Empathy Through a Narrative Lens:
Methodologies to Facilitate Empathy Development in the High School Literature
Classroom

by

Samantha Watkins

Bachelor of Philosophy of Literature, University of Pittsburgh, 2020

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This thesis was presented

by

Samantha Watkins

It was defended on

April 14, 2020

and approved by

Hannah Johnson, PhD, Literature

Christopher Warren, PhD, English, CMU

Thesis Advisor/Dissertation Director: Amy Twyning, PhD, Literature

Thesis Advisor/Dissertation Director: Geoffrey Glover, PhD, Literature

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Through literature it is possible to access the lived experiences of others, to essentially read someone else's mind, which is a straightforward way to explore empathy, yet curriculum for literature classes misses this opportunity entirely. It is this researcher's hypothesis that, by altering the discussion around literature, it would be possible for an educator to use the same texts to foster both technical and intrapersonal skills by altering core standards, without requiring major changes in existing curriculum. Through an extensive exploration of existing research and by conducting independent field research, this project examines the modes that can be used to teach empathy in the high school literature classroom.

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Preface

I would like to dedicate this work to the two individuals who inspired it.

I would also like to thank Dr. Geoffrey Glover, Dr. Amy Twyning, Dr. Hannah Johnson, Dr. Christopher Warren, and soon to be Dr. Christina Scanlon for their mentorship and guidance through this process.

1.0 Introduction

"The only effect I ardently long to produce by my writings, is that those who read them should be better able to imagine and to feel the pains and the joys of those who differ from them in everything but the broad fact of being struggling, erring human creatures." - George Eliot

1.1 The value of empathy

Empathy is worth teaching. Children develop empathic concern, distinct from personal distress, even before turning two, before developing theory of mind i.e. the ability to attribute motivations (Decety & Michalska, 2012; Jensen, Vaish, & Schmidt, 2014; Zahn-Waxler & Radke-Yarrow, 1990; cited in Decety & Yoder, 2016). It continues to be important for an individual's entire life for a myriad of reasons. Living in a complex society, it is necessary that individuals develop the cognitive skills to be able to comprehend other's actions by recognizing and understanding them and responding appropriately (Gallese, 2001). Empathy can also help people become the people they aim to be, catalyzing characteristics such as caring for others (Pelowski, 2011; cited in Bal, 2013). Empathy is central in maintaining the social contract (Laub & Auerhahn, 1989; cited in Gerdes, 2011). Most violence is perpetrated by those who struggle to display empathy (Docker-Drysdale, 1990; cited in Cooper, 2010). Gerdes (2011) claims that a "lack of empathy underlies the worst things human beings can do to one another; high empathy underlies the best." Extensive research has shown that empathy plays a central role in moral reasoning, motivating prosocial behaviors, and inhibiting aggression (Eisenberg, 2005; cited in Decety & Lamm, 2006) as well as catalyzing helping behavior (Batson, 1991; Batson & Shaw, 1991; Davis, 1994; Dovidio, Piliavin, Schroeder, & Penner, 2006; Eisenberg & Miller, 1987; Penner, Dovidio,

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Piliavin, & Schroeder, 2005; cited in Stocks, 2009). According to Decety & Yoder (2016), decades of psychology research has clearly illustrated that empathic concern is a primary motivator for prosocial behavior (Batson, 2012), especially when concern for others develops alongside an understanding of others' internal states (Davidov, Zahn-Waxler, Roth-Hanania, & Knafo, 2013; Patil & Silani, 2014; Smith et al., 2014; Svetlova, Nichols, & Brownell, 2010; Williams, O'Driscoll, & Moore, 2014). Empathy continues to be important because having empathic insights into discrimination, injustice, or inequality, better prepares us to take action that promotes social justice (Gerdes, 2011).

Focusing on education, empathy has an effect on the quality of classroom relationships and achievements (Cooper, 2010; cited in Wilson, 2016). Modeling their teacher's empathy was "transformative" for some students in regards to their "motivation, self-esteem and achievement in learning" (Cooper, 20010; cited in Wilson, 2016). Empathy reduces the detrimental impacts of stress, so teaching empathy explicitly in the classroom can boost academic achievement and capacity for learning as a result of stress reduction (Wilson, 2016).

1.2 The state of empathy education

What this tells us is that empathy can have a massively positive impact from the classroom to the global level. It can be revolutionary for the individual as they build stronger relationships and develop self-esteem among other things and for society as those individuals work together to bring about positive social change. Despite these benefits, empathy is undervalued after early childhood education. It is left in a state of decay, not nurtured past the second or third grade (the grades at which 10 states' SEL standards cut off), and seldom emphasized once students reach

high school. Yet, high school is one of the most tumultuous times in an adolescent's life; for example, bullying takes on a whole new meaning once students reach high school. Only 23 states have standards for social emotional learning (SEL); 10 of those only cover early childhood learning standards according to the Collaborative For Academic, Social, And Emotional Learning ("K-12 Learning Goals for SEL in all 50 States," 2018). When we want students to improve at something, we instruct them on it repeatedly, so why is social emotional learning treated differently? Once a child learns to read, we don't stop asking them to read. Yet when it comes to SEL, 10 states do exactly that. It is the equivalent of not asking students to read a book past the third grade. Meanwhile, continuing this analogy, 27 states don't ask students to learn to read at all.

This discussion is only of state SEL standards; not all 23 states with SEL standards have any requirements detailing empathy education. Illinois is championed as setting the bar for SEL state standards, but their standards mention empathy only once: vaguely saying that in eighth through twelfth grade a student should, "demonstrate empathy with others in a variety of situations" ("Social Emotional Learning Performance Descriptors, Grade 6-12," 2003).

If the leader in SEL standardization finds empathy to be such a footnote, then certainly there is cause to raise the alarm and discuss the values of empathy education. And given the need for repetition of a skill to develop it fully, it is justified to discuss such a topic in the high school setting.

1.3 Defining the scope of this research

Empathy requires an affective response followed by a cognitive response (Decety & Lamm, 2006). To elicit an affective response is a tricky thing. In order to understand how to

accomplish this aim, we must address two questions: 1) how can we make students *feel* while still requiring that they learn academic content? and 2) how can we evoke fitting cognitive responses?

To address the first question, creative classes seemed like good candidates as creative expression is known to cause an affective response (Djikic, 2009), but in a time where schools are cutting their arts programs, it didn't seem like the most sustainable option. History and social studies were good candidates, but literature provides the clearest path to execute the steps required to stimulate empathy development. Fiction, by its very nature, is meant to stimulate an affective response; authors, generally speaking, want their readers to feel something (Oatley, 1999, 2002; cited in Bal, 2013). Abundant research has shown that reading fiction develops empathy inherently (Oatley, 2016), so it was not a leap for me to conclude that it could be intentionally instructed in the literature classroom.

Additional research concerning affective responses indicated that students must engage with the literature in order to have any response at all. Greater transportation, that is deeper engagement with the text or a greater sensation that the reader feels as though they have lost themselves in the story, generates a greater empathic response (Green, 2012; Mar, 2011; cited in Oatley, 2016). To achieve this greater degree of transportation, it is ideal to choose texts that students naturally connect with, such as Young Adult, Steampunk, or Science Fiction literature (Boback Eisenbach, 2018), or even better, to allow students to choose books that they find interesting.

While choosing alternative texts may be ideal for empathy education, this paper seeks to propose strategies for teaching empathy in schools while also being realistic, suggesting some things that could be implemented at either the teacher or administrative level as something that works within existing curricula. I do very much support diverging from the canon, which currently

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occupies the curriculum for high school literature, but I aim to develop empathy education within existing structures, so I have elected to focus this research on texts that are already being taught in schools.

Given literature's natural capacity to generate affective responses, this paper will deal primarily with the second question: evoking fitting cognitive responses i.e. how to encourage students to think empathetic thoughts after their initial affective response. For example, a student could read *Tess of the D'Urbervilles* and initially be on Angel's side, believing that Tess was at fault for being assaulted. However, through the methodology that I will detail in chapter three, an educator can instruct a student to think more critically about their interpretation and to arrive at more empathetic analyses.

In summation, the original question was how to teach empathy to high school students which raised two new questions: how to generate affective and cognitive responses. This narrowed the scope of this research down to teaching empathy to high school students through literature. The question left, which this paper seeks to answer as fully as possible, is how to teach cognitive responses appropriate to empathy within that context.

2.0 Literature Review

The following literature review aims to elucidate what empathy is, how it works, how it can be taught, and how it interacts with literature. These are important questions to answer in order to understand the mechanics of empathy education and in order to comprehend the current scope of empathy education and is necessary for an informed consideration of the methodology that I propose in chapter 3.

2.1 Understanding empathy

In order to have a fruitful discussion of empathy education, it is important to have a thorough understanding of what empathy is. To accomplish this, I will discuss how empathy differs from sympathy, how it works in the brain, how it is defined by multiple researchers, and how I will define it for this project utilizing two existing frameworks.

2.1.1 Empathy and Sympathy

Sympathy and empathy are terms often used interchangeably, but they have distinct differences. Sympathy is often seen as an "umbrella term", defined as "the act of sharing the feelings or interests of another, or feeling concern for another's suffering" (Chabot Davis, 2004). Empathy involves a greater degree of perspective-taking (Chabot Davis, 2004). While sympathy can be as superficial as pity, resulting in no action, no connection, empathy can evoke action

(Chabot Davis, 2004). This characteristic of empathy is part of why I elected to conduct this research: empathy is destabilizing, even for closely held beliefs or prejudices, such as those concerning race and gender (Chabot Davis, 2004).

2.1.2 The Neuroscience of Empathy

Empathy isn't an ineffable feeling; it is a mappable neurological process that generates feelings. Some other members of the primate family have the ability to share feelings between individuals, but human beings seem to be unique in their ability to intentionally feel for and act on behalf of other people whose experiences may differ greatly from their own (Batson, 1991; cited in Decety, 2006). One striking thing about human empathy is its breadth: it can be felt for nearly any recipient, even those of another species (Decety, 2006). For a more in-depth explanation of the neuroscience and neurobiology of empathy, it is worth reading "Human Empathy Through the Lens of Social Neuroscience" by Jean Decety and Claus Lamm and "The Functional Architecture of Human Empathy" by Jean Decety and Philip L. Jackson. Here I will provide a synopsis of their research as it relates to this project.

Prosocial behaviors may result from "synchronizing representations" between oneself and another, that is to say, people may behave in prosocial ways because of the commonality they see between themself and others. The prelude to empathy pulls from somatic mimicry a.k.a emotion contagion, "i.e., the tendency to automatically mimic and synchronize facial expressions, vocalizations, postures, and movements with those of another person, and consequently to converge emotionally" (Hatfield, 1993; cited in Decety, 2006). An example of this in action is the way that people mimic facial expressions even without conscious recognition of the face they are mimicking (Dimberg, 2000; cited in Decety, 2006). Nonconscious behavioral mimicry increases

a sense of connection, which serves to foster relationships with others (Lakin, 2003; cited in Decety, 2006). Individuals with greater dispositional empathy show this behavior to a greater extent (Decety, 2006).

The neurophysiology of empathy lies in the mirror neuron system in the brain which is a collection of brain cells known as mirror neurons which trigger when an individual commits an action but also signal when we hear others speak; listen to the nuances of their voice (Gazzola, Aziz- Zadeh, & Keysers, 2006; cited in Gerdes, 2011); and observe their posture, gestures, actions, and facial expressions (Enticott, Johnston, Herring, Hoy, & Fitzgerald, 2008; cited in Gerdes, 2011). These neurons signal as though the observer is committing the observed action. For example, reducing this to its simplest terms, when someone observes another person crying, their brain gets the message "I am crying". Decety refers to this as the "action-perception coupling mechanism" which will be discussed in greater depth later (Decety, 2006). Mirror neurons automatically and unconsciously cause imitative influences which limit our autonomy by means of powerful social influences (Iacoboni, 2008). What we observe impacts us because of how our neurons mimic the observed action.

Another key element to the neurological functioning of empathy is a shared representational network, that is to say, one has to know what a feeling is in order to understand that feeling in someone else. The previously referenced articles provide in-depth examinations of studies conducted to validate this point; but to summarize, if someone has never experienced a pain, their brain registers that pain less when they observe it happening to another. For example, we all know childbirth is painful, but without having experienced childbirth it is difficult to imagine just how painful. If one were to do a brain scan on two people asked to think about someone going through childbirth, the brain of the person who had experienced childbirth

previously would show greater activity in the parts of the brain that indicate feeling pain while the person who had never experienced that pain, though still registering pain, would show less activity. It isn't because their mirror neurons weren't working as well or because they were less empathetic, but rather because they lacked the shared representational network. This isn't by any means to say that empathy can only occur between people who have had identical experiences. The methodology I will propose teaches how to extrapolate from one's own experience to better connect to the experience of another i.e. to bridge or fill in the gaps of that shared representational network.

2.1.3 Defining Empathy

Empathy is poorly defined. That is about the only part of the definition that every source agrees on. Please view table 1 to see some of the various definitions uncovered in the course of this research to see the breadth and range of definitions. In trying to group them, nearly all definitions agree on two things: empathy has an affective component and a cognitive component; some also believe there is a third, self-awareness component; and others believe there is a fourth, emotion regulation component. Affective empathy refers to feeling what someone else is feeling, rather than just recognizing it (Reniers, 2011). Cognitive empathy is the identification of emotions (Reniers, 2011). A compelling argument for the inclusion of the latter two, less frequently recognized components comes from Decety and Moriguchi (2007) who claims, "without self-awareness and emotion regulation processing, there may be no true empathy. The automatic activation of shared representations would instead be associated with anxiety and discomfort and would lead to responses oriented to the self (e.g., emotional distress)."

