

Running Head: POSITIVE EDUCATION IN HONG KONG

**Positive Education in Hong Kong: Opportunities, challenges and  
recommendations**

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University of Pennsylvania

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Advisor: Alejandro Adler, Ph.D.

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Abstract

Hong Kong education is the legacy of the Confucian Chinese culture and British colonialism. While regarded internationally as a hub of world-class education, Hong Kong education is also said to be examination-oriented and results-driven, trading off the psychological health of secondary students, teachers, and parents. This paper first explores the historical, cultural, and societal factors that have shaped Hong Kong education system. Existing data and studies show that teacher resistance and reactive parenting strategies are key local challenges to positive education implementation. Based on these, this paper proposes a model that promotes student well-being and academic diligence through the cultivation of teachers' occupational well-being as well as the provision of teacher and parental autonomy support, with positive relationships being the mediator. A model is proposed whereby it concludes with rigorous measurements that are cultural-specific for implementing positive education in Hong Kong.

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## **Introduction**

Hong Kong is known to be a place of mixed cultures. As a previous British colony, Hong Kong has inherited the structure of the British education system. Having said that, as a Chinese community, the education philosophy and ideology has been heavily influenced by the Chinese culture. Evidence (Furman & Buhrmester, 1992; Goodenow, 1993) suggests that students' intra-psychological processes (i.e. achievement orientation) as well as their significant people (i.e. parents, teachers, peers) in their social contexts can influence their learning outcomes. This paper aims to (i) explore the current education system of Hong Kong, (ii) examine its impact on students through the lens of positive education, and (iii) identify challenges of positive education implementation. Finally, the paper will suggest implications and measurement for effective implementation of positive education in Hong Kong that caters the needs of students, teachers and parents.

## **Education in Hong Kong**

Hong Kong, as a previous British colony, has inherited the structure of the British education system that supports students through primary to secondary schooling. Most school leaders, as well as teachers, are Chinese, and therefore the education in Hong Kong is strongly influenced by Chinese culture. To understand education in Hong Kong, it is essential to explore the historical and cultural factors that explain some of the hurdles of implementing positive education in Hong Kong.

## **Confucian ideology on education in ancient China**

Chinese culture is heavily infused with Confucian thoughts which underlie Chinese virtues. Benevolence, righteousness, propriety, wisdom, and fidelity are recognized as the Five Constant Virtues, which are widely acknowledged within the

Chinese community (Shek, Yu, & Fu, 2013). Confucian ideology on education aims to develop an individual towards *sagehood* – mastery of virtues. Education, in Confucian thought, is a form of personal development (Phillipson & Lam, 2011). It is the process of personal moral perfection, and the primary purpose (as well as the goal of education) is the joy experienced from learning. In other words, Confucian education emphasizes moral rather than utilitarian goals.

While it emphasizes personal enrichment, Confucian education also sees the significance of education for society. The idea of personal fulfillment is inseparable from societal impact because every person is a part of the community (Phillipson & Lam, 2011). Education is seen as a common link that attracts friends and promotes humanity because it allows intellectual exchange. Promoting humanity is the social dimension of Confucian education (*Great Learning, P20*).

Therefore, the classical curriculum in Confucian thought goes beyond the study of texts. The promotion of Six Arts (rites, music, archery, charioteering, writing and mathematics, including rituals and martial arts) aims to reach ‘sagehood’ – the Confucian educational goal (Lee, 2000). Confucius was attached to the *hermeneutic tradition in delivering the curriculum* – the goal of learning to write goes beyond literacy. Learning should aim for personal pleasure and enrichment through books, in order to understand life. The purpose of Confucian learning of the Six Arts is not merely for skill mastery, but to ‘tirelessly seek to comprehend knowledge, and use it to help integrate with the highest ideal of humanity’ (Lee, 2000, p. 160).

### **Impact of the examination system in China**

Since the Sung Dynasty, Chinese education became predominantly examination-driven. Examination has been used as a vehicle for selecting civil servants and government officials in every tier of the imperial bureaucracy (Cheng,

1997). Although most scholars adhered to Confucian education, the purpose of the examination (staff selection) has narrowed the educational purpose. Such system has posed conflicts between the Confucian values and the purpose of education, which has left significant impact on the current education system in Hong Kong.

The content of the civil service examination has been confined to recitations and memorization of classics such as the Four Books and the Five Classics (Chen, 2004). The candidates wrote essays in prescribed forms. During the Ming Dynasty (1368 – 1644), the exam required candidates to be familiar with one specific style and form of text. Imagination was not required. Such examination setting discouraged genuine learning.

The establishment of the Chinese government hierarchy made the examination a means to legitimize, preserve, and reproduce the power of monarchs. Candidates considered the examination as a path towards financial stability, social status and power. This has caused the degeneration of the Confucian model of education. The goal of learning became utilitarian, as it carries so much instrumental value in bringing glory and wealth, not just to the person, but to his entire family. Qianlong (An Emperor of the Qing Dynasty) mentioned in his reflection of the examination system:

*The pursuit for a degree in the examinations creates a kind of person who is only interested in name and profits. The desire is deeply planted in their thinking. It is very difficult to lure them back [to the right way]. (Jin 2001).*

The examination system has eroded the educational philosophy of the Confucius. Education is seen as a political means to secure material benefits (Lee, Wong, & Chow 2006). It serves to reinforce hierarchical power relations. Not only does it have deep-rooted influence on the education system of the Chinese community,

it has also shaped the perception of Chinese people towards education – with a focus on utilitarian goals instead of personal development. Chinese parents have a strong desire for their children to succeed because families are beneficiaries (Jin, 2001). They invest their energy and resources mainly on socializing their children for academic achievement, and consider development in other domains secondary (i.e. well-being, creativity, social skills) (Stevenson & Lee, 1990). Such emphasis on educational success in Chinese culture contrasts sharply with Western cultures that educate children to become well-rounded individuals and value their intellectual abilities in other areas as well as academics (Gardner, 1989).

### **The existing Hong Kong education system**

The focus on examination results and its benefits has continued to influence the education system within the Chinese community. The Hong Kong education system is examination-driven and content-based (Chen, 2004). Secondary education is highly academic and selective, focused mainly on inculcating knowledge in selected disciplines and selection of students with high academic abilities to go onto university. It has been criticized for its didactic approach to teaching because of its overemphasis on subject knowledge, overlooking the importance of cognitive development (Phillipson & Lam, 2011).

The teaching and learning process is examination-driven. After six years of primary education, students have to compete for a place in secondary schools. The admittance is based primarily on the students' examination results. All students will be allocated a place. Secondary schools in Hong Kong are categorized into three bands; with band one schools being recognized as 'good schools' followed by band two and band three schools. The banding of the schools is based on academic performance. Students will go through six years of secondary education before they



take a public examination, which is the Hong Kong Diploma of Secondary Education (HKDSE), that determines their admittance to universities. Generally, the top performing 20% of students will gain admittance to one of the local tertiary institutions. Unlike the United States, there are only eight universities in Hong Kong that provide bachelor degree programs funded by the university grant committee. The rest are self-financed institutions that generally charge higher tuition fees and they generally offer less paths of development. Therefore, some students who fall out of the top 20% will either pursue sub-degree programs, which are considered less preferred options because of the prospects of their graduates. Some of them will consider study abroad if their family can support them financially, however, this is often not an option for most families.

### **Existing Issues with Hong Kong Education**

The current exam system has a detrimental effect on students' interest in learning (Wong, 2001). Although recent educational reforms aimed to move Hong Kong education towards a student-centered approach, there have been challenges.

Declining birth-rate in Hong Kong has led to school closures. The decline in number of students has caused a 14.1% reduction in the number of primary schools between 1994 and 2004 (Hong Kong Annual Digest of Statistics, 2005). The wave later hit secondary schools. Between 2006 and 2017, the number of secondary school students has declined from 489498 to 339849 (Hong Kong Annual Digest of Statistics, 2017). As a policy to tackle the declining number of students, schools that did not receive enough applications would have to permanently reduce their number of classes, which means a reduction of student intake. The schools that failed to fulfill the required number of applications will have to reduce the number of classes further,

until the school closes down. Schools that are performing well are never short of applications. Consequently, the reduction of class is viewed by the public as a label of declining school performance. Therefore, class reduction is usually accompanied by a further drop of student intake in the coming years due to negative image. To survive, schools must compete for students. They have to ensure promising academic results as a selling point. This has also become the priority of school principals and teachers in the teaching and learning process.

### **Issues facing Hong Kong teachers**

As explained above, Hong Kong teachers are stressed because they perceive they have responsibility for their students' results in the public examinations. Driven by such perception, teachers invest most of their time drilling their students for tests and exams. In schools that appraise their teachers' performance based on the grades their students get in the public exams, teaching is mostly about student achievement rather than personal development that Confucians suggest. This adds to the stress of teachers and causes unstable emotions that affect teachers' well-being.

In fact, the lack of emotional stability is prevalent in Hong Kong teachers, causing undesirable conditions that mindfulness can address. Defined as the tendency to display positive emotions as self-confidence, adjustment, resilience, tolerance of stress, and positive affect (McCrae & Costa, 1991), high emotional stability is uncommon in Hong Kong high school teachers. Studies shows that 91.6% of the responding Hong Kong teachers reported an increase in stress level compared to one year ago (Chong & Chan, 2010). The most frequently reported sources of stress are heavy workload due to the recent Hong Kong education reforms that involves frequent change of examination formats and curriculums. These changes have added stress and negative emotions to the existing pressure because they have displaced

educational goals with administrative goals (Tsang & Kwong, 2017). Such displacement of goals has impacted teachers' evaluation of their own value at work. Apart from stress, teachers reported helplessness and frustration.

### **Issues facing Hong Kong students**

Most Hong Kong students are underachieving relative to their intellectual potential (Lam 2008; Phillipson 2008; Phillipson & Tse, 2007). Examination results are regarded not only as key performance indicator, but also a measure of personal value. Among 10,410 students, 51% showed signs of depression, with almost 20% of the interviewed youngsters showing an inclination for depression at different levels (Cheung, 2016). Within the students' social environment, stressful events like public exams and lack of family support are intensifying depression, causing increased suicidal tendency. Hopelessness caused by failure in public exams is positively correlated with suicidality (Lai Kwok & Shek, 2010). Another survey (Cheung, 2016) interviewed 1,685 high school pupils. 27% had considered harming themselves or committing suicide in the past six months. 62% had experienced signs such as feeling sad or crying for no reason, and 63% had sleeping disorders. In 2017, there were 45 student suicides in Hong Kong. Contrary to the Confucian model that suggests education as a pathway towards personal development, the education system in Hong Kong has narrowed students' perspective, implying that examination results equals development.

Under such pressure, the entire education process throughout the 12 years of schooling could be a challenge to those who falter in the exam. Those who do not excel in school could have negative feelings such as guilt, shame, anxiety, and fear of disappointing their parents (Yao, 1985). Researchers suggest that such sentiments can cause maladaptive coping strategies. Cheung (1997) found that low-achieving

students tend to seek emotional comfort in deviant-behaving peers facing the same adversities, drifting further into deviance. In such cases, academic pressure is detrimental to students' psychological and physiological well-being. Pong and Chow (2002) suggests that the Chinese cultural emphasis on academic excellence may contribute to a better future for some students, but at the cost of their present well-being for many.

### **Issues facing Hong Kong parents**

Chinese parents inherited values from their culture, and expect their children to have a positive attitude to their studies and fulfill their responsibility for performing well (Chen & Stevenson 1989; Phillipson & Phillipson 2007). Parental expectations are, therefore, a key factor influencing educational policies and practices.

Researchers have postulated that Chinese societies are relatively more collectivist (Bond, 1996; Hofstede, 1991; Triandis, 1989). This is reflected through the Chinese peoples' need for achievement as a kind of conformity to familial expectations (Yang, 1986). Filial piety and parental obligations are part of the cultural values emphasized in the Chinese culture (Hofstede, 1991). One prevalent motivation for Hong Kong children to pursue academic excellence is to meet the expectations and goals of their parents and teachers rather than fulfill their own individual desires (Stevenson & Lee, 1990). This stems from the belief that their academic success will bring honor to their parents, thereby fulfilling a filial duty. On the contrary, failure at school is associated with the fear of bringing shame to the family (Yao, 1985).

