

## Chapter 4

# Positive Education

---

### **Professor Martin Seligman**

Zellerbach Family Professor of Psychology,  
Director of the Positive Psychology Center,  
University of Pennsylvania

### **Dr. Alejandro Adler**

Director of International Education,  
Positive Psychology Center, University of Pennsylvania

### **Education Committee**

#### **Dr. Abdulla Al Karam**

Knowledge and Human Development Authority of Dubai

#### **Professor Kai Ping Peng**

Tsinghua University, Sir Anthony Seldon, University of Buckingham

#### **Sir Anthony Seldon**

University of Buckingham

#### **Professor Lea Waters**

The University of Melbourne

The committee members wrote drafts about PE in their regions of the world but were not responsible for the report as a whole. We are grateful to all of the following people who provided information about their projects: Hector Escamilla, Angela Duckworth, Donald Kamenz, Roger Weissberg, Justin Robinson, Mathew White, Yukun Zhao, Emily Larson, Jo Maher, Ye Hong, David Cooperrider, Steve Leventhal, and Tal Ben-Shahar.



**Schools are the primary place** where the values of a culture get instilled in young people. To the extent that teachers convey pessimism, distrust, and a tragic outlook on life, their students' worldview will be thus fabricated. To the extent that teachers transmit optimism, trust, and a hopeful sense of the future, this will positively influence their students' perception of the world. The theme of this entire volume is that hope, trust, and happiness cause better well-being, and so the guiding hypothesis of Positive Education ("PE" hereafter) is that positive schools and positive teachers are the fulcrum for producing more well-being in a culture.

This chapter reviews the state of PE across the globe as of the end of 2017. Throughout the chapter we underscore the components of what we consider the best practices: rigorous ongoing evaluation, analyses of effect sizes and intervention duration, cultural adaptation of evidence-based interventions, treatment fidelity measurements, and the promotion of teacher empowerment and creativity to refine local interventions.

Here is the outline. First, we define "Positive Education" and so limit this chapter's scope to programs and schools that teach validated PE interventions and measures. Second, we discuss the interventions and measures most commonly used. Third, we survey the spread of PE across the world alongside evidence that PE increases the traditional goals of schools (literacy numeracy, and science) as well as building well-being. Finally, we discuss some serious cautions as well as guidelines for the future.

## What is Positive Education?

The goal of PE is to produce both well-being as well as to forward the traditional outcomes of schooling. This goal is too broad, however, since many programs and many schools have such a goal. To make our review wieldy and useful, we will limit the scope of PE to schools and programs that actually measure outcomes and also use a replicable set of validated interventions to achieve those outcomes.

Measures. Three kinds of measures are important for evaluating PE. First, measures of "happiness," which must be decomposed into elements less vague than the highly ambiguous term,

"happiness." Second, measures of unhappiness, typically depression and anxiety. Third, measures of academic success.

There are a number of validated ways of disaggregating measures of happiness or well-being, both for adults and children. The most widely used one for adults is the satisfaction with life scale (Diener, Emmons, Larsen, & Griffin, 1985), but this is not used often with school children with one noteworthy exception: The Organisation for Economic Cooperation and Development's (OECD) 2015 Programme for International Student Assessment (PISA) included life satisfaction measures in the core items of its global exam, which the OECD conducts every three years in over 70 countries. Another way to slice the happiness pie is between hedonic (felt pleasure) and eudaimonic (purpose-oriented) well-being (Ryan & Deci, 2001). PERMA (Seligman, 2011) is an acronym for Positive emotion, Engagement, Good relationships, Meaning, and Accomplishment and is measured in children by EPOCH (Kern, Benson, Steinberg, & Steinberg, 2016) and in adults by the PERMA-Profilier (Butler & Kern, 2016) and by Comprehensive or Brief Inventories of Thriving (Su, Tay, & Diener, 2014).

**Unhappiness** is typically measured by depression inventories: the Children's Depression Inventory in children (Kovacs, 2004) and the Beck Depression Inventory or Center for Epidemiologic Studies Depression Scale in adults and analogous anxiety inventories for children and adults (Beck, Steer, & Brown, 1996; Radloff, 1977). While lowering depression and anxiety is a goal of PE, it should be noted that unhappiness in the sense of depression and anxiety does not exclude happiness (the correlation is much lower than -1.0 (Rezaee, Hedayati, Naghizadeh, Farjam, Sabet, & Paknahad, 2016)) but rather it merely hinders happiness. Hence decreasing pathology is an important, albeit incomplete, goal of PE.

**Academic success** measures are typically national standardized exam scores or grade point averages.

**Interventions.** We limit the scope of the programs we review below to those that use several of the following reasonably well-validated interventions (for meta-analyses of positive interventions and their validation, see Sin & Lyubomirsky, 2009 and Boller, Haverman, Westerhof et al, 2013):

- What Went Well (Seligman, Rashid, & Parks, 2006). In this intervention students record typically three events that went well today and why they went well.
- Gratitude Visit (Emmons, 2007). Students write a letter of gratitude and read it to the source.
- Active, Constructive Responding (Gable, Reis, Impett, & Asher, 2004). Students learn to respond constructively to another person's victories.
- Character Strengths (Peterson & Seligman, 2004). The students identify and use good character and their signature strengths in a new way.
- Best Self (Roberts, Dutton, Spreitzer, Heaphy, & Quinn, 2005). Students write about their best selves and proudest moments.
- Meditation and Mindfulness (Davidson et al., 2003). Students practice one or more of the various meditation and mindfulness techniques.
- Empathy training (Bryant, 1982). Students learn about and use empathy techniques.
- Coping with emotions (Deci & Ryan, 2010): Students identify, understand, and manage their emotions, particularly positive emotions.
- Decision-making (Albert & Steinberg, 2011). Students learn to choose the best action plans from available options.
- Problem-solving (Steinberg, 2014). Students use effective heuristics to solve theoretical and practical problems.
- Critical thinking (Marin & Halpern, 2011). Students conceptualize, synthesize, apply, and evaluate information as a guide to beliefs and actions.

## Positive Education across the Globe

### Asia

**Bhutan.** We begin with Bhutan because the first solid evidence that PE simultaneously increases well-being and national standardized exam performance emerged there (Adler, 2016). Bhutan is a small Himalayan country with fewer than one million inhabitants, and it uses Gross National Happiness (GNH) rather than Gross Domestic Product (GDP) to assess national progress and to drive public policy (Ura & K. Galay, 2004). In line with this, Bhutan has organized its education system around the principles of GNH;

the Bhutanese Ministry of Education's explicit mission is to "Educate for Gross National Happiness." The Bhutanese Ministry of Education collaborated with the Positive Psychology Center at the University of Pennsylvania to co-develop a *GNH Curriculum* that targets ten positive "life skills," including many in the list above, for secondary school students (grades 7 through 12). The curriculum taught these skills in a 15-month stand-alone course and imbedded them in existing academic subjects.

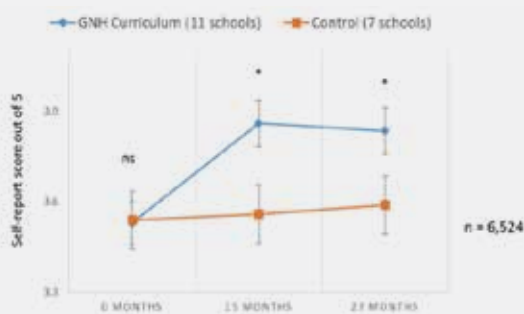
All principals and teachers from 11 treatment schools received training during a 10-day *GNH Curriculum* training retreat. The trainers were psychologists from the University of Pennsylvania and nine trained staff members from Bhutan's Ministry of Education; a training manual (*Educating for GNH*) was used. The trainers taught principals and teachers how to practice and how to teach the ten life skills. Teachers were also trained to infuse their academic subjects (e.g., math, science, reading) with the ten life skills. Literature, for instance, was taught through a "GNH lens" by identifying strengths and virtues in characters from novels and by encouraging students to use these strengths in their daily lives. Further, all students in the intervention group participated in botany practices in organic gardens in every one of the 11 school campuses. They learned to plant, grow, and harvest vegetables and other foods. By studying the plants' physiology, genetics, ecology, classification, structure, and economic importance, students learned how to interactively apply what they were learning in their biology, chemistry, physics, and mathematics classes to their botanic practices. Furthermore, through the complex process of growing different plants with their fellow students and understanding the role of food in the larger local and national economic system, they learned to practice critical thinking, creative thinking, decision making, and problem-solving skills.

