach to Teaching in an Elementary School	X	X	X	X					X
Galloway et al. (2020) Strengths-Based Teaching and Learning Approaches for Children: Perception and Practices	X	X	X	X			X		
Garwood & Ampuja (2019) Inclusion of Students with Learning, Emotional, and Behavioural Disabilities through Strength-Based Approaches	X	X				X		X	X
Griffiths (2020) Teaching for Neurodiversity: Training Teachers to See Beyond Labels	X	X		X			X		X

Article	Themes								
	Strengths-Based Learning Strategies	Neurodiversity vs. Deficit Model	Impact on Student Attitudes and Well-Being	Theoretical Foundation	Universal Design for Learning	Student and Educator Mindsets	Need for Continued Educator Training	Student Interest and Engagement	Importance of Collaboration and Culture
Joët et al. (2011) Sources of Self-Efficacy: An Investigation of Elementary School Students in France			X			X			X
Kozleski et al. (2015) A Never Ending Journey: Inclusive Education is a Principle of Practice, Not an End Game	X					X	X	X	X
Lopez & Louis (2009) The Principles of Strengths Based Education	X		X	X		X			X
Quinlan et al. (2015) How 'Other People Matter' in a Classroom-Based Strengths Intervention	X	X	X	X				X	
Rappolt-Schlichtmann et al. (2018) From Deficit Remediation to Capacity Building	X	X	X		X	X	X		
Sheras & Bradshaw (2016) Fostering Policies that Enhance Positive School Environment			X				X	X	X
Sokal & Katz (2015) Oh, Canada: Bridges and Barriers to Inclusion in Canadian Schools	X	X	X		X	X	X		
Stanley et al. (2004) Using an Invitational Theory of Practice to Create Safe and Successful Schools		X	X			X			X

## Appendix D: Mind Map

### CENTRAL TOPIC

**Driving Question:** How are the attitudes of secondary school students impacted by the implementation of a strengths-based approach to learning?

**Argument:** I argue that the implementation of strengths-based learning strategies will have a positive impact on the attitudes of students.

Research has shown that the implementation of strengths-based learning strategies has a positive impact on the attitudes of secondary school students. Because of this, it is important for educators in British Columbia to be provided with the training, tools, and resources needed to continue to develop and put into practice strengths-based learning approaches in secondary schools.

### SUBTOPICS

#### Subtopic 1 – **Student Attitudes**

Related Ideas:

- Impact on Student Attitudes and Mindsets
- Impact on Student Well-Being
- Impact on Student Interest and Engagement

#### Subtopic 2 – **Educator Mindsets (School Culture)**

Related Ideas:

- Educator Mindsets Matter
- Neurodiversity vs. Deficit Model
- Importance of Collaboration and School Culture
- Need for Continued Educator Training

#### Subtopic 3 – **Strengths-Based Approach to Learning**

Related Ideas:

- Theoretical Foundation of Strengths-Based Approaches
- Neurodiversity vs. Deficit Model
- Strengths-Based Approaches
- Universal Design for Learning (UDL)

## **Student Attitudes**

For my research project, I wanted to dig deeper into the impact of strengths-based learning approaches on the attitudes and well-being of secondary students. My motivation for focusing on this topic stems from my view of each child being created unique and valuable. In my research so far, I have identified three main areas that are impacted: mindsets (Lopez & Louis, 2009), well-being (Rappolt-Schlichtmann et al., 2018), and engagement (Quinlan et al., 2015). In my research, I will discuss the importance of each of these areas as well as their impact on student achievement and success.

## **Educator Mindsets**

Much of the research I have encountered so far highlights the importance of educator mindsets in relation to the implementation and effectiveness of strengths-based approaches to learning. An educator's mindset can directly impact student attitudes towards learning (Joët et al, 2011). It is important for educators to adopt a neurodiversity approach by moving away from the deficit model which focuses primarily on student needs and instead utilizing student strengths to promote positive student mindsets and well-being (Rappolt-Schlichtmann et al., 2018). This is most effective within the context of a school-wide approach where collaboration amongst all members of the school community is fostered (Griffiths, 2020). It is also important for educators to continue to receive the necessary training and professional development needed in order to create strengths-based schools (Armstrong, 2012a).

## **Strengths-Based Approach to Learning**

This subtopic is central to my research project. My research question is focused on identifying the impact of a strengths-based approach to learning on the attitudes of secondary school students. As such, it is necessary to define strengths-based approaches and highlight the

theoretical foundation of this approach. This approach is a movement away from the deficit model of learning by adopting a neurodiversity view of learners (Brownlee et al., 2012).

