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Michaela Horvathova
Consultant
Directorate for Education and Skills, OECD

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Paper #3: PERSONAL DEVELOPMENT

In addition to enhancing labour market outcomes and social cohesion, education can also be a means by which to enhance the chances of an individual's success and fulfilment in personal and professional life. Abraham Maslow (1908–1970), proposed a hierarchy of needs with self-actualization at the top, defined as the desire to become more and more what one is, to become everything that one is capable of becoming. Carl Gustav Jung made contributions to personal development with his concept of individuation, which he saw as the drive of the individual to achieve the wholeness and balance of the Self. Research on success in reaching goals, as undertaken by Albert Bandura, suggested that self-efficacy best explains why people with the same level of knowledge and skills get very different results. According to Bandura self-confidence functions as a powerful predictor of success.

In summary, personal development is a lifelong process which serves as a way for people to assess their skills and qualities, consider their aims in life and set goals in order to realise and maximise their potential. Personal development includes activities that improve awareness and identity, develop talents and potential, build human capital and facilitate employability, enhance quality of life and contribute to the realization of dreams and aspirations.

This paper seeks to advance the theoretical knowledge of personal development by reviewing and synthesizing available research into a conceptual framework. Personality development is complex matter with many overlapping and interrelated components. The proposed framework identifies four main, constructs driving and contributing to personal development: motivation, intelligence, talent and well-being. Furthermore, the paper identifies several social and emotional skills which are underlying components of the above-mentioned constructs. Finally, theoretical and practical implications are discussed.

MOTIVATION

Students' ability to perform at high levels depends on their belief that while aptitude and talent for particular school subjects can help, mastery can be achieved if students are motivated to put in the hard work that is needed. Spending more time and practicing more will have an effect on the individual; it results in a growth in knowledge, abilities and capacities. This explains why we see a positive correlation develop between motivation and abilities. The more motivated or interested in a particular domain, the more time one will spend in that domain and the more one will develop those capacities, abilities, the better one becomes. Highly motivated students will study more and by doing so they not only

obtain better school results but also become more able, more intelligent (Int. Handbook of Giftedness and Talent, 2001).

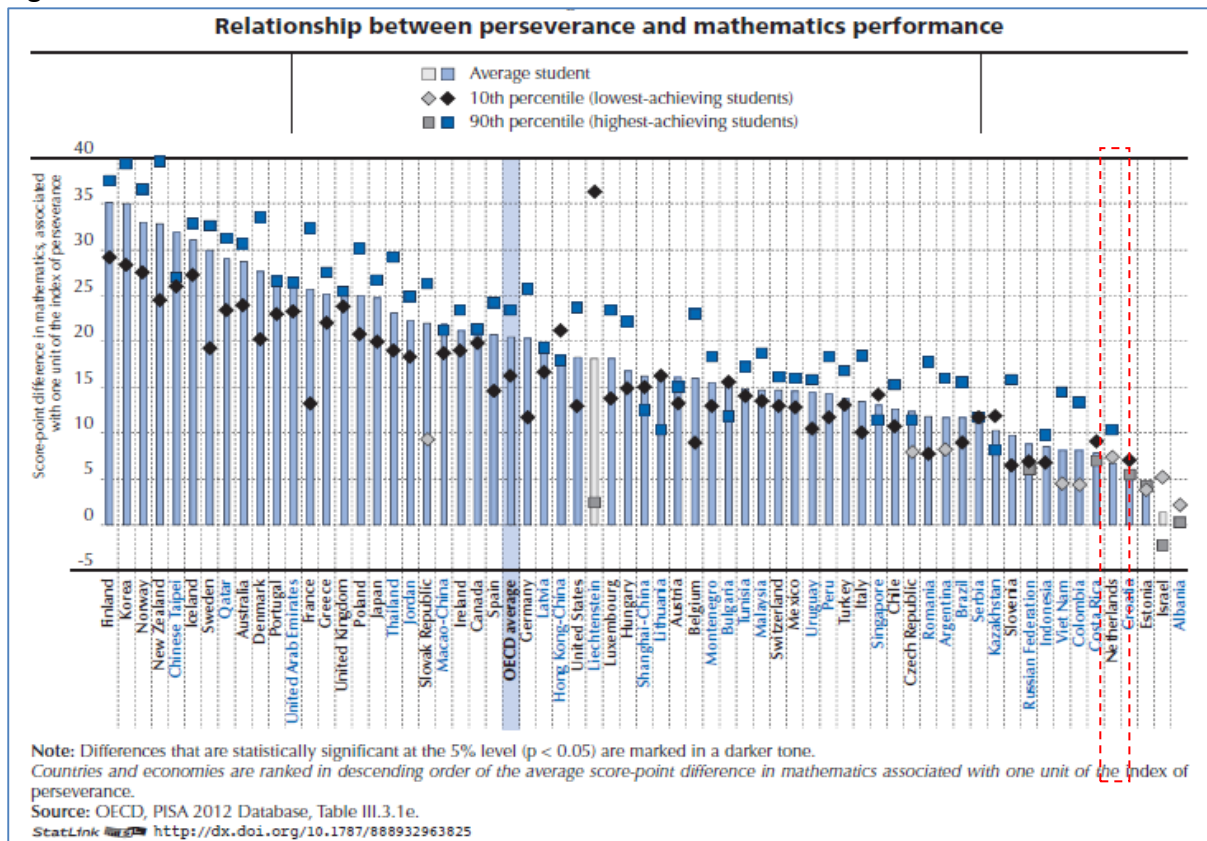
The belief that intelligence is a fixed trait and that only those who have it can succeed in school is both a myth and an obstacle to success. Students who consider themselves intelligent do not think that they need to cultivate their intelligence to make it flourish, and those who believe that they lack intelligence are not inclined to work hard to overcome initial difficulties (Rattan et al., 2012; Carr and Dweck, 2012; Dweck, 2006). Children differ in terms of innate intelligence and abilities but these qualities are also malleable and can be shaped by experiences and actions throughout life. Particularly, hard work, persistence and motivation are as necessary as innate abilities in achieving any endeavour. PISA 2012 measures students' drive and motivation by examining perseverance, openness to problem solving, locus of control and intrinsic and instrumental motivation. Although PISA 2012 only examined drive and motivation in relation to mathematics performance, motivation plays an important role in achieving other outcomes as well.

Perseverance

PISA 2012 measures students' perseverance through their responses to questions asking about the extent to which they feel they resemble someone who gives up easily when confronted with a problem, who puts off difficult problems, who remains interested in the tasks that he or she starts, who continues to work on a task until everything is perfect, and who does more than is expected of him or her when confronted with a problem (OECD, 2013).

As Figure 1 shows, in most countries and economies the association between students' perseverance and mathematics performance is relatively strong: in 25 countries and economies, a difference of one unit in the *index of perseverance* is associated with a difference in performance of at least 20 score points. In the Netherlands, perseverance is somewhat associated with mathematics performance among both the highest-achieving and the lowest-achieving students.

