

# Positive education: positive psychology and classroom interventions

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Positive education is defined as education for both traditional skills and for happiness. The high prevalence worldwide of depression among young people, the small rise in life satisfaction, and the synergy between learning and positive emotion all argue that the skills for happiness should be taught in school. There is substantial evidence from well controlled studies that skills that increase resilience, positive emotion, engagement and meaning can be taught to schoolchildren. We present the story of teaching these skills to an entire school—Geelong Grammar School—in Australia, and we speculate that positive education will form the basis of a 'new prosperity', a politics that values both wealth *and* well-being.

## Introduction

First, a quiz: In two words or less, what do you most want for your children? If you are like the hundreds of parents I've asked, you responded, 'Happiness', 'Confidence', 'Contentment', 'Balance', 'Good Stuff', 'Kindness', 'Health', 'Satisfaction', and the like. In short, you most want well-being for your children.

In two words or less, what do schools teach? If you are like other parents, you responded, 'Achievement', 'Thinking Skills', 'Success', 'Conformity', 'Literacy', 'Mathematics', 'Discipline' and the like. In short schools teach the tools of accomplishment. Notice that there is almost no overlap between the two lists.

The schooling of children has, for more than a century, been about accomplishment, the boulevard into the world of adult work. I am all for accomplishment, success, literacy, and discipline; but imagine if schools could, without compromising

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either, teach both the skills of well-being and the skills of achievement. Imagine *Positive Education*.

# Should well-being be taught in school?

The prevalence of depression among young people is shockingly high worldwide. Nearly 20% of youth experience an episode of clinical depression by the end of high school (Lewinsohn et al., 1993). By some estimates depression is about ten times more common now than it was 50 years ago (Wickramaratne et al., 1989). In addition, several studies suggest that the age of first onset has decreased from adulthood to adolescence (Weissman, 1987; Lewinsohn et al., 1993). Although researchers debate whether these findings reflect increases in rates of depression, increased awareness of depression, or methodological problems such as memory biases (see Costello et al., 2006), virtually all investigators are dismayed by how much depression there is now and how mostly it goes untreated (Twenge & Nolen-Hoeksema, 2002; Costello et al., 2006).

This is a paradox; particularly for those who believe that well-being comes from the environment. Almost everything is better now than it was 50 years ago: there is about three times more actual purchasing power, dwellings are much bigger, there are many more cars, and clothes are more attractive (Easterbrook, 2003). Progress has not been limited to the material: there is more education, more music, and more women's rights, less racism, less pollution, fewer tyrants, more entertainment, more books, and fewer soldiers dying on the battlefield (e.g., Schuman *et al.*, 1997; U.S. Environmental Protection Agency, 2006; Snyder *et al.*, 2008).

Everything is better, that is, everything except human morale. Depression and anxiety are rampant, and average individual and average national happiness, which has been measured competently for half a century, has not remotely kept up with improvement in the world. Happiness has gone up only spottily, if at all. The average Dane, Italian and Mexican is somewhat more satisfied with life than 50 years ago, but the average American, Japanese or Australian is no more satisfied with life than he was 50 years ago, and the average Briton or German is less satisfied (Inglehart *et al.*, 2007).

Why this is a matter of contention. It is certainly not biological or genetic. Nor is it ecological (the Old Order Amish who live 30 miles down the road from me in Philadelphia have only one-tenth our rate of depression, even though they breathe the same air, drink the same water, and make much of the food we eat (Egeland & Hofstetter, 1983). It has something to do with modernity and perhaps with what we mistakenly call 'prosperity'.

Not only is there widespread depression and spotty increases in happiness, two good reasons that well-being should be taught—if it could be taught—but there is a third good reason. *More well-being is synergistic with better learning*. Increases in well-being are likely to produce increases in learning, the traditional goal of education. Positive mood produces broader attention (Fredrickson, 1998; Bolte *et al.*, 2003; Fredrickson & Branigan, 2005; Rowe *et al.*, 2007), more creative thinking (Isen *et al.*,

1987; Estrada et al., 1994), and more holistic thinking (Isen et al., 1991; Kuhl, 1983, 2000), in contrast to negative mood which produces narrower attention (Bolte et al., 2003), more critical thinking, and more analytic thinking (Kuhl, 1983, 2000). Both ways of thinking are important, but schools emphasise critical, rather than creative thinking, and the negative mood so often found in the classroom facilitates only critical thinking.

We conclude that, were it possible, well-being should be taught in school on three grounds: as an antidote to depression, as a vehicle for increasing life satisfaction, and as an aid to better learning and more creative thinking. Because most young people attend school, schools provide the opportunity to reach them and enhance their well-being on a wide scale.

Schools are an excellent location for well-being initiatives for several reasons. Children and adolescents spend much of their waking time in school. For example, in the United States, 6-17 year-olds typically spend 30-35 hours per week in school (Hofferth & Sandberg, 2001). Thus, students' day-to-day interactions and experiences with peers, teachers and coaches are integral to their well-being and are important targets for well-being programmes. In addition, most parents and educators see the promotion of well-being and character as an important, if not central, aspect of schooling (Cohen, 2006). Surveys of American parents over the past 30 years indicate that their most important goal for education was to prepare children to become responsible citizens (Cohen, 2006).