The Chinese proverb 'wishing my son to be a dragon' is still a strongly held sentiment among Hong Kong parents, and the current economic and social conditions in Hong Kong have reinforced the traditional Chinese belief in the importance of

education and the concomitant role of examinations as a means for raising the socioeconomic status of individuals and their families (Lau, Chan, & Lau 1999; Lau & Yeung 1996). A big difference in wages is found between college graduates and non-college graduates (Choi, 2000; Rao et al., 2000). The entire lifetime earnings of a manual worker without a degree is equivalent to 15 years of a secondary school teacher's income. This shows that academic achievement has a strong impact on an individual's future occupational success in Hong Kong, and this explains why parents are increasingly demanding on their children's studies. The demand is even more intense when competition for employment soars, affected by the socio-economic environment.

As such, cultural expectations intertwine with the keen competition in Hong Kong society, especially since the return of sovereignty in 1997. Parents have increasing expectations on their children regarding academic performance. A body of research suggests that mothers of Chinese students were less satisfied with their children's grades than mothers of American students (Chen, 2004). Thus add to the stress of their children.

### **What Is Positive Education?**

Positive education refers to an approach to education that complements academic learning with positive psychology theory (Adler, 2016). Positive psychology is the scientific study of the conditions and processes that lead to human flourishing on multiple levels, including the biological, personal, relational, institutional, cultural, and global dimensions of life (Seligman, 2000). Based on these guiding principles, positive education emphasizes the nurturing of strengths and motivation to promote well-being (Chen & McNamee, 2011). The result is a blend of

academic learning, and character and well-being development, ultimately providing students with well-rounded life skills.

Positive education is becoming increasingly important in today's education system. Mental disorders, such as depression and anxiety, have noticeably increased within schools (Kern, 2017). Nearly one in five children experience a major depressive episode before graduating from high school. Fortunately, early positive education research has demonstrated positive effects not only on student well-being, but also on increased academic performance, improved social functioning, and mitigation of depressive symptoms (Bott et al., 2017). The relationship between well-being and academic achievement is further highlighted in a meta-analysis of 2,011 studies involving over 270,000 students from kindergarten through high school (Waters, Sun, Rusk, Cotton, & Arch, 2017). The analysis shows that, on average, students enrolled in a social and emotional learning program scored 11% higher on achievement tests compared to other students (Waters et al., 2017).

### **Exemplar of positive education implementation in schools**

Geelong Grammar School (GGS) in Australia was the very first school that introduced positive psychology in education. It started searching for ways to enhance well-being in 2003 as rates of mental illness and psychological distress were continuing to rise in society at large (Norrish, 2015). GGS trained every staff member (teaching and non-teaching colleagues) in positive psychology principles with the objective to *scale positive education school-wide so as to make its long-term vision of improved well-being a reality* (Norrish, 2015). In 2008, 220 GGS staff received training from University of Pennsylvania through either 6-day or 9-day courses. Three years later, GGS selected 25 staff to attend a train-the-trainer course, with the objective of them providing positive psychology training in the school

(Norrish, 2015). These trainers now run a yearly positive education program for new staff (Bott et al., 2017) as well as parenting programs (Norrish, 2015). The continued efforts have increased the well-being levels of both staff and students at GGS, which are now higher than the national average (Vella-Brodrick, Rickard, Hattie, Cross, & Chin, 2015; Quinlan, Swain, Cameron, & Vella-Brodrick, 2014; Seligman, Ernst, Gillham, Reivich, & Linkins, 2009).

GGS focuses its positive education efforts on six domains: positive relationships, positive emotions, positive health, positive engagement, positive accomplishment, and positive purpose. Its implementation plan entails four components: “learn it”, “live it”, “teach it”, and “embed it” (Adler, 2016).

*Learn it:* GGS dedicates new staff to an onboarding program on positive education. Existing staff also receive a one-day training yearly to enhance their knowledge and skills in positive psychology (Adler, 2016). “Learn it” also emphasizes the importance of teaching parents the skills and mindsets involved in positive psychology (Norrish, 2015).

*Teach it:* There are two ways of teaching positive psychology in GGS: explicit teaching and implicit teaching. Explicitly, GGS provides positive education classes for 5th - 10th grade students and encourages them to reflect on meaningful concepts in their lives (Adler, 2016). Implicitly, GGS has integrated positive psychology into the wider curriculum. For example, GGS has its students identify strengths in the characters in stories in English class, study how different physical environments can support or hinder well-being in Geography, and create self-portraits in as a means of enhancing self-awareness in Visual Arts (Norrish, 2015).

*Live it:* At GGS, staff who have been trained in positive education are encouraged and supported to take regular action to nurture their own wellbeing,

especially since they serve as role models for students (Norrish, 2015). As an administrator at GGS points out, “when you are making such a commitment to Positive Education, it needs to be authentic. It can’t just be taught; it also has to be lived” (Norrish, 2015, p. 98).

*Embed it:* GGS launched a positive institution project that aims to create positive cultural changes in the work environment for school staff. Some projects that have been implemented thus far include staff competing with one another to reach 10,000 steps a day and starting meetings with the “what went well” intervention (Norrish, 2015).

As a result of GGS’s continued efforts, the well-being levels of both staff and students at GGS has increased. In fact, student well-being at GGS is now higher than the national average (Vella-Brodrick, Rickard, Hattie, Cross, & Chin, 2015; Quinlan, Swain, Cameron, & Vella-Brodrick, 2014; Seligman, Ernst, Gillham, Reivich, & Linkins, 2009)

### **Positive education outcomes**

Research has shown that academics and well-being can work synergistically. Grit, a character strength centered on passion and persistence, can out-predict IQ in terms of effect on academic performance (Adler, 2016; Duckworth & Seligman, 2005). Character strengths and well-being can be improved over time with proper teaching and deliberate practice (Niemiec, 2018). While the elements of well-being themselves are critically important and are worthy of focus, they are also linked to other important life factors that, including school performance (Adler, 2016; Slade, Oades, & Jarden, 2017), future income (Diener et al., 2002), and physical health (Diener et al., 2017).



While positive education is a relatively new concept, education systems in the UK, Australia, Bhutan, and others around the world have adopted a positive education framework. In Mexico, fifteen months after adopting a comprehensive well-being program, 35 well-being focused schools had children with both higher well-being and significantly higher standardized test scores than control schools (Adler, 2016). Increased engagement and perseverance were the success drivers. In Peru, a University of Pennsylvania program taught 28 Peruvian trainers how to implement a well-being curriculum. These trainers in turn taught the curriculum to 590 local trainers who cascaded the learning to principals and teachers from 694 schools to over 690,000 students. The well-being curriculum improved academic performance fifteen months later (Adler, 2016). This initiative demonstrates the potential effectiveness of cascaded training, in addition to the ability to drive well-being and academic performance at scale. The teacher training itself is important, noted by the research: the perceived value of the program by the students was tied to the teachers' ability to deliver positive education lessons (Adler, 2016).

Lea Waters (2011) separately reviewed 12 positive education interventions designed to foster well-being in schools. The results of the studies demonstrate that positive psychology interventions in schools are significantly related to both well-being and academic performance as well. Moreover, the research highlighted a common factor of the 12 programs – the importance for positive interventions to be implemented by teachers, benefiting from the existing ongoing relationship and ability to reinforce the lessons outside of the curriculum itself (Waters, 2011).

The relationship between well-being and academic achievement is further highlighted in a meta-analysis of 2,011 studies involving over 270,000 students from kindergarten through high school (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

The analysis showed that, on average, students enrolled in a social and emotional learning program scored 11% higher on achievement tests compared to other students (Waters et al., 2017). In Australia, a similar program resulted in improvement in academic performance equal to an extra six months of school, and in the United States, a study found that life satisfaction and positive affect predicted improved GPAs one year later (Waters et al., 2017).

A comprehensive meta-analysis of 51 positive psychology interventions conducted by Sin and Lyubomirsky (2009) showed significant well-being enhancement ( $r = 0.29$ ) and decreased depressive symptoms ( $r = 0.31$ ) from positive interventions. The Penn Resiliency Program (PRP) focuses on increasing students' ability to handle daily stressors by promoting optimism and developing assertiveness, creative brainstorming, and other coping and problem-solving skills. A meta-analysis of 15 PRP studies demonstrates reductions of depressive symptoms at all follow-up assessments, up to 12 months later (Brunwasser, Gillham, & Kim, 2009). The data provides insights to a positive approach to education.

Positive Psychology improves well-being and academic achievement for students, and it also brings positive impact on students' mental health. Early positive education research has demonstrated positive effects on student well-being, increased academic performance, improved social functioning, and mitigation of depressive symptoms (Bott et al., 2017). Two specific design features of positive education studies that show promise include the implementation of positive interventions by teachers and infusing positive psychology skills into already established school subjects (Waters, 2011).

### **Challenges In Implementing Positive Education In Hong Kong**

To implement positive education in Hong Kong schools, it is necessary to impose changes not only to teaching and learning, but more importantly, to the objective of education. Education must change and go beyond its deep-rooted examination-driven approach adopted from the Chinese culture and history as discussed in the previous sections of this paper. Academic excellence is the primary concern of Hong Kong teachers and parents because it is viewed as a determining factor to students' future development, and also the brand of the school (Phillipson & Lam, 2011). The market demand for academic excellence has therefore reinforced the importance of exam preparation as an educational goal in secondary schools (Eng, 2012). Therefore, teachers generally have a strong belief that exam drillings are the best assistance they can offer to prepare students for their future (Phillipson & Lam, 2011). What can be done to convince teachers to teach for well-being instead of examination results? Facing the keen competition among schools, what can be done to reassure teachers that positive education will lead to competitiveness?

#### **Teachers' resistance**

Plant (1987) suggests a number of factors that can contribute to resistance to change. The fear of uncertainty and failure; inadequate knowledge and information; threat to self-identity and competence; threat to power base; fear of failure; reluctance to try and experiment; and reluctance to let go. Studies about teachers' resistance to change have provided explanations on today's Hong Kong teachers' reactions to change. Several contributors to teacher resistance in Hong Kong are discussed below:

#### **Lack of self-efficacy**

Mutch (2012) studied curriculum change and teacher resistance in New Zealand education. Her synthesis of teachers' feedback on educational changes

concluded that teachers from all sectors are constantly looking to create engaging and purposeful curriculum. Their effort of change is mainly to put forward what is best for their students, while resistance usually stems from moral considerations, either on the benefits to students or on teachers' self-efficacy in implementing the changes. "When curriculum reform runs counter to teachers' beliefs as to desirable outcomes for students, and undermines what they know to be effective pedagogical practice, this creates a dissonance which reduces their effectiveness" (Mutch, 2012, p. 4).

In his study of teacher resistance to change, Mohamed (2008) identifies fear of failure as one of the key factors that constitutes resistance. Many teachers express hesitancy to try new skills because they fear that the skill will fail, causing negative impact on students and their existing practices. In Hong Kong, most secondary schools require teachers to commit to professional development training two or three times a year. Owing to the tight schedule of the academic calendar, the duration of the training ranges from two to eight hours. To cater to diverse educational needs, most of these trainings are one-off programs on standalone topics. The time constraint as well as the lack of continual development plan have prevented in-depth training, thereby a lack of thorough understanding of novel knowledge and techniques. Without further assistance, teachers can barely understand the potential benefits of new educational thoughts.

### **Cultural stereotype of teachers' identity**

Crookes (1997) suggests that many schools regard teachers as all-knowing with a conception that new knowledge is independent of social conditions. Hong Kong education, as heavily influenced by the Chinese culture of respect and hierarchy, puts teachers in a superior identity of knowing and teaching – an identity that teachers are unlikely to move out of by themselves (Chen, 2004).

In Hong Kong, teaching is generally teacher-directed. This reinforces the prestige and authority of teachers which the Chinese culture promotes. In Chinese culture, the teacher-student relationship is structured and hierarchical, in which students have to respect and conform to the instructions of teachers. In such context, it is not easy for teachers to be convinced about educational thoughts that differ from their own, because the concept of 'teachers as learners' poses challenge to teachers' expertise. Lamie (2002; 2004) postulates that the question is not about teachers' ability to change, but a lack of self-confidence and self-worth that impedes some teachers in facing change. The threat to self-worth, again, speaks to the lack of sufficient information and knowledge about the innovation, which hinders change efforts. Self-efficacy comes from perceived mastery of a skill, and it takes time and deliberate effort to learn, comprehend and practice to develop a new expertise. Such a process of expertise development is face-threatening to teachers as it erodes their identity of knowing-all. Such a barrier gets stronger with the experience of teachers. That explains the negative attitudes towards issues involved in innovation.