Ickes (1997) definition is somewhat unique in that it specifies that empathy involves the assumed or perceived emotional state of another (cited in Decety, 2006) as opposed to their true state. Reniers (2011) clarifies that cognitive empathy deals with this perceived emotional state but not theory of mind which is "the ability to attribute mental states (desires, intentions and beliefs) to others" (V¨ollm et al., 2006; cited in Reniers, 2011). This distinction is important because attributing a feeling results in empathy; attributing an explanation for that feeling can result in prejudice.

There is an important distinction between empathy and emotional contagion: emotional contagion results from the complete overlap of the neural networks used in processing one's own emotions and the emotions of another i.e. it is when someone else's feelings take over entirely. This leads to personal distress, essentially because it is overwhelming (Decety & Moriguchi, 2007) and does not evoke justice-oriented behavior (Decety & Yoder, 2016). Unlike empathy, personal distress may lead to a desire to decrease the uncomfortable sensation, for example by withdrawing from the other person, resulting in aversive behavior rather than prosocial behavior (Decety & Lamm, 2009; cited in Decety & Yoder, 2016).

One of the frameworks I've elected to use is that of Decety and Lamm (2006) which is in figure 1. This framework identifies empathy as a construct that considers a similarity in the feelings of the self and another without confusion between the two. This model involves both bottom-up and top-down information processing: emotion sharing and motor mimicry are bottom-up; perspective-taking, representing the thoughts and feelings of the self and others, and components of emotion regulation are top-down. Bottom-up processes are automatic while top-down processes are intentional; both can be taught. It also draws on representational networks which, Decety's technical description aside, essentially means memories.

2.1.4 Decety's Framework

Decety's framework is founded on four components that collectively produce the experience of empathy

1. "Affective sharing between the self and the other, based on the automatic perception-action coupling and resulting shared representations.

2. Self-awareness. Even when there is some temporary identification between the observer and its target, there is no confusion between self and other.

3. Mental flexibility to adopt the subjective perspective of the other.

4. Regulatory processes that modulate the subjective feelings associated with emotion." (Decety & Moriguchi, 2007)

To fully understand empathy as it is being considered in this research, we must explore each of those four components.

2.1.4.1 Affective sharing between the self and the other

The action-perception mechanism is partly responsible for emotion sharing which is the crux of empathy (Preston, 2002; cited in Decety, 2007). This model claims that the perception of an emotion activates the neural mechanisms for the same emotion in the observer (Decety & Moriguchi, 2007). Without getting into the minutiae, essentially the action-perception mechanism relies on the common-coding theory which states that actions are coded in terms of their perceivable effects. The coding assigned to an object, action, or social situation is often shared within a group causing all members of that group to experience the action/object/social situation similarly within their neural networks. This shared action representation network enables us to mentally construct the thinking of another. For example, crying or laughing mean roughly the same

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thing to everyone; waving means the same thing to all Americans; saying "Hail to Pitt" means the same thing to all University of Pittsburgh affiliates, and so when those actions occur, they enable us to construct the thinking of another because it is similar to our own.

2.1.4.2 Self/other awareness

Self awareness is characterized by "by being able to become the object of [one's] own attention" (Decety & Moriguchi, 2007). The importance of self/other awareness is the ability to distinguish between being one's own object of attention and dedicating attention to another, i.e. knowing whose feelings belong to whom.

2.1.4.3 Mental Flexibility

People are "fundamentally egocentric" and struggle to practice perspective taking, especially in contexts in which they assume the person will share their perspective (Decety & Moriguchi, 2007). People are limited to their own "embodied cognition" and use their own knowledge, such as beliefs, opinions, attitudes, and feelings, as the primary foundation of their understanding of others (Decety & Hodges, 2006; Decety & Sommerville, 2003; cited in Decety & Moriguchi, 2007). Accordingly, self-perspective can be seen as the "default mode of the human mind" (Decety & Moriguchi, 2007). This is why perspective taking is so integral to empathy; the self-perspective is limited and cannot represent the entirety of human experience. Mental flexibility is required to shift from the default self-perspective to that of another.

2.1.4.4 Regulatory processes

Emotion regulation is required in this process in order to prevent emotional contagion or distress. Without that control, the action-perception mechanism, with it's autonomic and somatic

responses, could be overwhelming. An unregulated response could be perceived as personally distressing and result not in prosocial behavior but in egocentric, aversive behavior (Decety & Moriguchi, 2007).

2.1.5 Gerdes' Framework

The second framework utilized in this project is a framework for teaching empathy in social work developed by Gerdes, et al. which can be viewed in greater depth in table 2. These two frameworks will inform the intervention discussed in chapter 3 and provide structure for how to instruct empathy development. According to Gerdes, empathy requires the teaching of three skills:

1. "the affective response to another's emotions and actions

2. the cognitive processing of one's affective response as well as the other person's perspective

3. conscious decision making to take empathic action" (Gerdes & Segal, 2009; cited in Gerdes, et al. 2011)

2.1.6 Why empathy works: the empathy–altruism hypothesis and the aversive-arousal reduction hypothesis

Empathy is conceptualized to function according to two paradigms: the empathy–altruism hypothesis and the aversive-arousal reduction hypothesis. The empathy–altruism hypothesis (EAH) essentially claims that empathy evokes an altruistic response, the goal of which is to protect or promote the wellbeing of the other (Stocks, 2009). So empathy causes people to help others because it inherently evokes a desire to assist.

The aversive-arousal reduction hypothesis (AARH), on the other hand, claims that, because empathy is an aversive or unpleasant experience, people respond to empathy by helping in order to reduce the empathy they are experiencing. In this scenario, experiencing empathy makes people help others because it makes them feel sad or angry or otherwise discontent and they would prefer to stop that feeling for themselves and in order to do that, they must assist the person in need (Stocks, 2009).

The AARH has for centuries been a popular explanation for empathetic behavior in philosophy, however, research showed that the EAH was more influential (Batson, Bolen, Cross, & Neuringer-Benefiel, 1986; Batson, Duncan, Ackerman, Buckley, & Birch, 1981; Batson, O'Quin, Fultz, Vanderplas, & Isen, 1983; Toi & Batson, 1982; cited in Stocks, 2009). Stocks' (2009) research was novel in its methodology and in some ways more accurately tested both theories than this preceding research. Their experiment found that both models play a role in empathy-driven decision making and the influence of one over the other depends on specific variables in the scenario relating to amount of empathetic connection and ability to psychologically escape the situation (Stocks, 2009).

This connects to the research herein because I initially utilized the EAH as the assumed framework for understanding empathetic behavior, but this alternative model is worth considering on the part of educators because there may be students for whom the AARH proves more valid.

2.1.7 Summary

To summarize this section, empathy's definition is of great importance because in order to teach it, we must first understand it. Empathy is conducted through the mirroring processes in the brain; complete overlap between the neurological pathways for feeling one's own emotions and

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the emotions of another, or emotion contagion, leads to personal distress. Personal distress generates aversive rather than prosocial behavior. In order to comprehend empathy, this research utilizes both Decety's and Gerdes' frameworks. Empathy generates altruistic behavior according to the EAH and can sometimes also generate aversive behavior following the AARH.

2.2 The Mechanics of Teaching Empathy

On a promising note, Gerdes (2011), citing Decety & Lamm (2006) says, "the cognitive processing components of empathy (self/other-awareness, perspective-taking, and emotion regulation) are not automatic. On the contrary, they are sophisticated cognitive skills and as such can be learned, increased, perhaps even "mastered"." This means that empathy education has the capacity to be impactful as students can be taught the cognitive components of empathy intentionally, possibly to the point of mastery.

2.2.1 Perspective taking

There is extensive research indicating that perspective taking is a social skill that increases empathic concern and expands "the circle of care to unfamiliar others" (Batson, 2012; Underwood & Moore, 1982; cited in Decety & Yoder, 2016); it is also linked to moral reasoning and general prosocial behavior (Decety, 2006). The perspective-taking ability permits us to go beyond egocentrism and suit our behaviors to others' expectations, thereby enabling better interpersonal relations (Davis, 1994; cited in Decety, 2006). Conscious efforts towards perspective taking cause the perceiver to utilize cognitive processes typically utilized for self introspection, meaning greater

overlap between the self and the other "in cognitive representations and neural computations subserving such representations (Ames et al., 2008; Galinsky et al., 2005; Ruby & Decety, 2001, 2003, 2004)" (Decety & Yoder, 2016).

When conducting perspective taking, common neural networks circuits are activated for both the self and the other (Decety, 2004) meaning that perspective taking can cause individuals to take on the affective experience of another via shared neural circuits. (Hesslow, 2002; Goldman, 2006; cited in Decety, 2006). Research also validates simulation theory which essentially says that acting and perceiving activate the same neural circuits for a behavior (Hesslow, 2002; Goldman, 2006; cited in Decety, 2006). Which neural circuits are utilized are important because they indicate how much we are able to adopt the feelings of another; using the name circuits for others as for ourselves indicates greater empathy, however, a complete overlap would indicate emotion contagion and would cause a problem due to a lack of distinction between the self and the other.

Perspective-taking can be motivated by a myriad of factors, with a multitude of pathways catalyzing the behavior (Gehlbach, 2012). It can be brought about through a plethora of avenues, including reading fiction, plays, any poetry, and watching movies (Pinker, 2011; cited in Decety & Yoder, 2016). Though not a comprehensive list, Gehlbach (2012) identified 12 social perspective-taking strategies which fell into two categories: inferential strategies and information cultivation strategies. Inferential strategies included analogy, compare and contrast, consider present context, draw on background information, projection/anchoring and adjusting, reflection, and stereotyping. Information cultivation strategies included attention regulation, emotion regulation, increasing modalities, information extraction, and open-mindeness. For a more detailed description of each, please see table 3.

2.2.2 Self/other awareness

According to Gallup (1982), "self-awareness is a necessary condition for making inference about the mental states in others" (cited in Decety, 2006). If one too fully takes on the emotional state of another they can experience emotional distress or empathic overarousal which will not result in the desired prosocial behavior (Decety, 2006). Being able to distinguish one's own emotions from others is crucial in distinguishing between altruistic acts and aversive acts (Decety, 2006). That is to say, if one cannot tell the other's emotions from their own, they will act to end the suffering of another only to spare themselves (an aversive act) rather than to help the other (an altruistic act). Since we are asking students to engage in empathy with characters in books, i.e. with people in situations in which the student cannot intervene, it is important that we are not positioning them to experience emotional distress or empathic overarousal which will cause them to respond aversively, likely by closing the book, rather than altruistically. In order to do this, it is important to teach emotion regulation.

2.2.3 Emotion Regulation

Research indicates that individuals who can regulate their emotions are more likely to experience empathy and to "behave in morally desirable ways with others" (Eisenberg, 1994; cited in Decety, 2006). Emotion regulation is defined as "the process of initiating, avoiding, inhibiting, maintaining, or modulating the occurrence, form, intensity, or duration of internal feeling states, emotion-related physiological processes, emotion-related goals, and/or behavioral concomitants of emotion, generally in the service of accomplishing one's goal" (Eisenberg, 2004; cited in Decety, 2006). That is to say, emotional regulation is controlling one's emotions in order to meet

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the needs of the situation. A lack of emotion regulation can cause one to experience personal distress at their own emotions and those of others as both are overpowering, leading to an aversive emotional reaction such as anxiety (Derryberry, 1988; Eisenberg, 1991; cited in Decety 2006).

Emotion regulation can be a bottom-up or top-down process: bottom-up it involves reducing the experience of the emotion, common in the case of empathy because being overwhelmed by the strong feelings of another, as previously discussed, is detrimental; top-down it involves increasing the experience of the emotion, more common in the case of empathy when trying to empathize with someone when it doesn't come easily, for example members of an out-group (Decety, 2006).

According to Gross (1998), emotion may be regulated at five points in the emotion generative process: (a) selection of the situation, (b) modification of the situation, (c) deployment of attention, (d) change of cognitions, and (e) modulation of responses. To see a graphic representation of the following please see figure 2.

a. Situation selection

Situation selection means choosing to attend to or avoid specific people, places, or objects in order to regulate emotions (Gross, 1998). An example of this would be someone who is trying to quit smoking may avoid the places where they regularly smoked in order to prevent the physiological cue developed through habit triggered by that location. Another example would be a student choosing not to sit next to their friend in class in order to avoid getting distracted. In the classroom, this falls under the conversation of making good choices. This involves asking students to intentionally choose situations that will benefit them, e.g. studying, listening in class, surrounding themselves with positive influences, etc..

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b. Situation modification

  Situation modification refers to, "active efforts to directly modify the situation so as to alter its emotional impact" (Gross, 1998). An example of this would be asking a student who is talking during class to cease, thereby ending the emotionally evocative situation, rather than becoming irritated. In a classroom this might look like allowing students to move their seats to avoid peers who distract them, offering alterations to assignments that students experienced as distressing, or making reasonable accommodations when it comes to testing to reduce personal distress.

c. Attentional deployment

  Strategies concerning the modification of attention fall into three categories: distraction, concentration, and rumination (Gross, 1998). *Distraction* means focusing one's attention on the nonemotional aspects of the situation (Nix, Watson, Pyszczynski, & Greenberg, 1995; cited in Gross, 1998) or moving one's attention to something other than the immediate situation (Derrybeny & Rothbart, 1988; cited in Gross, 1998). Distraction can also mean changing one's internal focus (Gross, 1998). *Concentration* takes up cognitive resources (Erber & Tesser, 1992; cited in Gross, 1998). It is essentially the act of directing attention towards a single act exclusively. "*Rumination* also involves directed attention, but here attention is directed to feelings and their consequences" (Gross, 1998).