In the classroom, teachers learned how to give students verbal and written feedback in a way that empowered and motivated them to enhance the quality of their work. Teachers learned the importance of identifying and noting what students were doing right in their classwork, instead of only highlighting what they were doing wrong, which is typical of pedagogical practices in most secondary schools. The 11 schools in the treatment group implemented the *GNH Curriculum* from June 2012 to August 2013.

The *GNH Curriculum* significantly increased adolescent well-being (as measured by the EPOCH scale) in treatment schools, compared to control schools (*Cohen's d* = 0.59,  $t(16) = 3.54$ ,  $P=0.002$ ). The difference between treatment schools and control schools remained significant one year after the intervention ended.

**Figure 1**

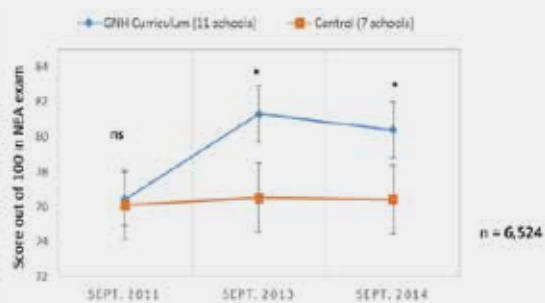
**Youth Well-being (EPOCH)**



The GNH Curriculum increased academic achievement significantly in treatment schools, compared to control schools (*Cohen's d* = 0.53,  $t(16) = 2.37$ ,  $P=0.031$ ). The difference between treatment schools and control schools remained significant one year after the intervention ended.

**Figure 2**

**Standardized Test Scores in Bhutan**



An upward shift of 0.53 standard deviations (SDs) in standardized exam performance means that, on average, students who were performing at the 50th percentile before the intervention performed at the level of students in the 60th percentile after the 15-month intervention. That is roughly equivalent to a gain of a full academic year.

Bhutan's Ministry of Education has decided to take the program to a national scale and is currently on a path to implement the curriculum in every public secondary school in the country (Adler & Seligman, 2016).

**China**

PE is quickly spreading in China. It seems to be popular not only because it is congenial to traditional Chinese philosophies, but also because the Chinese education system may be in search of a paradigm shift. On the one hand, the Chinese education system is enormously successful. It produces the most engineers in the world and Chinese students consistently perform outstandingly in math and sciences compared to other countries. On the other hand, however, the Chinese education system mainly relies on authoritarian discipline to achieve that academic success. This may result in the loss of interest of students in studying, in ever-growing conflicts between students and parents as well as teachers, and, worst of all, rampant depression and anxiety in the students.

Positive education may be the right antidote for the dilemma; since it focuses on both individual well-being and academic learning.

**Zengcheng.** In 2014, the city of Zengcheng (now part of Guangzhou), Guangdong province, launched the largest program to date in China. Under the supervision of Ms. Ye Hong, then Vice Mayor, more than 10,000 school principals and head teachers were trained in positive education by the Positive Psychology Research Center of Tsinghua University (PPRC). Martin Seligman also lectured to the educators of Zengcheng in 2015.

As of October 2017, Mayor Ye Hong reports that 350 - 400 kindergartens, primary schools, junior high schools, and senior high school have used Positive Education in Zengcheng, involving 260,000 students. 80,000 teachers have been trained in PE.

Mayor Ye Hong reports that from teachers' point of view, measured career devotion is higher and teaching methods have improved – they are more flexible and more effective. From the students: academic performance is higher on graduation exams in grades 9 and 12 compared to 2016, when the rate at which students were admitted to key universities was 28.1%, while in 2017 it has gone up to 41.2%. In the past, an average of 7 to 8 students committed suicide every year; in 2017, only one. Zengcheng has spent 21,500,000RMB (about US \$4,000,000) annually on PE, comprised of 1,500,000RMB on research and 20,000,000RMB on training.

**Beijing.** In 2012, the Bureau of Education of Beijing funded the 19th Middle School of Beijing to build a model of “happy education.” They combined positive psychology with traditional Chinese philosophy to design courses, train teachers, and remodel school culture. Three years later, their rate of first-class college entrances rose from 69.6% in 2012 to 75% in 2015.

In 2015, Ms. Dou Guimei, the principal of Tsinghua University Primary School (TUPS) decided to roll out a Positive Education program designed by the Positive Psychology Research Center (PPRC) of Tsinghua University. This marks the first attempt of a school practicing positive education in collaboration with an expert team with a rigorous research background and empirically grounded theoretical guidelines. TUPS is one of the most famous elementary schools in China, and this sends a strong message to the Chinese education community that PE has been accepted by the mainstream schools.

To further disseminate PE, PPRC also launched a non-profit program called “Happy Gardener” (Gardener is the common metaphor of teacher in China) that trains school principals for free, thanks to the Beijing Happiness Foundation. The program has trained more than six hundred principals, who went to Tsinghua University for a five-day training in PE.

The fourth **China International Positive Psychology Conference**, held during August 2017, was co-hosted with the International Positive Education Network (IPEN) and mainly focused on PE. Empirical data on effectiveness were presented.

## India

CorStone is an internationally recognized nonprofit organization. Its mission is to provide evidence-based resilience programs to improve mental and physical health, increase academic achievement, and reduce poverty among marginalized youth. Since 2009, CorStone has reached more than 40,000 beneficiaries in India. Projects have included a randomized controlled trial among 3,600 school children in a rural setting; and implementations for 11,000 highly marginalized girls in more than 100 residential government-run schools.

### **Children’s Resilience Program for Girls (CRPG); Surat, Gujarat, India, 2011-2012**

CorStone conducted an observational trial of the CRPG in urban schools among approximately 500 girls with matched controls in Surat, India. The program was led by community facilitators among high-poverty, low caste, urban slum-dwelling girls. Qualitative reports indicated that girls found the CRPG to be highly enjoyable and relevant to their daily lives. Additionally, program attendance predicted greater increases in optimism and prosocial behavior and decreases in behavioral problems. These changes remained 8-months after the program’s completion (all  $p$ 's < 0.05; Leventhal, Gillham, et al., 2015).

### **Girls First, Patna, Bihar, India, 2013-2014.**

Corstone followed with a large randomized controlled trial (RCT) in rural Bihar, India, one of India’s poorest states. The trial integrated resilience training with training in adolescent health. Called “Girls First,” the trial was conducted in 76 rural government schools for 7th and 8th grade girls during the school day by trained community facilitators. The program began with 22 resilience sessions (Girls First Resilience Curriculum or RC), followed by 20 adolescent health sessions (Girls First Health Curriculum or HC). The program included sessions meant to improve psychosocial resilience, including character strengths, emotional regulation, benefit-finding, goal-setting, planning, communication, and problem-solving.

Results showed that the resilience curriculum had significant positive effects compared to controls on psychosocial indicators such as emotional resilience, self-efficacy, social-emotional assets, psychological well-being, and social well-being (Leventhal, Gillham, et al., 2015).

### **Girls First - KGBV; Bihar, India 2015-2017**

During 2015 to 2017, CorStone trained over 150 school teachers to deliver Girls First to 11,000 girls in more than 100 KGBV schools (Kasturba Gandhi Balika Vidhyalayas or KGBVs) in 5 districts of Bihar. KGBV schools are special residential institutions established by the Indian government for marginalized low caste or minority girls at risk for trafficking, early marriage, and lack of schooling. Assessments at pre- and post-test indicate significant changes on psychosocial and physical health indicators.

There are 3,500 KGBV schools across India, including 500 KGBV schools in Bihar, in all serving over 300,000 adolescent girls in grades 6-8. In 2018, CorStone plans to begin the scale-up of Girls First - KGBV throughout Bihar as well as expand the program to KGBV schools in at least 2 additional states in India.