Strengths-based approaches are beneficial not only for students with exceptionalities, but for all of the diverse learners in the classroom (Galloway et al., 2020). Implementing Universal Design for Learning (UDL) strategies provide opportunities for all students to access the curriculum and feel engaged in their learning (Armstrong, 2012a).



## Appendix E: Strengths-Based Resources and Teaching Strategies

Strengths-Based Teaching Strategies and Resources
<i>Student Well-Being</i>
<ul style="list-style-type: none"> <li>• <b>Strengths Assessment Inventory (SAI)</b> <ul style="list-style-type: none"> <li>○ Questionnaire created for the purpose of assessing student’s individual strengths</li> <li>○ Includes a youth assessment for individuals between the ages of ten to eighteen</li> <li>○ Covers areas of day-to-day functioning as well as personal developmental domains</li> <li>○ <a href="https://www.strengthassessment.ca/">https://www.strengthassessment.ca/</a></li> </ul> </li>   <li>• <b>Clifton Strengths Finder</b> <ul style="list-style-type: none"> <li>○ Online tool that helps individual students recognize their strengths</li> <li>○ Clifton Strengths for Students is designed for college and pre-college students</li> <li>○ Clifton Strengths Explorer is designed for children ages ten to fourteen</li> <li>○ There are also various Clifton Strengths resources and professional training courses available to support school leaders.</li> <li>○ <a href="https://www.gallup.com/cliftonstrengths/en/253862/cliftonstrengths-for-schools.aspx">https://www.gallup.com/cliftonstrengths/en/253862/cliftonstrengths-for-schools.aspx</a></li> </ul> </li>   <li>• <b>Strengths Wall</b> <ul style="list-style-type: none"> <li>○ With student input, educators create a bulletin board display highlighting student strengths</li> <li>○ Can be revisited and added to throughout the school year</li> <li>○ More details can be found in <i>Implementation of a Strengths-Based Approach to Teaching in and Elementary School</i> (Brownlee et al., 2018).</li> </ul> </li>   <li>• <b>Respecting Diversity Program</b> <ul style="list-style-type: none"> <li>○ A nine-lesson program that introduces students to both their own and their classmates’ learning profiles.</li> <li>○ Highlights how diversity benefits a community</li> <li>○ <a href="http://www.threeblockmodel.com/respecting-diversity-program-videos.html">http://www.threeblockmodel.com/respecting-diversity-program-videos.html</a></li> <li>○ More details can be found in <i>Ensouling Our Schools: A Universally Designed Framework for Mental-Health, Well-Being, and Reconciliation</i> (Katz, 2018).</li> </ul> </li> </ul>

**Strengths-Based Teaching Strategies and Resources*****Student Mindsets***

- **Not Yet**
  - Educators can consider giving students a comment or grade of *Not Yet* (Garwood & Ampuja, 2019).
  - This helps students feel optimistic and hopeful and communicates that with effort and practice they are capable of reaching their goals
  
- **Inspiration Boards**
  - School staff and students can collaborate together to create an inspiration board (Garwood & Ampuja, 2019). Possible ideas include a display referencing famous people who had to overcome adversity, or a visual metaphor such as climbing a mountain with growth mindset quotes.
  
- **Growth Mindset Brag Time**
  - During this time, students are encouraged to share or document times when they observed a classmate or staff member demonstrating growth mindset thinking (Garwood & Ampuja, 2019).
  - This could be part of a weekly routine and take place during class meetings

More details on these strategies can be found in *Inclusion of Students with Learning, Emotional, and Behavioral Disabilities through Strength-Based Approaches* (Garwood & Ampuja, 2019).

**Strengths-Based Teaching Strategies and Resources*****Student Engagement***

- **Project Based Learning**
  - An instructional approach that encourages inquiry based, hands-on learning
  - Students are provided with voice and choice
  - The final product of the project is usually public and meets a real need in the community
  - <https://www.pblworks.org/what-is-pbl>
  - *Setting the Standard for Project Based Learning* (Larmer et al., 2015)
  - *Project Based Teaching* (Boss & Larmer, 2018)
  
- **Clusive**
  - An adaptive and user-friendly, web-based program to promote independent reading
  - Supports the growth of reading skills for students in grades five through twelve
  - Includes reading materials, read-aloud capabilities, and progress-monitoring tools
  - <https://www.cast.org/products-services/products/clusive>
  
- **Inspiration**
  - Software program that can be used to generate graphic organizers, concept maps, and outlines for any curriculum focus
  - Allows students to use their visual strengths to organize their learning
  - <https://www.inspiration-at.com/>
  
- **Mentored Pathways**
  - Mentored Pathways virtually connects students with business leaders from around the world who act as personal mentors
  - Resources and programming available for students in grades six through twelve
  - <https://welcome.mentoredpathways.org/>