  In regards to emotion regulation, one can use these three methods to modify their attention in order to control their emotion. If one is becoming overwhelmed, they can distract; if one is experiencing a positive sensation, they can concentrate;

if one is experiencing anxiety, they are liable to ruminate, but rumination is typically an unhealthy coping mechanism and is largely to be avoided. In translating this to the classroom, we might ask students who are overwhelmed with negative emotions to "take a time out" and distract with something else if it seems that they will not be able to overcome it in another way. This is more common in the elementary classroom, but that is because emotion regulation is much further developed by high school.

d. Cognitive change

Cognitive change refers to altering one's emotional response to a stimulus (Gross, 1998). Of particular interest are two specific modes of cognitive change: cognitive reframing and reappraisal. *Cognitive reframing* is when one reinterprets a situation to view it through a different light (Gross, 1998). For example, if a student studies for a test but still scores poorly, they might view themselves as a failure. If they were to cognitively reframe the situation they may alter their perception from "I am a failure" to "I failed, but I learned a lot while studying and I can try again." *Reappraisal* means cognitively transforming the situation in order to alter its emotional impact (Gross, 1998). Essentially this means thinking twice about something before letting it have an effect. An example of this would be while watching a sad movie, the observer might feel sadness but before getting to the point of crying, they might execute a cognitive change and reappraise—"this is just a movie, no one actually died"—altering their cognitive emotional response, with the benefit of their mascara not running. In the classroom, this would appear as guiding a student to reframe or reappraise a situation when they are expressing

emotional distress. This is the most useful form of emotional regulation in regards to the proposal in this paper.

e. Response modulation

Response modulation "refers to directly influencing physiological, experiential, or behavioral responding" (Gross, 1998) This occurs late in the emotion generative process, after a response has already begun (Gross, 1998). For example, if someone is experiencing heightened anxiety, they may consider exercising to modulate the physiological response to the emotion. In the classroom, this would appear as lowering one's voice when it naturally rises due to irritation or anger; relaxing one's muscles through breathing exercises in response to stress or worry; or stilling one's body through intentional inaction in response to agitation or exuberance.

2.2.4 Self Reflection

Self reflection, like self/other awareness and emotion regulation, is important for empathy because it enables the individual to distinguish between their feelings, attitudes, and beliefs from those of the other. Research has indicated benefits to reflection, finding that "reflective teachers have better interpersonal relationships with students, higher job satisfaction and feelings of self-efficacy, are more able to talk and write about their experiences, are more likely to grant students autonomy, use inquiry methods and expect themselves and their students to act ethically" (Rocco, 2010). Not all people are naturally inclined to reflect (Hobbs, 2007; cited in Rocco, 2010) but it is a cognitive skill that can be taught. As with every other skill previously discussed, reading and writing can benefit the development of self-reflection abilities (Rocco, 2010).

2.2.5 Summary

The mechanics of empathy—perspective taking, self/other awareness, emotion regulation, and self reflection—can be taught. Perspective taking is critical; it is the root of empathy. Self/other awareness is important because it preserves the distinction in neurological processing of emotions to prevent emotion contagion. Emotion regulation also serves a similar function. This relates to the project as a whole as it clarifies what components of empathy must be taught and what impact that will have.

2.3 Empathy and Literature

Moving from a discussion of empathy generally to the crux of this project, now I will discuss how empathy relates to literature. To do this, I will explain why one would teach empathy through literature by discussing the impact of literature on empathy and on the brain; how one would teach empathy through literature by discussing the relationship between literature and the previously detailed frameworks; and how empathy is currently being taught through literature.

2.3.1 Why Teach Empathy Through Literature

Historically, highly literate societies, particularly those that produced psychologically rich literature, were more empathetic and less violent than less literate societies (Lukacs, 1920; Watt, 1957; Ong, 1982; McKeon, 1987; Habermas, 1991; Pinker, 2011; cited in Tamir, 2013). This is true because of politics on the microscale, what Chabad Davis (2004) calls the feminine of politics.

Individuals create a society and if the individuals in that society are empathetic, it follows that the society would also be more empathetic. A society that champions reading will produce more empathetic citizens because reading, especially fiction, generates greater empathy (Oatley, 2016).

Research has proven a direct causal effect between reading fiction and greater empathy and theory-of-mind, as Oatley (2016, referencing Kidd, 2013) says, "although the relation between lifetime reading and theory-of-mind is a correlational one, direct causal effects have been found in experiments." Oatley (2016) says that reading is to the social world as a flight simulator is to real-world flight—a training ground. As will be discussed later, reading trains the neural pathways in the brain to respond to others in an empathetic manner, i.e. by utilizing neural pathways that overlap with the pathways utilized to process the self's emotions; this is how affective empathy is taught through literature. Cognitive empathy is taught as readers are taught how to respond to others' emotions. By reading fiction, people learn not only human psychology, but also how to interact in social situations (Mar, 2009; cited in Bal 2013).

Hakemulder (2000) considers literature a "moral laboratory." He conducted experiments finding that reading fiction novels depicting the experience of Algerian women decreased in-group bias against them (Oatley, 2016). Johnson (2014) found similar results in an experiment that involved reading fiction about Muslim women which reduced both in-group and out-group bias towards them (Oatley, 2016). This, along with a mass of other research, indicates that real-world empathy can be generated through reading.

In part, this works because literature exposes us to things that are different which conveys social values and reduces the strangeness of others (Kidd, 2013). Fiction allows readers to relate to experiences across time and space, something not readily available in real-life (Shuman, 2006;

cited in Ball, 2013). Increasing the perspectives available grows the representational network that one utilizes to connect with others (Decety, 2006).

2.3.2 A note on fiction versus non-fiction

Empathy development is correlated with the reading of fiction rather than nonfiction (Mar, 2006). Fiction readers score higher on measures of empathy and theory of mind than non-readers, even after controlling for age, gender, intelligence and personality factors (Mar et al., 2006, 2009, 2010; cited in Tamir, 2016). Fiction readers possess stronger social-cognitive abilities than non-fiction readers and those who do not read (Mar et al., 2006, 2009, 2010; cited in Tamir, 2016). Extensive literature supports the claim that if empathy is to be taught through literature, it must be done through reading fiction. Fortunately, high school literature classes cover fiction extensively, so this does not impact the program design for the proposed intervention.

2.3.3 How the brain reacts to reading fiction

Reading words activates the neural networks that would be stimulated were those events being observed (Isenberg et al., 1999; Martin & Chao, 2001; Pulvermuller, 1999, 2002; cited in Zwaan, 2004). This means that reading mirrors having an experience. Reading fiction and social cognition both use the default network in the brain (Mar, 2004, 2011; cited in Tamir, 2016). The default network is made up of the medial prefrontal cortex, posterior cingulate cortex, posterior superior temporal sulcus, temporal parietal junction, anterior medial temporal gyrus and medial temporal lobes and is responsible for supporting our capacity for simulation (Raichle et al., 2001; Buckner and Carroll, 2007; Schacter and Addis, 2007; Spreng et al., 2009; cited in Tamir, 2016).

The default network, specifically the act of simulation, is utilized both for reading fiction and for social cognition because both require the mental reconstruction of events. Essentially, the reader simulates that which they read in their mind as if it were actually occurring and integrates it into existing mental models meaning they integrate that which they read into their self-concept as if it were a lived experience (Zwaan, 2004; cited in Bal, 2013). Reading about someone experiencing an emotion stimulates a response as if the reader were experiencing that emotion, hence its connection to empathy development (Gallese, 2001; cited in Bal, 2013).

2.3.4 How empathy is learned through literature

How empathy is learned through literature is rooted in transportation, shared representational networks, and theory of mind. I will discuss each of these, with attention paid to how it impacts the brain, in addition to how literature connects to Decety's and Gerdes' empathy development frameworks.

2.3.4.1 Transportation

Transportation, i.e. being immersed in the text, is required to elicit an emotional response, in practice because if a reader doesn't buy into the story, they will not connect with the characters and will hold the narrative at arm's length. This will impact their neurological response to the story as they will not be utilizing the same neural network to represent the story as they would to perceive an observed event and therefore will not experience the full potential benefits of reading (Bal, 2013). Bal (2013) found that empathy increased over time for readers who were transported by the text—the greater the transportation, the greater the empathy development. In fact, disengagement with the text can lead to a mirrored negative response; the reader can become more self-centered

in order to protect their sense of self (Bal, 2011; cited in Bal, 2013). This is one argument for the use of diverse and inclusive literature in the classroom. Alienating literature can have a negative impact on students. For example, consider how a Jewish student might feel reading "The Prioress's Tale" from *The Canterbury Tales.*

If it is necessary to utilize texts that students may not naturally find transporting, teachers can use additional skills to engage students with the material. This can be done through a multitude of strategies, such as pairing canonical texts with noncanonical texts, for example teaching *Leviathan* for a week as pre-reading for *The Time Machine*. This engages students organically as they are able to discuss a text they inherently found interesting and to bring it into conversation with another text, thereby carrying over their engagement. Another strategy is to allow a great degree of student voice in discussing the literature, for example requiring that discussion be rooted in the text but permitting students to voyage beyond the confines of the book and discuss current events or their personal experiences. This engages students by allowing them to bring their own experience and perspective, topics naturally of interest, into the conversation. A third strategy is to implement experiential or project-based learning, thereby making the text interactive. This functions by engaging students multi-modally. For example, if a book is boring to read because of its archaic language, students may find it more engaging to rewrite the text as a modern rap battle or to translate it into visual art. This allows the students to be engaged by invoking problem-solving.

2.3.4.2 Shared representational network

When we read fiction, we develop a shared representational network with the characters (Bruner 1986; cited in Oatley, 2016). There is a reduced self/other delineation when reading fiction in that there is greater overlap in the neural networks used to comprehend the feelings of the other

and those used to process the feelings of the self (Gallese, 2001; cited in Bal, 2013). As previously discussed, a shared representational network is integral to empathy because it facilitates understanding. Developing the shared representational network between the reader and the character enables the reader to feel empathy for them.

Having the shared representational network between peers that comes from reading the same texts is also beneficial because it provides a common frame of reference and shared experiences. Much large-group activity is facilitated by the creation of a communal representational network created through reading.

2.3.4.3 Theory of mind

Theory of mind is "the ability to attribute mental states (desires, intentions and beliefs) to others" (V¨ollm et al., 2006; cited in Reniers, 2011). It is well established that reading fiction increases theory of mind abilities (Mar et al., 2006, 2009, 2010; cited in Tamir, 2016). Reading fiction influences theory of mind through its impact on the neural basis of social simulation (Tamir, 2016). That is to say, theory of mind is developed through reading fiction because it neurologically reproduces social experiences. Through perspective-taking, readers are able to infer what characters are thinking and feeling (Bal, 2013). Having to make inferences about characters generates greater empathy in the reader (Kotovych, 2011; cited in Oatley, 2016). Empathy is taught through literature in part because it develops theory of mind skills which students can use in their daily lives in the domain of cognitive empathy; being able to understand others' motivations may help them to attribute emotions appropriately and to have empathetic responses.

2.3.4.4 Empathy through literature in conversation with Decety and Gerdes' Frameworks

Decety's Framework has four components: affective sharing between the self and other; self-awareness; mental flexibility; and emotion regulation (Decety, 2007). Gerdes' framework has three components: an affective response, cognitive processing of the affective response and of the other's perspective; conscious decision making to take empathy action (Gerdes & Segal, 2009; cited in Gerdes, et al. 2011). For ease of discussion, I group these seven components into three categories: affective empathy which encompasses Decety's affective sharing and Gerdes' affective response; empathic skills which includes self-awareness, mental flexibility, and emotion regulation from Decety's framework; and cognitive empathy which is made up of both forms of cognitive processing in addition to conscious decision making from Gerdes' framework. Literature's capacity to develop empathy relates to each of these categories.

2.3.4.4.1 Literature and affective empathy

Literature generates affective responses (Oatley, 1999, 2002; cited in Bal, 2013). In order to teach affective empathy through literature, it is important to utilize literature with strong transportive effects. This means reading texts that students connect with and can so to speak lose themselves in. If this is not an option, one can utilize teaching techniques to make texts more engaging such as those previously discussed.

However, it is also important that a text not be transportive to the point that it becomes personally distressing because, as previously discussed, personal distress leads to aversive rather than prosocial behavior. This is outside of the control of the teacher. The solution to an overly affectively stimulating text is to help students develop the empathic skills to cope with strong emotions. If it becomes a truly distressing issue, it is worth considering assigning an alternative text.

2.3.4.4.2 Literature and empathic skills

Reading texts with characters that are not identical to the students helps with mental flexibility as they work to take on perspectives and thinking patterns that differ from their own. However, taking on the perspective of any other individuals, especially when mitigated by the page, is inherently an act of mental flexibility.

Because of literature's ability to cause us to neurologically interpret the actions of another as our own, it is important to stress self-awareness. Just as the characters are projected onto us, we project onto them. This can be accomplished through taking breaks to check in with the self while reading; to internally discuss how one is feeling and what one is taking away from the text.

Emotion regulation is perhaps the most difficult to maintain when reading because a truly transportive text hijacks our neural pathways and projects strong feelings into our minds. It is important for educators to stress finding balance between reading and take breaks to check on the self in order to solidify emotion regulation skills. Given the previous emotion regulation discussion, the only viable points of intervention when reading are cognitive change and response modulation which is not a bad thing. These two are also frequently the most viable options in real life as well, so practicing them is wise.