### **Middle East**

#### **United Arab Emirates (Dubai)**

*“What is the purpose of government if it does not work toward the happiness of the people? It’s the duty and role of the government to create the right conditions for people to choose to be happy.”*  
— H. E. Sheikha Ohood bint Khalfan Al Roumi (Simmons, 2017)

This quote from the UAE’s Minister of State for Happiness, H. E. Sheikha Ohood bint Khalfan Al Roumi, encapsulates the drive of the leadership of the United Arab Emirates (UAE) towards broader goals than simply economic growth and community engagement. Her main responsibility is to harmonize all government plans, programs, and policies to achieve a happier society through the National Programme for Happiness and Positivity.

The UAE’s National Agenda aims to position the UAE as one of the happiest countries in the world. In the 2017 version of the World Happiness Report, which ranks 155 countries by their happiness levels, the UAE ranked 21st in the world and was the happiest country in the Arab region (Helliwell, Layard, & Sachs, 2017). Positive education in schools throughout the UAE will play a critical role in helping to improve the nation’s happiness by encouraging the well-being of students at schools and by helping children develop positive character attributes.

At the national level, the Government of the UAE launched a pilot in PE during September 2017 teachers and leaders from a sample of 10 public schools received Positive Education training. Based on the results to be seen 18 months from now, the Government may choose to scale up the program to cover all public schools across the UAE. This program is being implemented in partnership with the Institute of Positive Education at Geelong Grammar School in Australia, United Arab Emirates University, and the University of Melbourne.

As Dubai’s regulator of private schools in Dubai, the Knowledge and Human Development Authority (KHDA) oversees the growth of quality education for more than 90% of Dubai’s school students. Inter-school collaboration has been fostered by the What Works Dubai series of workshops over the past five years.

The KHDA commenced a long-term partnership with the Government of South Australia’s Department of Education and Childhood Development to further develop the assessment and analysis of student well-being in all private schools in Dubai. The Dubai Student Well-being Census commenced in November 2017 and covered all children in Grades 6 to 9 at private schools in Dubai – about 70,000 students altogether. Every Dubai private school received a report that enabled the community - as policy-makers and educators - to put together more targeted, evidence-driven policies to improve student well-being. Future plans include the analysis of teacher well-being and correlating that with the well-being of students.

While surveys provide an understanding of the current well-being of students at schools, teachers and administrators require resources to develop activities to promote student well-being. Toward this end, a ‘memorandum of friendship’ was signed in February 2017 between KHDA and the International Positive Education Network (IPEN) to establish IPEN’s first regional branch.

One specific example is that of a new Dubai private school that has established itself on the premises of PE. Every single teacher at the school received rigorous training in Positive Education. A well-being department was established with three counselors in addition to an in-house PE team. Explicit PE classes are taught as part of the school curriculum and parents are invited to attend regular PE sessions.

Many other of Dubai's private schools already have well-developed programs in place to support student well-being. These programs fit across Australia's Institute of Positive Education model (Learn It, Live It, Teach It, Embed It) that brings positive education to life in a school and places well-being at the heart of education (Hoare, Bott, & Robinson, 2017).

- **Learn It:** A number of workshops by members of IPEN, such as the Institute of Positive Education in Australia and Action for Happiness in the UK have been delivered for parents and schools in Dubai to over 500 teachers.
- **Live It:** For example, one school has developed a mindfulness and well-being room to help students mentally and emotionally by focusing on positivity. The room has smart tablets loaded with guided meditation routines and a gratitude tree for students to display what they are thankful for. The #100DaysOfPositivity initiative, designed by the National Programme for Happiness and Positivity in collaboration with KHDA, encouraged schools to do something positive every day for 100 days and share it on Twitter and Instagram.
- **Teach It:** Approximately 30% of Dubai private schools have now allocated full time staff to focus on student and teacher well-being.
- **Embed It:** A Mindfulness Collective convenes at least 15 schools on a regular basis to collaborate and share existing programs in schools, collect evidence to demonstrate best practices, and provide support for schools who would like to implement mindfulness programs in the future.

Positive Education in the UAE is viewed as an important contributor to the overall happiness of the nation. This will help to fulfil the remarks made by His Highness Sheikh Mohammed bin Rashid al Maktoum that:

*"Yes, we seek to make people happy, and making people happy will be our objective and mission until it becomes a permanent and deep-rooted reality"* (Al Maktoum, 2017).

### **The Kingdom of Saudi Arabia (KSA) and Jordan**

The Crown Prince of the KSA, Mohammad bin Salman, and the King of Jordan, Abdullah II, have the joint objective of infusing their two countries

with Positive Education, using "21st skills" together with the most virtuous of Islamic values to promote equality, progress, and societal thriving. They have chosen to plant the seeds for a new future, with 2030 as the ambitious year by which the transformative investments they make in Positive Education, starting in 2018, will bear fruits for a new generation of young, productive, ethical adults. The Positive Psychology Center of the University of Pennsylvania will be partnering with the Ministries of Education of both the KSA and Jordan to cultivate the whole-nation Positive Education initiatives that these two leaders are pioneering.

### **Australia**

#### ***Positive Education Frameworks***

#### **Geelong Grammar School's Institute of Positive Education.**

In 2014, Geelong Grammar School (GGS) became the first school in the world to open an on-campus research, training, and development institute dedicated to Positive Education: The Institute of Positive Education. In the four years since its launch, the Institute has grown to a team of 16 individuals and has delivered more than 200 training courses to educators in Australia and internationally.

More than 10,000 teachers, representing more than 1,000 schools from around the world have attended the Institute's training courses. As the participants of these courses return to their schools, the benefits of Positive Education have been experienced by well over 250,000 students.

The Institute has immersion courses, with modules on Positive Emotions, Flow, Positive Relationships, Gratitude, Resilience, Help-seeking, Character Strengths, Positive Purpose, Curiosity, Kindness, Hope, and Meaningful Work.

GGS was the first school in the world to pioneer a whole-school Positive Education program and this was made possible by Professor Martin Seligman and his training team living at GGS for six months in 2008. The Institute has delivered courses and supported schools in every state and territory of Australia, and, increasingly, is delivering trainings in Asia, Europe, and the Middle East.

Since 2012, it has been a condition of employment at GGS that all existing employees and any new



employee to the school participates in a three-day residential, immersion course to ensure a common knowledge and common language is maintained across the school. All parents at GGS are also made aware of the principles of PE, with more than 200 parents choosing to participate in the annual two-day training courses delivered by the Institute.

Students at GGS have participated in the current curriculum which consists of more than 250 explicit lessons, totaling more than 200 hours of curricular content. The University of Melbourne has recently completed an independent, three-year longitudinal study of the effectiveness and impact of the GGS Positive Education program.

- *Year 9 students within the GGS Positive Education program, relative to control students, experienced significantly improved mental health (decreased depressive and anxiety symptoms) and well-being (e.g., life satisfaction, positive emotions, engagement, and meaning).*
- *Year 10 students showed significant increases in levels of growth mindsets, meaning, and hope compared with control students and significantly higher levels of well-being, social relationships, heart rate variability, and physical health at the end of the school year.*
- *Over the three-year study, GGS students, relative to comparison students, reported significantly higher levels of life satisfaction, happiness, gratitude, and perseverance*

### **St Peter's College – Adelaide, South Australia, Australia.**

Established in 1847, Australia's St Peter's College – Adelaide (SPSC) is one of the world's leading schools for boys aged 3 – 18 years. Under the Headmastership of Simon Murray, SPSC integrated Positive Education into all aspects of school life.

In 2012 and 2013, St Peter's College partnered with the Positive Psychology Center at the University of Pennsylvania to train all 250 employees in the latest science of positive psychology, resilience, and well-being. The School has used a whole-school, evidence-based approach towards PE. This involves three targeted areas:

1. **Strategy.** The School has included well-being as a central part of its strategic plan since 2011. The school uses the PERMA model of well-being: positive emotions, engagement, positive relationships, meaning, and accom-

plishment, as a guiding framework. Flourishing arises from these five elements, which are underpinned by character strengths.