### **Lack of motivation**

Most Hong Kong teachers are hired as permanent staff, and they are rarely made redundant. Permanent teaching staff are paid according to their years of experience. They receive a salary increment every year according to the civil servant pay scale, and they receive a pension when they retire. Even if they are yearly appraised by the principal, their performance has little effect on their tenure. As a result, many experienced teachers serve until retirement because of career stability. The education system in Hong Kong has a very structured promotion ladder. Most positions of middle management are taken by experienced teachers. The momentum of organizational change is thus dependent on the level of motivation of individual

teachers who are in the position to take extra effort to drive and sustain new interventions.

Another population within the Hong Kong teaching force is non-establishment teachers who work on contract basis. Due to the saturation of qualified teachers and the declining birth rate, the government has frozen the number of permanent teaching staff. As an alternative for schools to cater to changing student enrolments, the government provides schools with funding for hiring contract teaching staff. The duration of a contract depends heavily on the number of students of individual schools. Certain fundings support schools in hiring contract teachers on a project basis. The wages of these positions vary, while some teachers are paid less than what they should receive. In 2016, there were 4170 contract teachers in Hong Kong and the number is increasing (Hong Kong LCQ14, 2016). These teachers are generally less experienced and they usually hold relatively less senior positions in the school setting. Because of the employment terms, most of these contract teachers perceive a lack of procedural-voice justice and distributive justice, which are predictors of perceived helplessness and coping ability (Hassard, Teoh, & Cox, 2016), and which in turn have impact on stress levels and well-being (Prilletensky, Peirson, & Nelson, 1997). Crookes (1997) postulates the psychological separation between teachers as human beings and teachers in their working environments.

*When teachers have to "work in conditions in which they cannot maintain professional standards, and are unable to derive ... satisfaction and opportunities for personal growth" (p.74), it is hardly surprising that their professional practice is not at the optimum; and that for these teachers, survival rather than pedagogic concerns are the priority.*

As a result, these teachers are less likely to devote themselves to the change process. What can be done to motivate teachers with different years of experience to move towards positive education strategies?

### **Filtering out of the innovation**

Roberts (1998) views the lack of change in teachers not as resistance to change, but as the filtering out of the innovation. A common feedback from Hong Kong teachers towards professional development is that the new learnings are not new because what has been taught is what they are already. Roberts (1998) looks at it from a constructivist perspective of learning:

*Teachers - and especially experienced teachers - make sense of professional learning by interpreting input in such a way that it fits into their existing framework of theories about teaching and learning that have been established through prior experience. This is not the same as misinterpreting input.*

Instead, these teachers assimilate the new input to conform to their existing knowledge and beliefs that have become established and are central to their understanding of themselves. When teachers are not aware that they are following their existing pedagogies, it is hard for them to be convinced to adopt new strategies. Roberts suggests that uncovering teachers' implicit theories and relating them to the new learning can help minimise such processes of assimilation.

### **Parents' challenges**

Researchers have suggested that parental support is essential to children's healthy development and its influence extends from childhood to adolescence (Feldman & Rosenthal, 1991). Researchers define parental support as the parents' positive involvement and investment in their children's education (Cai, 2003). Adolescents who lack parental support can experience tension and negative emotions,

which cause problem behavior that affects well-being (Lamborn, Mounts, Steinberg, & Dornbusch, 1991). In contrast, higher level of parental support is linked to higher motivation to learn and better behavior (Cai, 2003).

### **Overdose of parental control causes frustration in adolescents**

One cultural value in the Chinese parent-child relationship is filial piety. It refers to an individual's devotion to one's parents. Confucius defines filial piety as taking care of and showing love, respect and courtesy to one's parents. Derived from this, children should not rebel against parents while it emphasizes that love rather than blind obedience is the basis of filial piety (Eng, 2012). Like teacher-student relationships parent-child relationships are structured and hierarchical in the Chinese community. Children have to respect their parents' opinions and instructions in order to be a 'good son' (Hofstede, 1991). For example, in the Chinese culture, children pursue academic results because they wish to meet their parents' expectations rather than fulfilling their own desires (Stevenson & Lee, 1990). This is still true until today. A lot of secondary school students study hard in order to please their parents. Excelling in their studies brings glory to their parents. It is a filial duty. Compared to adolescents in the western culture, Chinese adolescents tend to grow up under strict rules of their parents.

Adolescents are establishing their self-image as adults. In western cultures, adolescents value autonomy and detachment from parents (Fulgini & Eccles, 1993). In Chinese communities, adolescents are influenced both by their psychological development as well as their culture that emphasize filial piety. As a result, instead of detachment, Chinese adolescents value autonomous support from their parents. Parental autonomous support is parental autonomy the encouragement of adolescents' enactment upon their true personal interests and values (Deci & Ryan, 2000). The



overdose of parental control will come in conflict with the developmental needs of adolescents, causing negative reactions (McNeal, 1999). In Hong Kong, adolescents aged 13-16 generally regard their parents as over-controlling and dominating. While children are yearning for independence and reliance on self effort, they are culturally expected to obey and conform to their parents' instructions. However, most Chinese parents are not aware of the developmental needs of adolescents. This often results in poor parent-child relationships, which is found to affect adolescents' well-being negatively (Shek, 1998). What can be done to educate parents about the developmental needs of their children, at the same time, preserve filial piety as a Chinese virtue?

### **Parental support through reactive strategies**

Students' academic achievement relies not only on teachers' effort, but more importantly, their parents. The interrelationship among all key players in the education system (students, teachers, and parents) has determining effect on students' academic effort (Senge, 1990). A study by Hinds and his colleagues (1999) suggested that parental support has the strongest influence on students' attitude toward school. Parents' recognition of their progress in school has causal effect on students' academic effort and belief about the value of education for their future. Students who perceive more parental support also have less behavioral problems. The result of the study suggests that parents should take the role of a supporter to their children.

In contrast to the more individualistic cultures like the United States where individuals are believed to be accountable for their own achievements, parental obligations are embedded in the collectivistic Chinese culture (Stevenson & Lee, 1990). Researchers suggest that achievement is rather narrowly defined as academic success in the Chinese culture (Stevenson & Lee, 1990). While the Chinese culture

emphasizes educational success, Chinese parents believe they are responsible for their children's' success or failure.

Such perceived obligation explains the phenomenon that Chinese parents tend to provide extra support to their children when they are underperforming. The form of support can be extra guidance and monitoring of time use, assistance on studies, and control of social and extra-curricular activities. In fact, Shek, Yu, and Fu (2013) found that Hong Kong students with higher perceived parental support generally have higher engagement in learning than those who see their parents as less supportive and less demanding. The level of perceived parental support has strong impact on their self-perceived cognitive competence, which mediates their achievement (Grolnic, Ryan, & Deci, 1991) as well as their social judgment (Wentzel, 1997). There are also studies about the authoritarian parenting style that explains that the combination of high demands and warmth from parents will benefit children. In such regard, more parental support seems to have positive influence on students.

However, recent research on Hong Kong students' learning shows that the overdose of parental support has an inverse relationship with the children's academic engagement (the motivation to learn) as well as their well-being (Chen, 2004). Findings of the research shows that the stronger perceived academic support from parents, the worse these adolescents perform in school. That means parental support does not always translate into performance. It mediates through perceived engagement in learning – academic diligence. McNeal (1999) explained this with his *reactive hypothesis*. In the face of the highly competitive environment in Hong Kong, parents are driven by the fear of academic failure, which they perceive as a predictor of unpromising prospects and poor life. Therefore, children's' underachievement prompts their parents to take reactive strategies to improve their performance

(McNeal, 1999). These reactive interventions of parents include micro-monitoring, social control, and calling up teachers. The Chinese culture values control and discipline as good parenting practice, but this is exerting pressure on their children, causing adverse effect on their psychological well-being. Chinese parents feel responsible for their children's failure because it translates into their own failure (Bond, 1996). How can positive education fulfill such cultural expectations of Chinese parents and, at the same time, cultivate the psychological well-being and healthy development of adolescents?

### **Recommendations For Effective Implementation**

Launching positive education in Hong Kong means launching changes to the educational philosophy that dates to the Sung Dynasty (960 – 1280). As discussed, the Hong Kong education system is culturally specific, within which, teachers, parents and students are operating with ideologies that are not only driven by the current socio-economic environment, but also from the Chinese culture. It is essential to be mindful of the human factor of change in order to ensure successful implementation of positive education in Hong Kong (Newton, 2016).

#### **Cultivate procedural-voice justice through practising shared governance**

As discussed in the previous sections, Hong Kong teachers find it difficult to cope with imposed change because the change could imply potential frustration in their ambitions, extra workload resulted, or instability of their job function. Therefore, even though a top-down approach enables members of the school to take rapid action towards a clear and desired direction (Beer et al., 1990), studies about education reforms have identified resistance as a key reason that failed the top-down

approach when implementing changes in schools. One piece of evidence that is linked to the failure of top-down approach is the lack of perceived procedural-voice justice among teachers.

Procedural-voice justice refers to teachers' voice when they are given the opportunity to present information to the decision-makers (Lind & Tyler, 1988). Procedural justice theory suggests stronger voice predicts higher satisfaction with the outcome and with a procedure that provides process control (Thibaut & Walker, 1975). Research about changes in school settings have shown that Hong Kong teachers perceive limited procedural-voice justice in school (Hassard, Teoh, & Cox, 2016). This is usually accompanied by reduced teacher motivation, morale, and collegial interactions that are necessary to bring about reform (Newton, 2016).

In order to promote procedural-voice justice during the implementation of positive education strategies, schools can consider bringing in the concept of shared governance. Shared governance in school context refers to shared decision making (Malen & Ogawa, 1988). It is an approach that develops *cooperative relationships in order to reach collaboratively agreed-on goals* (Dunlap & Goldman, 1991). Olson and Dweck (2009) defines shared governance as a delicate balance between school leaders and staff participation in planning and decision-making processes, on the one hand, and administrative accountability on the other. It highlights the acknowledgement of teachers' expertise in education (Maeroff, 1988), and the principal's orientation of power as 'working with' teachers (Kreisberg, 1992). As a school practices shared governance, it empowers teachers to make educational decisions and invites teachers' participation in policy making through diverse channels.

Teachers in schools that practice shared governance are found to have enhanced reflective capability for educational problem solving (Blase & Blase, 2001). Teachers recognize the value of thinking and are given opportunities to implement their thoughts. They are engaged in the evaluation of actions and the corresponding influence on teaching and learning. The reflection extends to school-wide problems (Blase & Blase, 2001). Such reflective power of teachers translates into a systematic effort that involves planning, implementation and assessment. Such effort has also increased teachers' motivation, sense of team, sense of ownership, and work commitment. In Hong Kong schools where teachers report the lack of procedural-voice justice, shared governance seems to be a way to cultivate teacher engagement in change initiatives. The inclusion of teachers in the change process may cultivate and support teachers perceived 'voice', which is a salient approach taken in managing organizational change and uncertainty (Hassard, Teoh, & Cox, 2016). Shared governance can be achieved through including teachers on a steering group overseeing the change process or participation in strategic meetings, or through a consultation process that collect teachers' views in response to a school issue. Shared governance facilitates a teacher's sense of mattering, their purpose of work, engagement and commitment and, ultimately, their well-being.

Another significant benefit of developing shared governance in school is the cultivation of a sense of professionalism among teachers. It refers to *seeing oneself as a trusted and respected individual* and the ability to make independent decisions (Blase & Blase, 2001). As discussed, Chinese teachers bear the cultural expectations of knowing-all, which creates barriers for professional development, especially on novel educational ideas and techniques. The concept of shared governance allows teachers to experiment with their ideas and exchange opinions. It redirects the focus

of teacher behavior to continuous improvement instead of being perfect and correct all the time. Such dimensions of shared governance in school alleviates Chinese teachers fear of being wrong. Harrington & Slann (2011) evaluated the effectiveness of shared governance in higher education in the United States. They concluded that shared governance is a vital necessity due to the increasingly demanding environment for informed decisions that are made based upon divergent opinions.

An effective model to shared governance in facilitation of change initiative is the *R-G-U* approach – *Readiness* (R), establish common *goals* (G), and respond to the school's *unique characteristics* (U) (Blase & Blase, 1994).