Figure 1.



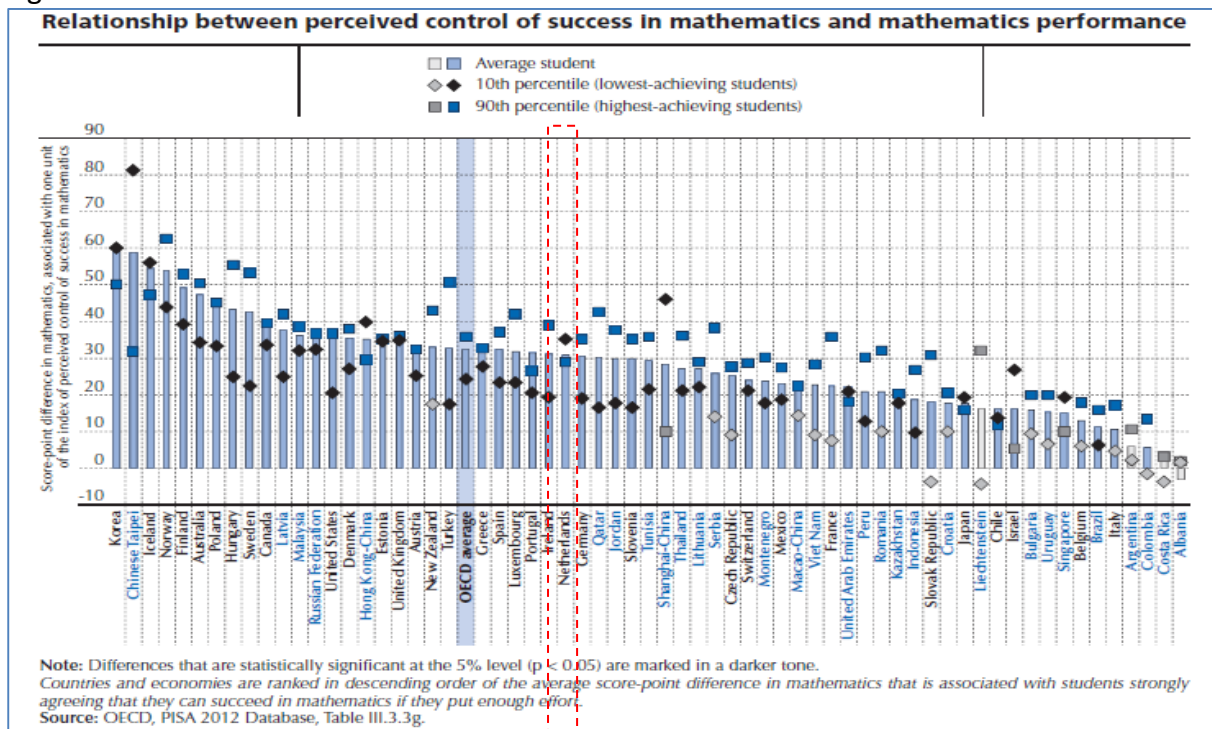
Grit

Duckworth and Quinn’s (2009) notion of “grit” captures the importance of working hard and persevering to complete tasks even when they are difficult and, sometimes, not interesting. Students who have drive, stamina, perseverance and capacity for hard work do not necessarily have aptitude and talent too: talent and drive are personal attributes that are not necessarily correlated. In many cases, individuals with less raw potential, but greater stamina, perseverance and capacity for hard work are more likely to succeed than those who are talented but have little capacity to set ambitious goals for themselves and to keep focused on achieving them (Duckworth et al., 2007; Duckworth and Seligman, 2006; Duckworth et al., 2010; Zimmerman and Schunk, 2011). In other research conducted by Duckworth et al., (2007), individual differences in grit accounted for significant incremental variance in success outcomes over and beyond what can be explained by IQ. Grittier individuals had attained higher levels of education than less gritty individuals of the same age. Older individuals tended to be higher in grit than younger individuals, suggesting that the quality of grit, although a stable individual difference, may nevertheless increase over the life span. Duckworth claimed that achievement is the product of talent and effort, the latter a function of the intensity, direction and duration of one’s exertions toward a goal (2007). Because grit is defined as a combination of passion or consistency of interests and persistence, it can be expected to be most important for goals where individuals have substantial choice (Ivcevic & Brackett, 2014).

Locus of control

Locus of control is defined by Rotter (1990) as the degree to which persons expect that reinforcement or an outcome of their behaviour is contingent on their own behaviour or personal characteristics. PISA 2012 measured locus of control as perceived self-responsibility for failing in mathematics. Students with high values on this index tend to attribute the responsibility for failure in solving mathematics problems to themselves, which students with low values on the index are more likely to see other individuals or factors as responsible. Across OECD countries, 58% of students reported that when doing badly on a teacher-administered quiz, they would think that they are not very good at solving mathematics problems; 48% reported that the teacher did not explain the concepts well; 46% reported that they made bad guesses on the quiz; 71% reported that the course material was too hard; 53% that the teacher did not get students interested in the material; and 49% that sometimes they are just unlucky (OECD, 2013). At the same time, students who reported that they strongly agree that they can succeed in mathematics and in school if they put in enough effort performed at higher levels than other students. Across OECD countries, students at the 90th percentile of performance who strongly agree that they can succeed in mathematics if they put in enough effort have a performance advantage of 36 score points over students who didn't report that they strongly agree with the same statement (OECD, 2013). In the Netherlands, perceived control of success in mathematics is associated with mathematics performance among the lower-achieving students but not the higher-achieving students (Figure 2). Based on research examining the working memory capacities of high-achieving students, one explanation for this is that high-achieving students suffer from a lower locus of control due to anxiety (Ramirez, 2013). This remains to be further explored in the Netherlands context.

Figure 2.