2. **Intervention.** The School aims to build an evidence-based culture of well-being, which specifically targets students, staff, and parents. All employees receive ongoing training in positive psychology. Specific PE programs have been implemented into the curriculum, co-curricular activities, staff training, leadership, and other aspects of the school's culture.
3. **Parents.** Scientifically informed workshops for parents are now being offered, to further support the well-being of the community.
4. **Measurement.** A defining component of SPSC's approach involves measuring and documenting the process and impact of PE efforts.

By 2017 over 8,500 students have now studied at least 4 to 5 of PE programs. An entire generation of boys has gained preventative skills for mental health and character development. St Peter's College now teaches positive education classes once a week from ELC through Year 10.

In 2016, 934 students (year 5-12) completed a third well-being survey. Students continued to score highly in most areas. However, it is clear that they are now more accepting of admitting when they are not doing well, enabling them to get the help they need to feel and function better. Discussing mental health and well-being is now seen as the 'new normal' for boys at St Peter's College. Students are expressing the growing sense of responsibility to look out for one's "mates" and to ask for help when needed.

**Building Resilience** is the result of a partnership between the Victorian Government and the University of Melbourne, led by Professor Helen Cahill and launched in 2015 under the Government's strategic plan to reduce alcohol and drug use in students. *Building Resilience* provides teachers with an online portal of activities and resources designed to help students make good decisions when faced with life's challenges. Although the framework focuses more on reducing negative states (i.e., drug and alcohol use), a closer look shows that the program incorporates numerous positively-oriented topics including positive relationships, optimism, strengths, social-emotional learning and mindfulness. The framework is

being used in schools in the State of Victoria with from prep to year 12 students.

The **Visible Wellbeing** framework was launched in 2015 by Professor Lea Waters. It is a whole-school framework based on six key pathways that can be taught in schools: 1) strengths; 2) emotional management; 3) attention and awareness, 4) relationships; 5) coping; and 6) habits and goals.

Visible Wellbeing has three key goals: 1) building student well-being; 2) enhancing student learning and 3) building well-being for staff and faculty. The program involves all staff and faculty receiving professional development run by trained facilitators at school, combined with ongoing coaching, an on-line portal, student activities and a Visible Wellbeing survey to track the well-being of both the students and adults in the school (<http://www.visiblewellbeing.org/>).

Visible Wellbeing training has been delivered in Australia, New Zealand, Hong Kong, and Canada reaching over 25,000 students and more than 3,500 teaching and non-teaching staff. Empirical testing of the impact of Visible Wellbeing is currently being evaluated; pilot testing showed significant, positive results.

**KidsMatter** and **MindMatters** was developed in 2006 and offers whole-school mental health frameworks to primary and secondary school students. The aim of the 'Matters framework' is to teach students the skills to build engagement and connectedness. The program is nation-wide and is funded by the Australian Government's Department of Health together with partnerships with the Australian Psychological Society, Principals Australia, and Australian Rotary Health (<https://www.mindmatters.edu.au/> <https://www.kidsmatter.edu.au/primary>).

An evaluation of the KidsMatter framework by university researchers across 96 schools in Australia found that schools that implemented the program with high quality had higher academic performance of up to 6 months' worth of schooling compared to schools that implemented the KidsMatter program poorly (Dix, Slee, Lawson & Keeves, 2012).

### ***Measuring Student Well-being***

The **Wellbeing Profiler** was developed by researchers at the Centre for Positive Psychology,

University of Melbourne, led by Dr Tan Chyuan Chin and Professor Dianne Vella-Brodrick. The Wellbeing Profiler is a 30-minute online survey administered in schools on the six domains of youth well-being of physical, psychological, cognitive, social, economic, as well as emotional well-being and strengths. The Wellbeing Profiler has measured the well-being of over 20,000 Australian students and has partnered with 61 Victoria schools.

### ***Positive Education Associations, Conferences, and Research Centers in Australia***

The major association in Australia is the **Positive Education Schools Association (PESA)**, which was formed in 2012. Mr. Simon Murray is the Chairman of PESA, Anne Johnstone, head of the Ravenswood School is vice-chair. and Professor Lea Waters is the Ambassador. PESA aims to facilitate collaboration amongst teachers, students, researchers, and practitioners of well-being and positive psychology across all aspects of school life. PESA now has over 1,000 members from more than one hundred schools all across Australia (Public/State Schools, Parochial/Catholic Schools, and Private Schools).

The **Australian Positive Psychology and Well-being Conference** has been running biennially for the past ten years and has been hosted by Sydney University, Monash University, Wollongong University, Melbourne University, and the South Australian Health and Medical Research Institute, respectively. The Australian Positive Education Summit was run biennially from 2008-2014 co-hosted by Sydney University and The Positive Psychology Institute. With the advent of the Positive Education Schools Association, this conference was taken over by PESA in 2014 and is now run annually.

Australia has two major research centers that are promoting the science of Positive Education both nationally and internationally: The Institute for Positive Psychology and Education, Australian Catholic University and the Centre for Positive Psychology, University of Melbourne. The Centre for Positive Psychology runs the only Master of Applied Positive Psychology in the southern hemisphere and also offers a Professional Certificate in Positive Psychology.

## Latin America and North America

### *Educación para el Bienestar* in Jalisco, Mexico.

Jalisco is one of 32 states in Mexico. It has a population of about eight million people, and it has a relatively high level of economic development, compared to other states in Mexico. The current governor of Jalisco, Aristoteles Sandoval, declared it his mandate to make Jalisco Mexico's first state of well-being (*bienestar*). The University of Pennsylvania's Positive Psychology Center partnered with Jalisco's Ministry of Education to conduct a Positive Education random assignment controlled trial (RCT) with the *Colegio de Estudios Científicos y Tecnológicos del Estado de Jalisco (CECYTEJ)*, or College of Science and Technology Studies of the State of Jalisco's 70 schools. After the empirical positive effects of the Positive Education 70-school (RCT) the Ministry of Education has taken the program to a state-wide scale.

Even though the life skills that this initiative teaches are analogous to those in the GNH Curriculum in Bhutan, the content and structure of the curriculum was fully adapted so that it resonates with the context and culture of local principals, teachers, and students. The *Curriculum de Bienestar* was co-developed with local principals and teachers from non-CECYTEJ schools (to ensure a single-blind study) as well as with staff trained in curricular design from Jalisco's Ministry of Education.

The *Bienestar Curriculum* significantly increased student well-being. As illustrated in Figure 3, longitudinal school-level analyses of survey data from August 2014 and December 2015 indicate that the *Bienestar Curriculum* significantly increased adolescent well-being (as measured by the Spanish-version of the EPOCH scale) in treatment schools, compared to control schools (*Cohen's d* = 0.41,  $t(68) = 3.01$ ,  $P < 0.001$ ).

Figure 3

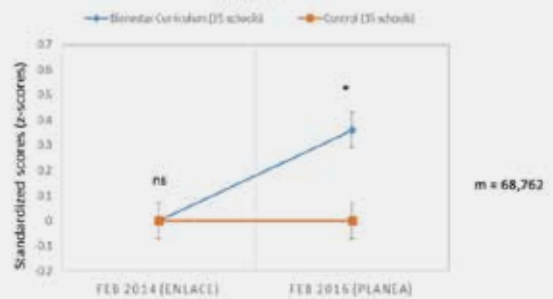
### Youth Well-being (EPOCH) in Jalisco, Mexico



The *Bienestar Curriculum* substantially and significantly increased academic performance. As illustrated in Figure 4, longitudinal school-level analyses of standardized test scores from February 2014 and February 2016 showed that the *Bienestar Curriculum* increased academic achievement significantly in treatment schools, compared to control schools (*Cohen's d* = 0.36,  $t(68) = 2.61$ ,  $P = 0.01$ ).

Figure 4

### Standardized Test Scores in Jalisco, Mexico



The strongest predictors of increased performance on standardized test scores, controlling for initial academic performance were higher connectedness, more perseverance, and more engagement. These were the same three factors that mediated academic gains in Bhutan (Adler, 2016).

