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# Fostering appreciation of beauty in education: toward a goal of enhancing individual and collective well-being via self-transcendent emotions

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## KEYWORDS

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## Introduction

“The object of education is to teach us to love what is beautiful.” -Plato

While schools increasingly aim to meet students' social and emotional needs, rates of depression and anxiety continue to skyrocket (Twenge, 2000; Bitsko et al., 2022; CDC Online Newsroom, 2023); concern over a loneliness epidemic escalates (Twenge, 2000; Alam et al., 2023; Jefferson et al., 2023); and international conflict persists (United Nations, 2020; Pandey et al., 2023). Educational programs strive to address students' holistic needs, with most American states having adopted social emotional learning (SEL) curricula (Stanford and Meisner, 2023), which promote skills such as self-awareness, relationship skills, and responsible decision making (Eklund et al., 2018). Although programs that utilize these strategies and practices achieve these goals (Durlak et al., 2011), more may be needed to foster individual and collective wellbeing.

In recent decades, there has been increasing attention to the benefits of beauty (Kawabata and Zeki, 2004; Diessner et al., 2008, 2013; Ishizu and Zeki, 2011; Tsukiura and Cabeza, 2011; Diessner, 2019a). Interestingly, while technological advances increasingly shape our society, we also recognize the benefits of engaging with beautiful nature (Zhang et al., 2014; Richardson and McEwan, 2018; Diessner, 2019a), art (Diessner et al., 2006, 2013; Cupchik et al., 2009; Wanzer et al., 2020; Fekete et al., 2022; Diessner and Niemiec, 2023), and morality (Diessner et al., 2006, 2013; Pohling and Diessner, 2016; Diessner, 2019b). These benefits include individual wellbeing (e.g., Capaldi et al., 2017; Richardson and McEwan, 2018), as well as increases in self-transcendent emotions (Diessner et al., 2008; Keltner and Haidt, 2010; Pohling and Diessner, 2016)—which are positive emotions that tend to foster collective wellbeing by increasing prosocial behavior (Haidt, 2003b).

Although researchers have shown that beauty boosts wellbeing, there is yet to be widespread application of this research. We propose applying these research findings in education. In particular, education standards and curricula might incorporate competencies related to engaging with beauty, thereby boosting individual and collective wellbeing via self-transcendent emotions.

## Self-transcendence

Self-transcendent emotions include gratitude, compassion, love, adoration, elevation, humility, awe, wonder, curiosity, and inspiration (Schindler, 2014; Stellar et al., 2017; Li et al., 2019; Abatista and Cova, 2023). Self-transcendent emotions have been tied to wellbeing (Wood et al., 2010; Rudd et al., 2012; Schindler, 2014) and related outcomes, including more positive emotions (Fredrickson, 2004; Schindler, 2014; Sturm et al., 2022), transcendence of one's own "momentary needs and desires" (Stellar et al., 2017, p. 201), and decreased negative emotions (Wood et al., 2010; Koh et al., 2019). Self-transcendent emotions have also been related to interpersonal wellbeing, including more prosocial behavior (Stellar et al., 2017), orientation toward others vs. self (Shiota et al., 2007; Fredrickson, 2013), identification with humanity (Pizarro et al., 2021), and motivation to help others (Pizarro et al., 2021). Moreover, self-transcendent emotions have been tied to decreased discrimination (Lai et al., 2014), greater acceptance of stigmatized groups (Bartsch et al., 2018), and prosocial behavior toward out-group members (Freeman et al., 2009). Self-transcendent emotions have also been linked to pro-environmental attitudes and behavior (Zelenski and Desrochers, 2021; Chen et al., 2022; Diessner et al., 2022; Jacobs and McConnell, 2022).

The positive outcomes associated with self-transcendent emotions support not only intrapersonal wellbeing but also better interpersonal relationships and thus, collective wellbeing. By fostering self-transcendent emotions, we can expect more interpersonal and intergroup unity and collaboration, as well as greater care for the environment, thereby leading to a more peaceful and beautiful world.

## Bidirectional relationship between self-transcendent emotions and collective wellbeing

It is important to note that while self-transcendent emotions elicit positive outcomes, such positive outcomes also increase self-transcendent emotions. For example, moral beauty elicits elevation (Algoe and Haidt, 2009; Aquino et al., 2011; Thomson and Siegel, 2013; Pohling and Diessner, 2016), which leads to prosocial behavior (Lai et al., 2014; Van de Vyver and Abrams, 2015; Pohling and Diessner, 2016; Ding et al., 2018). In the reverse, prosocial behavior is perceived as beautiful and elicits elevation (Algoe and Haidt, 2009; Aquino et al., 2011; Thomson and Siegel, 2013; Pohling and Diessner, 2016).