- *Readiness* is the antecedent to empowerment in regard to implementing change in schools (Newton, 2016). Teachers have varying levels of engagement and commitment depending on their career stage. Shared governance should recognize the dynamics and strategically prepare teachers towards professionalism through staff development and task allocation simultaneously. This links to the staff development initiatives of Hong Kong schools. More will be discussed in the following section about cultivating teachers buy-in.
- *Common goals* are identified through reflective and collaborative discussions among staff. Fruitful discussions first focus on educational tasks, and less on administrative issues. For the case of implementing positive education in Hong Kong, the discussion should focus on the cultivation of student well-being and, as teachers are generally concerned, academic performance.
- *Unique characteristics* of the school refers to the specific school culture and political context that determines the feasibility of decisions made. This include specific school routines and human relationships

The R-C-U approach helps school leaders prepare their teachers for shared governance. The concept of shared governance is a combination of top-down and bottom-up approach. On one hand, the school leaders can allow every member to acknowledge the strengths, weaknesses and obstacles facing the school. They also provide intellectual stimulation and knowledge that allow for discussions and adaptations. On the other hand, teachers are given the chance to formulate change initiatives that fit their educational needs. Shared governance, as a combination of top-down and bottom-up approach, posits teachers as problem solvers and educational enhancers who focus on both problems and solutions, unlike a pure bottom-up approach that has been criticized for presenting problems but not solutions to the top managers (Fischer, 2004). The shift from isolation to public collaboration reinforces a sense that all staff, including the school leaders, work equal and are accomplishing the same goal.

### **Cultivate teachers' buy-in through promoting love of students**

In previous sections, we discussed the lack of self-efficacy and lack of motivation being two contributors of teachers' resistance to change. After all, the successful implementation of positive education relies heavily on teachers' contributions and dissemination of positive psychology in and outside classroom. It is therefore crucial to cultivate teacher buy-in and minimize resistance.

Concerning teachers' lack of self-efficacy, a lot of schools have provided mandatory staff development on topics of concern to the school. However, most of these initiatives are top-down without an understanding the actual needs of teachers. It often fails to convince and motivate teachers about the change initiatives (Fischer, 2004). From developmental perspective, teachers' defensiveness is an expression of their inability to process contradicting information, which shuts them off from

learning and leaves them struggling (Li & Shiu, 2008). Traditional staff development programs in Hong Kong emphasize the acquisition of pedagogies that do not respond to the actual needs of teachers. To impact teacher behavior, it is crucial to acknowledge their perception regarding teaching and professional development (Fischer, 2004). In other words, to cultivate teacher buy-in, address the perception of teachers and provide what they need professionally.

With the impact of culture and social pressures, teachers tend to view academic excellence as the primary educational goal. Naturally, Hong Kong teachers yearn for pedagogies that help students excel academically. In fact, teachers are hoping to do their best to help students secure a promising future. A study on commitment trends of Hong Kong teachers between revealed that 'love for students' remained a predictor of teachers' commitment throughout all phases of their career (Choi & Tang, 2008). It is worth noting that a supportive environment is crucial for teachers' commitment to sustained effort. Also, teachers' commitment is fueled by students' recognition and improvement. The psychic reward contributes to teacher retention.

Hong Kong teachers' love of students provides insights on future staff development initiatives. Professional development should enable individuals to have *the problem-solving, innovative skills to cope with new skills as they arise* (Fischer, 2004). Hong Kong teachers need to see the link between professional development and their teaching needs (Phillipson & Lam, 2013). The implementation of positive education should therefore acknowledge Hong Kong teachers' concern about academic performance by showing how it will lead to academic performance and demonstrate a variety of dissemination channels. The emerging data of how positive education leads to academic results will reassure teachers about the effectiveness and



impact. Procedural-voice justice and distributive justice should also be taken in to account when considering the format of staff development in order to ensure a continual and systematic introduction to positive education that improves teachers' perceived ability to cope (Newton, 2016). Research shows that when the entire faculty is engaged in the change process, the transfer rate of training into classroom practice is far higher than that when only a part of the faculty is engaged (Joyce & Showers, 1995).

### **Increase teacher motivation through enhancing expectancy, value, and affect**

Teacher motivation is comprised of three components: expectancy, value, and affect (Peetsma, Hascher, van der Veen, & Roede, 2005; Pintrich & De Groot, 1990).

- *Expectancy* refers to teachers' self-efficacy. When teachers strongly believe in their abilities in accomplishing a desired result, they become more engaged in professional learning activities. To achieve this, it will be important to help teachers learn and feel comfortable with the positive education materials and research.
- *Value* refers to internalizing school goals into personal goals (Peetsma et al., 1990). In a study of a transformative leadership teacher training program, the more that teachers were able to internalize the program's goals, the more engaged they became in professional learning activities and the more they kept themselves up to date as a result (Thoonen et al., 2011). Internalization of school goals into personal goals can be facilitated through collaborative activities and participative decision-making. These tactics can help develop teachers' tolerance for uncertain situations, and in turn, lead to a greater engagement in professional learning activities (Thoonen et al., 2011).

- *Affect* refers to positive feelings and emotions which teachers derive mainly from their tolerance of uncertainty (Peetsma et al., 1990). Teachers who are more certain tend to be more flexible in their approaches. A study confirms that intellectual stimulation appears to impact both teacher affect (tolerance for uncertainty) and value (internalization of school goals into personal goals) components of teacher motivation indirectly via teacher collaboration and trust (Thoonen et al., 2011). By encouraging teachers to have in-depth reflections on their values and beliefs, teachers will develop their ability to appreciate and trust and become more willing to collaborate. This ultimately results in increased motivation for professional learning and commitment to implementing the content into teaching practices.

In practice, changes demand commitment from teachers, who may or may not agree with the reform idea (Fullan, 2002). Without teachers' commitment, it is unlikely that professional development programs will come to fruition (Silin & Schwartz, 2003).

### **Educate parents through encouraging school-family partnership**

Given that Chinese parents have strong influence over their children's development, it is inevitable to consider the potential impact of parents in education. Even though peer influence has considerable impact on adolescents' development, researches found that Hong Kong adolescents reported support from parents and teachers as powerful predictors of their self-perceived engagement in learning (Chen, 2004). It sheds light on the need for a holistic positive education model to engage Hong Kong parents.

Chinese parents, as discussed, have authority over their children because of the cultural hierarchy within parent-child relationships. The two issues to address are:

(a) understanding and respect of adolescents' developmental needs, and (b) striking a balance between pursuit of their children's academic excellence and well-being.

Considering the busy lifestyle of Hong Kong people, it is difficult for schools to facilitate formal parent training on positive psychology. Parents have to work for long hours, and they may have other priorities apart from positive psychology. Therefore, it is important to understand their priority – their children's academic performance. From my personal experience, a secondary school in Hong Kong recorded 90% parent attendance on the day they receive the academic report of their children. However, they recorded only close to 20% parent attendance for a seminar on mental health development.

In order to cultivate parents' understanding of their children's developmental needs, it is important for schools to help parents see the benefits of positive education and how it enables their children to thrive. Chinese parents are demanding to their children. The cultural heritage of being demanding to children has induced a deficit-based parenting method in Hong Kong parents. A deficit-based appraisal focuses on the elimination of demerits and misbehavior of students (Waters, 2017). The intention of such is to help them improve so that they will succeed in the future. Both Hong Kong teachers and parents are influenced by the deficit-based model of education and therefore become fault-finding. Changing the education system will involve changes in the appraisal of students, shifting from a deficit-based to an asset-based nature.

Positive education must shift the paradigm to an asset-based model that focuses on the children's strengths and aims at enhancing developmental assets (Waters, 2017). Given that parents generally prioritize academic performance, a school-family partnership will engage parents in part of the education process.

Through which, parents will experience and witness what is beneficial to their children towards healthy development. Examples of school-family partnership could be engaging parents in the leadership of after-school activities as well as the mentorship of students. Provided that prior training is provided, parents will become accountable for their children's education as they contribute to the school. Also, workshops and lectures can be held to help parents understand the impact of positive parenting.

Although the Hong Kong Education Commission has emphasized in its education reform statement that 'Life long learning and all-round development' is expected (Education Commission, 2000), very few schools are taking the asset-based approach towards education. The schools' efforts in appreciating assets possessed by these adolescents will be a pathway towards convincing parents of the value of such a model.

### **Measuring Positive Education Outcomes in Hong Kong**

The Hong Kong government has developed five evaluation tools in support of schools' self-evaluation work for sustainable improvement. In fact, the government has been aware of the need to foster student well-being. However, the effort of well-being promotion and its intensity relies heavily on individual school principals. In order to implement positive education effectively, rigorous measurement is necessary. Effective measurement should evaluate the impact on all stakeholders (students, teachers and parents) and the design of the tool should be culturally-sensitive so that it addresses factors of concern which we have discussed in the previous sections. Successful implementation of positive education relies on the synergy among students, teachers and parents. This section of the paper discusses

three of the evaluation tools in Hong Kong schools and to what degree do they measure well-being within the ecosystem of schools. We will also discuss the empirical metrics in positive psychology that can complement a cultural sensitive measurement of positive education implementation in Hong Kong.

### **Existing measurement tools**

Among the five evaluation tools endorsed by the Education Bureau, three are relevant to the promotion of well-being as well as the deep-rooted emphasis of academic performance. Each has its strengths and limitations in supporting the implementation of positive education.

### **Assessment Program for Affective and Social Outcomes (APASO-II)**

In 2003, the Education Bureau in Hong Kong has launched the APASO-II. The government endorsed assessment is in facilitation of self-evaluation of programs and students' social and affective development in schools. The design of APASO is based on Bronfenbrenner's (1995) model of *ecological system theory*. It was further revised and launched in 2010 as APASO-II (Education Bureau HKSAR, 2016b). APASO-II has established good validity and reliability with a sample size of 80,000 primary school and 130,000 secondary school students in Hong Kong (Education Bureau HKSAR, 2016a; Wu and Mok, 2017).

In APASO-II for secondary schools, there are 10 scales. The first three scales (*Self-Concept, Health and Well-being, and Stress Management*) measure students' affective and social performance related to the self. The next five scales (*Interpersonal Relationships, Attitudes to School, Motivation, Learning Competency and Independent Learning Capacity*) measure students' affective and social performance related to their immediate social influences such as peers, family and school. The following three scales (*Leadership, Ethical Conducts and National*

*Identity and Global Citizenship*) measures students’ affective and social performance related to community. The final scale (*Goals of Life*) measures students’ affective and social performance related to the future. Table 1 summarizes the structure and the APASO-II scales from the APASO-II training manual created by the Hong Kong Education Bureau and the Hong Kong Institute of Education in 2010.

**Table 1: Structure and scales used in APASO-II**

| Bronfenbrenner’s (1995) model      | Coresponding scales used in APASO-II  |
|------------------------------------|---|
| Self                               | <ul style="list-style-type: none"> <li>▪ Self-concept</li> <li>▪ Health and well-being</li> <li>▪ Stress management</li> </ul>  |
| Immediate environment: Self-Other  | <ul style="list-style-type: none"> <li>▪ Interpersonal relationships</li> </ul>   |
| Immediate environment: Self-School | <ul style="list-style-type: none"> <li>▪ Attitudes to school</li> <li>▪ Motivation</li> <li>▪ Learning Competency</li> <li>▪ Independent Learning Capacity</li> </ul> |
| Community                          | <ul style="list-style-type: none"> <li>▪ Leadership</li> <li>▪ Ethical Conducts</li> <li>▪ National identity and global citizenship</li> </ul>                        |
| Self-Future                        | <ul style="list-style-type: none"> <li>▪ Goals of life</li> </ul>   |

APASO has been widely adopted in Hong Kong schools (both primary and secondary) because the scales in it reflect development in the self-selected areas of students of the individual schools. Schools are advised to select scales or subscales that correspond to their school developmental direction and purposes as yearly evaluation tools. The intention of this is to encourage school-based development and to respect the diversity of education philosophies among different school sponsoring body such as religious parties, charitable parties, private school owners, etc. Schools are also advised that the questionnaire should not exceed 100 questions. Most secondary schools in Hong Kong select a few scales or subscales from the list based on what they perceive as important. From the perspective of positive education, despite the good intention of encouraging customized self-evaluation, the self-selection of APASO-II scales has led to several unknowns:

1. How does a school select the scales to be used? (selection criteria)

2. To what degree do the selected scales reflect and predict well-being in that school?
3. What are the contributing factors of the data collected?
4. What is needed/lacking in the promotion of well-being?
5. Does it show the correlation between the well-being of students, teachers, and parents?