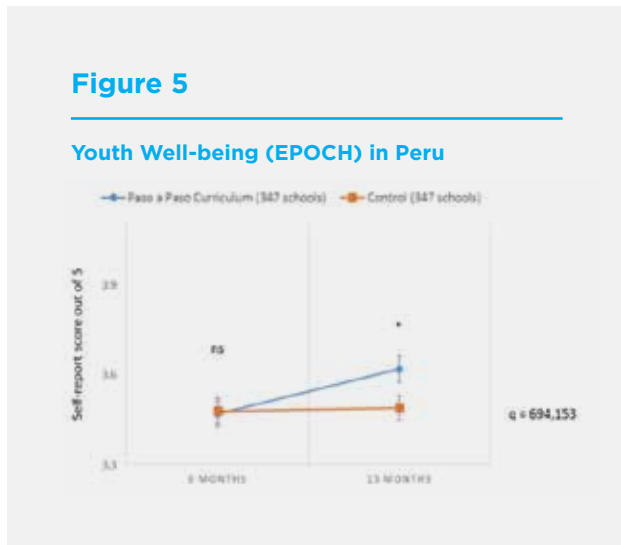
### Escuelas Amigas in Peru

In November 2013, the University of Pennsylvania’s Positive Psychology Center partnered with the Peruvian Ministry of Education and the World Bank to run the largest education controlled trial (RCT) in the region’s history. Minister Saavedra’s goal was to choose 700 representative schools from Peru and to randomly assign them to receive a novel curriculum with a well-being focus or to receive a placebo control curriculum (to control for demand artifacts). The World Bank collected data throughout the project, and the Ministry of Education implemented the program.

Just as in Jalisco, Mexico, the content and structure of the curriculum was adapted so that it resonated with local principals, teachers, and students. The study eventually included 694 secondary schools with almost 700,000 students from all over Peru (grades 7 – 12).

The *Paso a Paso Curriculum* significantly increased student well-being. As illustrated in Figure 5, longitudinal school-level analyses of survey data from March 2014 and July 2015 indicate that the

The *Paso a Paso Curriculum* significantly increased academic performance. As illustrated in Figure 6, longitudinal school-level analyses of test scores on the ECE from November 2013 and November 2015 showed that the *Paso a Paso Curriculum* increased academic achievement significantly in treatment schools, compared to control schools



*Paso a Paso Curriculum* significantly increased adolescent well-being (as measured by the Peruvian Spanish-version of the EPOCH scale) in treatment schools, compared to control schools (*Cohen’s d* = 0.24, *t*(692) = 2.81, *P*=0.004).



(*Cohen’s d* = 0.19, *t*(694) = 2.45, *P*=0.014).

The same three factors were the strongest predictors of gains on standardized test scores: higher connectedness, more perseverance, and more engagement (Adler, 2016).

While this chapter is focused on primary and secondary education, it must be mentioned that Mexico founded the first entire university devoted to Positive Education. Hector Escamilla, as President of **Universidad Tecmilenio** in Mexico serves 52,000 university students on their 29 campuses across the country. Central to Tecmilenio is the premise that well-being and happiness are teachable and should pervade the curriculum. The vision is “to prepare people with a purpose in life and with the competencies to achieve it. We define ourselves as a Positive University: ‘A learning community that cultivates the best of each person allowing them to flourish. To foster leadership within an ecosystem dedicated to well-being and happiness’” (Escamilla, 2017). In their ongoing evaluation, Tecmilenio students are showing significant increases in PERMA, as well as in mindfulness and gratitude.

## United States

### CASEL.

The Collaborative for Academic, Social, and Emotional Learning (CASEL) has been the leading voice in studying, defining, and promoting Social and Emotional Learning (SEL) for the last 20 years ([www.casel.org](http://www.casel.org)). CASEL concentrates on five interrelated sets of cognitive, affective, and behavioral competencies.

- Self-awareness. The ability to accurately recognize one's emotions and thoughts and their influence on behavior.
- Self-management. The ability to regulate one's emotions, thoughts, and behaviors effectively.
- Social awareness. The ability to take the perspective of and empathize with others.
- Relationship skills. The ability to establish and maintain rewarding relationships with others.
- Responsible decision making. The ability to make constructive and respectful choices.

A major review of 213 experimental-control group studies of K-12 students who participated in SEL programs demonstrated:

- Improved social and emotional skills, self-concept, and bonding to school,
- Less disruptive classroom behavior, aggression, bullying, and delinquent acts; and
- Reduced stress and social withdrawal.

Students also performed better on achievement tests where scores averaged 11 percent higher than students who did not receive SEL programming (Durlak et al., 2011). A recent meta-analysis (Taylor, Oberle, Durlak, & Weissberg, 2017) reviewed 82 SEL interventions involving 97,000 students and confirmed these findings. Participants did better than controls on SEL skills across race and SES, and these skills were the best predictors of well-being at follow-up. The effect sizes were modest, but keep in mind that this is *universal* prevention: all students get the interventions whether or not it is indicated.

### Character Lab.

Angela Duckworth founded the Character Lab at the University of Pennsylvania following her pioneering research on the relationship between grit and academic performance (Duckworth, Peterson, Matthews, & Kelly, 2007). This is a well-funded research organization that intends to publish empirically validated “playbooks” that will

help teachers and their students develop strengths of heart, will, and mind.

Each Playbook will:

- communicate essential scientific facts with clarity
- provide strategies that make exercising the strength easier and more rewarding
- structure opportunities to practice strategies with feedback
- invite teachers into a community where they can ask and answer questions
- encourage teachers to benefit personally before helping their students.

These Playbooks have several features that distinguish them from existing resources to develop character. They are

- co-created by world-class scientists and world-class educators
- informed by an iterative process employing best practices in design thinking
- infused with beauty and delight
- aligned with basic human motives to exercise choice, develop competence, and help others
- digitally-delivered and provided free of charge.

### The Shipley School.

It was the first school in the United States to adopt a whole-school Positive Education transformation. Collaborating with the University of Pennsylvania, Shipley uses a “Learn, Live, Teach, Embed” model for every adult who works at Shipley, including administrators, teachers, and staff (Shipley “colleagues”). After every Shipley colleague learns and lives well-being skills, they will be able to teach them explicitly to students and embed them in every facet of the school, including existing academic subjects. The program began with an eight-day training retreat for all Shipley colleagues during the summer of 2017, right before the new academic year, which included a training of Shipley trainers. The measurement of well-being and academic performance has begun.

### United Kingdom

After Prime Minister David Cameron in 2010 announced the United Kingdom would measure National Well-being alongside GDP (Cameron, 2010), there have been many studies about how these data could be used for public policy. For example, the O'Donnell (2014) Report shows how

well-being data could be used to improve the cost-benefit analysis of all public policies, with the results already in hand showing the importance of mental health for both adults and children.

Gutman and Vorhaus (2012) found that students with higher well-being had better later academic achievement and engagement in school and scored 2.46 points higher on national tests than those with lower well-being (Gutman & Vorhaus, 2012). This is the equivalent of one term's advancement.

**Schools**

In 2006, one of the first schools to fully integrate positive education in the UK was Wellington College under the leadership of Sir Anthony Seldon. During his time at Wellington, Sir Anthony and his team, led by Ian Morris, created a 6-pronged curriculum to increase well-being teaching: physical health, positive relationships, perspective, engagement, living sustainably, and meaning and purpose. During their time at Wellington, students received one hour of well-being training every two weeks. (Kebble, 2015).

How to Thrive and Healthy Minds have been highlighted in the UK and are currently working with many British schools.

**Healthy Minds**

The Healthy Minds Project, aimed at empowering young people to lead happier and more prosocial lives, and led by How to Thrive in partnership with the London School of Economics and Political Science, is currently being piloted for more than 10,000 students across 33 secondary schools in the U.K. over a period of four years (Centre for Economic Performance, 2016).

**How to Thrive**

How to Thrive is an organization set up in the UK based on the Penn Resiliency Program of the University of Pennsylvania.

The UK findings of the 3-year study involving 4,000 students, taught universally (not targeted) at 21 secondary schools in Manchester, South Tyneside, and Hertfordshire.

- The quantitative work found a significant improvement in:
  - pupils' depression symptom scores
  - school attendance rates
  - academic attainment in English
  - anxiety scores
  - mathematics attainment concentrated in a few groups of pupils
- The impact varied by pupil characteristics with a larger impact for:
  - pupils entitled to free school meals
  - students who had worse initial symptoms of depression or anxiety

Research results in 3 Hertfordshire primary schools produced outcomes in line with other studies.