Most schools are already engaged in this work to some degree. In recent years, there has been increasing recognition of this promise. American schools are a major provider of mental health services (American Academy of Pediatrics, 2004; Foster et al., 2005). Schools also have enormous (largely untapped) potential for prevention and well-being initiatives (Pfeiffer & Reddy, 1998; American Academy of Pediatrics, 2004; Weist, 2005). In the USA, most states now mandate or encourage character education, and many have standards related to social and emotional learning (Cohen, 2006; CASEL, 2009). Britain's education policy also includes the promotion of moral or character development (Arthur, 2005).

Despite the potential, there is considerable debate about school-based well-being initiatives. Many parents are concerned that programmes will teach values that are determined by educators or politicians and that bear little resemblance to the values they hope to instil in their children (Arthur, 2005). Researchers are often concerned about the lack of empirical evidence for most programmes (Spence & Shortt, 2007). Parents, educators and politicians are often concerned that programmes will waste money or (worse) lower students' achievement by diverting time and money away from academic subjects (Benninga et al., 2006; Financial Times, 2007). We argue below that well-being programmes can: 1) promote skills and strengths that are valued by most, and perhaps all, parents; 2) produce measurable improvements in students' well-being and behaviour; and 3) facilitate students' engagement in learning and achievement.

What follows is the framework that guides us when we teach well-being in schools.

## What is happiness?

'Happiness' is too worn and too weary a term to be of much scientific use, and the discipline of Positive Psychology divides it into three very different realms, each of which is measurable and, most importantly, each of which is skill-based and can be taught (Seligman, 2002). The first is hedonic: positive emotion (joy, love, contentment, pleasure etc.). A life led around having as much of this good stuff as possible, is the 'Pleasant Life'. The second, much closer to what Thomas Jefferson and Aristotle sought, is the state of flow, and a life led around it is the 'Engaged Life'. Flow, a major part of the Engaged Life, consists in a loss of self-consciousness, time stopping for you, being 'one with the music' (Csikszentmihalyi, 1990). Importantly engagement seems to be the opposite of positive emotion: when one is totally absorbed, no thoughts or feelings are present—even though one says afterwards 'that was fun' (Delle Fave & Massimini, 2005). And while there are shortcuts to positive emotion—you can take drugs, masturbate, watch television, or go shopping—there are no shortcuts to flow. Flow only occurs when you deploy your highest strengths and talents to meet the challenges that come your way, and it is clear that flow facilitates learning.

The third realm in the framework of Positive Psychology is the one with the best intellectual provenance, the Meaningful Life. Flow and positive emotion can be found in solipsistic pursuits, but not meaning or purpose. Meaning is increased through our connections to others, future generations, or causes that transcend the self (Durkheim, 1951/1897; Erikson, 1963). From a Positive Psychology perspective, meaning consists in knowing what your highest strengths are, and then using them to belong to and serve something you believe is larger than the self (Seligman, 2002).

The framework of Positive Psychology, we want to emphasise, is an empirical research endeavour and not mere grandmotherly common sense. Among its more surprising recent findings:

- Optimistic people are much less likely to die of heart attacks than pessimists, controlling for all known physical risk factors (Giltay et al., 2004).
- Women who display genuine (Duchenne) smiles to the photographer at age eighteen go on to have fewer divorces and more marital satisfaction than those who display fake smiles (Keltner *et al.*, 1999).
- Positive emotion reduces at least some racial biases. For example, although people generally are better at recognising faces of their own race than faces of other races, putting people in a joyful mood reduces this discrepancy by improving memory for faces of people from other races (Johnson & Fredrickson, 2005).
- Externalities (e.g., weather, money, health, marriage, religion) added together account for no more than 15% of the variance in life satisfaction (Diener *et al.*, 1999).
- The pursuit of meaning and engagement are much more predictive of life satisfaction than the pursuit of pleasure (Peterson *et al.*, 2005).
- Economically flourishing corporate teams have a ratio of at least 2.9:1 of positive statements to negative statements in business meetings, whereas stagnating teams

have a much lower ratio; flourishing marriages, however, require a ratio of at least 5:1 (Gottman & Levenson, 1999; Fredrickson & Losada, 2005).

- Self-discipline is twice as good a predictor of high school grades as IQ (Duckworth & Seligman, 2005).
- Happy teenagers go on to earn very substantially more income 15 years later than less happy teenagers, equating for income, grades and other obvious factors (Diener et al., 2002).
- How people celebrate good events that happen to their spouse is a better predictor of future love and commitment than how they respond to bad events (Gable et al., 2004).
- People experience more 'flow' at work than at home (Csikszentmihalyi & LeFevre, 1989).

So there is a growing scientific basis for understanding positive emotion, engagement and meaning. These states are valuable in their own right, they fight depression (Seligman et al., 2005), they engender more life satisfaction (Peterson, Park, & Seligman, 2005; Seligman et al., 2005), and they promote learning, particularly creative learning (Fredrickson, 1998). So we conclude that well-being should be taught in school. But can it?

# Can well-being be taught in school?

Our research team has devoted much of the last 15 years to finding out, using rigorous methods, whether well-being can be taught to school children. We believe that well-being programmes, in parallel with any medical intervention, must be evidence-based, so we have tested two different programmes for schools, the Penn Resiliency Program (PRP) and the Strath Haven Positive Psychology Curriculum. Here are our findings. First PRP:

The major goal of the PRP curriculum is to increase students' ability to handle dayto-day stressors and problems that are common for most students during adolescence. PRP promotes optimism by teaching students to think more realistically and flexibly about the problems they encounter. PRP also teaches assertiveness, creative brainstorming, decision making, relaxation, and several other coping and problemsolving skills.