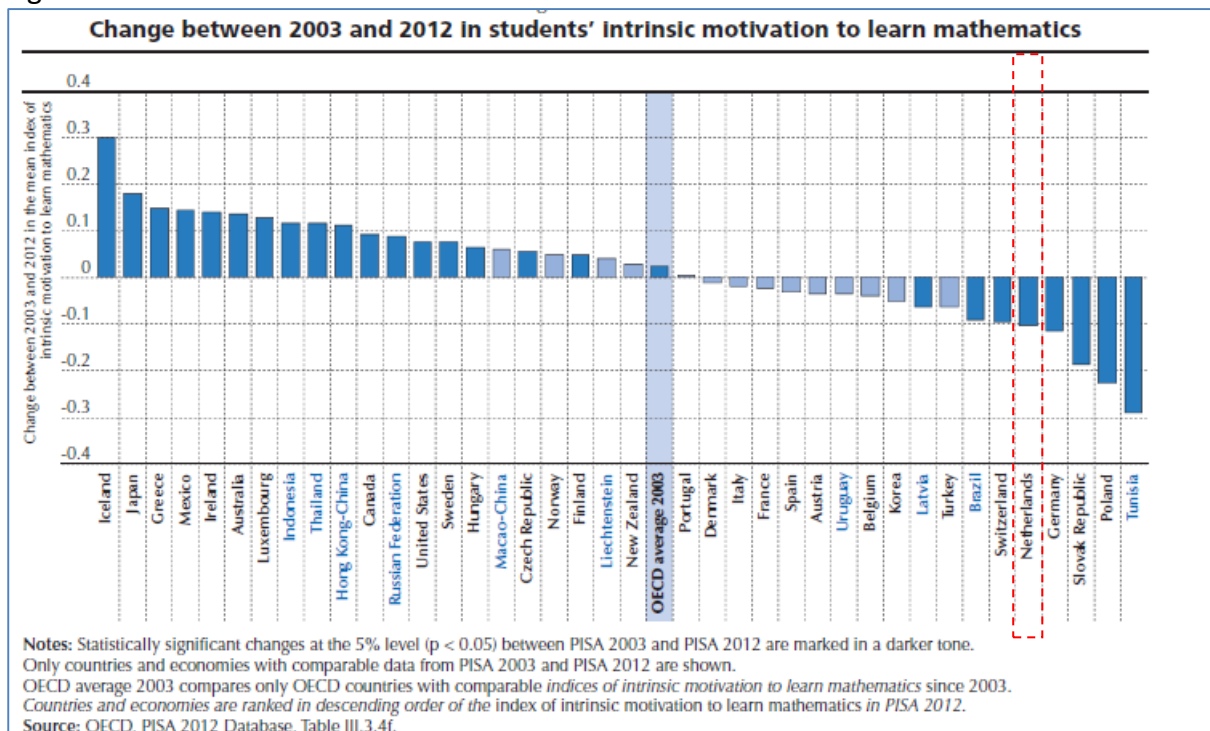
Intrinsic motivation

Motivation and engagement can be regarded as the driving forces behind learning. Intrinsic motivation refers to the drive to perform an activity purely for the joy gained from the activity itself. Students are intrinsically motivated to learn mathematics because they find learning mathematics interesting and enjoyable and because it gives them pleasure, not because of the goal to get good grades upon mastering mathematical concepts (Ryan and Deci, 2009).

Interest and enjoyment affects both the degree and continuity of engagement in learning and the depth of understanding reached (Schiefele, 2009). Intrinsic motivation affects the degree of student engagement, the learning activities in which students enrol, student performance, and the types of careers students aspire to and choose to pursue (Reeve, 2012). Generally, intrinsic motivation dissipates from elementary school to higher education because as students grow older their interests become increasingly differentiated (OECD, 2004).

PISA measures students' intrinsic motivation to learn mathematics through students' responses as to whether they "strongly agree", "agree", "disagree" or "strongly disagree" that they enjoy reading about mathematics; that they look forward to mathematics lessons; and that they do mathematics because they enjoy it and that they are interested in the things they learn in mathematics. Across OECD countries, 38% of students reported that they agree or strongly agree that they do mathematics because they enjoy it and 53% reported that they are interested in the things they learn in mathematics. Between 2003 and 2012, students' intrinsic motivation to learn mathematics improved in 17 countries and economies. However, the *index of intrinsic motivation to learn mathematics* fell by more than 0.1 units in the Netherlands (Figure 3).

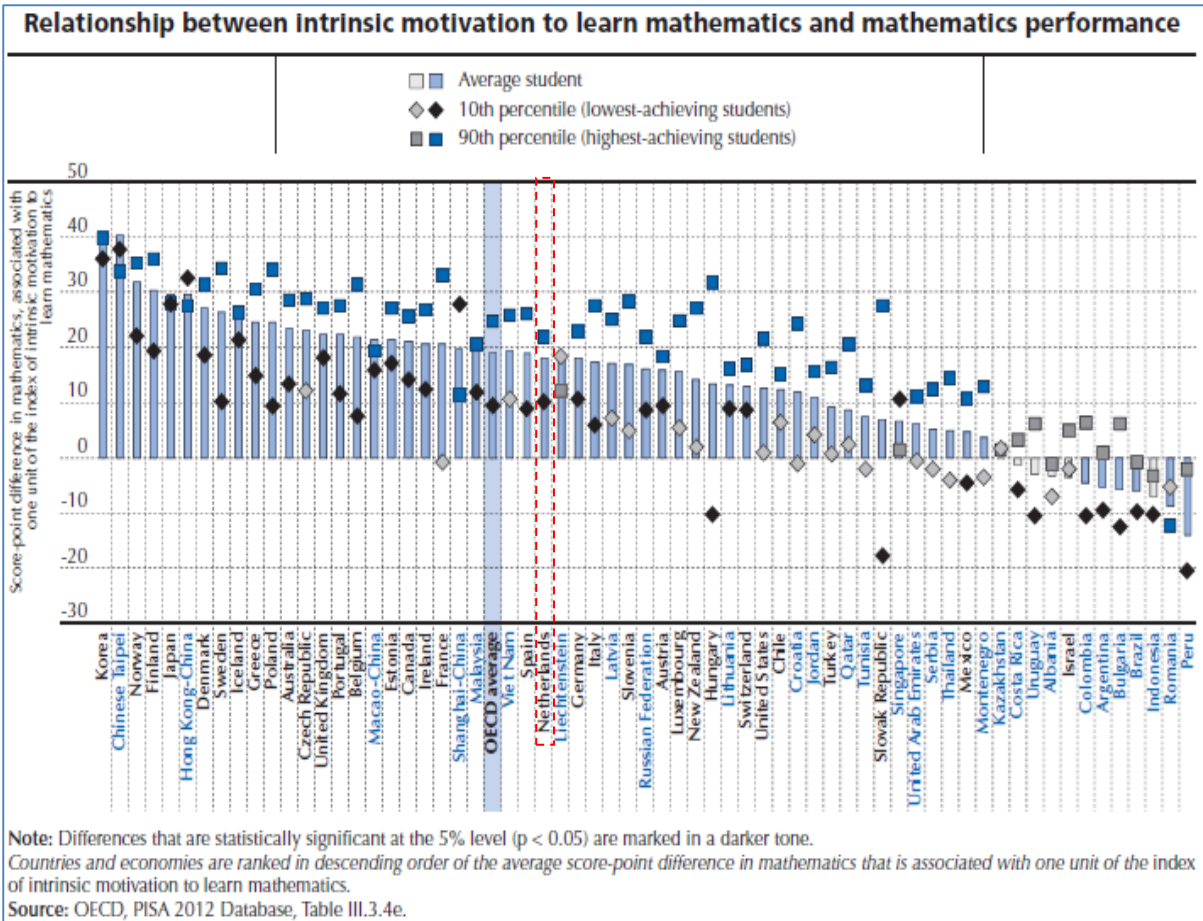
Figure 3.