- Significant improvement in pupils' depression scores
- Significant improvement on their anxiety scores
- Suggestions that the depression and anxiety improvements were slighter better for girls than boys

A sizeable positive impact on behavior scores for both boys and girls, but no effect on prosocial behavior. Beyond the positive impact on academic performance, the effects of How to Thrive showed decreases in ill-being but no increases in well-being, since the focus was on resilience rather than on well-being.

In 2014 Lord James O'Shaughnessy, a leading figure in the policy and implementation of character education in the UK, set up a string of primary schools that were built from the ground up with a focus on well-being and character. Most of the exemplars in PE exist in the secondary school context; however, Floreat has been a shining example that positive education does not

| Teachers Trained | Students Impacted | Evaluation of Program                | Parents Trained | Money Spent on Training + RCTs |
|------------------|-------------------|--------------------------------------|-----------------|--------------------------------|
| 5,000            | 150,000           | 3-year evaluation; see summary below | 3,500           | £2.5 million                   |

have an age limit; rather, the younger the students learn how to look after their well-being, the better their outcomes later in life. Floreat started with one primary school in Wandsworth and has now expanded to 4 schools around greater London.

Moving from secondary and primary schools to higher education, Sir Anthony Seldon became the Vice-Chancellor of Buckingham University in 2015. He has taken with him his passion for creating an ethos of well-being that is at the heart of education. Sir Seldon announced in 2016

that Buckingham was to become the UK's first Positive University (Grove, 2017).

### Evaluations

The UK has taken the evaluation of programs around character and well-being very seriously. In 2011, The Education Endowment Foundation (EEF) was founded by Sutton trust with a £125 million funding grant from the Department for Education. In total, EEF projects are working in 4,500 schools and reaching 630,000 pupils (What Works Network, 2014). In 2013 EEF released a report on

**Table 1: Summary of Findings on Non-Cognitive Skills**

|                                 | Quality of measurement | Malleability   | Effect on other outcomes | Strength of Evidence |
|---------------------------------|------------------------|----------------|--------------------------|----------------------|
| <b>1. Self-Perceptions</b>      |                        |                |                          |                      |
| Self-Concept of Ability         | High                   | Medium         | Not available            | Medium               |
| Self-Efficacy                   | High                   | High           | High                     | Medium               |
| <b>2. Motivation</b>            |                        |                |                          |                      |
| Achievement Goal Theory         | High                   | Medium         | Low to medium            | Medium               |
| Intrinsic Motivation            | High                   | Medium         | Low to medium            | High                 |
| Expectancy-Value Theory         | Medium                 | Not available  | Medium to high           | Medium               |
| <b>3. Perseverance</b>          |                        |                |                          |                      |
| Engagement                      | Medium                 | Not available  | Not available            | Low                  |
| Grit                            | Medium                 | No evidence    | No evidence              | Low                  |
| <b>4. Self-Control</b>          | Medium                 | Low to medium  | Low                      | Medium               |
| <b>5. Meta-Cognition</b>        | Medium                 | Medium to high | Medium to high           | High                 |
| <b>6. Social Competencies</b>   |                        |                |                          |                      |
| Leadership Skills               | Low                    | Not available  | No evidence              | Low                  |
| Social Skills                   | Medium                 | Medium to high | Low to medium            | High                 |
| <b>7. Resilience and Coping</b> | Medium                 | High           | Low                      | Medium               |
| <b>8. Creativity</b>            | Medium                 | Not available  | No evidence              | Low                  |

Note. From Morrison & Schoon (2013) "The Impact of non-cognitive skills on outcomes from young people: Literature review.," *Institute of Education*.

*The impact of non-cognitive skills on outcomes for young people* (Morrison & Schoon, 2013).

The Education Endowment Foundation (EEF) has funded a number of programs in the UK on character education, totaling approximately £10 million and reaching 1,000 schools and 65,000 children (Education Endowment Foundation, 2017).

Below is a summary of several ongoing programs yet to be evaluated that are related to PE.

There are many research institutions in the United Kingdom which have advanced the science of positive education including: London School of Economics, The Behavioral Insights Team, Healthy Minds, Education Endowment Foundation, University College London, What Works Wellbeing and the Legatum Institute.

Perhaps the most influential is the Jubilee Centre for Character and Virtues. Founded in 2012 by Professor James Arthur, the Jubilee Centre for Character and Virtues is a major hub for empirical and politically neutral research, guides on implementation and now courses in positive education.

| Program & Delivery Organization                                    | Description  |
|--|--|
| Changing Mindsets<br>Portsmouth University                         | A test of Dweck's theory of 'growth mindset,' which suggests that intelligence is a malleable quality that can be improved through effort, not a fixed entity. This project will evaluate two models: teacher delivery and university students teaching primary school pupils about growth mindset theory.                           |
| Engage in Education<br>Catch22                                     | A project providing small group and one to one support for pupils in Years 9 and 10 at high risk of exclusion. Targeted pupils receive training in areas such as emotional literacy and communication, with the aim of improving behavior, attitudes to learning and school engagement.  |
| Improving Talk and Listening<br>School21 & Cambridge University    | A project that aims is to develop confident, articulate speakers, and to improve classroom talk in order to foster better thinking and attainment by giving speaking the same place in the curriculum as reading and writing. The project will develop a set of interventions that schools can use to boost pupils' speaking skills. |
| Youth Social Action Trial<br>Secondary Youth United Foundation     | A project in secondary schools that encourages children to undertake challenging activities, volunteer in the community, and learn new skills. This project will test how far such extra-curricular activities impact on engagement, attainment and non-cognitive skills such as motivation, confidence and team-working.            |
| Promoting Alternative Thinking Strategies<br>Manchester University | A primary school project that covers topics such as identifying and labelling feelings, controlling impulses, reducing stress, and understanding other people's perspectives.  |
| The Good Behaviour Game<br>Mentor Foundation UK                    | A project that aims to improve behavior in primary school, particularly by encouraging good group behavior, and self-control. This study builds on promising evidence from a trial in the US, which found attainment, improved levels of progress on leaving school, and improved health outcomes.                                   |



## Accelerating Positive Education Worldwide

### A World Positive Education Accelerator on June 25-28, 2018 in Fort Worth, Texas.

Consisting of the International Positive Education Networks (IPEN) 2nd Festival of Positive Education and an Appreciative Inquiry Summit, the Accelerator will utilize the methods of Appreciative Inquiry to accelerate Positive Education around the globe. At the event, over 1,200 stakeholders from nearly two dozen countries will elevate the strengths of positive education and design the spread and deployment of future PE impacts (thus “accelerating” Positive Education).

The backstory: In December 2016, the Stiller Family Foundation gifted \$1 million to Champlain College to launch the envisioning and convening of a Positive Education Summit. The funds were directed to the David L. Cooperrider Center for Appreciative Inquiry in the Stiller School of Business at Champlain College, which partnered with IPEN.

A critical first step to the Accelerator was the Steering Committee Meeting at Champlain College on September 14-15, 2017. The Steering Committee had 105 members from 17 countries: The Netherlands, Spain, Singapore, Mexico, the United Kingdom, South Africa, Egypt, Brazil, Canada, Nepal, France, Chile, Australia, UAE, Belgium, Costa Rica, and the United States. It included teachers, students, headmasters, researchers, CEOs, consultants, philanthropists, and foundations. The team collaboratively designed the June 2018 event by: identifying critical stakeholders, planning the engagement of these stakeholders; establishing event tasks and objectives; and thinking about long-term outcomes of the Summit.

The Cooperrider Center and IPEN intend for the 2018 event to:

- Generate a vision for advancing Positive Education across diverse stakeholder groups
- Elevate all the innovations that are already working in the fields of education and positive psychology
- Create a model process for countries to host more focused national summits on PE
- Launch prototype models around the world

- to advance PE in bold and innovative ways
- Lead to transforming early childhood, K-12, and higher education schools into positive institutions.