2.3.4.4.3 Literature and cognitive empathy

This is where empathy development is most crucial: in cognitively responding to an affective stimulus with empathy. Based on the outcomes of many studies regarding the impact of reading on empathy, readers naturally develop cognitive empathy when reading, but this is also where empathy becomes most teachable. This can be taught through activities that require students to further develop their affective responses into thought-out cognitive responses and to, as per Gerdes' framework, take empathic action. More discussion will be devoted to this topic in chapter three.

2.3.5 How empathy is being taught in the literature classroom

There is not extensive literature on how to teach empathy in the literature classroom, particularly at the high school level as it is not widely practiced and therefore there are not many guides for it. What writing does exist on the topic primarily focuses on three avenues to empathy education in the literature classroom: text selection; teaching vocabulary; and practicing perspective taking. These are all integral parts of empathy education. Other empathy educators, like myself, have found through research that empathy is most developed when students engage with the text. They also propone teaching students how to discuss their affective responses; I will also do this, however, I will frame it through cognitive-behavioral and dialectical-behavioral therapy rather than simply a list of feeling words. Finally, they, like me, encourage teachers to have students practice perspective taking. My methodology does this as well, however through the lens of therapeutic psychology.

2.3.6 Summary

Empathy naturally occurs when reading fiction, so it is not a stretch to use fiction as an avenue for empathy education. Neurologically, the brain responds to reading about an event very much as if it had experienced that event. Literature works to develop empathy through transportation, a shared representational network, and the development of theory of mind capacities. This makes it a prime candidate for the application of Decety's and Gerdes' frameworks as it can be used to teach affective empathy, empathic skills, and cognitive empathy. Empathy education through literature as currently advertised focuses on text selection; teaching vocabulary; and perspective taking, but is wanting for more focus on the many other components of empathy.

2.4 The pedagogical tools for empathy education in the literature classroom

There are many activities an educator can use to conduct empathy education in their literature class, but they broadly fall into two categories: discussion and writing.

Discussion prompts students to develop higher-order cognitive skills, such as higher-order thinking, distributed thinking, and constructive thinking (Hansen and Salemi 1990,98; cited in Greenlaw, 2003, Muilenburg, 2006) and can also teach the cognitive skills required for empathy. It also enables students to share perspectives, providing an opportunity for perspective taking (Hansen and Salemi 1990,98; cited in Greenlaw, 2003), in addition to self reflection and emotion regulation as their own perspectives come under scrutiny. Classroom discussion has the limitation that a student is rarely able to fully develop a point due to the finite amount of "space" for discourse, that is to say because of time constraints and the number of speakers, a classroom

discussion often will not enable students to work through complicated ideas in their entirety (Bean 2006; cited in Greenlaw, 2003). For this reason, writing assignments and online discussion can be invaluable for allowing students to develop their thoughts further.

Writing is essential, in part because it facilitates the development of critical thinking as students are asked to develop arguments supported by logic and evidence (Cohen and Spencer, 1993; cited in Greenlaw, 2003). Writing also has the benefit of giving students the "space" that in-class discussions cannot in order to fully form their ideas. Students should write as part of an empathy development program in order to engage fully with self reflection.

When deciding between a discussion or a writing assignment, educators should consider the value of having multiple voices versus self reflection. Neither mode precludes either component, but discussion lends itself better to a discourse of student voices while a writing assignment is more solitary in nature. Using both will often be the solution as writing in advance of a discussion enables students to generate their own thoughts before being asked to share them aloud.

3.0 Intervention

3.1 Introduction

As the introduction to this project indicated, there is a gap in the preceding research; some of it is rooted in neuroscience, some in education psychology, some in real-world experience but what is missing is an element of clinical psychology, working in conjunction with that which already has been shown to work. Strengthening mirror neurons bolsters one's capacity for empathy which Gerdes (2011) says can be done through role-play, mirroring, mimicry, and other activities. These activities can be shaped to be more effective using scientifically-backed practices that come out of clinical psychology. This project proposes a novel approach to empathy education rooted in cognitive-behavioral therapy, dialectical-behavioral therapy, and bibliotherapy working in conjunction to develop empathy and its components.

At its most fundamental level, this intervention is about reframing the discussion of texts to include the goal of empathy development which is done by expanding the conversation to include building empathy-related skills and empathetic discourse. The crux of this methodology is question design. All of the activities that stem from it are rooted in asking the right questions; those that reflect on affective responses, consolidate cognitive responses, evoke perspective taking, encourage emotion regulation, and so on.

The practices that inform this novel approach to empathy education come from clinical psychology. Without debate, a licensed provider is the only person qualified to apply them in a therapeutic context. The method that this project uses does not ask teachers to become or to act as mental health providers, rather it asks that teachers imbibe their practices with the underpinnings

of these therapies. Teachers should not take the materials provided in this guide as tools to help students who experience mental illness or personal crises. Instead, they are asked to consider the relevant components of these therapies as tools to change the dialogue around literature to be something more responsive to the psychology of an adolescent. All people, even those who are neurotypical, experience thought distortions—cognitive-behavioral therapy can be used to identify those. All people live in a world where an approach to truth that values multiple perspectives is required—dialectical-behavioral therapy can be used to develop that approach. And developmental bibliotherapy (unlike clinical bibliotherapy) is meant to be used by laypeople to generate discourse around texts that deals with the personal rather than exclusively the literary. With that disclaimer in place, the discussion can begin on the principles of these tools and their value to a literary approach to empathy instruction.

3.1.1 Cognitive-Behavioral Therapy

The first tool I propose utilizing is cognitive-behavioral therapy (CBT) which is a technique for which there is "ample scientific evidence that the methods that have been developed actually produce change." ("What Is Cognitive Behavioral Therapy?," n.d.). It helps practitioners to change their thinking patterns. This often comes from recognizing cognitive distortions which are essentially thoughts that diverge from reality in some way; these are unhelpful ways of thinking that cause problems which can be alleviated by altering said thinking patterns. There will be a more detailed discussion of cognitive distortions later in this chapter. By changing their thinking patterns, practitioners are able to gain a variety of benefits that relate to how they perceive the world. For this reason, it is beneficial in empathy education; it helps users to perceive the world in

such a way that they are able to practice perspective taking, self reflection, and emotional regulation.

This project proposes that this therapy would serve as an effective way to uproot bias and habits that come from a lack of empathy such as prejudice and bullying. CBT is conducted using strategies that in part involve

- "Learning to recognize one's distortions in thinking that are creating problems, and then to reevaluate them in light of reality
- Gaining a better understanding of the behavior and motivation of others
- Using problem-solving skills to cope with difficult situations
- Learning to develop a greater sense of confidence is one's own abilities" ("What Is Cognitive Behavioral Therapy?," n.d.)

It is apparent how some of these tenants relate to empathy development as laid out in previous chapters. Better understanding the behavior and motivation of others is integral to better empathizing with them. Reevaluating thought distortions promotes more accurate thought. For example a student who holds the all-or-nothing distortion in regards to immigrants, thinking something like all immigrants have malicious motivations for entering the country, could be asked to recognize that this thought is distorted, that it causes a problem, and that it can be reframed based on reality. This might look like asking a student to recognize that they perceive a population as a monolith when their own population is not; asking them to imagine the difficulty that this belief causes for those against whom the prejudice is held; and asking them to empathize with that population by engaging with their stories, finding the commonalities and respecting the differences. At the end of this process, the student may find themselves empathizing with the group

that had previously othered because they are better able to see their humanity, all because they were able to read a book through the lens of CBT.

The underpinning beliefs of CBT are

- "Psychological problems are based, in part, on faulty or unhelpful ways of thinking

- Psychological problems are based, in part, on learned patterns of unhelpful behavior

- People suffering from psychological problems can learn better ways of coping with them, thereby relieving their symptoms and becoming more effective in their lives" ("What Is Cognitive Behavioral Therapy?," n.d.)

This project proposes that problems caused by a lack of empathy follow these patterns closely. For example, prejudice comes from a faulty way of thinking, enacted through learned patterns of unhelpful behavior, and that it can be alleviated if the person learns better ways of coping with those negative beliefs. In addition, CBT is shown to treat "common difficulties such as negative thinking, low mood, poor motivation, problem solving difficulties, lethargy, and fears and phobias of various kinds" (Haarhoff, 8, Low intensity Psychological interventions in Aotearoa: What can we learn from IAPT?). These additional benefits are further reasons to implement CBT based practices in the classroom.

3.1.2 Dialectical-Behavioral Therapy

Dialectical-behavioral therapy (DBT) "is a comprehensive, evidence-based treatment for borderline personality disorder (BPD)" (Chapman, 2006). It is important to clarify that under no circumstances does this project mean to equate adolescence with borderline personality disorder nor to suggest that students generally have the problems associated with BPD. Rather, the reason that this therapy is considered is because of the tenants which underpin it. These tenants include

- "the biosocial theory and focusing on emotions

- a consistent dialectical philosophy

- mindfulness and acceptance-oriented interventions" (Chapman, 2006)

Focusing on emotions in discussion is required for the development of empathy. A dialectical philosophy, that is to say the ability to recognize that perceived truth differs between individuals and that there is no "correct" way to experience reality, helps students to empathize by emphasizing that differences between themselves and the other are not unbridgeable, more so that they are natural and central to the human experience. Mindfulness assists students in preserving that difference between the self and the other which is required to prevent emotion contagion. Acceptance-oriented interventions, though somewhat different in the context of BPD, assist in encouraging students to accept the differences they experience and to then empathize with those differences.

3.1.3 Bibliotherapy

Bibliotherapy is as haphazardly defined as empathy and almost warranted its own definition table. According to Smith (1989), bibliotherapy is healing through literature (cited in Vare, 2004). Riordan and Wilson (1989) define it as guiding someone's reading to foster an understanding of the self or to help solve therapeutic problems (cited in Vare, 2004). Shepherd and Iles (1976) view it as the process of guiding students toward books that might help provide solutions to personal problems, develop life skills, or enhance self-image (cited in Vare, 2004). Prater (2006) claims bibliotherapy "is the use of books to help people solve problems."

There are many other options when it comes to an official definition, but broadly it is agreed that bibliotherapy has three components 1) books, 2) readers, and 3) solving a problem.

That is to say, bibliotherapy is the use of literature to help individuals solve some sort of personal issue. The goals of bibliotherapy are to provide information, insight, and solutions to problems; to evoke discussion about problems; to create awareness that others have experienced similar problems; and to communicate new values and attitudes (Pardeck, 1995; cited in McCulliss, 2013). Because of its nature, bibliotherapy can be used as a preventative, early intervention, or treatment program to solve students' problems (Prater, 2006).

There are two branches of bibliotherapy: clinical and developmental. The biggest difference between the two is the practitioner: therapists practice clinical bibliotherapy while everyone else practices developmental bibliotherapy (Catalano, 2008). Clinical bibliotherapy is meant to solve clinical problems—issues related to mental health primarily. Developmental bibliotherapy for youth is meant to facilitate healthy social and emotional development or to maintain typical mental health (McCulliss, 2013). This project deals exclusively with developmental bibliotherapy.

The benefits of bibliotherapy are extensive. According to Prater (2006), bibliotherapy has five key benefits: 1) students are encouraged to express their problems and concerns freely, 2) students are asked to analyze their thoughts and behaviors in relation to themselves and others, 3) students gain insights to solve their problems, 4) it reduces anxiety and promotes relaxation, and 5) it is a novel and fun way to explore solutions to students' problems. It also contributes to healthy development, as books can serve as a guide to students to show the stages of adolescents and how other teenages have dealt with similar problems (Prater, 2006). According to Cornett & Cornett (1980), bibliotherapy can evoke improvements to the following: empathy, positive attitudes, personal and social adjustment, positive self-image, new interests, tolerance, respect, acceptance of others, realization that there is good in all people, socially accepted behaviors, and an

examination of moral values leading to character development. In addition, it can cause the following cognitive changes: enhanced critical thinking, perspective and universality of problems, insight into human behaviors and motives, increased capacity for self-evaluation, and higher-level reasoning (cited in McCulliss, 2013).

Bibliotherapy has three to five stages, depending on the source. This research relies on Hynes (1986) guide *Biblio/Poetry Therapy -- The Interactive Process: a Handbook* and therefore follows a structure that views bibliotherapy as having four phases:

1. Recognition: something in the text catches the reader's attention and there is an affective response

2. Examination: the reader explores the initial affective response and its stimulus

3. Juxtaposition: the reader's second interpretation is compared to their first interpretation

4. Self-application: this phase is made up of two steps—evaluation and integration: evaluation is the stage in which the reader conducts critical self reflection then in the integration stage they incorporate the insights they've had through this process into themselves.

The overlaps between empathy education and bibliotherapy may now be beginning to become clear. Bibliotherapy, like empathy, is catalyzed by an affective response and is characterized by self reflection. Another way to look at these steps is to see it as an affective response (recognition) followed by a cognitive response (examination) followed by a more deeply thought out cognitive response (juxtaposition) followed by self reflection (self-application) which very closely mirrors the process of empathy. The second cognitive response especially makes sense in the instructional context as students are being asked to stretch themselves past their knee jerk reactions and to examine their own thinking for bias and prejudice.

Bibliotherapy can take many forms, from self-guided reading to group settings; utilizing many mediums, from poetry to fiction to film to art; resulting in any number of tangibles from writing to painting to acting to anything else the mind can imagine (McCulliss, 2013). It can be implemented using fiction or nonfiction (McCulliss, 2013), but this project will be focusing on the use of fiction. Prater (2006) identifies a 10-step program for implementing bibliotherapy in the classroom:

1. develop rapport, trust, and confidence with the student

2. identify other school personnel who may assist

3. solicit support from the student's parents or guardians

4. define a specific problem the student is experiencing

5. create goals and activities to address the problem

6. research and select books appropriate for the situation

7. introduce the book to the student

8. incorporate reading activities

9. implement post reading activities

10. evaluate the effects of bibliotherapy on the student

Steps 1-3 fall outside of the realm of this research. Step 4 is characterized by a desire to evoke empathy development. As for step 6, this methodology assumes that teachers will not be altering the curriculum they currently teach. However, if given the opportunity, they are encouraged to choose texts that discuss the issues that their students face and that represent a diverse array of voices, on top of being transporting i.e. engaging to students.