PRP is one of the most widely researched programmes designed to prevent depression in young people. During the past 20 years, 17 studies have evaluated PRP in comparison to a control group. Most of these studies used randomised controlled designs. Together, these studies include over 2,000 children and adolescents between the ages of 8 and 15. By comparison, a recent meta-analysis of research on depression prevention programmes for young people found 30 studies in total (including many PRP evaluations) (Horowitz & Garber, 2006).

 Diverse samples. PRP studies include adolescents from a variety of racial/ethnic backgrounds, community settings (urban, suburban and rural) and countries (e.g., United States, United Kingdom, Australia, China and Portugal).

- Variety of group leaders. Across the PRP studies, group leaders include teachers, counsellors, psychologists, social workers and graduate students in education and psychology, as well as the programme developers in some studies.
- *Independent evaluations of PRP*. The PRP research team at the University of Pennsylvania conducted many of the PRP evaluations; however, several independent research teams have also evaluated PRP.

Here are the basic findings for PRP compared to control groups:

- PRP reduces and prevents symptoms of depression. Of the 17 PRP studies, 15 examined PRP's effects on depression symptoms. A meta-analysis of these studies revealed significant benefits of PRP at all follow-up assessments (immediately post-intervention as well as six and 12 months following the programme) (Brunwasser & Gillham, 2008).
- PRP reduces hopelessness. The meta-analysis also found that PRP significantly reduced hopelessness and increased optimism (Brunwasser & Gillham, 2008).
- PRP prevents clinical levels of depression and anxiety. In several studies, PRP has prevented moderate to severe levels of depressive symptoms. For example, in the first PRP study, the programme halved rates of moderate to several levels of depressive symptoms through two years of follow-up (see Figure 1). In a primary care setting, PRP prevented diagnoses of depression and anxiety disorders among adolescents with high levels of depressive symptoms at baseline (see Figure 2). In that study, diagnostic information was obtained from medical records (with consent) and reflected independent evaluations by clinicians who were not involved in the study.
- *PRP reduces and prevents anxiety*. There is less research on PRP's effects on adolescents' anxiety symptoms, but most studies found significant and long-lasting effects.
- PRP may reduce behavioural problems. There is less research on PRP's effects on adolescents' behavioural problems (aggression, delinquency), but a few studies found significant effects. For example, a recent large-scale programme evaluation found significant benefits on parents' reports of adolescents' behavioural problems three years after the programme (see Figure 3).
- PRP works equally well for children of different racial/ethnic backgrounds. The metaanalysis found no evidence that PRP's effects varied by race or ethnicity (Brunwasser & Gillham, 2008).
- Training and supervision of group leaders is critical. Recent reviews of PRP research indicated that PRP's effectiveness vary considerably across studies (Gillham et al., 2007). On average, effects were small; PRP had moderate to large effects in some studies and no effect in others. This variability in effectiveness appeared to be related, at least in part, to the level of training and supervision that group leaders receive. Programme effects were strongest when group leaders were members of the PRP team, or trained by the PRP team and closely supervised by the PRP team. Programme effects were smaller and less consistent when group leaders received minimal training and supervision. The quality of curriculum delivery also appeared critical. For example, a study of PRP in a primary care setting revealed significant

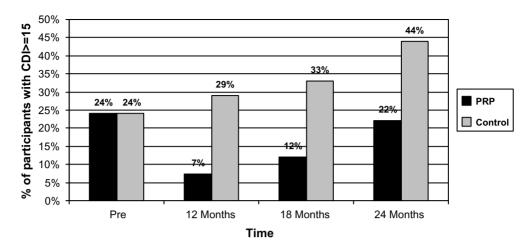


Figure 1. Prevention of moderate to severe depressive symptoms (% of participants with CDI>=15) (from Gillham *et al.*, 1995)

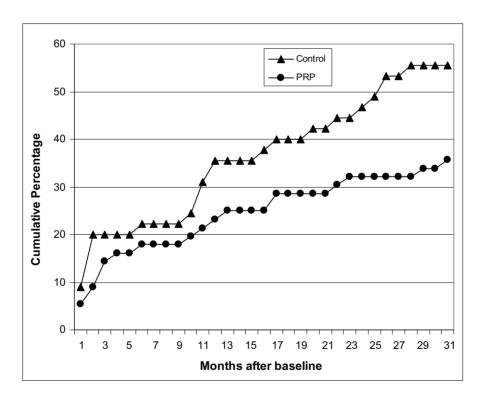


Figure 2. Prevention of depression, anxiety and adjustment disorder diagnoses among participants with high levels of baseline symptoms: cumulative percent diagnosed with disorder (from Gillham *et al.*, 2006)

(Note: intervention is from one month to approximately six months after baseline)

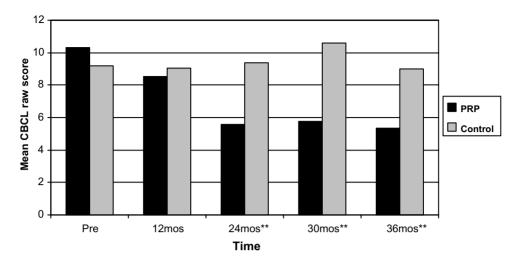


Figure 3. Prevention of conduct symptoms: Mean CBCL externalising raw scores (from Cutuli, 2004; Cutuli et al., forthcoming)

reductions in depression symptoms for adolescents in groups with high adherence to the programme. In contrast, PRP did not reduce depressive symptoms relative to control in groups with lower programme adherence (Gillham et al., 2006). Thus, we believe that current best practices for PRP include intensive training and supervision of group leaders.