### Overview

We cannot help being impressed by the rapid growth and widespread dissemination of Positive Education worldwide. The number of teachers and students impacted is staggeringly large and we believe that this growing trend will continue and likely accelerate. We are hopeful that the result will be higher well-being and higher school achievement for many millions of school children. We are mindful, however, of the long history of fads in education and we do not want Positive Education to be yet another fad. So, we have some suggestions about how to make the gains sustainable.

The first, and by far and away most important one, is ongoing **rigorous evaluation**. What separates modern work on happiness from the well-intended programs of the past is good science and good measurement. The presence of science and measurement justifies some of the enthusiastic uptake of Positive Education, but the popularity creates the danger of outstripping the science. In addition to ongoing measurement, we underscore that:

- Much more evidence is needed on the reality of the well-being enhancements and the academic achievement enhancements that seem to be produced.
- Serious cost-benefit analyses are needed on the programs, and this depends on the **effect sizes and duration** of the well-being enhancements and the academic achievement improvements that seem to be produced.
- Improvement and cross-validation of measures is needed. When a school system, to say nothing of a government, endorses happiness as a value, there is a lot of incentive to game the system and produce data that confirm the endorsement. Less obtrusive and less reactive measures are needed, and big data techniques (e.g., Eichstaedt, Schwartz, Kern, et al, 2013) can now provide complementary validation to questionnaires.
- **Treatment fidelity** measurement must be done for the execution of interventions. Are the teachers actually delivering what is specified in the manuals?

- More creativity on the part of teachers should be allowed. Moving the happiness needle may follow from merely measuring happiness before and after interventions and by telling teachers that they are accountable for building well-being. Teachers should use their own knowledge of the students and their creativity about what makes their students happy to design local, creative, and contextually resonant interventions.

While these are rather serious guidelines and warnings, we believe that we are actually in the midst of a revolution in education. We believe that Positive Education will likely produce increasingly rigorous results that reinforce this educational paradigm, and, most importantly, a generation of happier and more knowledgeable, skillful youth – children and adolescents better equipped to create a happier world.

## References

- Adler, A., Seligman, M. E., Tetlock, P. E., & Duckworth, A. L. (2016). *Teaching well-being increases academic performance: Evidence from Bhutan, Mexico, and Peru*. Philadelphia, PA: University of Pennsylvania.
- Adler, A., & Seligman, M. E. P. (2016). Using Well-being for Public Policy: Theory, Measurement, and Recommendations. *International Journal of Well-being*, 6(1), 1-35. doi:10.5502/ijw.v6i1.1
- Al Maktoum, M. B. R. (2017). *Reflections on happiness and positivity*. Dubai: Explorer Publishing & Distribution.
- Albert, D., & Steinberg, L. (2011). Judgment and decision making in adolescence. *Journal of Research on Adolescence*, 21(1), 211-224. doi:10.1111/j.1532-7795.2010.00724.x
- Australian Curriculum, Assessment and Reporting Authority. (2010). *The Australian Curriculum*. Retrieved from <https://www.australiancurriculum.edu.au>
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Manual for the Beck Depression Inventory-II*. San Antonio, TX: Psychological Corporation.
- Bolier, L., Haverman, M., Westerhof, G., Riper, H., Smit, F., & Bohlmeijer, E. (2013). Positive psychology interventions: a meta-analysis of randomized controlled studies. *BMC Public Health*, 13(119). <https://doi.org/10.1186/1471-2458-13-119>
- Bryant, B. K. (1982). An index of empathy for children and adolescents. *Child Development*, 53(2), 413-425. doi:10.2307/1128984
- Butler, J., & Kern, M. L. (2016). The PERMA-Profler: A brief multidimensional measure of flourishing. *International Journal of Wellbeing*, 6(3), 1-48. doi:10.5502/ijw.v6i3.526
- Cahill, H., Beadle, S., Farrelly, A., Forster, R., Smith, K. *Building resilience in children and young people*. Retrieved from <http://www.education.vic.gov.au/documents/about/department/resiliencelitreview.pdf>
- Cameron, D. (2010). *PM speech on wellbeing: Proceedings from Cabinet Office, Prime Minister's Office, 10 Downing Street*. London, UK. Retrieved from <https://www.gov.uk/government/speeches/pm-speech-on-wellbeing>
- Centre for Economic Performance, London School of Economics and Political Science. *Healthy Minds Project*. Retrieved from [http://cep.lse.ac.uk/\\_new/research/wellbeing/healthy\\_minds\\_project.asp](http://cep.lse.ac.uk/_new/research/wellbeing/healthy_minds_project.asp)
- Cooperrider, D., & Srivastva, S. (2008). Appreciative Inquiry in Organizational Life. *Research in Organizational Change and Development*, 1, 129-169.
- Davidson, R. J., Kabat-Zinn, J., Schumacher, J., Rosenkranz, M., Muller, D., Santorelli, S. F., Urbanowski, F., Harrington, A., Bonus, K., & Sheridan, J. F. (2003). Alterations in brain and immune function produced by mindfulness meditation. *Psychosomatic Medicine*, 65(4), 564-570.
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75.
- Dix, K. L., Slee, P. T., Lawson, M. J., & Keeves, J. P. (2012). Implementation quality of whole-school mental health promotion and students' academic performance. *Child and Adolescent Mental Health*, 17(1), 45-51. <http://doi.org/10.1111/j.1475-3588.2011.00608.x>
- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6), 1087-101. doi:10.1037/0022-3514.92.6.1087
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405-432. doi:10.1111/j.1467-8624.2010.01564.x
- Education Endowment Foundation. (2017). *Character and Education*. Retrieved from <https://educationendowmentfoundation.org.uk/get-involved/apply/themed-rounds/character-and-education>
- Eichstaedt, J. C., Schwartz, H. A., Kern, M. L., Park, G., Labarthe, D., Merchant, R., Jha, S., Agrawal, M., Dziurzynski, L., Sap, M., Weeg, C., Larson, E., Ungar, L., & Seligman, M. E. P. (2015). Psychological language on Twitter predicts county-level heart disease mortality. *Psychological Science*, 26(2), 159-169. doi:10.1177/0956797614557867
- Emmons, R. A. (2007). *Thanks!: How the New Science of Gratitude Can Make You Happier*. New York, NY: Houghton Mifflin Harcourt.
- Escamilla, H. (2017). Universidad Tecmilenio, Mexico. In *The State of Positive Education*. Retrieved from <https://www.worldgovernmentsummit.org/api/publications/document/8f647dc4-e97c-6578-b2f8-ff0000a7ddb6>
- Gable, S. L., Reis, H. T., Impett, E. A., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality and Social Psychology*, 87(2), 228-45. doi:10.1037/0022-3514.87.2.228
- Grove, J., Times Higher Education. (2017). *Happiness expert advises UK's first 'positive university'*. Retrieved from <https://www.timeshighereducation.com/news/happiness-expert-advises-uks-first-positive-university>
- Gutman, L. M., & Vorhaus, J. (2012). *The Impact of Pupil Behaviour and Wellbeing on Educational Outcomes*. Retrieved from [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/219638/DFE-RR253.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/219638/DFE-RR253.pdf)
- Helliwell, J., Layard, R., & Sachs, J. (ed). (2017). *World Happiness Report 2017*. New York: Sustainable Development Solutions Network.
- Hoare, E., Bott, D., & Robinson, J. (2017). Learn it, Live it, Teach it, Embed it: Implementing a whole school approach to foster positive mental health and wellbeing through Positive Education. *International Journal of Wellbeing*, 7(3), 56-71. doi:10.5502/ijw.v7i3.645
- Kebble, M. (2015). *Why wellbeing is so important at Wellington College*. Retrieved from <http://www.schoolreportonline.com/independent-school-news/wellbeing-at-wellington-college/>
- Kern, M. L., Benson, L., Steinberg, E. A., & Steinberg, L. (2016). The EPOCH Measure of Adolescent Well-Being. *Psychological Assessment*, 28(5), 586-97. doi:10.1037/pas0000201
- Kern, M. L., Waters, L., Adler, A., & White, M. (2014). Assessing employee wellbeing in schools using a multifaceted approach: Associations with physical health, life satisfaction, and professional thriving. *Psychology*, 5, 500-513. doi:10.4236/psych.2014.56060
- KidsMatter. (2012). Retrieved from <https://www.kidsmatter.edu.au/primary>