Understanding the contributors of well-being is important to the promotion of positive education. Seligman (2011) defined human flourishing as the fulfilment of five pillars: Positive emotion, Engagement, Relationships, Meaning, and Accomplishment, which is the PERMA model. It is the combination of these five pillars that contributes to the well-being of an individual, therefore useful evaluation data should show the schools a full picture. Showing where their students are in terms of the five pillars, the data will inform the future policies and strategies that direct the school towards the improvement of well-being, which contributes to positive education. Although the APASO-II scales and the PERMA scales overlap to some degree, allowing schools to select scales and sub-scales has restricted the school's understanding of students' well-being to selected items, leaving out potential areas for improvement.

Some schools conduct the full APASO-II survey once every few years to obtain a baseline. Although that provides a fuller picture of students' affective and social development, there are challenges with the use of data. First, the analysis of data relies heavily on the knowledge of individual schools. The teachers responsible should be capable of identifying and interpreting relevant data from the series of scales in APASO-II in order to drive school improvement and future policies. Most Hong Kong teachers are not equipped with the knowledge to do this data

interpretation. A school that implements positive education should be able to locate data from the APASO-II that indicates students' PERMA. That implies teachers should possess comprehensive knowledge of the PERMA model. Second, even with the data of a full APASO-II, it is hard for schools to associate what constitutes the scores, because a series of scales used in APASO-II (i.e. social power, care for others, negative affect) are distant from the daily subject teaching which Hong Kong teachers concern most. Some schools deliberately collect yearly data on certain scales (i.e. self-esteem) in order to observe trends, but school principals reported challenges in developing corresponding actions because they do not know what causes the rise and fall in the yearly scores. As a result, improvement efforts become arbitrary.

**Stakeholder Surveys (SHS)**

Another measuring instrument endorsed by the Hong Kong Education Bureau is the Stakeholder Surveys (SHS). The SHS aims to help school collect the views of teachers, students, parents, and specialists on the school. Table 2 summarizes the content of SHS detailed in the Tools and Data for School-evaluation Booklet published by the Hong Kong Education Bureau in 2016.

**Table 2: Structure and content of SHS**

| Scope                       | Survey  | Respondents |          |         |
|-----------------------------|---|-------------|----------|---------|
|                             |   | Teachers    | Students | Parents |
| School Management           | Perception of School Management   | ✓           |          |         |
| Professional Leadership     | Perception of 'Leadership and Monitoring' and 'Collaboration and Support' for principal, vice-principals, and middle management | ✓           |          |         |
|                             | Perception of Teachers' Professional Development  | ✓           |          |         |
| Curriculum & Assessment     | Perception of Curriculum and Assessment   | ✓           |          |         |
| Student Learning & Teaching | Perception of Teaching  | ✓           | ✓        |         |
|                             | Perception of Student Learning  | ✓           | ✓        | ✓       |
| Student Support             | Perception of Support for Student Development   | ✓           | ✓        | ✓       |
|                             | Perception of School Climate  | ✓           | ✓        | ✓       |
| Parentship                  | Perception of Home-School Cooperation   |             |          | ✓       |



The Education Bureau advises schools to conduct the surveys in the final year of their school development cycles to promote schools' sustainable development. The development cycle in Hong Kong is generally three years. The SHS allows schools to compare data from different stakeholders in order to refine school strategies and development plans. Having said that, the SHS questionnaires generally focus on the stakeholders' perceptions of school performance rather than their own perceived well-being.

In the six scopes of SHS, two focus on management and colleague (school management and leadership), two on academics (curriculum, learning and teaching), and two on student support (school climate, and home-school partnership). There is robust literature suggesting the importance of teacher well-being and parent well-being in fostering positive education (Spilt, Koomen, & Thijs, 2011; Adler, 2017). Although individual questionnaires may have a certain degree of relevance to the R (positive relationships) of PERMA, what SHS does not cover is the perceived wellbeing of teachers and parents. In such regard, the data of SHS shows the existing school performance in six areas, while it also leaves the following unknown:

1. What constitutes the data?
2. To what degree does teacher well-being play a role in the six items of SHS?
3. How do the data from different stakeholders correlate with each other?

Well-being is an important factor because it has direct influence on the school performance. Student support and teacher well-being are connected. Teachers internalize experiences with students in their representational models of relationships which guide emotional responses in their interactions with students and, in turn, poses threats to the teachers' professional and personal self-esteem in the long run (Spilt,

Koomen, & Thijs, 2011). As that intensifies, it worsens teacher-student relationships and support. Well-being can be a factor that moderates or mediates school performances in the six items of SHS, therefore, an evaluation tool of well-being for students, teachers, and parents will complement SHS and inform decision making on future school policies.

### **School Value-Added Information System (SVAIS)**

Academic performance is culturally seen as one of the top goals of education by Hong Kong parents and educators. It also explains the imbalanced educational efforts between academics and well-being development. SVAIS tracks the value-addedness of students in terms of academic performance in the six years of secondary education. It estimates the future public examination results of secondary one students based on their current academic performance, and then compares the estimation with their actual public examination results when they are secondary six. The result reflects the relative effectiveness of the school in adding value to students' academic performance.

Schools are advised to take the data as reference. In actual situations, academic performance can be influenced by external factors, therefore schools are advised to interpret the data in conjunction with non-academic performances in order to fully understand students' needs.

SVAIS measures purely the scores of examinations. What it does not measure is academic effort. While effort is a key factor to examination results, researchers have suggested that the components of well-being predicts academic effort (Duckworth, 2017). Grit and self-discipline predict effort and academic achievement in science (Hagger, & Hamilton, 2018). Positive teacher-student relationships have a positive correlation with academic effort (Spilt, Koomen, & Thijs, 2011). Studies

about parenting beliefs have postulated that authoritarian parenting (being demanding and caring) is connected to higher academic achievements of children because they associate the high expectations of their parents with warmth and care (Chen, 2004). Examination results seem to be mediated through academic effort which is closely connected to well-being. Therefore, to measure the progress of positive education in Hong Kong, SVAIS has to be complemented by measurements of both academic effort and in-school examination results in order to have a comprehensive understanding of the progress and outcomes.

### **Metrics to measure positive education implementation in Hong Kong**

The existing evaluation tools have provided rich data, while there are also missing pieces that are essential to the ecosystem of Hong Kong education. To facilitate positive education implementation in Hong Kong, the following metrics will complement the existing measurement of schools:

1. PERMA Profiler and EPOCH (The measurement of stakeholder well-being)
2. Academic Diligence Task (The measurement of academic effort)
3. Intrinsic Motivation Inventory (The measurement of teacher motivation)
4. Problems in Schools Questionnaires (The measurement of autonomy support of teachers and parents)
5. The Passion Scale (The measurement of teachers' passion at work)
6. Perceived Parental Autonomy Support Scale (The measurement of parental autonomy support)

### **PERMA Profiler as a measure of teacher and parent well-being**

The subjective well-being of teachers and parents affects not only the quality of teaching and parenting, but also teacher-student and parent-child relationships, which has an impact, positive or negative, on the subjective well-being of students.

Having said that, little has been done to measure well-being of teachers and parents. Even though the existing SHS covers teachers and parents, it does not thoroughly measure the well-being of teachers and parents. The scales in SHS puts the respondents in a third-person position as an evaluator of school performance.

Positive Psychology is the scientific study of human flourishing. It focuses on the cultivation of strengths and virtues in facilitation of well-being. Seligman (2011) introduced the PERMA model of well-being, in which he suggested the five pillars of well-being: Positive emotions, Engagement, Positive Relationships, Meaning, and Accomplishment. *Positive emotions* refers to positive affect and feelings. Positive emotions and mood enhance life in multi-dimensions. *Engagement* refers to the involvement and inclination towards activities. Engagement also relates to the complete concentration on an activity – ‘flow’, which is a state of total immersion in a preferred activity that brings enjoyment and fulfillment (Csikszentmihalyi, 2009). *Positive relationships* refers to strong and healthy connections with others. Our well-being is enhanced through building strong relationships with people we care about. *Meaning* refers to the use of strengths for oneself in order to fulfill important goals. When we dedicate time and effort to something greater than ourselves (i.e. religion, volunteer work, community service, etc.). A sense of purpose offers meanings to our life. *Accomplishments* refers to achievements in areas that one cares about. *Accomplishments* brings a sense of being productive and capable. It also relates to self-confidence and recognition.

To assess the well-being of an individual, Kern and Butler (2016) have developed the PERMA profiler which has been widely adopted as a measurement tool. The survey consists of 23 items and the items require the individual to rate themselves on the gauge of 0 – 10. The PERMA Profiler will provide 5 scores for

each scale of PERMA, showing the level of each component of PERMA. This allows the individual to review what constitutes his well-being. The PERMA Profiler will be a tool to understand parent well-being in Hong Kong, while teachers can take the Workplace PERMA Profiler which changes the context of the questions to work context.

### **EPOCH as a measure of student well-being**

Kern, Benson, Steinberg, & Steinberg, (2016) introduced the EPOCH Measure of Adolescent Well-Being which assesses five positive psychological characteristics (Engagement, Perseverance, Optimism, Connectedness, and Happiness) that mirrors PERMA (Seligman, 2011). *Engagement* refers to the absorption and focus on what one is doing and interested in life activities. *Perseverance* refers to the pursuit of goals to completion even in the face of obstacles. It is one of the Big Five traits of conscientiousness. It is also a component of grit (Duckworth, 2017). *Optimism* refers to hopefulness and confidence for the future. It is also characterized by the positive explanatory style that sees negative events as temporary, external and specific to situations (Seligman, 1991). *Connectedness* refers to satisfying relationships with others, feeling loved, and providing friendship to others. The literature of adolescent development has shown that adolescent social connectedness predicted greater adult well-being (Olsson, McGee, Nada-Raja, & Williams, 2013)

*Happiness* refers to positive affect and contentment with life. EPOCH has been internationally validated in various cross-cultural populations (Kern, Benson, Steinberg, & Steinberg, 2016).

To enable adult to have well-being, it is important for adolescents to possess the assets that will help foster well-being along their path towards adulthood. To measure well-being, a multi-faceted approach is necessary in order to provide a full

picture. This is especially important for positive education implementation so that the data collected can allow more targeted approaches to intervention. EPOCH measures *Engagement, Perseverance, Optimism, Connection to others, and Happiness* (Kern et al., 2016). EPOCH is a 20-item multidimensional measure of flourishing for youth. It illustrates the well-being theory and assess adolescent positive biopsychosocial functioning.

With these metrics as a complement to APASO-II, schools will be able to connect student well-being with their intended area of development. The EPOCH measurement goes beyond academic performance. Paired with the existing SVAIS and SHS, it provides information for a better understanding of academic results and student behaviors.

EPOCH also enables schools to observe individual differences. It indicates the level of perceived fulfilment in five separated pillars of well-being. In other words, even with the same scores of overall well-being, a student can score lower in engagement than another student even if their overall well-being scores are the same. Therefore, EPOCH not only inform school decision making at the management level, but also provides teachers with insights for catering to learners diversity, which has been a subject of interest in many Hong Kong schools.

### **Academic Diligence Task (ADT) measures students' academic effort**

As discussed, well-being mediates academic effort and academic performance. With SVAIS in place measuring the academic value-addedness of each school, the use of ADT will measure students' academic diligence, showing the degree of change in students' academic effort during the implementation of positive education.

Academic diligence refers to the students' choice to stay engaged in a tedious but valuable assignment (Galla, Plummer, White, Meketon, Dmello, & Duckworth,

2014). ADT assesses *the tendency to expend effort on academic tasks which are tedious in the moment but valued in the long-term* (Galla et al., 2014). A study about ADT demonstrates convergent validity with self-report ratings of self-control, grit, and Big Five conscientiousness. The ADT measure is a scalable, Internet-delivered measure of academic diligence. Previous studies of ADT has shown incremental predictive validity for academic outcomes. Therefore, by using ADT in Hong Kong, schools will be able to track students' academic effort during the implementation of positive education. It is important to note that academic diligence is one of the factors that contribute to examination results, and it relies also on the cultivation of well-being among students and teachers.

### **Intrinsic Motivation Inventory (IMI) measures teacher motivation**

Teacher motivation has been an issue for Hong Kong education. Motivation drives people to act, think, and develop (Deci & Ryan, 2008). The Self-Determination Theory (SDT) emphasizes the importance and benefits of autonomous motivation, which comprises intrinsic motivation and well-internalized extrinsic motivation. When teachers are autonomously motivated, they have higher levels of psychological well-being (Ryan, Rigby, & King, 1993) and become more engaged at work. Autonomous motivation also promotes creativity (Koestner, Ryan, Bernieri, & Holt, 1984), better productivity and less burnout (Fernet, Guay, & Senecal, 2004).