In summary, the existing research indicates that PRP produces positive and reliable improvements in students' well-being. To date, most studies of PRP examine effects on self-reported pessimism and depressive symptoms. Although self-report is considered the most accurate method for measuring internalising symptoms such as depression, it will be important to document PRP's effects on observable behaviours and a broader range of outcomes, including students' social skills, positive emotion and engagement in learning.

Next we review the Positive Psychology Programme which is the first empirical study of a Positive Psychology curriculum for adolescents. With a \$2.8 million grant from the US Department of Education, our research group recently completed a randomised controlled evaluation of the high school positive psychology curriculum. We randomly assigned 347 Year 9 students to Language Arts classes that contained the positive psychology curriculum (Positive Psychology Condition) or did not contain the positive psychology curriculum (Control). Students, their parents and teachers completed standard questionnaires before the programme, after the programme, and through two years of follow-up. Questionnaires measured students' strengths (e.g., love of learning, kindness), social skills, behavioural problems and enjoyment of school. In addition, we examined students' grades.

The major goals of the positive psychology programme are 1) to help students identify their signature character strengths and 2) to increase students' use of these strengths in day-to-day life. The programme targets strengths (e.g., kindness, courage, wisdom, perseverance) that are described in the VIA classification (Peterson & Seligman, 2004) and that are valued across cultures and throughout history (Peterson & Seligman, 2004; Dahlsgaard et al., 2005). In addition to these goals, the intervention strives to promote resilience, positive emotion and students' sense of meaning or purpose.

The curriculum consists of approximately 20–25 80-minute sessions delivered over the 9th grade year. Most lessons involve the discussion of character strengths (or other positive psychology concepts and skills), an in-class activity, a real-world homework activity that encourages students to apply concepts and skills in their own lives, and a follow-up journal reflection.

## Exercises

Here are two examples of the exercises we use in the curriculum:

Three Good Things. We instruct the students to write down three good things that happened each day for a week. The three things students list can be relatively small in importance ('I answered a really hard question right in Language Arts today') or relatively large in importance ('The guy I've liked for months, asked me out!!!'). Next to each positive event listed, they write a reflection on one of the following questions: 'Why did this good thing happen?', 'What does this mean to you?', 'How can you increase the likelihood of having more of this good thing in the future?'

Using Signature Strengths in a New Way. We believe that students can get more satisfaction out of life if they learn to identify which of these character strengths they possess in abundance and then use them as much as possible in school, in hobbies, with friends and family. Students take the VIA Signature Strengths test for children (www.authentichappiness.org) and several lessons in the curriculum focus on helping students to identify characters strengths in themselves and others, using strengths to overcome challenges, and applying strengths in new ways.

Here are the basic findings of the positive psychology programme relative to control:

Engagement in learning, enjoyment of school, and achievement. The positive psychology programme increased students' reports of enjoyment and engagement in school. According to teacher reports, the positive psychology programme improved strengths related to learning and engagement in school (e.g., curiosity, love of learning, creativity) (see Figure 4). These findings are especially encouraging because teachers who completed measures did not deliver the positive psychology curriculum and were blind to whether students participated in the programme or the control classes. Effects on these outcomes were particularly strong for students in regular

## Learning Strengths (OSS)

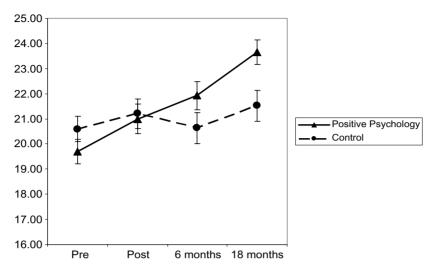


Figure 4. Learning strengths (reported by teachers)

(non-Honors) classes. Among students in non-honors classes, the positive psychology programme increased Language Arts achievement through 11th grade. It is important that increasing the skills of well-being does not antagonise the traditional goals of classroom learning, but rather enhances them.

Social Skills. The positive psychology programme improved social skills (e.g., empathy, cooperation, assertiveness, self-control) according to both mothers' and teachers' reports (see Figures 5 and 6).

Other Outcomes. The positive psychology programme did not improve other outcomes we measured, such as students' reports of their depression and anxiety symptoms, character strengths, and participation in extra-curricular activities. Better effects may be obtained through combining the PRP and positive psychology programmes, or through more intensive interventions.

As this is the first study of the positive psychology curriculum, it will be important to replicate our findings and to determine whether the programme is effective with students from a variety of socio-economic and cultural backgrounds.

Based on this research, we conclude that well-being should be taught and that it can be taught in school. But can an entire school be imbued with positive psychology?

# The Geelong Grammar School Project

The Positive Psychology Center at the University of Pennsylvania has been training American and British teachers in these techniques and we have just reviewed the

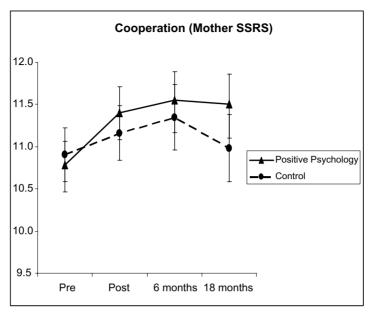


Figure 5. Adolescents' cooperation (reported by mothers)

# Social Skills (Teacher SSRS)

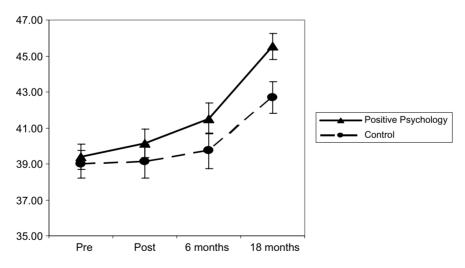


Figure 6. Social skills (reported by teachers)

findings from these controlled studies of individual classrooms. But we never before had an entire school—from the classrooms to the playing fields to the houses to the counselling centre—to infuse. One of Australia's great schools, Geelong Grammar School (GGS), located about an hour south of Melbourne, invited us in 2008 to do exactly this.