Students who reported low levels of interest in and enjoyment of mathematics, who do not look forward to mathematics lessons, and who reported not being interested in the things they learn in mathematics generally do not score as high in mathematics as those who reported that they enjoy mathematics and that they are interested in mathematics lessons. On average across OECD countries, a change of one unit in the *index of intrinsic motivation to learn mathematics* translates into a 19 score-point difference in mathematics performance (OECD, 2013).

However, the relationship between students' motivation and mathematics performance is significantly stronger among the highest achieving students than among the lowest-achieving students. While greater motivation can give the highest-achieving students an edge in performance, among the lowest-achieving, motivation seems to have little relationship with performance. On average across OECD countries, the performance difference that is associated with a change of one unit in the *index of intrinsic motivation to learn mathematics* is 26 score points among the highest-achieving students but only 10 points among the lowest-achieving students. As Figure 4 shows, in the Netherlands the difference in the strength of the association between intrinsic motivation to learn mathematics and mathematics performance among the highest- and lowest-achieving students is more than 10 score points (OECD, 2013). This interesting paradox in the Netherlands, where student performance in mathematics is high, but motivation seems to be falling, suggests that we need to continue to explore the context-specificity of motivation and learning.

Figure 4.



How does motivation influence choice and performance?

There are a variety of constructs posited by motivation theorists to explain how motivation influences choice, persistence and performance. One long-standing perspective on motivation is expectancy-value theory. Theorists in this tradition argue that individuals' choice, persistence, and performance can be explained by their beliefs about how well they will do on the activity and the extent to which they value the activity. According to Wigfield and Eccles (2000) children's ability-related beliefs and values become more negative as they get older, at least through adolescence. Children believe they are less competent in many activities and often value those activities less. These negative beliefs have been explained in two major ways. One explanation is that children become much better at interpreting the evaluative feedback they receive and engage in more social comparison with their peers. A second explanation is that the school environment changes in ways that makes evaluation more salient and competition between students more likely, thus lowering some children's achievement beliefs.

Differences in motivation may create differences in cognition, reflected in intelligence test scores and in cumulative intellectual achievement over time. Highly motivated individuals would always seek out a variety of challenging task situations; they work hard and they are persistent. As a consequence, they might accordingly develop a higher ability to tackle new situations (Int. Handbook of Talent, 2011).

Student engagement

Motivation and emotion are essential to education because – together – they ensure that students acquire new knowledge and skills in a meaningful way. If all classroom activities were interesting and fun, students would engage in them naturally. But students face many tasks that they do not like or in which they are not interested or do not feel competent. Teachers thus need to be aware of how to adapt the curriculum and their teaching so that students find the classroom activities more interesting, purposeful and enjoyable, and feel more competent to do them. Students become more effective learners when they understand how their learning and motivation systems work and how they can boost their own motivation, whatever the teacher might do (OECD, 2010).

Student motivation is the key variable underlying and causing students' classroom engagement. Student engagement is an important educational construct because it anticipates and predicts the sort of positive student outcomes such as academic achievement, course grades, learning and skill development. That is, engagement bridges students' motivation to highly valued outcomes.

According to Reeve (2012), student engagement can be conceptualized as a four-component construct featuring the following components:

1. behavioural (on task attention, effort, persistence, lack of conduct problems)
2. emotional (presence of interest and enthusiasm, absence of anger and boredom),
3. cognitive (strategic learning strategies, active self-regulation),
4. agentic (proactively, intentionally and constructively contribute to the instruction).

The agentic engagement explains unique variance in student achievement, skill development and learning because it is through agentic acts such as making suggestions, asking questions, and personalizing lessons that students find ways to enrich and to adapt the lessons they receive into improved opportunities for learning, skills development and achievement. Hence, agentic engagement contributes achievement-enabling behaviours that the behavioural, emotional and cognitive aspects of engagement fail to capture.

Student engagement is essential because it makes learning possible and it is a relatively malleable student characteristic that is open to constructive influences, such as teachers' support. For example, teachers can influence student engagement by practicing a more autonomy-supportive motivating style toward their students. More specifically, an autonomy-supportive motivating style is the interpersonal sentiment and behaviour teachers provide to identify, vitalize and develop their students' inner motivational resources during instruction. Research shows that it predicts students' constructive motivation, engagement and functioning. Additionally, teachers can intentionally monitor and enhance students' classroom engagement (Reeve, 2012).

According to *The Nature of Learning* (OECD, 2010) there are eight key principles which underpin motivational beliefs, motivation regulation strategies and the learning environment that have certain implications for teaching.

Principle 1: Students are motivated when they feel competent to do what is expected of them.

Numerous studies have reported that students who think that they have what it takes to do specific tasks in a domain (high self-efficacy) will choose more challenging problems, invest more effort, persist longer, and will enrol in courses that are not obligatory (Pintrich and Schunk, 1996; Schunk and Pajares, 2004; Wigfield and Eccles, 2002).

Principle 2: Students are more motivated to engage in learning when they perceive stable links between specific actions and achievement.

The causes as understood by students about what lies behind their success or failure shape their motivational beliefs and, in this way, student expectations about future performance. Motivation research has direct implications for the design of effective learning environments. Teachers need to understand how cognitive and motivation systems work and how they interact and how negative emotions and unhealthy attributions can inhibit learning and demoralise.

Principle 3: Students are more motivated to engage in learning when they value the subject and have a clear sense of purpose.

Students are not likely to initiate activities and maintain effort if the perceived value of the task is minimal. The anticipated pleasure and pride in accomplishing a task energises them. Wigfield and Eccles (2002) conclude that the importance, interest and relevance students attach to a domain are the best predictors of whether they will persist, whether they select challenging or easy tasks and whether they will enrol in courses in that subject.

Principle 4: Students are more motivated to engage in learning when they experience positive emotions towards learning activities.

Positive emotions serve to signal fulfilment of one's psychological needs – need for competence, autonomy and social relatedness – encouraging active, constructive engagement (Ryan and Deci, 2000). Positive emotions energise students because they direct attention towards relevant cues in the task and the learning environment to create an optimal internal environment for learning, self-regulation and achievement.

Principle 5: Students direct their attention away from learning when they experience negative emotions.

Performance anxiety is the best known negative emotion in relation to learning, but shame, boredom, anger, disappointment and hopelessness are others. Negative emotions produce ruminating thoughts (recall Julie's example) that inhibit performance. Negative emotions prime encoded information in long-term memory and signal to the student that something is wrong (Bower, 1991). This triggers a negative mood and unfavourable judgments of the task and one's performance of it.