Moreover, prosocial behavior promotes wellbeing (Hui, 2022) and should logically promote collective wellbeing; which in turn fosters individual wellbeing (Helliwell, 2003; Fowler and Christakis, 2008; Christakis and Fowler, 2009).

All in all, increasing self-transcendent emotions by fostering appreciation of beauty in education may lead to cyclic, bidirectional improvements in individual and collective wellbeing.

## Beauty as a path toward individual and collective wellbeing

The benefits of beauty align with the goal of increasing individual wellbeing and collective wellbeing via self-transcendent emotions.

## Beauty and wellbeing

Appreciation of beauty has been linked with, and empirically shown to elicit, countless positive outcomes. To begin with, beauty elicits positive emotions such as attraction, captivation, pleasure, joy, humor, energy, and relaxation (Schindler et al., 2017). Beauty increases wellbeing (Martínez-Martí et al., 2014; Capaldi et al., 2017; Richardson and McEwan, 2018) and happiness (Proyer et al., 2016); reduces perceived stress (Henderson et al., 2016; Fekete et al., 2022) and depression (Proyer et al., 2016); and may be related to resilience (Williams et al., 2018). It is also correlated with meaning in life (Capaldi et al., 2017). Overall, beauty increases multiple outcomes associated with wellbeing.

## Beauty and self-transcendent emotions

Research demonstrates that experiences of beauty are related to (Haidt, 2003a; Pohling and Diessner, 2016; Schindler et al., 2017) and evoke (Diessner et al., 2006; Martínez-Martí et al., 2014) self-transcendent emotions. In particular, beauty has been related to fascination, being moved, awe, wonder, admiration, interest, curiosity, and transcendence (Schindler et al., 2017). Moreover, in an intervention study, participants who engaged in written and verbal activities that promoted appreciation of beauty (e.g., "Describe something you felt was beautiful in human behavior"; Diessner et al., 2006, p. 309) had higher post-intervention scores on a measure of hope (Diessner et al., 2006). Another empirical study showed that when participants saw images of natural beauty, they engaged in more generous, trusting, and helpful behavior (Zhang et al., 2014).

Overall, these findings point to beauty as instrumental in boosting self-transcendent emotions and prosocial behavior, thereby yielding countless benefits and promoting individual and collective wellbeing.

## Appreciation of beauty in education

It is clear that beauty fosters self-transcendent emotions, yielding well-documented benefits in wellbeing and collective wellbeing. But where and how can beauty be fostered in education?

## Beauty in academic disciplines

Educational programs can encourage students to learn from the lives of scholars, scientists, artists, musicians, and writers who have been inspired by beauty.

Philosophers such as Socrates proposed a hierarchy of love—ascending from love of the human body to love of the soul; then to love of the sciences; and finally, to love of the essence of beauty itself (Nehamas, 2007). Theologians such as von Balthasar (1982) were also fascinated by beauty, proposing that beauty leads to goodness.

Natural and social scientists have also been inspired by beauty in their fields. For example, in mathematics, the Pythagoreans believed that the “mathematical order of the universe” was the essence of beauty (Caldecott, 2009). Today, pharmacologist Simonetta Sipione highlights the beauty of the human brain (Rutherford, 2022) and modern-day mathematician and professor Emmy Murphy describes her excitement about the beauty that she finds in geometric shapes (Gutman, 2023).

Artists such as Claude Monet (Fuller, 1899), and musicians such as Johannes Sebastian Bach (Jones, 2013) have inarguably been enticed by beauty. Such appreciation of beauty is also found amongst writers, with Russian novelist Dostoevsky proclaiming that “beauty will save the world” (Dostoevsky, 1869).

All in all, appreciation of and inspiration by beauty is prevalent amongst outstanding academics across disciplines. Educational programs can foster an awareness of beauty as a source of inspiration, while also promoting an awareness of beauty in academia, thereby leading the next generation of learners on beauty-inspired academic journeys.

## Beauty in nature

Educational programs can also tap into the beauty of nature, evident in physical landscapes as well as videos and photographs of worldwide locations, past and present. Nature has been shown to be perceived as beautiful (Han, 2010; Workman et al., 2017; Pearson et al., 2024), with rivers (Herzog et al., 2000), flowers (Huss et al., 2018), forestry (Ribe, 1989) and bird song (Hedblom et al., 2014) all linked to aesthetic pleasure.