GGS has four campuses with about 1500 students (coeducational) and about 200 faculty members. In January of 2008, we assembled 15 of our Penn trainers to teach the skills of positive psychology (resilience, character strengths, gratitude, positive communication, optimism) to about 100 members of the faculty. In a nine day programme, we emphasised how the teachers could use the skills in their own lives—personally and professionally—and we gave examples and detailed curricula of how to teach them to children. The principles and skills were taught in plenary sessions, and reinforced through exercises and applications in groups of 30, as well as in pairs and small groups. Following the training, several of us were in residence for the entire year and about a dozen visiting scholars (e.g., Barbara Fredrickson, Roy Baumeister, Stephen Post, Diane Tice, Christopher Peterson, Kate Hays, George Vaillant, Nansook Park and Ray Fowler) came to GGS, each for a week or more, to instruct faculty in their positive psychology specialities.

We have no systematic data to report at this early stage, but our impression and that of the faculty is that the programme was enormously successful. So we confine ourselves to the narration of what ensued and to illustrative anecdotes. These divide into 'Teaching Positive Education', 'Embedding Positive Education' and 'Living Positive Education'.

# Teaching Positive Education (the explicit courses developed)

Stand alone courses and course units have now arisen at GGS in several grades. These teach the elements of positive psychology: resilience, gratitude, strengths, meaning, flow, positive relationships and positive emotion. The 200 10th-grade students on the Corio campus (the upper school) attended a Positive Education class taught twice weekly by the heads of the ten boarding houses, most of whom are mathematics teachers. Students heard several lectures tailored to secondary students by the visiting scholars, but the backbone of the course centred on discovering and using signature strengths. During the first lesson, prior to taking the VIA signature strengths test (www.authentichappiness.org), students wrote narratives about times when they were at their very best. Once they got back their own VIA results, students reread their narratives looking for examples of their signature strengths. Nearly every student found two, and a majority found three, of their signature strengths in their writings.

Other signature strengths lessons included interviewing family members to develop a 'family tree' of strengths, learning how to use strengths to overcome challenges, and developing a strength that was not among an individual's top five. For the final strengths lesson, students identified campus leaders (students or teachers) whom they considered paragons of each strength. The process of identifying and developing strengths has given teachers and students a common language for discussing their lives.

After Signature Strengths, the next series of lessons for the 10th grade focused on building positive emotion. Students wrote gratitude letters to parents, learned how to savour good memories, how to overcome negativity bias, and how gratifying kindness

is to the giver. The blessings journal, in which students nightly kept track of what went well (WWW) that day, is now a staple at GGS.

The Timbertop campus is built on a mountain near Mansfield, Victoria, and all 220 9th-grade students live a rugged outdoor life for an entire year there, which culminates in running a marathon through the mountains. The stand-alone positive education course at Timbertop emphasised resilience (Seligman, 1992). First, students learned about the ABC model (Ellis, 1962): how beliefs (B) about an adversity (A) influence the consequent (C) feelings. Then students learned how to slow down this ABC process through more flexible and more accurate thinking. Finally, students learned 'real-time resilience' (Reivich & Shatte, 2003) in order to deal with the 'heat-of-the-moment' adversities that 9th graders so often face at Timbertop.

After resilience, the next Timbertop lessons addressed active constructive responding (ACR) to the report of good events by a friend (Gable et al., 2004) and the importance of a 3:1 positive-to-negative ratio (Fredrickson & Losada, 2005). Both the first and second units were taught by the health and physical education teachers, a natural fit given the overarching goals of Timbertop.

In 2009, Corio and Timbertop will both have a year-round Positive Education course, and while these stand-alone courses teach content and skills leading to wellbeing, there is much more to positive education than simple stand-alone courses.

# Embedding Positive Education

GGS teachers and administrators have now begun the process of embedding Positive Education into most academic courses, on the sports field, in pastoral counselling, in music and in the chapel. First some classroom examples:

English teachers use signature strengths and resiliency to discuss novels. Even though Macbeth is a pretty depressing read, students hypothesise the strengths of the main characters, and how these strengths have both a good and a shadow side. English teachers also use resiliency concepts to demonstrate more and less accurate thinking about setbacks faced by characters in Arthur Miller's Death of a Salesman and Franz Kafka's Metamorphosis.

Teachers changed speaking prompts from 'Give a speech on a time you were embarrassed or made a fool out of yourself' to 'Give a speech about when you were of value to others'. Student preparation for these speeches took less time, students spoke more enthusiastically and fluently, and teachers reported that listening students did not fidget as much during the speeches.