In Hong Kong where teachers lack motivation, a natural question to ask is 'How can we cultivate autonomous motivation in teachers?' Studies have found autonomous motivation more evident in people who experience satisfaction of their basic psychological needs for competence, relatedness and autonomy (Deci & Ryan, 2008). In an eastern culture that values interdependence, relatedness is an important cultural need. This points us to our earlier discussion of teachers' self-efficacy

(perceived competence), collegial relationship and teacher-student relationship (relatedness), and shared governance and procedural-voice justice (autonomy).

Autonomy motivation and autonomy support are related in the sense that teachers, as authority figures in the hierarchy of teacher-student relationship, relate to students by taking their own perspectives. Deci et al. (2008) found that teachers who are autonomously motivated thus tend to be more autonomy supportive. They encourage initiation, supporting a sense of choice, and are more able to foster an interpersonal climate which allow students to learn from both successes and failures. In turn, students who receive more autonomy support are found to have higher intrinsic motivation (curious, persistent, making independent mastery attempts), perceived competence, and self-esteem, which bring benefits to student well-being.

Intrinsic Motivation Inventory (IMI) is a multi-dimensional assessment used to assess the respondents' levels of interest/enjoyment, perceived competence, effort/importance, value/usefulness, felt pressure and tension, relatedness, and perceived choice while they were performing the activity (McAuley, Duncan, & Tammen, 1987). By adapting the seven scales to the context of positive psychology theories and their application in school, IMI measures the intrinsic motivation of teachers. Apart from motivation in general, the value of IMI for Hong Kong is a measurement of teachers' perceived competence in applying positive education strategies to daily teaching, which is an important piece that contributes to teacher buy-in (Peetsma, Hascher, van der Veen, & Roede, 2005; Pintrich & De Groot, 1990; Mutch, 2012).

### **The Passion Scale measures teachers' harmonious passion**

Passion, as a strong inclination toward a specific activity or concept that an individual finds important and invest his time and energy in, is essential to well-being and



performance (Vallerand, 2015). Vallerand (2015) suggested the Dualistic Model of Passion, in which he distinguishes harmonious passion. Individuals who are harmoniously passionate possess the motivation to choose to engage in an activity. Such positive activity investment mediates the experience of flow (Csikszentmihalyi, 1975, 1982) and subjective well-being through increased positive affect (Carpentier, Mageau, & Vallerand, 2011). Harmonious passion predicts deliberate practice that mediates performance achievement and fuel self-fulfilment (Vallerand, Salvy, Mageau, Elliot, Denis, Grouzet, & Blanchard, 2007). From these studies, we postulate that teachers who are harmoniously passionate at work will have higher well-being. They will demonstrate non-defensiveness towards teaching and learning, and also be motivated for professional development and continuous improvement. In contrast, obsessively passionate teachers engage in teaching and learning because of intrapersonal or interpersonal pressure. Although obsessive passion also predicts deliberate practice and goal achievements, meta analysis shows that obsessive passion is connected to defensiveness within the activity. It also correlates negatively with subjective well-being through negative affect (Vallerand, Salvy, Mageau, Elliot, Denis, Grouzet, & Blanchard, 2007).

Vallerand and colleagues (2003) created the Passion Scale to measure harmonious passion and obsessive passion toward a specific activity. The Scale is a 15-item questionnaire with four questions about passion in general, six questions on harmonious passion and six questions on obsessive passion (Carbonneau, Vallerand, Fernet, & Guay, 2008). The data will enable understanding of Hong Kong teachers about their openness and motivation towards the professional training of positive education strategies. It will also predict implementation effort and obstacles. The

Scale will provide useful data for team selection and human resources allocation in facilitation of positive education implementation in individual schools.

### **Problems in Schools Questionnaire (PIS) measures autonomous support**

Another questionnaire for teachers and parents that assesses the amount of autonomous support given by teachers is the Problems in Schools Questionnaire (PIS), which assesses whether teachers tend to be controlling versus autonomy supportive with their students (Deci, Schwartz, Sheinman, & Ryan, 1981). The 32 item questionnaire provides respondents with four subscale scores: highly controlling (HC), moderately controlling (MC), moderately autonomy supportive (MA), and highly autonomy supportive (HA). The data of PIS will point to the reflection of teacher development for enhancing self-efficacy and autonomous motivation towards positive education.

### **P-PASS measures perceived parental support**

Alongside with PIS, the Perceived Parental Autonomy Support Scale (P-PASS) is a 24-item survey designed to assess children's perceived parental autonomy support versus controlling (Mageau, Ranger, Joussemet, Koestner, Moreau, & Forest, 2015). Studies have found that children whose parents are more autonomy supportive tend to be more autonomously motivated and better adjusted (Chirkov & Ryan, 2001) and tend to develop relatively stronger intrinsic aspirations for personal growth, meaningful relationships, and community contributions than for extrinsic aspirations such as fame, wealth, and social status. Parental autonomy support is also a negative predictor of addictions and undesirable habits such as alcohol and drug use (Williams, Cox, Hedberg, & Deci, 2000). In the Chinese culture, parents generally demonstrates controlling parenting behavior due to the chase for academic excellence. Culturally, parents also regard themselves as the authority and expect to be respected by having

their children obey them. P-PASS therefore provides useful data in revealing the degree of influence that parents are having on students.

By comparing the different sets of data collected from the different metrics, schools should be able to have a clearer picture about the well-being of students, teachers, and parents. Apart from the degree of well-being, the data, interpreted in conjunction with other existing data, should also measure the influence of the challenges facing positive education implementation in Hong Kong.

To sum up, positive psychology metrics focus on the measurement of well-being and its impact on human flourishing. By complementing the existing measurement tools used in Hong Kong, they will provide very useful data for pre/post evaluation and longitudinal studies that enable a more targeted approach to sustainably improve the quality of education in school. Table 3 and 4 (below) summarizes the suggested measurement tools for all important stakeholders in the education ecosystem:

**Table 3: Suggested tools for measuring positive education implementation in Hong Kong**

|                 | Existing measurement tools   | Positive Psychology metrics   |
|-----------------|--|---|
| <b>Students</b> | <ul style="list-style-type: none"> <li>✓ APASO-II</li> <li>✓ Stakeholders Survey (SHS)</li> <li>✓ SVAIS</li> </ul> | <ul style="list-style-type: none"> <li>✓ EPOCH</li> <li>✓ Academic Diligence Tasks (ADT)</li> <li>✓ Perceived Parental Autonomy Support Scale (P-PASS)</li> </ul>   |
| <b>Teachers</b> | <ul style="list-style-type: none"> <li>✓ Stakeholders Survey (SHS)</li> </ul>                                      | <ul style="list-style-type: none"> <li>✓ Workplace PERMA Profiler</li> <li>✓ Intrinsic Motivation Inventory (IMI)</li> <li>✓ The Passion Scale</li> <li>✓ Problems In Schools Questionnaire(PIS)</li> </ul> |
| <b>Parents</b>  | <ul style="list-style-type: none"> <li>✓ Stakeholders Survey (SHS)</li> </ul>                                      | <ul style="list-style-type: none"> <li>✓ PERMA Profiler</li> <li>✓ Problems In Schools Questionnaire(PIS)</li> </ul>  |

**Table 4: Measurement tools and their subject of focus (for different stakeholders)**

| <b>STUDENTS</b>                  |  |
|----------------------------------|--|
| <b>APASO-II</b>                  | Affective and social development   |
| <b>EPOCH*</b>                    | Subjective well-being  |
| <b>P-PASS*</b>                   | Perceived parental autonomy support  |
| <b>SHS</b>                       | Perception of teaching<br>Perception of learning<br>Perception of student support<br>Perception of school climate  |
| <b>ADT*</b>                      | Academic effort  |
| <b>SVAIS</b>                     | Academic progress and exam results   |
| <b>TEACHERS</b>                  |  |
| <b>Workplace PERMA Profiler*</b> | Subjective well-being  |
| <b>IMI*</b>                      | Intrinsic motivation   |
| <b>Passion Scale*</b>            | Harmonious passion   |
| <b>PIS*</b>                      | Provision of autonomy support  |
| <b>SHS</b>                       | Perception of school management<br>Perception of leadership and monitoring<br>Perception of collaboration and support<br>Perception of professional development<br>Perception of curriculum and assessment<br>Perception of teaching and learning<br>Perception of student support<br>Perception of school climate |
| <b>PARENTS</b>                   |  |
| <b>PERMA Profiler*</b>           | Subjective well-being  |
| <b>SHS</b>                       | Perception of Home-School Cooperation  |

*\* Suggested tools to add to the existing measurement*

### **The Way Forward**

Hong Kong has undergone different education reforms since 1997. The reforms include changes in the medium of instruction, changes in subject curricula, revision of assessment mechanisms and academic structure, and the admission systems for different stages of education (Forestier, Adamson, Han, & Morris, 2016). What has not changed over the years is the focus on academic performance as the top educational goal. Pursuit of academic excellence has been deep-rooted in the Chinese culture and is fueled by the socio-economic environment of Hong Kong which promises academic elites good opportunities and career paths (Phillipson & Lam, 2011). Meanwhile, student anxiety and depression has reached an alarming level in

Hong Kong. A study in 2015 has called for attention to student mental health, showing 30% of secondary school students had symptoms of anxiety and 60.4% experience more negative emotions as they grow older (Tsang, July 12, 2015). Strong maladaptive stress and depression are prevalent among both students and teachers (Leung, Mak, Chui, Chiang, & Lee, 2009) while coping skills and resources are limited. Meta analyses show that mental health issues contributes to lower grades, higher absenteeism, lower self-control, and higher dropout rates (Hinshaw, 1992; McLeod & Fettes, 2007). All these findings are revealing the needs for a more balanced education model that teaches academic skills and cultivate adolescent well-being at the same time for the balanced and healthy development of young people (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009; Steinberg, 2014).

Robust literature and researches have provided ample evidence on the benefits of cultivating student well-being. It contributes to academic performance, better engagement and academic diligence, and better physical conditions in both adolescence and adulthood (Seligman & Adler, 2018; Caprara et al., 2000; Hoyt, Chase-Lansdale, McDade, & Adam, 2012). Longitudinal research also suggests that adolescent well-being is connected to academic achievement and future accomplishments in their adulthood (De Neve & Oswald, 2012; Diener, Nickerson, Lucas, & Sandvik, 2002). An education system that incorporates well-being education is therefore yielding long-term benefits for students and teachers.

In the culture that is fueled by social expectations, economic and educational development, implementing positive education in Hong Kong will imply a change of social mentality to a broader view that values the development of different skills for the overall well-being of students (Phillipson & Lam, 2014). Studies about worldwide positive education efforts in Mexico, Bhutan, and Peru have confirmed the

value of rigorous measurements with adaptations that are sensitive to local contexts and culture (Adler, 2016). They provided evidence that well-being science can be taught systematically in large-scale and implemented in school settings, resulting in both academic improvement and healthy development. In this light, we conclude that positive education, as an approach to education that emphasizes both well-being and academic skills, will guide Hong Kong education towards the cultivation of human flourishing.