Principle 6: Students free up cognitive resources for learning when they are able to influence the intensity, duration and expression of their emotions

Students experience many stressful situations in the classroom that can harm their self-concept and elicit negative emotions and produce ruminating thoughts that interfere with information processing (Key Principle 5). Students need to remove these internal road blocks and re-direct their attention to the learning task. They should either express their

emotions or turn down the level and duration of arousal caused by these emotional triggers. At times, it is beneficial to express one's emotions so that others can take account of one's feelings (such as showing disappointment or irritation if someone takes credit for something they did not do). Thus, schools should develop students' capability to regulate their emotions.

Principle 7: Students are more persistent in learning when they can manage their resources and deal with obstacles efficiently

As seen, motivational beliefs influence the way students assign meaning and purpose to their learning and they provide information on how students can enhance and sustain motivation. Ideally, students should orient themselves to a learning task before they start with it, so that they can determine its purpose and the outcomes to be reached. Establishing a clear and concrete learning goal helps students to select appropriate strategies and to assess how much time and effort will be needed

Principle 8: Students are more motivated to engage in learning and use motivation regulation strategies when they perceive the environment as favourable for learning

Students learn in social and classroom contexts which interact with their personal characteristics, motivational beliefs and personal strategies. Students observe teachers demonstrating a new skill, and they listen to teacher questions and feedback as well as to reprimands and appreciative statements. They participate in learning activities with others and observe their successes and failures. In sum, students come to understand and integrate learning strategies through observing and participating in social learning activities. Their appraisal of the task and its context are co-constructed in the specific educational and social context (Perry, Turner and Meyer, 2006).

INTELLIGENCE

The concept of intelligence is among the most important concepts in educational settings and in society in general. Although students differ in innate intelligence and abilities, these qualities are also influenced, to a large extent, by environmental factors. Recent research indicates that individual IQ scores can change in the teenage years, and maps such changes to alterations in brain structures (Ramsden et al., 2011; Price et al., 2013) Our actions and experiences throughout life have the potential to reshape how our brains work because brains are "plastic" and can change during a lifetime. In particular, extensive practice and expertise are associated with profound changes in the connections between the neurons of those regions of the brain that are stimulated. Through practice, the brain forms new connections and the internal structure of existing synapses change, so much so that some regions of the brain grow in size and complexity. Stamina, hard work and persistence are just as necessary, if not more necessary, than talent and aptitude to become proficient in any endeavour.

How do beliefs about intelligence influence learning and achievement outcome?

Students' beliefs and goals can powerfully influence their learning success. There is increasing evidence that the likelihood of their success is influenced not only by actual ability, but also by the beliefs and goals that they bring to the achievement situation (Elliot Dweck, 2005). Those who believe intelligence is a fixed entity (entity theorists) tend to

emphasize 'performance goals', leaving them vulnerable to negative feedback and likely to disengage from challenging learning opportunities. In contrast, students who believe that intelligence is malleable (incremental theorists) tend to emphasize 'learning goals' and rebound better from occasional failures (Mangels, Buttefield, Lamb, Good and Dweck, 2006). The way in which an individual naturally responds to negative feedback plays a role in forming some of the individual's beliefs and goals. The study conducted by Mangels, Buttefield, Lamb and Dweck (2006) found that incremental theorists demonstrated significantly greater overall gains in knowledge than did entity theorists.

Additionally, research by Deck et al. (2012) found that people's beliefs about the incremental versus entity nature of intelligence can have also profound effects on their motivation and academic outcomes. For example, compared to individuals who believe that intelligence is fixed, those who believe that intelligence can be changed show more sustained motivation in the face of difficulty (Blackwell, Trzesniewski, & Dweck, 2007) and focus more on self-improvement rather than self-defence.

How does praise for intelligence influence children's motivation and performance?

Praise for ability is commonly considered to have beneficial effects on motivation and achievement. Whether it is in the classroom or on the sports field, nothing seems more natural than to commemorate individuals' achievements by applauding their abilities in some way (Mueller and Dweck, 1998). Thus, it is unsurprising that this type of praise has been widely accepted as a popular tool in development and maintenance of individuals' academic achievement motivation, behaviours and strategies. Praise for intelligence, in particular, has been targeted as playing an important role in children's perceptions of their ability and motivation to succeed. However, attributing children's good performance to intelligence may have an undesired impact on children's overall achievement. Praise for intelligence seems to teach children to value performance while praise for hard work seems to lead children to value learning opportunities.

In Mueller and Dweck's study, the children who were explicitly told that they were smart after success were the ones who most indicated their ability on the basis of poor performance. This indictment of ability also led children praised for intelligence to display more negative responses in terms of lower levels of task persistence, task enjoyment, and performance than their counterparts, who were praised for effort. These children also seemed to consider that low performance reflected their intelligence in a way in which children praised for hard work did not. Praise for ability was found to orient children toward defining intelligence in terms of a stable trait. If children carry away this lesson, they may read low intelligence from poor performance and thus make ability attributions not only for their successes but also for their failures. Praise for hard work, on the other hand, appeared to lead children to see intelligence as malleable and to define intelligence in terms of motivation and knowledge.

The results from the study suggest that when students succeed, attention and praise should be directed at their efforts or work strategies. That is, children should be praised for the process of their work (focusing on the task, using effective strategies, or persisting on challenging problems) rather than for the end product and the ability that produced it. Well-meant praise for intelligence which is intended to boost children's enjoyment, persistence,

and performance during achievement, doesn't prepare them for coping with setbacks (Mueller and Dweck, 1998).

Gifted education

In an age of advancing globalization and continued international competition, talented individuals are important for cultural progress, scientific innovation and economic prosperity. The focus is no longer on the myth of individual genius, but on the identification and education of as many gifted children and adolescents as possible.

Curriculum for the gifted, its goals and purposes, as well as its delivery systems speaks loudly as to how talent and its development is honoured and nurtured in a society. Curriculum planners for the gifted need to be cognizant of the importance of maintaining a balanced perspective toward key issues if gifted education is to be meaningful for the students it wants to serve.

The similarities between curriculum development efforts in general education and the principles of gifted education curriculum development are very complementary. While the translation of these principles into practice still require greater flexibility and latitude when dealing with the range of high ability learners, it is important to note the commonalities of general approaches to curriculum reform with those principles of good gifted education. Both approaches value learner outcomes that emphasize higher level thinking and conceptual understanding, authentic instruction and assessment, deep involvement in inquiry, use of multiple resources and technology applications, and helping students develop metacognitive tools. The standards also reflect an attempt to view the curriculum experience as one that promotes the habits of mind of a practicing professional, whether it be a scientist, writer or mathematician; all of these components have been staples of gifted curriculum philosophy for the past 20 years (Int. Handbook of Giftedness and Talent). Honoring the affective development of the gifted is also an important aspect of a comprehensive balanced curriculum view. These students need to understand their own exceptionality, their intensity and sensitivity of feelings, their need for coping strategies to help them deal with their own perfectionism and vulnerability. These needs require a strong affective orientation to the curriculum to be delivered by teachers sensitive to the nature of gifted students. Such needs also demand a set of counseling services that can respond to psychosocial, academic planning, and career planning needs at requisite periods during schooling.