One example of a successful yet unknowingly bibliotherapeutic intervention is the Oprah Winfrey Book Club. As Chabot Davis (2004), who doesn't mention bibliotherapy in her critical

examination of the project, put it, "for Oprah, reading is a means of therapy, and books are agents of conversion." Chabot Davis conducted a localized case study of empathetic audience responses to *The Oprah Winfrey Show* by analyzing eight book club episodes involving discussions among four or five readers, Oprah and the author of each novel; another program in which eight audience members were invited to discuss the film *Beloved*; and over a thousand postings on the discussion boards on Oprah's website, Oprah.com. She found that by connecting with characters "as women," some audience members experienced cross-racial empathy. She also observed some cases in which race was entirely minimized. This indicates that it is the educators responsibility to guide their students responses in order to focus them. As a general rule, "personal distress is detrimental to empathic concern" (Decety & Yoder, 2016), and conversations about race can cause a great deal of personal distress if not addressed properly. Chabot Davis observed a "potential for African American literature and culture to elicit a radically destabilizing empathy among white audiences, an emotional experience that could encourage anti-racist coalitions by fostering a self-reflective alienation from white privilege." It is reasonable to extrapolate that out and say that literature can elicit radically destabilizing empathy which could encourage self-reflection and thereby social-justice oriented behavior. The intervention detailed here seeks to encourage those results and this case study provides evidence that bibliotherapy, even without the benefits of cognitive-behavioral or dialectical-behavioral therapies, can evoke cognitive changes to those ends.

3.2 The Methodology

In the following section I will discuss how the preceding three techniques can interact within the framework provided by Decety and Gerdes to facilitate empathy development. To

simplify the discussion of those two frameworks, as previously stated, I combined them into three categories: affective empathy which encompasses Decety's affective sharing and Gerdes' affective response; empathic skills which includes self-awareness, mental flexibility, and emotion regulation from Decety's framework; and cognitive empathy which is made up of both forms of cognitive processing and conscious decision making from Gerde's framework.

Asking the right questions is central to facilitating learning across contexts. When it comes to attempting to spur the development of empathy in students, teachers have no better tool in their arsenal than questions because asking questions stimulates reflection which is at the heart of empathy development. Each of these sections will discuss the therapeutic skill and the kinds of questions teachers would need to ask to stimulate it.

3.2.1 Affective Empathy

Generating an affective response is built into the literature; this part is done for the educator. However, helping students to develop that affective response and to work to prevent emotion contagion does fall to them. This can be done through DBT's focus on emotion regulation which will be discussed at greater length in the empathic skills section.

3.2.2 Cognitive Empathy

Cognitive empathy can best be facilitated through three techniques: DBT's dialectical philosophy, CBT's cognitive restructuring, and DBT's acceptance and mindfulness. These three techniques were chosen because of their ability to reframe thoughts and to facilitate perspective taking.

3.2.2.1 Dialectical Philosophy

Dialectical philosophy holds that the universe is made up of opposing forces, each incomplete without the other, neither more right or true (Chapman, 2006). The ability to hold a multitude of conflicting perspectives is integral to functioning in a world where not everyone agrees on everything. In regards to the development of cognitive empathy, developing this philosophy enables students to engage with beliefs that are different from their own without shutting them down as false or wrong and without subverting their own perspectives.

The development of this philosophy can be aided by the teacher through asking questions that do not pit opinions against one another, rather values every opinion for what it is—an opinion—and keeps debate centered on facts rather than beliefs. Asking questions that prioritize the exploration of multiple perspectives on a topic can achieve this goal, as can questions that ask students to adopt the perspectives of others.

3.2.2.2 Cognitive Restructuring

Cognitive restructuring is the challenging of cognitive distortions (Friedberg & McClure, 2002; Friedberg, et al., 2009; cited in Dalzell, 2016). For this research we are utilizing the 10 distortions identified by David Burns in *The Feeling Good Handbook* (1999) which are:

1. All-or-nothing thinking: seeing things as black or white

2. Over generalization: extrapolating a single negative event as evidence of greater implications, evidenced by words such as "always" or "never"

3. Mental filter: focusing on a small negative detail, rather than the positive whole

4. Discounting the positive: rejecting positives as if they "don't count"

5. Jumping to conclusions: interpreting things negatively despite a lack of evidence

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a. Mind reading: assuming what someone else thinks in order to base one's conclusions

b. Fortune telling: assuming things will go a certain way in order to justify one's conclusions

6. Magnification: exaggerating the negative or minimizing the positive thereby skewing one's perspective on something

7. Emotional reasoning: assuming that how oneself feels indicates the truth of how something is

8. "Should" statements: basing judgements off of expectations, rather than reality

9. Labelling: this is an extreme form of all-or-nothing thinking characterized by denouncing something as a unilateral label rather than recognizing its true complexity

10. Personalization and blame: holding oneself accountable for something outside of one's control

These distortions are valuable in two ways: 1) students can learn to identify their own cognitive distortions, 2) students can learn to identify the cognitive distortions in the texts they read. By so doing, they are able to uproot unhelpful ways of thinking and convert them into more productive ways of thinking. This relates to cognitive empathy as cognitive distortions are often what prevent an empathetic cognitive response so by exploring those barriers, students are able to better develop the skill to have empathetic cognitive responses without the influence of bias or prejudice.

A teacher can utilize this in discussion by asking questions that guide students to identify 1) the cognitive distortion, 2) the consequences of that distortion, and 3) a replacement thought. An example of this might be a student utilizing labelling identifies all immigrants as "bad people". Their teacher, when discussing a text from the perspective of a person who has immigrated, might

ask the student to identify their distortion (labelling); the consequences of that labelling, e.g. alienating others, holding prejudices, isolating oneself, etc.; and a replacement thought such as "I have a limited perspective on immigration and would benefit from informing myself on the complexity of both the issue and the people affected in order to facilitate more positive interactions with people I might meet."

3.2.2.3 Acceptance and Mindfulness

Both of these skills, acceptance and mindfulness, are rooted in the present, in engaging with what is rather than what should or could be (Chapman, 2006). Through practicing the non-judgement component of mindfulness, students are able to engage with multiple perspectives without self criticism. Through acceptance, students are able to permit differing points of view without fighting for the "right" answer. This relates to cognitive empathy as these skills enable students to engage with one another and with texts without conflict as they embrace a dialectical philosophy and accept that multiple points of view can be held on a topic. These two skills can be developed by the instructor through questions that focus on the facts of what occurred and encourage students to take a neutral approach.

3.2.3 Empathic Skills

Empathic skills—mental flexibility, perspective taking, emotion regulation, self/other awareness, and self reflection—factor heavily into Decety's framework. Each can be taught using skills from the three therapeutic techniques applied in this research.

3.2.3.1 Mental flexibility

Mental flexibility is developed through the various mental exercises students are asked to perform in order to empathize with others. Any difficulty in conducting these acts of mental flexibility must be addressed situationally. If it stems from a student being unfamiliar with this kind of mental labor, adjusted tasks are a sensible solution. If it stems from students being uncomfortable with the literature, there are more traditional approaches to assisting students who struggle with difficult texts available.

3.2.3.2 Perspective taking

Perspective taking is easier to do once a dialectical philosophy is adopted because students will not experience cognitive dissonance when asked to simultaneously consider their perspective and the perspectives of others. This is central to empathy development because, as previously discussed, perspective taking is integral to the process of empathizing with others. Teachers can evoke this behavior by asking questions that induce students not to challenge but to understand and inhabit the perspectives of others. This may involve a discussion of cognitive distortions, on the part of the student or the other person, which can lead to a productive discourse regarding replacement thoughts, generating cognitive empathy.

3.2.3.3 Emotion regulation

Emotion regulation in DBT is rooted in identifying and accepting emotions (Brodsky, 2013). As students work through texts, the instructor can ask them to take note of the emotions involved—just to name them and keep them in mind—for each of the characters and for themselves. This assists in perspective taking, particularly in situations where the reader's

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emotions diverge from that of the character. For example, taking the perspective of the villain means recognizing their feelings, too, and analyzing the background for that feeling.

3.2.3.4 Self/other awareness

Self/other awareness is less taught and more so guarded. It can be reinforced by clarifying in tasks when a question deals with the perspective of the student or with the perspective of a character and asking for clear delineation between the two. Looking in student responses for signs of emotion contagion is important to prevent larger problems later on. If students struggle with separating emotions or perspectives, the teacher can reinvoke the dialectical philosophy and ask them to try and separate but not judge either belief through activities that identify similarities and differences between the self and the other.

3.2.3.5 Self reflection

Self reflection is central to both CBT and DBT, both being therapeutic interventions and therefore invested in discussing the self. A teacher can facilitate self reflection by asking questions that require students to verbalize their own perspectives and the ways they differ from those of the characters in the text. This can be very productive when done in tandem with a dialectical philosophy and an eye for cognitive distortions.

3.2.4 Where does bibliotherapy fit in?

Bibliotherapy was not listed as the therapeutic intervention of choice for developing any of the previously discussed capabilities for one simple reason: it is how all of these capabilities are fostered. Bibliotherapy is the setting for the CBT and DBT skills analyzed above. By implementing

strong developmental bibliotherapeutic practice in the classroom, by doing things like encouraging the discussion of problems and solutions, guiding students through the four phases of bibliotherapeutic engagement with the text, and conducting the appropriate related activities, teachers can facilitate empathy development using bibliotherapy as the tool to instruct all of these other skills.

3.3 Classroom Integration Through Pedagogy

To incorporate these three techniques into the classroom is not as complicated as it may first appear. Bibliotherapy is simply talking about books with the goals previously stated. Teachers are already talking about books, this project only asks that they adjust their goals to incorporate an emphasis on helping students relate to the characters and problems, to develop positive attitudes, and to experience cognitive changes. By changing the vector which texts are approached, it is possible to achieve a different outcome, even though the choice in text is the same. This minimizes the need to revamp existing curriculum.

DBT can be incorporated through the framing of a text and the associated discussion by emphasizing the dialectical nature of truth and engaging with the emotional experience of literature while guiding students towards acceptance of themselves and others. By encouraging a dialectical mindset during work with a text, the educator can provide students with practice in a skill that will benefit them in various aspects of their lives. This can be done by having discussions of thoughts versus opinions, framing opinions as valid but requiring they be evidence based, and delving deep into opinions to explore the mindset behind them.

CBT will most inform question design; framing questions to engage with cognitive distortions and unhelpful patterns of thinking and then questioning what to do once those are identified to push students to discover empathy for themselves. This can be incorporated by making choices when it comes to what questions to ask and choosing intentionally to use questions that will push students to think about their own thinking process and the thinking processes of others. By encouraging students to take the perspective of others and, more importantly, to explore and understand that perspective, educators are enabling them to develop empathy and problem-solving skills. This can be done with activities like having students debate and then midway through to switch to the other side of the argument; writing out the story from the antagonist's point of view; writing a backstory for a difficult character; or other things that encourage them to look at the text from a new angle.

To see a more detailed discussion of how this methodology might play out in regards to a specific text, please see appendix A.

3.4 Finding Balance with Existing Curriculum

No part of this methodology asks instructors to change the texts they teach. While it would work more harmoniously with texts that prioritize diversity and positive representation, it can also be used with texts that are less varied in their perspective. When practicing perspective taking, it would be ideal to expose students to as many different perspectives as possible, which means exposing them to views that are different from their own which typically means including a variety of marginalized voices. However, not every school district has adopted this philosophy yet, so this methodology has been designed to work within canon, that is to say, to evoke discussion of

different perspectives even in a text that portrays traditional or historically well-represented views. Texts by authors from varied backgrounds, representing different races, sexualities, socioeconomic statuses, abilities, and life experiences would be ideal but reading the likes of Shakespeare, Chaucer, and Milton will not prevent the program from working because it is heavily vested in the student voice. A canonical text with little diversity still works because, as previously discussed, by asking students to make inferences in the text, they are actually developing empathy to a greater degree than if it were spelled out for them. In a canonical text, discussion might center around what is missing from the text; who isn't being represented, who is being presented with a positive or negative bias, what assumptions are made based on the assumed audience and how do those assumptions hold up now? With a more diverse text, the conversation can be less theoretical about voice and representation, inviting discussion examining the parts of the text that diverge from the students' experience and from the experience of the majority.

By permitting students to share their perspectives, the door is open to diversity. Even in a relatively homogenous classroom, there will be varied perspectives which will enable the practicing of empathy. However, to really grow students' capabilities, it is encouraged that educators incorporate some media that represents people and perspectives that are different from those of their students.

4.0 Program Design

I've adapted the following framework from "Logic models for program design, implementation, and evaluation: Workshop toolkit" by Karen Shakman and Sheila M. Rodriguez. Following their system of questions, using a theory-based logic model, I designed a program that would integrate empathy education objectives into existing curriculum utilizing the previously discussed novel methodology to evoke empathy development through literature. To view this program design's logic model, please view appendix B.

4.1 Problem statement

The problem is that empathy is not being taught in schools. This is a problem because, as previously discussed, empathy has a myriad of benefits and the lack of empathy has a plethora of negative outcomes. Without any intentional instruction of this skill, the education system is failing to provide students with an asset that can help them for the rest of their academic, personal, and professional lives. This problem exists ubiquitously, across the vast majority of high schools.