**Appendix**

**APASO-II (10 scales with subscales)**

Retrieved from the Hong Kong Education Bureau at website:

[https://www.edb.gov.hk/attachment/en/sch-admin/sch-quality-](https://www.edb.gov.hk/attachment/en/sch-admin/sch-quality-assurance/performance-indicators/apaso2/APASO-II%20Workshop%20Training%20Manual%20(English%20version%20for%20Secondary%20schools).pdf)

[assurances/performance-indicators/apaso2/APASO-](https://www.edb.gov.hk/attachment/en/sch-admin/sch-quality-assurance/performance-indicators/apaso2/APASO-II%20Workshop%20Training%20Manual%20(English%20version%20for%20Secondary%20schools).pdf)

[II%20Workshop%20Training%20Manual%20\(English%20version%20for%20Sec-](https://www.edb.gov.hk/attachment/en/sch-admin/sch-quality-assurance/performance-indicators/apaso2/APASO-II%20Workshop%20Training%20Manual%20(English%20version%20for%20Secondary%20schools).pdf)

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| Scale / Subscale             | School Concern      |                        |                     |                     |               |         |               |        |
|------------------------------|---------------------|------------------------|---------------------|---------------------|---------------|---------|---------------|--------|
|                              | Learning Strategies | Quality of School Life | Learning Motivation | Social Relationship | Moral Conduct | Emotion | Self-Efficacy | Values |
| Self-Concept                 |                     |                        |                     |                     |               |         | ✓             |        |
| ● Emotional Stability        |                     |                        |                     |                     |               | ✓       | ✓             |        |
| ● General                    |                     |                        |                     |                     |               |         | ✓             |        |
| ● Honestly / Trustworthiness |                     |                        |                     |                     | ✓             |         | ✓             |        |
| ● Mathematics                |                     |                        |                     |                     |               |         | ✓             |        |
| ● Parent Relationships       |                     |                        |                     | ✓                   |               |         | ✓             |        |
| ● Physical Appearance        |                     |                        |                     |                     |               |         | ✓             |        |
| ● Verbal                     |                     |                        |                     |                     |               |         | ✓             |        |
| Health & Well Being *        |                     |                        |                     |                     |               | ✓       | ✓             |        |
| Stress Management            |                     |                        |                     |                     |               | ✓       |               |        |

| Scale / Subscale  | School Concern      |                        |                     |                     |               |         |               |        |
|---|---------------------|------------------------|---------------------|---------------------|---------------|---------|---------------|--------|
|   | Learning Strategies | Quality of School Life | Learning Motivation | Social Relationship | Moral Conduct | Emotion | Self-Efficacy | Values |
| Interpersonal Relationships <ul style="list-style-type: none"> <li>● Care for Others</li> <li>● Interpersonal Competence</li> <li>● Respect for Others</li> <li>● Share</li> <li>● Social Skills</li> <li>● Support</li> </ul>                                      |                     |                        |                     | ✓                   | ✓             |         | ✓             | ✓      |
| Attitudes to School <ul style="list-style-type: none"> <li>● Achievement</li> <li>● Experience</li> <li>● General Satisfaction</li> <li>● Negative Affect *</li> <li>● Opportunity</li> <li>● Social Integration</li> <li>● Teacher-Student Relationship</li> </ul> |                     | ✓                      |                     |                     |               | ✓       | ✓             | ✓      |
| Motivation <ul style="list-style-type: none"> <li>● Affiliation</li> <li>● Competition</li> <li>● Effort</li> <li>● Praise</li> <li>● Social Concern</li> <li>● Social Power</li> <li>● Task</li> <li>● Token</li> </ul>  |                     |                        | ✓                   | ✓                   |               |         |               | ✓      |
| Learning Competency <ul style="list-style-type: none"> <li>● Creative Thinking</li> <li>● Critical Thinking</li> <li>● Problem Solving</li> <li>● Time Management</li> </ul>  | ✓                   |                        |                     |                     |               |         | ✓             |        |



| Scale / Subscale                         | School Concern      |                        |                     |                     |               |         |               |        |
|--|---------------------|------------------------|---------------------|---------------------|---------------|---------|---------------|--------|
|  | Learning Strategies | Quality of School Life | Learning Motivation | Social Relationship | Moral Conduct | Emotion | Self-Efficacy | Values |
| Independent Learning Capacity            |                     |                        |                     |                     |               |         |               |        |
| ● Academic Affect                        | ✓                   |                        | ✓                   |                     |               |         |               |        |
| ● Academic Initiation                    | ✓                   |                        | ✓                   |                     |               |         |               |        |
| ● Academic Monitoring                    | ✓                   |                        | ✓                   |                     |               |         |               |        |
| ● Academic Self-Concept                  | ✓                   |                        | ✓                   |                     |               |         | ✓             |        |
| ● Change to Improve                      | ✓                   |                        | ✓                   |                     |               |         |               |        |
| ● Costs of Help Seeking *                | ✓                   |                        | ✓                   |                     |               | ✓       | ✓             |        |
| ● Goal Setting                           | ✓                   |                        | ✓                   |                     |               |         |               |        |
| ● Inquisitiveness                        | ✓                   |                        | ✓                   |                     |               |         |               |        |
| ● Reading Strategy                       | ✓                   |                        | ✓                   |                     |               |         |               |        |
| ● Strategic Help Seeking                 | ✓                   |                        | ✓                   |                     |               |         |               |        |
| ● Study Environment Control              | ✓                   |                        | ✓                   |                     |               |         |               |        |
| ● Study Plan                             | ✓                   |                        | ✓                   |                     |               |         |               |        |
| ● Value of School Work                   | ✓                   |                        | ✓                   |                     |               |         |               | ✓      |
| Leadership                               |                     |                        |                     | ✓                   |               |         | ✓             |        |
| Ethical Conducts                         |                     |                        |                     |                     |               |         |               |        |
| ● Commitment                             |                     |                        |                     |                     | ✓             |         |               | ✓      |
| ● Ethical Conduct                        |                     |                        |                     |                     | ✓             |         |               |        |
| ● No Indulgence Life Style               |                     |                        |                     |                     | ✓             |         |               |        |
| ● Perseverance                           |                     |                        | ✓                   |                     | ✓             |         |               | ✓      |
| ● Self Control                           |                     |                        |                     |                     | ✓             |         |               |        |
| National Identity and Global Citizenship |                     |                        |                     |                     | ✓             |         |               | ✓      |
| Goals of Life                            |                     |                        |                     |                     |               |         |               |        |
| ● Expectation on Career                  |                     |                        | ✓                   |                     |               |         |               | ✓      |
| ● Goal Setting                           |                     |                        | ✓                   |                     |               |         |               | ✓      |
| ● Goals of Life                          |                     |                        | ✓                   |                     |               |         |               | ✓      |

**EPOCH (Sample)**

Retrieved from

[http://www.peggykern.org/uploads/5/6/6/7/56678211/epoch\\_measure\\_of\\_adolescent\\_well-being\\_102014.pdf](http://www.peggykern.org/uploads/5/6/6/7/56678211/epoch_measure_of_adolescent_well-being_102014.pdf)

*Final 20-Item EPOCH Measure*

| Item | Question   |
|------|--|
| C1   | When something good happens to me, I have people who I like to share the good news with. |
| P1   | I finish whatever I begin.   |
| O1   | I am optimistic about my future  |
| H1   | I feel happy.  |
| E1   | When I do an activity, I enjoy it so much that I lose track of time.                     |
| H2   | I have a lot of fun.   |
| E2   | I get completely absorbed in what I am doing.  |
| H3   | I love life.   |
| P2   | I keep at my schoolwork until I am done with it.   |
| C2   | When I have a problem, I have someone who will be there for me.                          |
| E3   | I get so involved in activities that I forget about everything else.                     |
| E4   | When I am learning something new, I lose track of how much time has passed.              |
| O2   | In uncertain times, I expect the best.   |
| C3   | There are people in my life who really care about me.                                    |
| O3   | I think good things are going to happen to me.   |
| C4   | I have friends that I really care about.   |
| P3   | Once I make a plan to get something done, I stick to it.                                 |
| O4   | I believe that things will work out, no matter how difficult they seem.                  |
| P4   | I am a hard worker.  |
| H4   | I am a cheerful person.  |

*Note.* Participants were given the following instructions: "This is a survey about you! Please read each of the following statements. Indicate how much each statement describes you. Please be honest - there are no right or wrong answers!" Each item is scored on a 1 to 5 scale (almost never/not at all like me = 1; almost always/very much like me = 5). Scores are computed as the average of the four items, and results are presented as a profile across domains: Engagement = mean(E1,E2,E3,E4); Perseverance = mean(P1,P2,P3,P4); Optimism = mean(O1,O2,O3,O4); Connectedness = mean(C1,C2,C3,C4); Happiness = mean(H1,H2,H3,H4).

**Sample of Intrinsic Motivation Inventory (IMI)**

Retrieved from <http://selfdeterminationtheory.org/>

**THE INTRINSIC MOTIVATION INVENTORY**

(Below are listed all 45 items that can be used depending on which are needed.)

For each of the following statements, please indicate how true it is for you, using the following scale:

|            |   |   |               |   |   |           |
|------------|---|---|---------------|---|---|-----------|
| 1          | 2 | 3 | 4             | 5 | 6 | 7         |
| not at all |   |   | somewhat true |   |   | very true |

**Interest/Enjoyment**

I enjoyed doing this activity very much

This activity was fun to do.

I thought this was a boring activity. (R)

This activity did not hold my attention at all. (R)

I would describe this activity as very interesting.

I thought this activity was quite enjoyable.

While I was doing this activity, I was thinking about how much I enjoyed it.

**Perceived Competence**

I think I am pretty good at this activity.

I think I did pretty well at this activity, compared to other students.

After working at this activity for awhile, I felt pretty competent.

I am satisfied with my performance at this task.

I was pretty skilled at this activity.

This was an activity that I couldn't do very well. (R)

**Effort/Importance**

I put a lot of effort into this.

I didn't try very hard to do well at this activity. (R)

I tried very hard on this activity.

It was important to me to do well at this task.

I didn't put much energy into this. (R)

**Pressure/Tension**

I did not feel nervous at all while doing this. (R)

I felt very tense while doing this activity.

I was very relaxed in doing these. (R)

I was anxious while working on this task.

I felt pressured while doing these.

**Perceived Choice**

I believe I had some choice about doing this activity.

I felt like it was not my own choice to do this task. (R)

I didn't really have a choice about doing this task. (R)

I felt like I had to do this. (R)

I did this activity because I had no choice. (R)

I did this activity because I wanted to.

I did this activity because I had to. (R)

**Value/Usefulness**

I believe this activity could be of some value to me.

I think that doing this activity is useful for \_\_\_\_\_

I think this is important to do because it can \_\_\_\_\_

I would be willing to do this again because it has some value to me.

I think doing this activity could help me to \_\_\_\_\_

I believe doing this activity could be beneficial to me.

I think this is an important activity.

**Relatedness**

I felt really distant to this person. (R)

I really doubt that this person and I would ever be friends. (R)

I felt like I could really trust this person.

I'd like a chance to interact with this person more often.

I'd really prefer not to interact with this person in the future. (R)

I don't feel like I could really trust this person. (R)

It is likely that this person and I could become friends if we interacted a lot.

I feel close to this person.

**Constructing the IMI for your study.** First, decide which of the variables (factors) you want to use, based on what theoretical questions you are addressing. Then, use the items from those factors, randomly ordered. If you use the value/usefulness items, you will need to complete the three items as appropriate. In other words, if you were studying whether the person believes an activity is useful for improving concentration, or becoming a better basketball player, or whatever, then fill in the blanks with that information. If you do not want to refer to a particular outcome, then just truncate the items with *its* being useful, helpful, or important.

**Scoring information for the IMI.** To score this instrument, you must first reverse score the items for which an (R) is shown after them. To do that, subtract the item response from 8, and use the resulting number as the item score. Then, calculate subscale scores by averaging across all of the items on that subscale. The subscale scores are then used in the analyses of relevant questions.

**Sample of Passion Scale (Carbonneau, Vallerand, Fernet, & Guay, 2008).**

Retrieved from [http://discoverthought.com/Burnout/Passion\\_Scale.html](http://discoverthought.com/Burnout/Passion_Scale.html)

**Passion Scale – (Carbonneau et al., 2008).****General Passion:** (four questions)

I spend a lot of time doing my job as a teacher.

I like my job as a teacher.

My job as a teacher is important for me.

My job as a teacher is a passion for me.

**Harmonious:** (six questions)

My job as a teacher is in harmony with other activities in my life.

The new things that I discovered about doing my job as a teacher allow me to appreciate it even more.

My job as a teacher reflects the qualities I like about myself.

My job as a teacher allows me to live a variety of experiences.

My job as a teacher is well integrated in my life.

My job as a teacher is in harmony with other things that are a part of me.

**Obsessive:** (six questions)

I have difficulties controlling my urge to do my job as a teacher.

I have almost an excessive feeling for my job as a teacher.

My job as a teacher is the only thing that really turns me on.

If I could, I would only do my job as a teacher.

My job as a teacher is so exciting that I sometimes lose control over it.

I have the impression that my job as a teacher controls me.

Strongly disagree, moderately disagree, slightly disagree, slightly agree, moderately agree, and strongly agree.

## The Problems In School Questionnaires (PIS)

Retrieved from <http://selfdeterminationtheory.org/>

### The Problems in Schools Questionnaire (PIS)

On the following pages you will find a series of vignettes. Each one describes an incident and then lists four ways of responding to the situation. Please read each vignette and then consider each response in turn. Think about each response option in terms of how appropriate you consider it to be as a means of dealing with the problem described in the vignette. You may find the option to be 'perfect,' in other words, 'extremely appropriate' in which case you would respond with the number 7. You might consider the response highly inappropriate, in which case you would respond with the number 1. If you find the option reasonable you would select some number between 1 and 7. So think about each option and rate it on the scale shown below. Please rate each of the four options for each vignette. There are eight vignettes with four options for each.