Because of the complementarity of discipline-specific reform efforts and gifted education tenets, educators of the gifted should align their efforts in curriculum with the work currently going on in all the content disciplines. As a field, gifted education has much to contribute to the debate on national and international standards in all of the core domains of inquiry (Int. Handbook of Giftedness and Talent). It is through appropriate curriculum design and delivery for the top five per cent of the population that the whole of curriculum can be upgraded and enhanced. The curricular work for the gifted can spearhead higher standards and more rigorous methodologies in addressing the needs of the rest of the student body.

While the Netherlands is currently performing satisfactorily in accommodating low-achieving students, evidence has shown that students with a higher potential tend to under-achieve. The Netherlands needs to motivate and challenge all students, regardless of their background or their talents, to fully realise their potential (OECD, 2015).

TALENT

The terms gifted, talented and intelligent all have meanings that suggest an individual's highly proficient or exceptional performance in one or more areas of strength. Exceptional talent is the result of interactions between goal-directed behaviour and perceptual processes in the brain. Findings from the neurosciences on the neural basis of intelligence and creativity through the profiles of expert performers suggest a paradigm for investigating talent as the maximal and productive use of either or both of one's high level of general intelligence or domain specific ability (Kalbfleisch, 2004).

Someone exhibits talent when they perform in a certain capacity above the norm. Someone possesses intelligence when they respond to a circumstance appropriately and with motivation, applying their knowledge and skill when it is a relevant contribution. Someone is creative when they provide a solution for or interpretation of a problem or product that is significant and novel. Attributes such as creativity, exceptional memory, rapid processing speed, high motivation, an affinity for learning and optimal cognitive performance in one or more domain are the basis for the expression of talent (Kalbfleisch, 2004). Practically speaking, talent is the possession and development of a skill, and the expression of a natural aptitude in one or more domains. A domain is a culturally-structured pattern of sensimotor and cognitive skills in a symbolic system such as music, mathematics or athletics.

Creativity

Creativity is widely accepted as being an important outcome of schooling. Most people agree that schools need to develop creativity in students just as much as they need to produce literate and numerate learners. There are economic and social reasons why creativity might have a place within the school curriculum. Creativity is held as one of the most important competencies by 21st century employers, and when creativity is acknowledged by and promoted through policy it is often in response to employability and competitiveness concerns (OECD working paper 86). Although recent graduates are beginners in their field, a fresh perspective and new solutions to old problems is one thing they can contribute to the organization right away (European Commission, 2013).

At the same time, it is clear that creativity can also be seen as a social good and therefore that is important for the social and personal development of young people in communities and other social settings. Creativity in education can enable a country to compete in a global market, having a flexible workforce, facing national economic challenges, feeding the creative industries and enabling youth to adapt to technological change (Banaji et al., 2010).

The human capacity for creativity, insight and innovation demonstrates the dynamic complexity of the brain (Singer, 1995). Creativity is comparable to intelligence in a number of ways, including in its ubiquity and in its learnability (OECD/WKP, 2013). Perkins has made a powerful case for the learnability of intelligence, including many aspects of creativity (Perkins, 1995). While Torrance believed that creativity could be taught like any other skills, Csikszentmihalyi believed that, while children could not be taught creativity, the right combination of personal characteristics and an encouraging environment could produce it. He also developed a concept of *flow*, the feeling of optimal performance when things are going well as an almost automatic, effortless, yet highly focused state of consciousness.

According to OECD/WKP (2013), the creativity model identified five core dispositions of the creative mind:

1. Inquisitive: clearly creative individuals are good at uncovering and pursuing interesting and worthwhile questions in their creative domain. They pose concrete questions about things which enable them to think things through and develop new ideas and constantly aim to seek and find out more and challenge assumptions.

2. Persistent: creative individuals are persistent which enables them to go beyond familiar ideas and come up with new ones. Creativity also demands a certain level of self-confidence as a prerequisite for sensible risk-taking as well as toleration of uncertainty.

3. Imaginative: at the heart of a wide range of various analysis of creative personality is the ability to come up with imaginative solutions. It is often through making connections and the process of synthesising that brings together a new combination of different things. Additionally, using intuition allows individuals to make new connections and arise at thoughts and ideas that would not necessarily come through analytical thinking.

4. Collaborative: the creative individual co-operates appropriately with others. This means working collaboratively as needed, not necessarily all the time. Another aspect of it is feedback and the propensity to want to contribute to the ideas of others, and to hear how one's own ideas might be improved.

5. Disciplined: as a counterbalance to dreamy, imaginative side of creativity, there is a need for knowledge and craft in shaping the creative product in developing expertise. Creative individuals will devote time to creative endeavour and practice in order to improve their skills, pay attention to details and correct errors.

A central challenge for the cultivation of creativity in schools is their subject-dominated nature. Thus, while creativity spans all subject areas and is not limited to the arts, there are inherent conflicts in attempting to ensure assessment of cross-curricular concepts. A further issue is often the overriding agenda of school accountability grades, assessment systems that competes with serious attempts to foster creativity (Menter, 2010). Unsurprisingly, many teachers focus more closely on high-stakes mandated testing than on tracking the development of dispositions such as creativity (William et al., 2004).

Arts education and creativity

Arts education is often said to be a means of developing critical and creative thinking. It has also been argued to develop skills that enhance performance in non-arts academic subjects such as mathematics, science, reading and writing, and to strengthen students' academic motivation, self-confidence, and ability to communicate and cooperate effectively. Arts education has thus often been assumed to have a positive impact on the three subsets of skills that we define as "skills for innovation": technical skills, including in some non-arts subjects; skills in thinking and creativity; and behavioural and social skills (or character).

Everyone associates art with creativity. However, there are a few studies linking enhanced creativity with theatre and dance education, but the limited number of studies and statistical power of the positive evidence does not allow us to generalise this finding (OECD, 2013). Research on multi-arts education has not clearly demonstrated a causal impact on student creativity and problem solving (OECD, 2013). One possible reason for the weak evidence on this question is the limited way in which creativity has been measured – using “domain-general” tests such as the Torrance Tests of Creativity (in which students must for example come up original uses for common objects, or title pictures in unusual ways). Another reason for the lack of a strong demonstrated link between arts education and creativity is that anything can be taught so as to stimulate creativity and imagination, and anything can also be taught in a deadening way. Thus, a science class – indeed, a class in any subject – can teach creativity and imagination if well-taught; and an art class can leave creativity and imagination untouched if poorly taught. It is possible that, even in art, these skills are only developed very deliberately. It is also possible that students who gain expertise in an art form develop creative abilities in that art form but that this new creativity does not spill over into other domains.