The stakeholders in this problem are primarily the students who would benefit from the intentional instruction of this skill. Additionally, their instructors would benefit from the positive repercussions of empathy education in the classroom. Their guardians would also likely see a difference as a result of this instruction. Zooming further out, providing students with empathy education prepares them to be more positive influences in their communities, giving them the capacity to seek to create change which could have a massive impact over time.

Due to the limitations of this project, no data has been collected as to the existing impact of a lack of empathy education in schools. However, based on the literature review previously discussed, it is clear that there would be benefits from instituting such a program.

4.2 Resources (inputs)

The resources this program requires are primarily 1) educational materials 2) knowledge of the program and how to implement it 3) time 4) funding for the materials required by and for the evaluation of the program.

Because this methodology is rooted in the belief that empathy education can be conducted with any text, it requires very little change to what is being taught and therefore the cost of educational materials is just assuring that all students have the materials; this is the same cost as would have been present were the program not in place. The biggest fiscal cost is optional, though encouraged, and it is the cost of evaluating the efficacy of the program. This will require the assistance of a statistician, or more likely a research team through a university or external organization, as well as the purchasing of evaluative materials, such as empathy rating tests. However, if the facility has the faculty to conduct this level of evaluation already, then this expenditure can be foregone. Most of the evaluation will be cost free, as it is primarily done through observation by the instructors.

Professional development training will be required to educate teachers on how to utilize this methodology. This will likely also carry a cost in both time and money. However, it is extremely important because without the proper knowledge on how to implement the program, at best it will not be implemented to its full potential and at worst it could be harmful.

Additionally, it is worthwhile to educate families and the community as to the school's intention to implement this program. This is because transparency in curriculum is central to building trust between education facilities and school stakeholders. This is also central to practicing empathy towards the community; enabling stakeholders to be a part of their students' education is an empathetic act on the part of the school as it indicates that they have observed the stakeholder's perspective, which is typically very limited when it comes to pedagogical structures as access to understanding teaching materials, even when openly available, requires advanced pedagogical understanding and a high-degree of English comprehension.

4.3 Strategies and activities

The strategies outlined here fall into five categories: 1) program consolidation, what is required for the program to be taken up by the school; 2) professional development, what is required to educate the staff on the program; 3) program preparation, what is required to ready the program before utilizing it; 4) program implementation, what is done during the program; and 5) program conclusion, what is done after the close of the academic year to validate the program. For more details on the steps that go into each category, please view the activities matrix (appendix D).

4.4 Outputs

The outputs refer to the measurable products of the program. There are three categories: a measurable change in empathy rating according to the chosen evaluation method, be it self-report

or observational; a measurable increase in student content knowledge retention and test scores; and an observable difference in student behavior in regards to prosocial behavior, attitude, motivation, and productivity. These outputs are rooted in classroom behavior. The change in empathy scores will only be achievable if a school elects to use an empathy pre- and post-test which is advisable for validation and amelioration of the program but not required for success. The anticipated change in content knowledge retention and test scores should be measured by existing assessments. The observable changes could be recorded using a dedicated matrix, which is advisable in order for the data to be most useful for the program, but could be done in a less structured manner if time and money are limiting factors.

4.5 Outcomes

The outcomes are focused primarily on the skills this program will develop as well as the positive effects empathy can have both inside and outside the classroom. These outcomes fall into two categories: outcomes for students and outcomes for teachers. Students will increase empathy; develop perspective-taking, self-reflection, and emotion-regulation skills; and decrease classroom disruptions and antisocial behavior. Teachers will increase empathy, time dedicated to empathy instruction, and use of bibliotherapeutic practices. They will also facilitate positive affective responses and cognitive changes within their students as well as facilitate positive interactions between students.

The outcomes for this program were designed using the outcomes matrix (appendix C), which I edited by removing the "by when?" column because, given that this proposal is theoretical, there is no proposed timeline. The outcomes are defined using SMART goals which are Specific,

Measurable, Achievable, Realistic, and Time-phased. The outcomes from the outcomes matrix all fell under short-term outcomes which focus on the duration of the program. The long-term outcomes were focused on the period of adolescence and were primarily that students would sustain the empathy development they had experienced and as a result conduct more prosocial behavior. The impact was focused on life-long outcomes and similarly anticipated increased empathy and less antisocial behavior over the lifespan.

4.6 Assumptions

The assumptions section of the matrix deals with the premises behind the program. These are important to consider because if one proves to be false, it risks undermining the entire program. It is the responsibility of the institution implementing the program to ensure that these assumptions are valid in their setting or that they can cope around them.

The assumptions that underpin this program design are as follows. Empathy is an effective solution to the aforementioned problems and that schools are designed to solve those problems, not perpetuate them. The proposed methodology is an effective way to teach empathy. Any teacher can be taught to provide empathy education through professional development training. Teachers will be willing to introduce new components to their curriculum, including empathy education, and be able to make the commitment to regularly integrating this new methodology into their teaching. Finally, it is assumed that families and communities will not be opposed to their students being taught empathy or to the specific methodology.

5.0 Teacher's Tool

The availability of research limits knowledge of pedagogy (Watkins, 3). That is to say that if educators can't obtain the research conducted here, then it serves no practical purpose. In order to make this information accessible, I have created a website that serves as a tool for professional development and could be used independently or in a workshop setting. It is essentially a guided tutorial that walks users through the methodology discussed in the previous chapter. The information it aims to convey is the importance of empathy education, background on teaching empathy, and the new methodology that utilizes CBT, DBT, and bibliotherapy to stimulate empathy development. The website contains three primary components: an overview of the topic and current research, exemple texts, and a guide to implement the methodology. To view the site, please see appendix E.

5.1 Instructions

Users can access the site in any order; this is inherent to the nature of a website and is beneficial after the user has first interacted with the tutorial because they can return to the pages they would like to spend more time with. However, there is an intended progression and the benefit of a user following this progression is that they will receive the information in an order that builds upon itself. It makes little sense to start with the application of the methodology if the user doesn't yet know what the methodology is, for example. The intended flow assumes that they will start at the homepage where there is an explanation of the need for empathy education which is important

because without buy-in to the necessity of the topic, there is likely to be little behavioral change as a result of interaction with the material. Then they will move onto the methodology page where they will learn about the context and components of the technique. Next they will select a text from a list of options.

In this text they are able to see the annotations I have made in three areas: typical literary analysis such as setting and character development; critical analysis regarding race, class, gender, orientation, and ability; and opportunities for the application of CBT and DBT. By selecting a checkbox, users are able to highlight the corresponding sections in the text, viewing annotations similar to those an educator would typically make in preparing a text for discussion. They also can view a list of discussion questions produced following the proposed methodology. The intention is that educators will be able to gain a practical understanding of the methodology by observing its theoretical application. If the user were to select "The Comet" by W.E.B. DuBois as the example, when they viewed the discussion plan they would find such questions as "what is Julia thinking in this moment? What does she realize? What does her subsequent behavior reflect on her?" and "put yourself in Julia's shoes. What are her options in this scene? Which option would you choose and why?" They would be able to navigate the annotations of the text to see the supporting evidence that they might utilize when leading discussion and have a discussion plan available to them.

Finally, teachers will go to a page labelled "Implementation" which is focused on creating discussion plans which includes a discussion of question design and templates for questions that could be asked about any story such as "are you like any of the story's characters?" and "do any of the characters remind you of someone?" These are meant to serve as a jumping off point for

educators to begin using the methodology as they deepen their understanding. They are also given the previously discussed 10-step program for designing a developmental bibliotherapy program.

The last page of the site provides acknowledgments and citations.

5.2 Suggested Use

This resource would be most beneficial in three settings: independent professional development, learning communities, and professional development workshops. Working alone, an educator would be able to work through the site at their own pace and mirror it with a text that they use for their class. In this way it would be beneficial as the study would be customizable. This is the most appropriate approach for teachers who do not have an administration driven program, i.e. teachers who are doing it alone. Similarly a learning community would allow the educator to work through the site independently, reaping the benefits of self-pacing, but also allow them to reconvene with their peers to discuss it in a way that would enrich understanding. This is the ideal way to approach the entirety of the program described in this paper, as research shows that collaborative learning provides great benefit (Mouza, 2009). It could also be used as the guide for a workshop presentation which, if led by someone with experience, would allow educators to ask questions and work together to develop understanding communally. This can serve as an excellent introduction to the methodology as teachers do not have to build understanding in a vacuum, rather they have a community to build off of and a guide to mentor them. This tool is versatile and, because it is free, accessible to all to be used in the mode most befitting of each individual context.

5.3 Further Development

This tool could be expanded in several ways with access to additional resources. The largest development to be made would be the integration of a discussion board feature. This would facilitate collaborative learning even for educators who may not have a community in their own school. Because of restrictions on the use of the server that hosts the website, a forum is not currently feasible, but if it were added it would allow for the creation of an online professional learning community. Collaboration in the context of this material could provide transformative opportunities for discussion. It would also permit for more points of view on the specific examples which currently are entirely rooted in a single perspective, a limitation of its own.

6.0 Developing Empathy in Undergraduate Literature Students through the Use of Online Discussion Boards

6.1 Introduction

The online discussion board model is of value because of its ability to engage students multimodally, asynchronously, and using a different set of skills than typical in-class discussion. By allowing students to use online discussion boards as a form of class participation, it engages students who are shy or who do not feel comfortable speaking in front of their peers, such as nonnative speakers or students with disabilities; communities that can be difficult to nurture in a busy classroom discussion (Greenlaw, 2003). It also allows for discussions to develop more fully as students can return to topics after having discovered new skills. It invites students to stretch abilities that classroom discussions cannot by asking them to develop their thoughts fully before posting rather than working them out as they speak and to focus on the structure of their arguments rather than their delivery. Neither set of skills is necessarily more valuable, but they do ask students to think in different modes which evokes problem-solving skills, one factor of empathy development. This research project serves to explore the use of CBT and DBT informed question design implemented in an online discussion board for an undergraduate literature class.

6.2 Literature Review

An online discussion board can capture the best features of traditional writing assignments and in-class discussion, according to Greenlaw (2003). The values of both mediums were previously discussed in chapter two, so now I will expand on the unique medium that is online discussion boards. Online discussion boards enable students to communicate the entirety of their idea in a way that they may not be able to during class discussions (Greenlaw, 2003). This includes students who are quiet, shy, or not comfortable speaking in front of others, be it because of a disposition or a language difficulty. This is similar to a writing assignment, however the induced interactions with peers brings in the value of a discussion. Those two components—well thought out argumentation and discourse—combine to make online discussion boards a viable setting for empathy education. Discourse, like that conducted through in-class discussions, encourages the exchange of perspectives which, when combined with the principles of the proposed intervention such as perspective taking, evokes a cognitive empathetic response. Additionally, it encourages emotional regulation as students' ideas are challenged. Well thought out argumentation, achieved through writing, causes students to practice self reflection and critical thinking when evaluating their own ideas.

Considering the previously discussed theoretical groundwork for the setting of empathy education, online discussion boards stand out in their ability to foster collaborative learning (Simkins, 99; cited in Greenlaw, 2003; Du, 2011). This is because in a virtual setting, the educator becomes a "content facilitator" rather than a "content provider" (Bose, 2003; Goodyear, Salmon, Spector, Steeples, & Tickner, 2001; Parise, 2000; Smith, Ferguson, & Caris, 2001; cited in Whiteley, 2006). Students have ownership over their ideas and over the discussion in an online setting where who gets to speak isn't determined by the teacher's choice, rather all voices are

equal; no one can speak louder or talk over someone else. The learning is collaborative because meaning is constructed through discourse as ideas build off of one another. Online collaboration has also been shown to provide the benefits of reflection, peer feedback (Ruhleder & Michael, 2000; cited in Du, 2011), and reduced anxiety in social situations (Gokhale, 1995; cited in Du, 2011). Additionally, the benefits of online collaborative learning include "achieving complex and higher-level concepts and skills, and bringing about different perspectives and explanations" (Thompson & Ku, 2006; cited in Du, 2011).

One of these higher-level skills is critical thinking, a core component of empathy education. Online discussions are apt for teaching critical thinking because they combine discussion and writing, particularly because they permit for the inclusion of a variety of student viewpoints, rather than relying on the teacher's sole perspective (Greenlaw, 2003). Electronic discussion boards accelerate the rate of development of critical thinking because students do not have to wait for a back and forth of feedback from the teacher across multiple assignments, rather their idea is immediately posited alongside others and they must develop arguments to support their claims in a way that they may not have otherwise had they not been faced with opposing viewpoints (Greenaw, 2003).

It is specified that in order to facilitate cognitive changes, students must be asked "interpretive questions," or somewhat ambiguous questions that allow for multiple points of view that students must choose between and then support (Hansen and Salemi, 1990; cited in Greenlaw, 2003). This clearly relates to the development of critical thinking, but it also ties in to empathy education as empathy development is another cognitive change that is evoked by interacting with multiple points of view. The diversity in viewpoints on an electronic discussion board requires students to evaluate others' perspectives (Greenlaw, 2003). This is similar to how classroom

discussions work, however in an online discussion, the viewpoints are written out, therefore easier to remember and assess side-by-side. This benefits the act of perspective taking because it is less urgent and less influenced by the pathos of presentation. Students can take time to evaluate one another's perspective and practice perspective taking before writing out their own responses.

Another key component of empathy development that is benefited by online discussion is self reflection as the asynchronicity of discussion allows students time to reflect (Greenlaw, 2003). Similar to critical thinking, self reflection is also benefited by the available time and space to fully write out arguments because students can take time to think critically and revise and do not have the limitation of sharing class time or a finite writing limit to restrict their ideas.