There are no right or wrong ratings on these items. People's styles differ, and we are simply interested in what you consider appropriate given your own style.

Some of the stories ask what you would do as a teacher. Others ask you to respond as if you were giving advice to another teacher or to a parent. Some ask you to respond as if you were the parent. If you are not a parent, simply imagine what it would be like for you in that situation.

Please respond to each of the 32 items using the following scale.

|                    |   |                        |   |   |                  |   |
|--------------------|---|------------------------|---|---|------------------|---|
| 1                  | 2 | 3                      | 4 | 5 | 6                | 7 |
| very inappropriate |   | moderately appropriate |   |   | very appropriate |   |

**A.** Jim is an average student who has been working at grade level. During the past two weeks he has appeared listless and has not been participating during reading group. The work he does is accurate but he has not been completing assignments. A phone conversation with his mother revealed no useful information. The most appropriate thing for Jim's teacher to do is:

1. She should impress upon him the importance of finishing his assignments since he needs to learn this material for his own good.
2. Let him know that he doesn't have to finish all of his work now and see if she can help him work out the cause of the listlessness.
3. Make him stay after school until that day's assignments are done.
4. Let him see how he compares with the other children in terms of his assignments and encourage him to catch up with the others.

**B.** At a parent conference last night, Mr. and Mrs. Greene were told that their daughter Sarah has made more progress than expected since the time of the last conference. All agree that they hope she continues to improve so that she does not have to repeat the grade (which the Greene's have been kind of expecting since the last report card). As a result of the conference, the Greens decide to:

5. Increase her allowance and promise her a ten-speed if she continues to improve.
6. Tell her that she's now doing as well as many of the other children in her class.
7. Tell her about the report, letting her know that they're aware of her increased independence in school and at home.
8. Continue to emphasize that she has to work hard to get better grades.

**C.** Donny loses his temper a lot and has a way of agitating other children. He doesn't respond well to what you tell him to do and you're concerned that he won't learn the social skills he needs. The best thing for you to do with him is:

9. Emphasize how important it is for him to 'control himself' in order to succeed in school and in other situations.
10. Put him in a special class which has the structure and reward contingencies which he needs.
11. Help him see how other children behave in these various situations and praise him for doing the same.
12. Realize that Donny is probably not getting the attention he needs and start being more responsive to him.



D. Your son is one of the better players on his junior soccer team which has been winning most of its games. However, you are concerned because he just told you he failed his unit spelling test and will have to retake it the day after tomorrow. You decide that the best thing to do is:

13. Ask him to talk about how he plans to handle the situation.
14. Tell him he probably ought to decide to forego tomorrow's game so he can catch up in spelling.
15. See if others are in the same predicament and suggest he do as much preparation as the others.
16. Make him miss tomorrow's game to study; soccer has been interfering too much with his school work.

E. The Rangers spelling group has been having trouble all year. How could Miss Wilson best help the Rangers?

17. Have regular spelling bees so that Rangers will be motivated to do as well as the other groups.
18. Make them drill more and give them special privileges for improvements.
19. Have each child keep a spelling chart and emphasize how important it is to have a good chart.
20. Help the group devise ways of learning the words together (skits, games, and so on).

F. In your class is a girl named Margy who has been the butt of jokes for years. She is quiet and usually alone. In spite of the efforts of previous teachers, Margy has not been accepted by the other children. Your wisdom would guide you to:

21. Prod her into interactions and provide her with much praise for any social initiative.
22. Talk to her and emphasize that she should make friends so she'll be happier.
23. Invite her to talk about her relations with the other kids, and encourage her to take small steps when she's ready.
24. Encourage her to observe how other children relate and to join in with them.

G. For the past few weeks things have been disappearing from the teacher's desk and lunch money has been taken from some of the children's desks. Today, Marvin was seen by the teacher taking a silver dollar paperweight from her desk. The teacher phoned Marvin's mother and spoke to her about this incident. Although the teacher suspects that Marvin has been responsible for the other thefts, she mentioned only the one and assured the mother that she'll keep a close eye on Marvin. The best thing for the mother to do is:

25. Talk to him about the consequences of stealing and what it would mean in relation to the other kids.
26. Talk to him about it, expressing her confidence in him and attempting to understand why he did it.
27. Give him a good scolding; stealing is something which cannot be tolerated and he has to learn that.
28. Emphasize that it was wrong and have him apologize to the teacher and promise not to do it again.

H. Your child has been getting average grades, and you'd like to see her improve. A useful approach might be to:

29. Encourage her to talk about her report card and what it means for her.
30. Go over the report card with her; point out where she stands in the class.
31. Stress that she should do better; she'll never get into college with grades like these.
32. Offer her a dollar for every A and 50 cents for every B on future report cards.

**Scoring Information.** The procedure for scoring the questionnaire begins by averaging the eight ratings in each of the four categories. The four categories are highly controlling (HC), moderately controlling (MC), moderately autonomy supportive (MA), and highly autonomy supportive (HA). The four subscale scores (composed of the average of the eight responses for that subscale) can be used separately, in multi-variate analyses, or they can be combined into one overall reflection of the 'Adult's Orientation Toward Control Versus Autonomy Support with Children.' The original procedure for combining the four subscales into one total scale score, as described in Deci, Schwartz, Sheinman, and Ryan (1981) involved weighting the average for the highly controlling responses with a -2 (minus two); weighting the moderately controlling average with -1 (minus one); weighting the average for the moderately autonomy supportive subscales with +1; and weighting the average for highly autonomy supportive subscale with +2. The algebraic sum reflects the adults' orientations toward control versus autonomy support, with a higher score reflecting a more autonomy supportive orientation and a lower score or a more negative score reflecting a more controlling orientation. However, more recent work (e.g., Reeve, Bolt, & Cai, in press) has indicated that the so-called moderately autonomy supportive subscale actually acts more like a Slightly Controlling subscale. Accordingly, Reeve et al. recommended weighting the MA subscale 0 (zero), rather than -1 (minus 1). The items making up the subscales are as follows.

HC 3, 5, 10, 16, 18, 21, 27, 32

MC 1, 8, 9, 14, 19, 22, 28, 31

MA 4, 6, 11, 15, 17, 24, 25, 30

HA 2, 7, 12, 13, 20, 23, 26, 29

#### References

Deci, E. L., Schwartz, A. J., Sheinman, L., & Ryan, R. M. (1981). An instrument to assess adults' orientations toward control versus autonomy with children: Reflections on intrinsic motivation and perceived competence. *Journal of Educational Psychology, 73*, 642-650.

Reeve, J., Bolt, E., & Cai, Y. (1999). Autonomy-supportive teachers: How they teach and motivate students. *Journal of Educational Psychology, 91*, 537-548.



### Sample of Perceived Parental Autonomy Support Scale (P-PASS)

Retrieved from <http://selfdeterminationtheory.org/>

#### YOUR PERCEPTION OF YOUR PARENTS

Please answer the following questions about your mother and father while you were growing up. If you did not have any contact with one of your parents (for example, your father), but another parent of the same sex lived with you (for example, your stepfather), please answer the questions about this other adult.

*If you did not have any contact with one of your parents, and no other adult of the same sex lived with you, please leave the questions about this parent blank.*

Using the scale below, please indicate the extent to which you agree with each of the statements regarding your mother and father's behaviors.

|                          |                   |                     |                     |            |                     |                          |
|--------------------------|-------------------|---------------------|---------------------|------------|---------------------|--------------------------|
| Do not agree at all<br>1 | Hardly agree<br>2 | Slightly agree<br>3 | Somewhat agree<br>4 | agree<br>5 | Strongly agree<br>6 | Very strongly agree<br>7 |
|--------------------------|-------------------|---------------------|---------------------|------------|---------------------|--------------------------|

**BE CAREFUL, the order of responses for your mother and father changes for each item.**

#### WHEN I WAS GROWING UP ...

|   |   |
|---|---|
| 1. My parents gave me many opportunities to make my own decisions about what I was doing.                           | Mother 1 2 3 4 5 6 7<br>Father* 1 2 3 4 5 6 7 |
| 2. When my parents asked me to do something, they explained why they wanted me to do it.                            | Father* 1 2 3 4 5 6 7<br>Mother 1 2 3 4 5 6 7 |
| 3. When I refused to do something, my parents threatened to take away certain privileges in order to make me do it. | Mother 1 2 3 4 5 6 7<br>Father* 1 2 3 4 5 6 7 |
| 4. My point of view was very important to my parents when they made important decisions concerning me.              | Father* 1 2 3 4 5 6 7<br>Mother 1 2 3 4 5 6 7 |
| 5. My parents refused to accept that I could want simply to have fun without trying to be the best.                 | Mother 1 2 3 4 5 6 7<br>Father* 1 2 3 4 5 6 7 |
| 6. When my parents wanted me to do something differently, they made me feel guilty.                                 | Father* 1 2 3 4 5 6 7<br>Mother 1 2 3 4 5 6 7 |
| 7. My parents encouraged me to be myself.   | Mother 1 2 3 4 5 6 7<br>Father* 1 2 3 4 5 6 7 |
| 8. Within certain limits, my parents allowed me the freedom to choose my own activities.                            | Father* 1 2 3 4 5 6 7<br>Mother 1 2 3 4 5 6 7 |
| 9. When I was not allowed to do something, I usually knew why.  | Mother 1 2 3 4 5 6 7<br>Father* 1 2 3 4 5 6 7 |
| 10. I always had to do what my parents wanted me to do, if not, they would threaten to take away privileges.        | Father* 1 2 3 4 5 6 7<br>Mother 1 2 3 4 5 6 7 |
| 11. My parents believed that, in order to succeed, I always had to be the best at what I did.                       | Mother 1 2 3 4 5 6 7<br>Father* 1 2 3 4 5 6 7 |
| 12. My parents made me feel guilty for anything and everything.   | Father* 1 2 3 4 5 6 7<br>Mother 1 2 3 4 5 6 7 |
| 13. My parents were able to put themselves in my shoes and understand my feelings.                                  | Mother 1 2 3 4 5 6 7<br>Father* 1 2 3 4 5 6 7 |

|  |   |
|--|---|
| 14. My parents hoped that I would make choices that corresponded to my interests and preferences regardless of what theirs were. | <i>Father*</i> 1 2 3 4 5 6 7<br><b>Mother</b> 1 2 3 4 5 6 7 |
| 15. When my parents wanted me to do something, I had to obey or else I was punished.   | <b>Mother</b> 1 2 3 4 5 6 7<br><i>Father*</i> 1 2 3 4 5 6 7 |
| 16. My parents were open to my thoughts and feelings even when they were different from theirs.                                  | <i>Father*</i> 1 2 3 4 5 6 7<br><b>Mother</b> 1 2 3 4 5 6 7 |
| 17. In order for my parents to be proud of me, I had to be the best.   | <b>Mother</b> 1 2 3 4 5 6 7<br><i>Father*</i> 1 2 3 4 5 6 7 |
| 18. When my parents wanted me to act differently, they made me feel ashamed in order to make me change.                          | <i>Father*</i> 1 2 3 4 5 6 7<br><b>Mother</b> 1 2 3 4 5 6 7 |
| 19. My parents made sure that I understood why they forbid certain things.   | <b>Mother</b> 1 2 3 4 5 6 7<br><i>Father*</i> 1 2 3 4 5 6 7 |
| 20. As soon as I didn't do exactly what my parents wanted, they threatened to punish me.   | <i>Father*</i> 1 2 3 4 5 6 7<br><b>Mother</b> 1 2 3 4 5 6 7 |
| 21. My parents used guilt to control me.   | <b>Mother</b> 1 2 3 4 5 6 7<br><i>Father*</i> 1 2 3 4 5 6 7 |
| 22. My parents insisted that I always be better than others.   | <i>Father*</i> 1 2 3 4 5 6 7<br><b>Mother</b> 1 2 3 4 5 6 7 |
| 23. When I asked why I had to do, or not do, something, my parents gave me good reasons.   | <b>Mother</b> 1 2 3 4 5 6 7<br><i>Father*</i> 1 2 3 4 5 6 7 |
| 24. My parents listened to my opinion and point of view when I disagreed with them.  | <i>Father*</i> 1 2 3 4 5 6 7<br><b>Mother</b> 1 2 3 4 5 6 7 |

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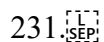
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