Religious Education teachers asked students to explore the relationship between ethics and pleasure. Students considered perspectives from Aristotle, Jeremy Bentham and John Stuart Mill in light of the most current brain research on pleasure and altruism. Students also examined a variety of perspectives (including their own) about what gives life meaning and purpose. Students and their parents engaged in a 'Meaning Dialogue', which consisted of a series of e-mail reflections about what makes life meaningful and purposeful. Students and parents received a packet of 60 quotations on meaning and purpose, written by a wide range of famous and not-so-famous figures. These quotations served as prompts for students and their parents as they began their own personal dialogue about meaning.

Geography teachers asked students to consider how to measure the happiness of an entire nation, and how criteria for well-being might differ from Australia to Iran to Indonesia. They also researched how the physical geography of a place (e.g., green space) might contribute to well-being. LOTE (Language other than English) teachers asked students to examine character strengths in the context of Japanese, Chinese and French folklore and culture. Elementary teachers started each day with 'What went well?' (WWW; Eades, 2005) and had students nominate classmates who had done something displaying the 'strength of the week'. Music teachers used resilience skills to build optimism from the very frequent experience of a performance that did not go well. Art teachers at all levels taught savouring of beauty.

Athletic coaches, while eager, found it challenging to embed Positive Education into their instruction given the time factor required to teach the ball, bat or racquet skills needed for the next game. Coaches taught the skill of letting go of grudges against team-mates who performed poorly. Others used the guided imagery techniques taught by Frank Mosca, one of our visiting scholars, to become calm before a contest. Some coaches used refocusing skills to remind team members of the good things they had done on the field and these coaches reported more consistent play among those students who thus overcame their negativity bias. One coach developed a character-strengths framework and accompanying rubric to be used to debrief his team following each game. During the debrief session, students review the game's successes and challenges through the lens of character strengths. Team members identify—in themselves, in their team-mates, and in their coaches—examples when specific strengths were called upon during the game. In addition students identify 'missed opportunities' for using certain strengths, the idea being that identifying these 'missed opportunities' will increase awareness of future opportunities to use strengths.

The chapel services became another locus of Positive Education. Scriptural passages on courage, forgiveness, persistence, and nearly every other strength were referenced during services, reinforcing classroom discussions. When, for example, gratitude was the 10th grade classroom topic for a given week, the chaplain's sermon and biblical readings were about gratitude.

In addition to stand-alone courses and embedding Positive Education into the day, many students and teachers found themselves living it in ways they had not anticipated.

# Living Positive Education

Like all Geelong Grammar School six-year-olds, Kyle starts his day in a semi-circle with his uniformed, first-grade classmates. Facing his teacher, Kyle's hand shot up when his teacher asked, 'Children, what went well last night?'. Eager to answer, several first-graders shared brief anecdotes such as 'We had my favourite last nightspaghetti' and 'I played checkers with my older brother and I won.'

Kyle said, 'My sister and I cleaned the patio after dinner, and mum hugged us after we finished.'

The teacher followed up with Kyle. 'Why is it important to share what went well?' He didn't hesitate. 'It makes me feel good.'

'Anything more, Kyle?'

'Oh, yes, my mum asks me what went well when I get home every day, and it makes her happy when I tell her. And when mum's happy, everybody's happy.'

Heather had just returned from a nursing home where she and her fifth-grade classmates had just completed their 'Breadology' project, in which Ion Ashton, a television celebrity and one of our visiting scholars, taught the fourth grade how to make his granny's bread, and then they all visited a nursing home and gave the bread away to the residents. Heather explained the project.

'First, we learned about good nutrition,' she said, 'Then we learned how to cook a healthy meal, but instead of eating, we gave the food to other people.'

'Did it bother you to not eat the food you'd spent so much time preparing? It smelled really good.'

'No, just the opposite,' she declared, smiling broadly, 'At first I was scared of the old people, but then it felt like a little light went on inside me. I want to do it again.'

Heather's best friend quickly chimed in, 'Doing something for others felt better than any video game.'

Kyle and Heather are two of the threads sewn into the 'living it' tapestry at the Geelong Grammar School in 2008. Kyle's class starts every day with 'What went well?', but Kyle goes home and he lives Positive Education. No courses or units are displaced by WWW, but with this enhancement the days start better, and the students seem to learn with more eagerness. Heather experienced 'helper's high' from learning and using a skill for the benefit of others without expecting any compensation.

This smattering of examples illustrates how Positive Education, whether teaching it, embedding it or living it, is making a difference in the lives of students and teachers at Geelong Grammar School.

# Why Positive Education now?

When nations are at war, poor, in famine or in civil turmoil, it is natural that their institutions should be about defence and damage, about minimising the disabling conditions of life. When nations are wealthy, at peace and in relative harmony, however, they, like Florence of the 15th century, turn to what makes life worth living, not just to curtailing the disabling conditions of life, but to building the enabling conditions of life.

What is all our wealth for, anyway? Surely not just to produce more wealth. Gross domestic product (GDP) was, during the Industrial Revolution, a decent first approximation to how well a nation was doing. Now, however, every time we build a prison, every time there is a divorce or a suicide, the GDP goes up. The aim of wealth should not be to blindly produce more wealth, but to produce more well-being. General well-being—how much positive emotion, how much engagement at work, how much meaning in life our citizens have—is now quantifiable and it complements, and makes sense of, GDP. Public policy can be aimed at increasing general well-being and the successes or failures of policy can be measured quantitatively against this standard.

Prosperity-as-usual has been equated with wealth. The time has come for a *new prosperity*, a prosperity that combines well-being with wealth. Learning to value and to attain this new prosperity must start early—in the formative years of schooling—and it is this new prosperity, kindled by Positive Education, that the world can now choose.