6.3 Methods

6.3.1 Participants

This research was conducted in an undergraduate literature class at the University of Pittsburgh. The course was titled "Science Fiction" and focused on the last three years Nebula award winning short stories, novellas, novelettes, and novels. This class contained 30 students, 24 of whom participated in the study. The ages of the participants ranged from 18-32, with only two of the participants being older than 18-23. There were 10 female participants and 14 male participants.

6.3.2 Measures

Data was collected using a pre/post test structure using the Questionnaire of Cognitive and Affective Empathy (QCAE). The test has 31 items and uses a 4-point forced-choice response. This test is broken into two parts: cognitive and affective empathy. Cognitive empathy has two subscales: perspective taking and online simulation; affective empathy has three subscales: emotion contagion, proximal responsivity, and peripheral responsivity; for a total of five subscales.

6.3.3 Analysis

The Cronbach Alpha score, or the measure of internal consistency, for each subscale was: perspective taking = 0.899, online simulation = 0.829, emotion contagion = 0.845, proximal responsivity = 0.674, and peripheral responsivity = 0.675. For the cumulative cognitive category the Cronbach Alpha score was 0.879 and for the cumulative affective category it was 0.748. The Cronbach Alpha score for the test as a whole was 0.841. This means that every part of the test was internally consistent and relevant; removing any subscale would have rendered the test weaker as a whole.

6.4 Results

A paired-samples t-test was conducted to evaluate the impact of the intervention on student's scores on the QCAE. There was no statistically significant change in the cumulative aggregate QCAE scores from the pre-test (M= 89.2, SD=1.86) to the post-test (M=88.2, SD=1.84),

nor on any of the subscales. A lack of statistical significance indicates that, though there may have been changes between the pre- and post-tests, it was not enough to indicate that the intervention was impactful as a whole.

6.5 Discussion

There are three explanations that may independently or interactively have caused the lack of statistically significant results: 1) limitations regarding the experiments, 2) limitations regarding the delivery method, or 3) limitations regarding the methodology.

6.5.1 Limitations regarding the experiment

A sample size of 24 was only ever meant to be exploratory and would never have been adequate to have validated the intervention. Low sample size can explain a lack of statistical significance.

6.5.2 Limitations regarding the delivery method

The results may suggest that an exclusively online delivery of this methodology may not be optimal to achieve the desired outcomes. It is my belief that this methodology would be most successful when integrated throughout the course materials; delivered in class, online, and through assignments. Further testing would be required to know if delivering this methodology as online supplemental to course material is effective.

It may also indicate a fault in the execution of the delivery method. Research indicates that student engagement plays a central role in the efficacy of any learning outcome on an online discussion board (Greenlaw, 2003). Greenlaw discusses as length the best modes to incentivize participation. My study may have inadequately incentivized engagement. Additionally, the caliber of an online discussion is affected by the "design of the interaction mechanism" (Gilbert & Dabbagh, 2005; cited in Du, 2011). It is possible that I may have erred in designing the interaction mechanism, i.e. in incentivizing participation, modelling appropriate responses and discussion, or encouraging student buy-in.

6.5.3 Limitations regarding the methodology

It is possible that the CBT, DBT, and bibliotherapy informed methodology is not effective. However, this test, due to its limited sample size and engagement, is not sufficient to determine this. Further testing of the methodology in different settings, mediums, and populations will be necessary to determine its efficacy.

6.5.4 Recommendations

After the lack of significant findings from this research, I recommend that there be further study of the methodology in a setting where it can be regularly implemented. Study of the efficacy of the methodology when utilized daily, semi-daily, and weekly, would be of value. Study of the efficacy of the methodology via different delivery methods, such as through in-class discussion, online discussion boards, assignments and a blend of the three would also be of value. It is my

hypothesis that this methodology is effective, but that further testing of the methodology when regularly implemented throughout the curriculum would be better suited to examine its validity.

7.0 Summary and Conclusion

This research sought to answer the question how can empathy education be conducted in a high school literature classroom? The answer that this paper chose to concentrate on was the application of cognitive-behavioral therapy, dialectical-behavioral therapy, and bibliotherapy as tools to shape classroom practices and instruction to foster empathy development, focusing on generating an affective response but more so on evoking appropriate cognitive responses through perspective taking, critical thinking, self reflection, and emotional regulation.

In regards to the intervention, program design and experiment, the research herein has crossed the line from theoretical to applied and, despite the lack of conclusive results, still appears promising. Developing a novel methodology requires extensive vetting which went beyond the limitations of an undergraduate thesis, but, in continuing this research, it would be worthwhile to continue to test the validity of the practices proposed in a variety of settings with diverse populations. This would best be done by choosing a research site and conducting a proper, scientific, evidence-based needs assessment which was impossible to do for this paper as there was no site in mind. Additionally, a more robust set of data collection would be of great value.

Regarding the teacher's tool, focus group testing would be the next step. To actually put it in the hands of teachers and to gather their feedback as a means to improve the product would be worthwhile. After improving the tool through theoretical feedback, it would be appropriate to run a small field test and collect data regarding its efficacy, however, this would likely either need to be conducted after or in conjunction with the research of the validity of the methodology.

As for what this paper has contributed to the field, there is a novel methodology now available and packaged for dispersion to facilitate empathy education in the high school literature

classroom. While further research is needed in order for that to be ethical, the contribution is not negligible. There is something new to try which is constructive given that empathy education is not broadly available.

Appendix A Supplemental Tables and Figures

Table 1 Definitions of Empathy

Definition	Source
The act of perceiving, understanding, experiencing, and responding to the emotional state and ideas of another person	Barker, R. L. (2008). *The social work dictionary*. Washington, DC: NASW Press. (cited in Gerdes, 2011)
The ability to put oneself into the mental shoes of another person to understand his or her emotions and feelings[a form of simulation, or inner imitation	Goldman, A. (1993) Ethics and cognitive science. *Ethics* 103, 337–360 (cited in Decety, 2006)
A complex form of psychological inference in which observation, memory, knowledge, and reasoning are combined to yield insights into the thoughts and feelings of others	Ickes, W. (1997) *Empathic Accuracy.* The Guilford Press, New York. (cited in Decety, 2006)
An affective response more appropriate to someone else's situation than to one's own	Hoffman, M.L. (1982) Development of prosocial motivation: empathy and guilt. In *The Development of Prosocial Behavior*. Eisenberg, N., Ed. Academic Press, New York. pp. 281–313. (cited in Decety, 2006)
An other-oriented emotional response congruent with the other's perceived welfare	Batson, C.D., Sager, K., Garst, E., Kang, M., Rubchinsky, K., and Dawson, K. (1997) Is empathy-induced helping due to self-other merging? J. *Pers. Soc. Psychol.* 73, 495–509. (cited in Decety, 2006)
An affective response that stems from the apprehension or comprehension of another's emotional state or condition, and which is similar to what the other person is feeling or would be expected to feel in the given situation	Eisenberg, N. (2000) Emotion, regulation, and moral development. Annu. Rev. Psychol. 51, 665–697. (cited in Decety, 2006)
a complex form of psychological inference in which observation, memory, knowledge, and reasoning are combined to yield insights into the thoughts and feelings of others	Ickes W: Empathic Accuracy New York: The Guilford Press; 1997. (cited in Decety, 2007)

empathy could be seen as a type of sympathy, empathy usually signifies a stronger element of identification or 'perspective-taking' – imaginatively experiencing the feelings, thoughts and situation of another	Chabot Davis, K. (2004). Oprah's Book Club and the politics of cross-racial empathy. International Journal of Cultural Studies, 7(4), pp. 399–419.
Empathy refers to an other oriented emotional response congruent with the perceived welfare of another that results from adopting the perspective (i.e., imagining the thoughts and feelings) of a person in clear need	Batson, C. D., Fultz, J. N., & Schoenrade, P. A. (1987). Distress and empathy: Two qualitatively distinct vicarious emotions with different motivational consequences. *Journal of Personality, 55*, 19–40. (cited in Stocks, 2009)
the capacity to understand and respond to the unique affective experiences of another person	Decety & Jackson, 2004; Batson, Fultz, & Schoenrade, 1987 (cited in Lamm, 2007)
Empathy refers to a change in emotional state triggered by the formation of an internally generated replica of the emotional state of another.	Light S. N. (2019). The Heterogeneity of Empathy: Possible Treatment for Anhedonia?. Frontiers in psychiatry, 10, 185. https://doi.org/10.3389/fpsyt.2019.00185

Table 2 Gerdes' Framework for Teaching Empathy

Component	Definition	Key Aspect	Ways to Develop
Affective Response	Involuntary physiological reaction to another's emotions and actions	Mirroring Mimicry Conditioning	Promote healthy neurological pathways
Cognitive Processing	Voluntary mental thought processes used to interpret one's affective response; enables one to take the other person's perspective	Self/other-awareness Mental flexibility Role-taking Emotion regulation Labeling Judgment Perspective-taking Self-agency	Set boundaries Practice mindfulness Use role-plays
Conscious Decision Making	Voluntary choices for action made in response to cognitive processing	Empathic action Social empathy Morality Altruism	Helping Advocacy Organizing Social action

Note. Reprinted from "Teaching empathy: a framework rooted in social cognitive neuroscience and social justice", by Gerdes, K.E., Segal, E.A., Jackson, K.F. & Mullins, J.L., 20011, *Journal of Social Work Education, 47*(1), p. 117.

Table 3 Gelbach's Taxonomy of Social Perspective Taking Strategies

| Strategy	Description
Inferential Strategies	*Perceivers use extant information to try to make inferences about the target.*
Analogy	Perceivers try to understand the target's experience by recalling a different situation from their own experience that is presumed to parallel the target's situation.
Compare/contrast	Perceivers use comparisons to identify differences and/or similarities that will aid in understanding the target's thoughts/feelings. Specifically, perceivers can compare: (1) themselves versus the target, (2)"most people" versus the target, (3) other members of the target's group versus the target, and (4) the target in the current situations versus the target in other situations.
Consider present context	Perceivers evaluate the present context or the situational factors that the target is experiencing.
Draw on background information	Perceivers use information gathered from personal previous experiences with the target or from others' reports about the target.
Projection/anchoring & adjusting	Perceivers imagine themselves in the target's situation and may adjust for differences between themselves and the target (i.e., perceivers put themselves in the target's shoes).
Reflection	Perceivers reflect on the target and/or their interaction with the target through: (1) searching their memories, recalling more details, and reanalyzing them (i.e., ruminating), or (2) discussing with a third party (i.e., conferring).
Stereotyping	Perceivers use generalized schemas to infer targets' thoughts and feelings in a particular situation.
Information Cultivation Strategies	*Perceivers engage in regulatory or active behaviors to try to garner more information about the target.*
Attention regulation	Perceivers regulate their attention and/or the target's attention to maximize communication.
Emotion regulation	Perceivers may regulate their own or the target's

	emotions.
Increasing modalities	Perceivers seek more information about the target by increasing the number of communication modalities.
Information extraction	Perceivers elicit more information from the target about his or her thoughts/feelings.

Note. Reprinted from "The Social Perspective Taking Process: Strategies and Sources of Evidence in Taking Another's Perspective", by Gehlbach, J. & Brinkworth, M., 2012, *Teachers College Record 114*(1), p. 16.

Figure 1 Schematic Framework of Empathy as a Construct
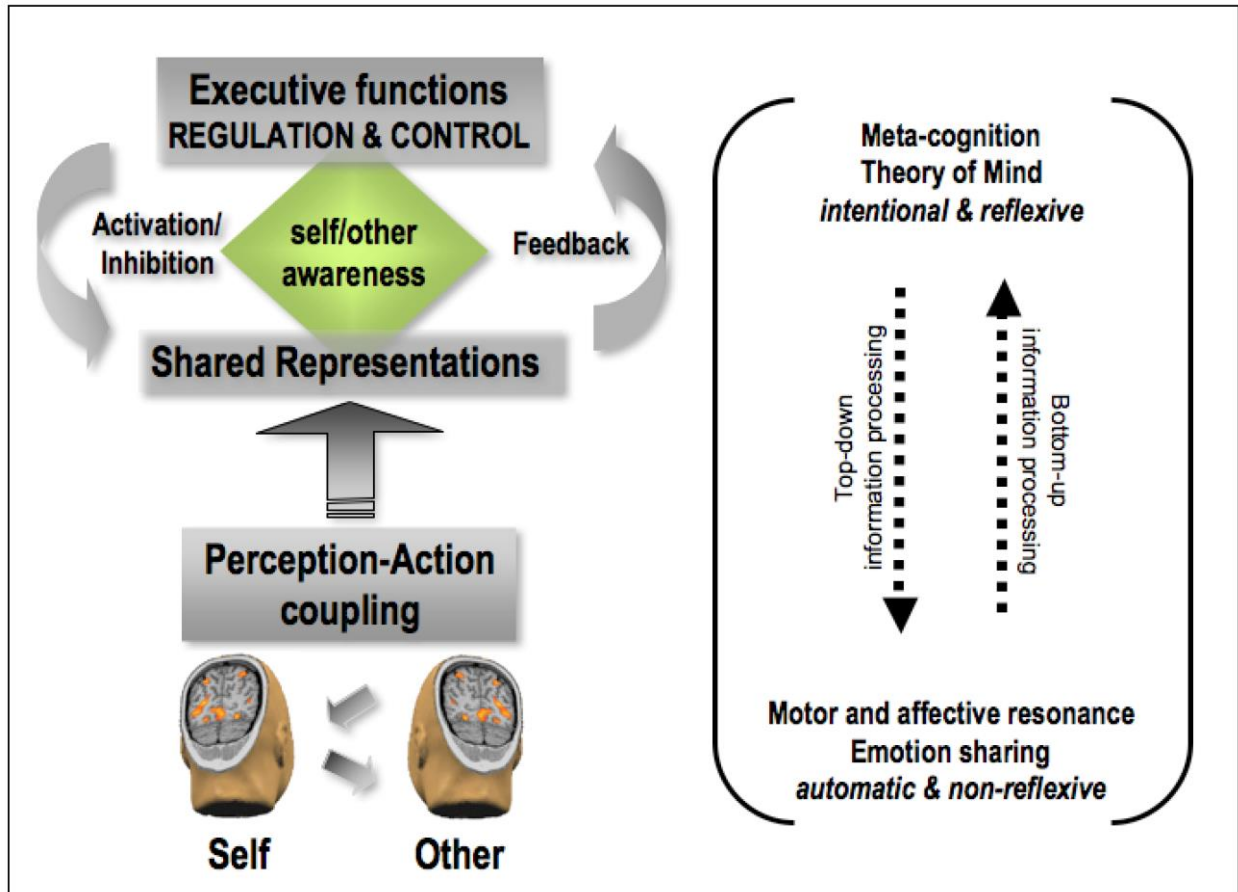
Schematic representation of the bottom-up (i.e., direct matching between perception and action) and top-down (i.e., regulation and control) information processes involved in human empathy. These two levels of processing are interrelated. The lower level, which is automatically activated (unless inhibited) by perceptual input, accounts for emotion sharing, which leads to the implicit recognition that others are like us. Executive functions, implemented in the prefrontal cortex, serve to regulate both cognition and emotion, notably through selective attention and self-regulation. This meta-level is continuously updated by bottom-up information and, in return, controls the lower level by providing top-down input. Thus, top-down regulation, through executive functions, modulates low levels and adds flexibility, making the individual less dependent on external cues. The meta-cognitive feedback plays a crucial role in taking into account one's own mental competence in order to react (or not) to the affective states of others.