Entrepreneurship education and creativity

Entrepreneurship education is education and training which allows students to develop and use their creativity, and to take initiative, responsibility and risks. It is made up of all kinds of experiences that give students the ability and vision of how to access and transform opportunities of different kinds. It goes beyond business creation. It is about increasing students’ ability to anticipate and respond to societal changes. Although traditionally, entrepreneurship education might have been for high achieving young people, it should be available for all. It is recognized that not everyone would be an entrepreneur and that countries are looking for a well-rounded society. Entrepreneurship education has two strands – being an entrepreneur and being entrepreneurial. Both the academic and vocational streams need entrepreneurial education. For example, the Norwegian model puts a lot of emphasis on project work. Project work is perhaps the best way to allow students to experience and develop appropriate knowledge and skills.

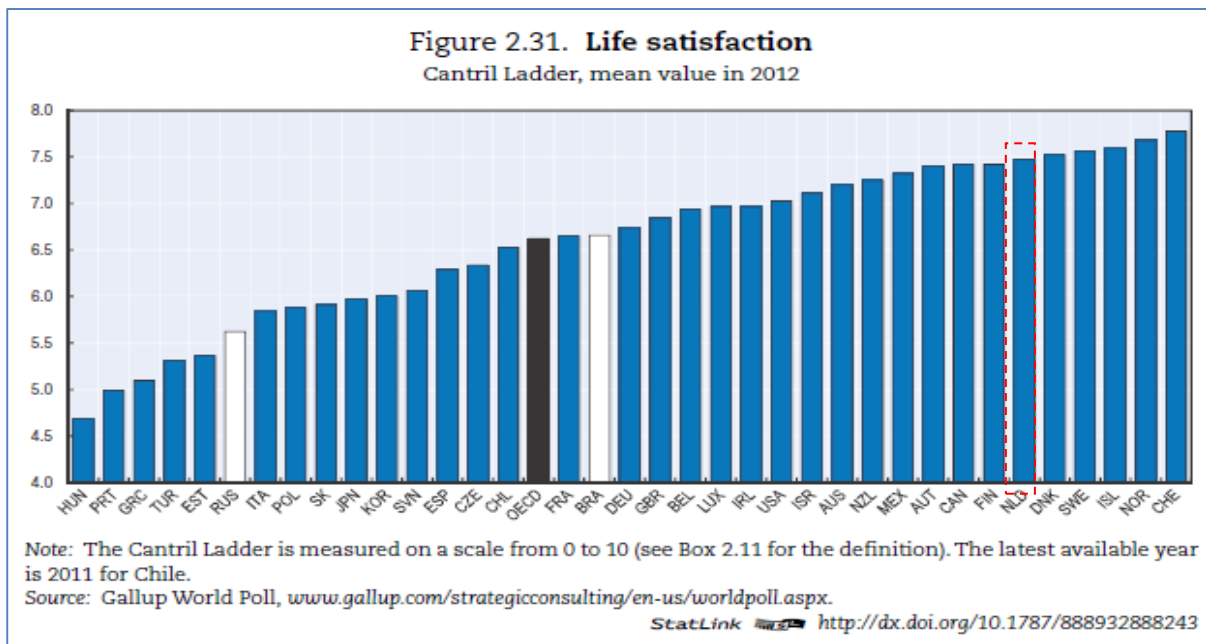
Research often highlights creativity and novel solutions as a key part of the entrepreneurial process or as a characteristic of entrepreneurial behaviour, and a common attribute in the entrepreneurship education programs. Creativity might raise entrepreneurial intentions, since acting creatively and generating new ideas is often focus of entrepreneurial programs. There is a long tradition of describing entrepreneurship and innovative business behaviour as an act of creativity (Amabile, 1996; Ward, 2004) and the two are often used synonymously.

The findings indicate that exercises in creativity can be used to raise the entrepreneurial intentions of students in entrepreneurship education. To benefit various students’ style of creativity, entrepreneurship education should therefore to a larger extent focus on progress in team working, divergent thinking, and interpersonal communication. By integrating creativity approaches and skills into entrepreneurship education, students will gain new and much-needed skills to interact with the dynamic marketplace of today.

WELL-BEING

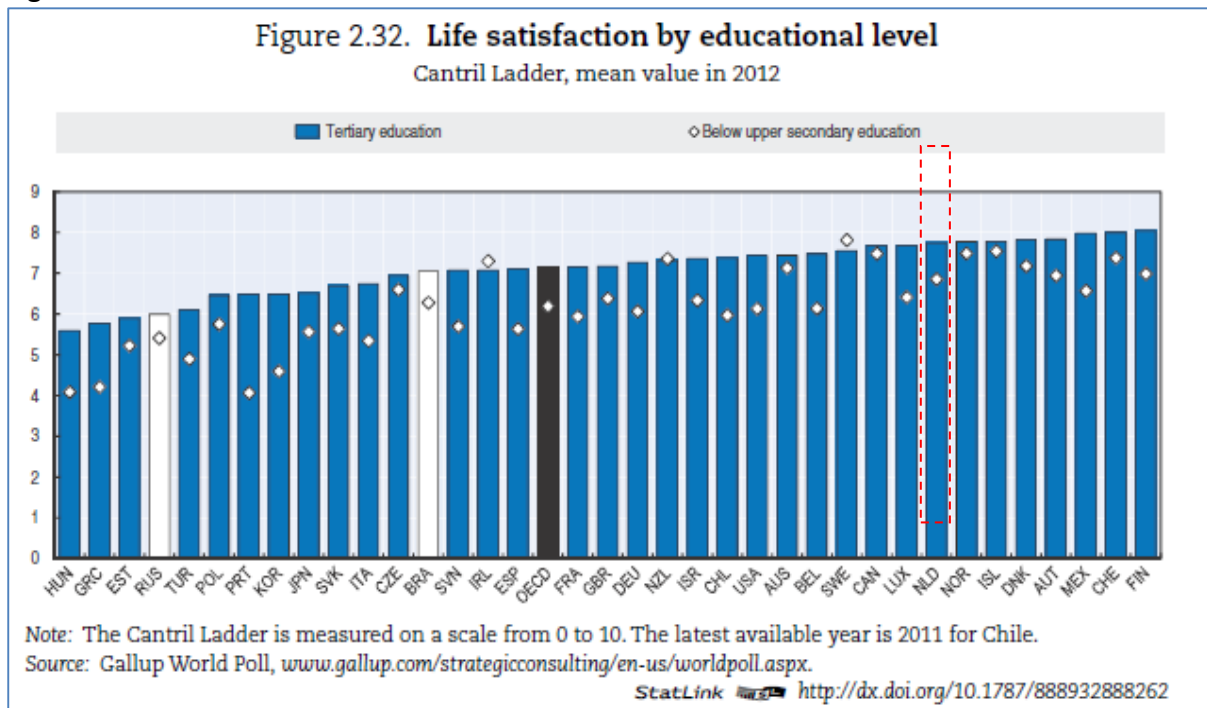
The OECD Better Life Initiative reports on various indicators that measure people’s and nations’ well-being to learn what matters the most to them. Many OECD countries ranked life satisfaction as one of the most important aspects of well-being. The indicator of life satisfaction illustrates people’s evaluation of their life as a whole and reflects the notion of how people experience a set of life circumstances. They are good indicators of people’s evaluations and experiences of life, as well as their psychological well-being. As demonstrated in Figure 5, people in the Netherlands have high levels of life satisfaction (OECD, 2012). In general, 86% of people in the Netherlands say they have more positive experiences in an average day (feelings of rest, pride in accomplishment, enjoyment, etc.) than negative ones (pain, worry, sadness, boredom, etc.); more than the OECD average of 80% (OECD, 2013). Additionally, educational success is related to life satisfaction.