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## References

- American Academy of Pediatrics (2004) Policy statement on school-based mental health services, Pediatrics, 113, 1839-1845.
- Arthur, J. (2005) The re-emergence of character education in British education policy, British *Fournal of Educational Studies*, 53(3), 239–254.
- Benninga, J.S., Berkowitz, M.W., Kuehn, P. & Smith, K. (2006) Character and academics: what good schools do, Phi Delta Kappan, 87, 448-452.
- Bolte, A., Goschke, T. & Kuhl, J. (2003) Emotion and intuition: effects of positive and negative mood on implicit judgments of semantic coherence, Psychological Science, 14, 416-421.
- Brunwasser, S.M. & Gillham, J.E. (2008) A meta-analytic review of the Penn Resiliency Programme. Paper presented at the Society for Prevention Research, San Francisco, May.
- Collaborative for Academic, Social and Emotional Learning (CASEL) (2009) Standards and policies: SEL policy. Available from http://www.casel.org/standards/policy.php (accessed 1 March 2009).
- Cohen, J. (2006) Social, emotional, ethical, and academic education: creating a climate for learning, participation in democracy, and well-being, Harvard Educational Review, 76, 201-237.
- Costello, E.J., Erkanli, A. & Angold, A. (2006. Is there an epidemic of child or adolescent depression?, Journal of Child Psychology and Psychiatry, 47, 1263–1271.
- Cutuli, J.J. (2004) Preventing externalizing symptoms and related features in adolescence. Unpublished honors thesis, University of Pennsylvania, Philadelphia, PA.
- Cutuli, J.J., Gillham, J.E., Chaplin, T.M., Reivich, K., Seligman, M.E.P., Gallop, R. & Abenavoli, R. (forthcoming) A depression prevention program's effect on adolescents' conduct problems and depression/anxiety symptoms. Manuscript in preparation.
- Csikszentmihalyi, M. (1990) Flow: the psychology of optimal experience (New York, Harper & Row). Csikszentmihalyi, M. & LeFevre, J. (1989) Optimal experience in work and leisure, Journal of Personality and Social Psychology, 56, 815-822.
- Dahlsgaard, K., Peterson, C. & Seligman, M.E.P. (2005) Shared virtue: the convergence of valued human strengths across culture and history, Review of General Psychology, 9, 203–213.
- Delle Fave, A. & Massimini, F. (2005) The investigation of optimal experience and apathy: developmental and psychosocial implications, European Psychologist, 10, 264-274.
- Diener, E., Nickerson, C., Lucas, R.E. & Sandvik, E. (2002) Dispositional affect and job outcomes, Social Indicators Research, 59, 229-259.
- Diener, E., Suh, E.M., Lucas, R.E. & Smith, H.L. (1999) Subjective well-being: three decades of progress, Psychological Bulletin, 125, 276–302.
- Duckworth, A.L. & Seligman, M.E.P. (2005) Self-discipline outdoes IQ in predicting academic performance of adolescents, Psychological Science, 16, 939–944.
- Durkheim, E. (1951/1897) Suicide (New York, Free Press).
- Eades, J.M.F. (2005) Classroom tales: using storytelling to build emotional, social and academic skills across the primary curriculum (London, Jessica Kingsley).

Egeland, J.A. & Hofstetter, A.M. (1983) Amish study: I. Affective disorders among the Amish, 1976–1980, *American Journal of Psychiatry*, 140, 56–61.

Ellis, A. (1962) Reason and emotion in psychotherapy (New York, Lyle Stuart).

Erikson, E.H. (1963) Childhood and society (2<sup>nd</sup> edn.) (New York, W.W. Norton & Co).

Estrada, C.A., Isen, A.M. & Young, M.J. (1994) Positive affect improves creative problem solving and influences reported source of practice satisfaction in physicians, *Motivation and Emotion*, 18, 285–299.

Financial Times (2007) Happiness lessons: this is not a subject to add to the national curriculum [Editorial], June 14. Available online at: http://www.ft.com/cms/s/0/dede57d0-1a13-11dc-99c5-000b5df10621.html?nclick\_check=1 (accessed 3 January 2009).

Foster, S., Rollefson, M., Doksum, T., Noonan, D., Robinson, G. & Teich, J. (2005) *School mental health services in the United States 2002–2003*. DHHS Pub. No. (SMA) 05-4068 (Rockville, MD, Center for Mental Health Services, Substance Abuse and Mental Health Services Administration).

Fredrickson, B.L. (1998) What good are positive emotions? *Review of General Psychiatry*, 2, 300–319.

Fredrickson, B.L. & Branigan, C. (2005) Positive emotions broaden the scope of attention and thought-action repertoires, *Cognition & Emotion*, 19, 313–332.

Fredrickson, B.L. & Losada, M.F. (2005) Positive affect and the complex dynamics of human flourishing, *American Psychologist*, 60, 678–686.

Gable, E.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, 228–245.

Gillham, J.E., Brunwasser, S.M. & Freres, D.R. (2007) Preventing depression early in adolescence: the Penn Resiliency Program, in: J.R.Z. Abela & B.L. Hankin (Eds) *Handbook of depression in children and adolescents* (New York, Guilford Press), 309–332.

Gillham, J.E., Hamilton, J., Freres, D.R., Patton, K. & Gallop, R. (2006) Preventing depression among early adolescents in the primary care setting: a randomized controlled study of the Penn Resiliency Program, Journal of Abnormal Child Psychology, 34, 203–219.