- Kovacs, M. (2004). Children's depression inventory (CDI), Toronto: Multi-Health Systems Inc.
- Marin, L. M., & Halpern, D. F. (2011). Pedagogy for developing critical thinking in adolescents: Explicit instruction produces greatest gains. *Thinking Skills and Creativity*, 6(1), 1-13. doi:10.1016/j.tsc.2010.08.002
- MindMatters. (2014). Retrieved from <https://www.mindmatters.edu.au/>
- Ministerial Council on Education, Employment, Training and Youth Affairs. (2008). *Melbourne Declaration on Educational Goals for Young Australians*. Retrieved from [http://docs.acara.edu.au/resources/national\\_declaration\\_on\\_the\\_educational\\_goals\\_for\\_young\\_australians.pdf](http://docs.acara.edu.au/resources/national_declaration_on_the_educational_goals_for_young_australians.pdf)
- Morgan, N. (2015). *Character Education: Apply for 2015 grant funding*. Retrieved from <https://www.gov.uk/government/news/character-education-apply-for-2015-grant-funding>
- Morrison, L. & Schoon, G. I. (2013) *The impact of non-cognitive skills on outcomes for young people Literature review*. Retrieved from [https://educationendowmentfoundation.org.uk/public/files/Publications/EEF\\_Lit\\_Review\\_Non-CognitiveSkills.pdf](https://educationendowmentfoundation.org.uk/public/files/Publications/EEF_Lit_Review_Non-CognitiveSkills.pdf)
- Norrish, J. M., Williams, P., O'Connor, M., & Robinson, J. (2013). An applied framework for positive education. *International Journal of Wellbeing*, 3(2), 147-161. doi:10.5502/ijw.v3i2.2
- O'hara, J., & McNamara, G. (2001). Process and product issues in the evaluation of school development planning. *Evaluation*, 7(1), 99-109. doi:org/10.1177/13563890122209540
- O'Donnell, G., Martine, A. D., Halpern, D., & Layard, R. (2014). *Wellbeing and Policy*. Retrieved from <http://li.com/docs/default-source/commission-on-wellbeing-and-policy/commission-on-wellbeing-and-policy-report---march-2014-pdf.pdf>
- Peterson, C., & Seligman, M. E. (2004). *Character strengths and virtues: A handbook and classification* (Vol. 1). New York, NY, Washington, DC: Oxford University Press, American Psychological Association.
- Public Health England (2014). *The link between pupil health and wellbeing and attainment A briefing for head teachers, governors and staff in education settings*. Retrieved from <https://www.gov.uk/government/publications/the-link-between-pupil-health-and-wellbeing-and-attainment>
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1(3), 385-401. <https://doi.org/10.1177/014662167700100306>
- Rezaee, M., Hedayati, A., Naghizadeh, M. M., Farjam, M., Sabet, H. R., & Paknahad, M. (2016). Correlation between Happiness and Depression According to Beck Depression and Oxford Happiness Inventory among University Students. *Galen Medical Journal*, 5(2), 75-81.
- Roberts, L. M., Dutton, J. E., Spreitzer, G. M., Heaphy, E. D., & Quinn, R. E. (2005). Composing the reflected best-self portrait: Building pathways for becoming extraordinary in work organizations. *Academy of Management Review*, 30(4), 712-736.
- Rusk, R., & Waters, L. (2015). Exploring the underlying components of positive psychology interventions: Five domains of positive function. *Journal of Positive Psychology*, 10(2), 141-152.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual review of psychology*, 52, 141-166. doi: 10.1146/annurev.psych.52.1.141
- Seligman, M. E., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: empirical validation of interventions. *American psychologist*, 60(5), 410-21. doi: 10.1037/0003-066X.60.5.410
- Seligman, M. E., Rashid, T., & Parks, A. C. (2006). Positive psychotherapy. *American psychologist*, 61(8), 774 -788. doi:10.1037/0003-066X.61.8.774.
- Seligman, M., Ernst, R., Gillham, J., Reivich, K., & Linkin, M. (2009). Positive education: positive psychology and classroom interventions. *Oxford Review of Education*, 35(3), 293- 311. doi:10.1080/03054980902934563
- Seligman, M. (2011). *Flourish: A New Understanding of Happiness and Wellbeing*. New York, NY: Free Press.
- Sin, N. L. & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive interventions: A practice-friendly meta-analysis. *Journal of Clinical Psychology*, 65(5), 467-87. doi:10.1002/jclp.20593.
- Shoshani, A., & Steinmetz, S. (2014). Positive Psychology at school: A school-based intervention to promote adolescents' mental health and well-being. *The Journal of Happiness Studies*, 15(6), 1289-1311. doi:10.1007/s10902-013-9476-1
- Shoshani, A., & Slone, M. (2017). Positive Education for young children: Effects of a positive psychology intervention for preschool children on subjective well-being and learning behaviors. *Frontiers in Psychology*, 8(1866), 1-11. doi: 10.3389/fpsyg.2017.01866
- Simmons, A. (2017). *UAE's minister of happiness insists her job is no laughing matter*. Retrieved from <http://www.latimes.com/world/middleeast/la-fg-global-uae-happiness-2017-story.html>
- Slone, M., & Shoshani, A. (2014a). The centrality of the school in a community during war and conflict. In R. Pat-Horenczyk, D. Brom, C. Chemtob, & J. Vogel (Eds.), *Helping children cope with trauma: Individual family and community perspectives* (180-192). London, England: Routledge.
- State Government of Victoria, Australia. (2017). *Building Resilience*. Retrieved from <http://www.education.vic.gov.au/school/teachers/health/mentalhealth/Pages/buildingresilience.aspx>
- Steinberg, L. (2014). *Age of Opportunity: Lessons from the New Science of Adolescence*. New York, NY: Houghton Mifflin Harcourt.
- Su, R., Tay, L., & Diener, E. (2014). The development and validation of the Comprehensive Inventory of Thriving (CIT) and the Brief Inventory of Thriving (BIT). *Applied Psychology: Health and Well-Being*, 6(3), 251-279. doi:10.1111/aphw.12027
- Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting Positive Youth Development Through School-Based Social and Emotional Learning Interventions: A Meta-Analysis of Follow-Up Effects. *Child Development*, 88(4), 1156-1171. doi: 10.1111/cdev.12864
- UAE Ministry of Cabinet Affairs and the Future (2017). *Happiness Research Institute to be set up Soon*. Retrieved from <https://www.mocaf.gov.ae/en/media/news/happiness-research-institute-to-be-set-up-soon>
- Ura, K. & Galay, K. (2004). *Gross national happiness and development*. Thimphu, Bhutan: The Center for Bhutan Studies. Retrieved from <http://www.grossnationalhappiness.com/2017/02/gnh-and-development/>
- Visible Wellbeing. (n.d.). Retrieved from <http://www.visiblewellbeing.org/>

Waters, L. (2017). Visible Wellbeing in Schools: The powerful role of Instructional leadership. *Australian Educational Leader*, 39(1), 6-10.

Waters, L. (2011). A review of school-based positive psychology interventions. *Australian Educational and Developmental Psychologist*, 28(2), 75-90. doi:10.1375/aedp.28.2.75

Waters, L. (2015). Why Positive Education? *Teaching and Learning Network*, 22(3), 16-19.

Waters, L. (2017). Progressing Positive Education and creating Visible Wellbeing. In S. Donaldson & M. Rao (Eds.), *Scientific Advances in Positive Psychology*, (229-256).

Waters, L., Sun, J., Rusk, R., Aarch, A., & Cotton, A. (2017). Positive Education: Visible wellbeing and the five domains of positive functioning. In M Slade., L Oades., & A Jarden (Eds), *Wellbeing, recovery and mental health*, (245-264).

What Works Network. (2014). *What Works: Evidence for Decision Makers*. Retrieved from: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/378038/What\\_works\\_evidence\\_for\\_decision\\_makers.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/378038/What_works_evidence_for_decision_makers.pdf)

White, M., Slemp, G., & Murray, A. S. (2017). *Future Directions in Well-being: Education, Organizations and Policy*. Cham, Switzerland: Springer International Publishing. Springer Press.