Note. Reprinted from "Human Empathy Through the Lens of Social Neuroscience", by Decety, J. & Lamm, C., 2006, *TheScientificWorldJOURNAL, 6*, p. 1148.

Figure 2 Emotion Regulation Process Model
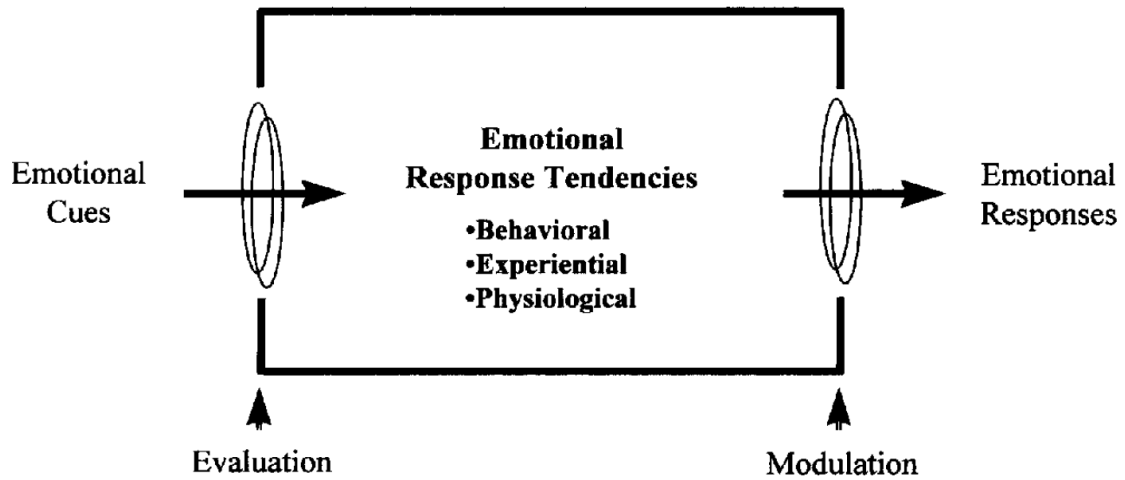
Note. Reprinted from "The Emerging Field of Emotion Regulation: An Integrative Review", by Gross, J., 1998, *Review of General Psychology, 2*(3), p. 272.

Appendix B *The Metamorphosis*: A Case Study in Empathy Education

To find what is required in an activity to stimulate empathy we must return to its definition. First, an affective response is required. This is best accomplished by choosing literature that will naturally generate a strong affective response. These are often jarring, emotional texts. The jarring nature of the content of *The Metamorphosis* naturally generates an affective response on the part of the reader: it is visceral. When choosing content for the affective response, it is important to consider that it provides insights into the mind of the character, usually either because it is in the first person or third person omniscient. *The Metamorphosis* works on this front because of the narrated monologue used throughout. It is easy to get a read on Gregor's thought processes, making it relatively simple for the reader to assume his perspective.

This relates to the second component: the cognitive capacity to take another's perspective. Students at the high school level will generally already have this capacity because they have progressed into what Piaget identifies as the formal operational stage of development. This means they have progressed past the egocentrism of infancy and early childhood and have developed the ability to handle abstract thought and logical thinking. The lack of egocentrism and presence of abstract thought and logical thinking enables them to handle perspective taking. *The Metamorphosis*, because of its view into the inner workings of Gregor's mind provides an opportunity for students to apply those skills to tease out more complexity in the character, allowing for greater empathy.

The third component, the ability to regulate one's emotions, is something also generally developed in high school age students, though it should always be considered as a key skill to develop further. This does not influence the choice of text but will factor into several of the

proposed activities. Similarly, the final aspect, "a level of self/other-awareness that allows some temporary identification between self and other, but also ultimately avoids confusion between self and other," is something that the instructor must consider but is not a key factor in choosing a text (Gerdes, 2011, 112).

Having established the value of this text in regards to the key components of empathy, we can begin to consider what activities will be most useful in generating empathy development. These activities must address any number of the following criteria in order to be useful in this pursuit: perspective taking, critical thinking, and self reflection.

Perspective taking activities typically involve doing as the name implies: taking the perspective of a character in the story or inserting the self into the story and inventing a narratival perspective. This may look like rewriting or acting out the story from the point of view of Grete, the Charwoman, or any other character besides Gregor. This activity works to stimulate students' mirror neurons by challenging them to assume the perspective of that character, making their minds work in tandem with that of another. They may also rewrite the story with themself as a character, challenging them to think how they would respond if they had to interact with the situation, encouraging them to find camaraderie or at least understanding with the other characters.

Critical thinking activities similarly can set students' mirror neurons to firing by stimulating them to think in the mindset of others. Activities that engage this component may involve problem solving within the story. For example, students may discuss or answer a writing prompt asking them to consider the problem of Gregor's metamorphosis from the father's or sister's perspective. How else could they have addressed the problem? Or similarly, from Gregor's perspective, how could he have handled his metamorphosis differently and how would those different choices have affected his family?

Finally, self-reflection should be integrated into activities for perspective taking and critical thinking as often as possible. This can simply be done by asking, "what would you have done?" and "why did the character behave differently from the way you believe you would have?" These two questions invite students to reflect not only on their own perspective but also to identify what makes others different. It is important for the instructor to facilitate a culture of nonjudgement when asking these questions. If students respond too forcefully with "the character did it wrong and I would have done it right," they are shutting down the opportunity for an empathetic response. In this situation it is the instructor's responsibility to guide the student to a less fixed mindset by encouraging them to consider the factors that influenced the character's choices. Ask them to consider what cultural, social, economic, and historical contexts influenced the character and how those differ from the students'. By encouraging students to dig deeper into their own thinking and that of the character, they are encouraging connections to be drawn. Those connections can cause students to identify differences and similarities, to uncover hardships that may not be initially visible. By finding those difficulties that are hidden in the text or that go entirely undiscussed, like the weight the father bears of being a former breadwinner and a failure in supporting his family or the guilt Grete may feel from being perceived as incapable and burdensome, the student may find opportunities to empathize. Perhaps they or someone they know have felt those or similar difficulties. Even in the case that a student feels entirely divorced from a character, there is always some sort of similarity to be found. By giving students assignments that get to the core of those similarities while asking them to explore the differences, educators can encourage the strengthening of mirror neurons while also developing critical thinking.

These activities can be categorized a number of ways, but looking through the pedagogical lens, let us consider them based on classroom organization: independent work, small group work,

and whole group work. By assigning independent work, students critical thinking is particularly challenged, as they are asked to on their own discover the essence of another being. Small group work encourages collaboration and can generate empathy between peers as they explore their similar and differing perspectives. Whole group work, often the most challenging for students, usually takes the form of whole-class discussion. This is best saved as a closing activity, after students have had the opportunity to come up with ideas independently or in small groups where the stakes are lower.

Another way to categorize these activities through a pedagogical lens is based on medium of instruction: writing, discussion, acting, art-making, and so on. It is important for educators to utilize a mix of mediums of instruction in order to engage as many students as possible. Some students will come up with ideas best by discussing them with their peers while others will benefit from being able to create, for example drawing the emotions they perceive in the story. Mixing up the mediums will keep students interested in the coursework and allow them to explore their relationship to the text in a variety of ways, causing them to engage more fully. A nod should especially be paid to acting as means for developing empathy. Writing exercises are similarly powerful for getting students to assume the perspective of another, but acting as the character engages mirror neurons most fully.

Appendix C Logic Model for Empathy Education Program

Logic Model for Empathy Education Program					
Problem Statement					
Many problems, such as bullying, classroom disruption, poor student/teacher relationships, and low motivation, among others persist in high school classrooms across the United States. These problems will require a variety of solutions to be fully extinguished, but one powerful solution not currently being utilized is empathy education. Empathy education could prove to solve many common school problems from the classroom to interpersonal relationships, so it is a problem that it is not being explicitly taught to any extent.					
Resources/ Inputs	Strategies and Activities	Outputs	Short-Term Outcomes	Long-term Outcomes	Impacts
• Dedicated curriculum • Dedicated time for this material	• Program consolidation • Professional Development • Program Preparation	• Measurable change in empathy scores • Measurable increase in student content knowledge	1. By the end of the program, students will have increased their ability to practice empathy as measured by a set of tools to be determined by the institution.	1. After completing the program, students will have the skills to practice empathy, including perspective taking,	1. As they enter their adult lives, students will be able to implement the skill of empathy in their daily lives, in

• Training for educators • Training for administrators • Information for community and families • Funding for the above requirements	• Program Implementation • Program Conclusion	retention and test scores • Observable difference in student behavior in regards to prosocial behavior, attitude, motivation, and productivity	2. By the end of the program, students will have developed their abilities to practice perspective taking, self reflection, and emotional regulation, which will be measured by metrics determined by the institution but will be observable through in class activities. 3. By the end of the program, students will decrease antisocial behaviors, such as bullying and classroom disruptions. 4. By the end of the program, educators will increase their ability to practice empathy as measured by a set of tools to be determined by the institution. 5. During the program, educators will increase the amount of instructional time	self reflection, and emotional regulation, in their daily lives, in personal, professional, and academic settings. 2. After completing the program, students will be less prone to antisocial behavior, including bullying and classroom disruptions.	personal, professional, and academic settings. 2. In their adult lives, students will continue to be less prone to antisocial behavior.

			dedicated to empathy education and their use of bibliotherapeutic practices 6. During the program, educators will facilitate positive affective and cognitive changes in their students as well as positive interactions between students as well as between themselves and the students.		

Assumptions

- Empathy is an effective solution to the aforementioned problems
- Schools are designed to solve those problems, not perpetuate them
- The proposed methodology is an effective way to teach empathy
- Any teacher can be taught to provide empathy education through professional development training
- Teachers will be willing to introduce new components to their curriculum, including empathy education
- Families will not oppose their students being taught empathy
- Communities will not oppose the introduction of empathy education or the specific methodology
- Teachers will be able to make the commitment to regularly integrating this new methodology into their teaching

Appendix D Outcomes Matrix

Outcomes Matrix		
What is the target?	What is the desired change?	In what?
Students	Increase	Empathy
	Develop	Perspective-taking skills
		Self-reflection abilities
		Emotional-regulation abilities
	Decrease	Classroom disruptions
		Antisocial behavior, including bullying
Teachers	Increase	Empathy
		Instructional time dedicated to empathy education
		Use of bibliotherapeutic practices in the classroom
	Facilitate	Positive affective responses in their students

		Positive cognitive changes in their students
		Positive interactions between their students

Appendix E Activities Matrix

Activities Matrix	
Strategy	Activities
Program Consolidation	Determine how much funding can go into purchasing training, new materials, and assistance for evaluation.
	Select measurement tools to be used in the implementation of the program.
Professional Development	Train teachers in new methodology.
Program Preparation	Permit teachers time to create unit and lesson plans integrating new methodology.
	Hold regular check-ins both on the individual and departmental level to facilitate collaboration and unity in the new curriculum.
	Purchase new materials.
	Inform families of the new program being implemented.
	Inform community of new program being implemented.
	Try to cultivate community buy-in; invite speakers and volunteers.
	Keep measurements throughout the program, including a pre-test on day one and a post-test at the end.

Program Implementation	Ask all teachers, not limited to those in the pilot program, to keep records of their observations of the students.
	Daily integrate a selection of empathy education exercises or discussion models into class time.
Program Conclusion	Evaluate findings; calculate quantitative data but also incorporate qualitative findings based on teacher and administrator observations. Do not restrict these to just the literature teachers involved in the program; ask all of the teachers how they have observed the students throughout the year.
	As a unit, discuss ways to fine tune the program and to improve it for the following year.

Appendix F The Teacher's Tool

To view the teacher's tool referenced in chapter 5, please visit http://empathy.obdurodon.org/.

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