Gillham, J.E., Reivich, K.J., Jaycox, L.H. & Seligman, M.E.P. (1995) Prevention of depressive symptoms in schoolchildren: two-year follow- up, *Psychological Science*, 6, 343–351.

Giltay, E.J., Geleijnse, J.M., Zitman, F.G., Hoekstra, T. & Schouten, E.G. (2004) Dispositional optimism and all-cause and cardiovascular mortality in a prospective cohort of elderly Dutch men and women, *Archives of General Psychiatry*, 61, 1126–1135.

Gottman, J.M. & Levenson, R.W. (1999) What predicts change in marital interaction over time? A study of alternative medicine, *Family Process*, 38, 143–158.

Hofferth, S.L. & Sandberg, J.F. (2001) How American children spend their time, Journal of Marriage and the Family, 63, 295–308.

Horowitz, J.L. & Garber, J. (2006) The prevention of depressive symptoms in children and adolescents: a meta-analytic review, *Journal of Consulting and Clinical Psychology*, 74, 401–415.

Inglehart, R., Foa, R., Peterson, C. & Welzel, C. (2007) Development, freedom, and rising happiness: a global perspective, *Perspectives on Psychological Science*, 3, 264–285.

Isen, A.M., Daubman, K.A. & Nowicki, G.P. (1987) Positive affect facilitates creative problem solving, Journal of Personality and Social Psychology, 52, 1122–1131.

Isen, A.M., Rosenzweig, A.S. & Young, M.J. (1991) The influence of positive affect on clinical problem solving, *Medical Decision Making*, 11, 221–227.

Johnson, K.J. & Fredrickson, B.L. (2005) 'We all look the same to me': positive emotions eliminate the own-race bias in face recognition, *Psychological Science*, 16, 875–881.

Keltner, D., Kring A.M. & Bonanno, G.A. (1999) Fleeting signs of the course of life: facial expression and personal adjustment, *Current Directions in Psychological Science*, 8, 18–22.

- Kuhl, J. (1983) Emotion, cognition, and motivation: II. The functional significance of emotions in perception, memory, problem-solving, and overt action, Sprache & Kognition, 2, 228–253.
- Kuhl, J. (2000) A functional-design approach to motivation and self-regulation: the dynamics of personality systems interactions, in: M. Boekaerts, P.R. Pintrich & M. Zeidner (Eds), Handbook of self-regulation (San Diego, Academic Press), 111–169.
- Lewinsohn, P.M., Rohde, P., Seeley, J.R. & Fischer, S.A. (1993) Age-cohort changes in the lifetime occurrence of depression and other mental disorders, Journal of Abnormal Psychology, 102, 110–120.
- Peterson, C., Park, N. & Seligman, M.E.P. (2005) Orientations to happiness and life satisfaction: the full life versus the empty life, Journal of Happiness Studies, 6, 25-41.
- Peterson, C. & Seligman, M.E.P. (2004) Character strengths and virtues: a handbook and classification (New York, Oxford University Press/Washington, DC, American Psychological Association).
- Pfeiffer, S.I. & Reddy, L.A. (1998) School-based mental health programs in the United States: present status and a blueprint for the future, School Psychology Review, 27, 84-86.
- Reivich, K. & Shatte, A. (2003) The resilience factor: 7 essential skills for overcoming life's inevitable obstacles (New York, Broadway).
- Rowe, G., Hirsh, J.B., Anderson, A.K. & Smith, E.E. (2007) Positive affect increases the breadth of attentional selection, PNAS Proceedings of the National Academy of Sciences of the United States of America, 104, 383-388.
- Schuman, H., Steeh, C., Bobo, L. & Krysan, M. (1997) Racial attitudes in America: trends and interpretations (Cambridge, MA, Harvard University Press).
- Seligman, M.E.P. (1992) Learned optimism: how to change your mind and your life (New York, Pocket Books).
- Seligman, M.E.P. (2002) Authentic happiness: using the new positive psychology to realize your potential for lasting fulfillment (New York, Free Press).
- Seligman, M.E.P., Steen, T.A., Park, N. & Peterson, C. (2005) Positive Psychology progress: empirical validation of interventions, American Psychologist, 60, 410–421.
- Spence, S. & Shortt, A.L. (2007) Research review: can we justify the widespread dissemination of universal, school-based interventions for the prevention of depression among children and adolescents? Journal of Child Psychology and Psychiatry, 48, 526-542.
- Snyder, T.D., Dillow, S.A. & Hoffman, C.M. (2008) Digest of education statistics 2007 (Washington, DC, U.S. Department of Education).
- Twenge, J.M. & Nolen-Hoeksema, S. (2002) Age, gender, race, socioeconomic status, and birth cohort difference on the children's depression inventory: a meta-analysis, Journal of Abnormal Psychology, 111, 578–588.
- U.S. Environmental Protection Agency (2006) Latest findings on national air quality: status and trends through 2006 (Research Triangle Park, NC, U.S. Environmental Protection Agency).
- Weissman, M.M. (1987) Advances in psychiatric epidemiology: rates and risks for major depression, American Journal of Public Health, 77, 445-451.
- Weist, M.D. (2005) Fulfilling the promise of school-based mental health: moving toward a public mental health promotion approach, Journal of Abnormal Child Psychology, 33, 735-741.
- Wickramaratne, P.J., Weissman, M.M., Leaf, P.J. & Holford, T.R. (1989) Age, period and cohort effects on the risk of major depression: results from five United States communities, Journal of Clinical Epidemiology, 42, 333–343.

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