## Beauty in morality

Educational programs might encourage students to appreciate beauty in moral acts that are perceived as beautiful (Algoe and Haidt, 2009; Aquino et al., 2011; Thomson and Siegel, 2013; Pohling and Diessner, 2016). The lives of heroes such as Martin Luther King Jr. and Mother Teresa might be studied with an appreciation of moral beauty.

## Fostering individual responses to beauty

It is important to note that individuals differ in the degree to which they appreciate beauty (Diessner and Niemiec, 2023). Importantly, some strategies have been shown to increase trait appreciation of beauty. These include exposure to beautiful stimuli, intentionally searching for beauty in the environment, learning about the benefits of beauty, and writing about felt experiences of beauty (Diessner et al., 2006; Martínez-Martí et al., 2014, 2018).

Curricula might incorporate these, and future research might investigate, additional strategies to promote trait appreciation of beauty amongst students.

## Implications

How can this research translate into real-world practices? We propose that curricula incorporate appreciation of beauty by utilizing, for example, stories, biographies, journal prompts, and discussion topics. Educational programs can emphasize the widespread search for beauty amongst outstanding academics and scholars; and encourage students to do the same in each discipline. For example, students might research whether ancient philosophers were inspired by beauty or investigate the role of beauty in the life of a scientist such as Albert Einstein. Such programs might also invite students to search for beauty in mathematical theories, harmonies, physics laws, literature, art, and music. They might ask students to generate beautiful poetry, stories, and artwork; or to seek beauty in the diversity of humanity.

Given that nature is perceived as beautiful, educational programs might implement videos and photographs of nature scenes and invite students to reflect on beauty through expressive writing and speaking assignments. In history, students might search for beauty in ancient ruins; in literature, search for beauty in the land of Narnia; and in science, search for beauty in forests, tundra, and deserts. Field trips to parks and other places of natural beauty might be prioritized with the goal of inviting students to appreciate beauty in nature. In and outside the classroom, educational institutions might also aim to beautify the environment. Throughout these activities, students might be asked to reflect on their own subjective reactions to natural beauty; investigate scientific literature on the benefits of natural beauty; extract meaning from beautiful nature; relate experiences of natural beauty to course content (e.g., fractals in seashells to formula for fractals in mathematics); and generate solutions to the global climate crisis.

Students might be invited to search for beauty in the human person. They might be asked to find beauty in moral acts and in the lives of heroes, reflecting on why and how prosocial actions are perceived as beautiful; and, to engage in moral acts of beauty within the classroom and in their homes, neighborhood, and broader communities. These activities would serve to increase students' knowledge of such heroes as well as their understanding of the value of moral actions.

Moreover, learning objectives related to appreciating beauty in academic disciplines, nature, and morality might be considered for inclusion in core standards. Teacher education programs might implement coursework related to appreciation of beauty, demonstrating the effects of beauty and practices empirically examined. Future research might also develop and test specific academic programs and interventions that aim to foster appreciation of beauty. These might include, but are not limited to, technological educational programs.

Overall, there are countless ways in which beauty can be fostered in education, ranging from curriculum content to skills, goals, and technological programs.

## Conclusion

In today's world, intrapersonal mental health has declined and intergroup conflict is on the rise. With an ever-increasing need for more individual and collective wellbeing, educational programs might consider fostering an appreciation of beauty, thereby increasing self-transcendent emotions, which serve to strengthen social connection and behavior. With this, we can expect increases in individual and collective wellbeing.

Future research might review the extent to which existing educational institutions and programs foster an appreciation of beauty. Other research might develop and test the effectiveness of interventions which aim to foster appreciation of beauty amongst various age groups. Potential outcomes include learning (skills and content), academic motivation, and individual and collective wellbeing.

By fostering an appreciation of beauty in education, we might find that students are increasingly captivated by the beauty of our world—one for which we are all called to care. We just might find that we are captivated by the beauty of the human person – finding ourselves motivated to uphold each person's health and wellbeing through the utilization of technological advances. We just might find that we are so enticed by beauty that we are inspired to apply academic skills to support the people in developing countries who need clean water and nutritious food. Finally, we might be so fascinated by the beauty we encounter, that we indeed come across a therapeutic technique to foster reconciliation and peaceful communication amongst foes.

All in all, by incorporating appreciation of beauty in schools, we are striving toward collective wellbeing. With this, education can become a means to wellbeing amongst individuals, while also promoting connectedness, self-transcendence, and transformation—all which are so urgently needed in today's world.

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## Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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