Figure 5.



In the Netherlands (Figure 6), higher levels of education are associated with higher levels of life satisfaction (OECD, 2013).

Figure 6.



Social and emotional skills have a high impact on subjective well-being

The results from three years of research under the auspices of the Education and Social Progress (ESP) project suggest that raising social and emotional skills such as self-esteem, self-efficacy and persistency generally has a considerable impact on improving self-reported life-satisfaction, positive attitudes towards life and (un)happiness, and their effects on these outcomes largely outweigh the effects of raising cognitive skills (OECD, 2015). Among many OECD countries, raising of social and emotional skills exhibits strong effects on increasing subjective measures of well-being, life satisfaction and happiness (OECD, 2015).

Health correlates most strongly with subjective well-being

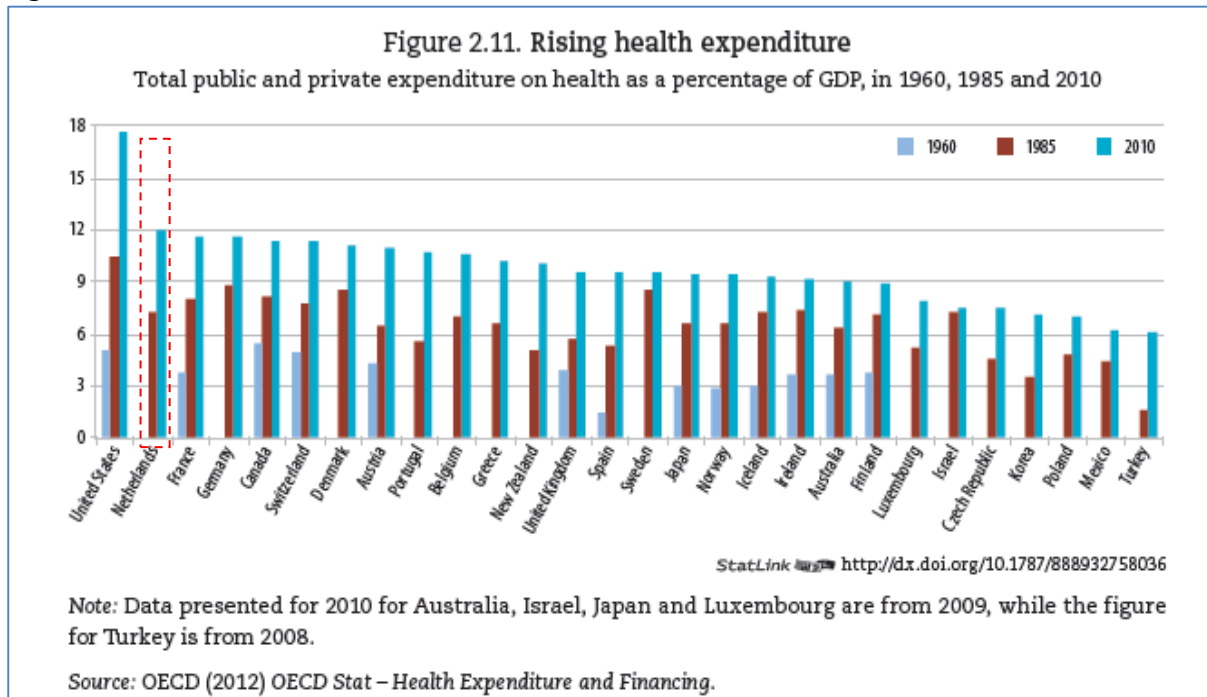
Physical and mental health is important in itself for people's well-being but also because they allow them to perform a range of personal and social activities that contribute to their well-being and development. Countries that perform relatively better on health status also perform better on overall well-being (OECD, 2013). However, due to the recent sharp rise in chronic health problems, health remains an important policy concern in OECD countries (OECD, 2010).

Health expenditure is rising

In spite of rapid increased in life expectancy, OECD countries remain concerned about the deterioration in lifestyle habits and increasing number of health problems. In many OECD countries, one of the most significant negative trends are rising health issues (e.g., obesity, mental illness, etc.) that are reflecting our changing demography and have profound effects on government expenditure in OECD countries. Public and private expenditure on health has increased in all OECD countries since 1960. At that time, health expenditure was on average just over 3% of GDP in the 13 countries for which these data were available. By

1985, this figure had risen to 6%, and by 2010, it had risen again to almost 10% (OECD, 2013). Except for Luxembourg, health spending has grown more quickly than GDP since 2000, which is in part driving this trend. It is important to note that within the averages, there is considerable country variation. In 2010, the Netherlands had the second highest public and private expenditure on health as a percentage of GDP (Figure 7).

Figure 7.



The role of education in fostering health outcomes

Information

Schools can be an ideal place to teach essential health-related information; however, a number of studies suggest that information has a small role to play in explaining the relationship between education and health. Hence, the evidence on school based interventions and pathways suggest that simply providing information does not seem to be very effective in improving health behaviours (OECD, 2010). The modest role of information may mean that it is making sense of the information or translating the information into action that is the real driver for improving health.

Cognitive skills

Schools can play an important role in raising cognitive skills such as reading and scientific literacy, which may help people better digest information and successfully follow recommendations contained in the instructions. These examples suggest that education enables individuals to better absorb information that promotes healthy behaviours (OECD, 2010). Moreover, cognitive skills such as the capacity to learn may help individuals cope with health challenges. The literature suggests that cognitive skills play an important role. Low literacy is generally associated with a variety of adverse health outcomes, including

mortality, long-term illness, self-perceived health, and respiratory and coronary heart disease (Hemmingsson *et al.*, 2006; Batty *et al.*, 2006).

Social and emotional skills

Education may also affect individuals' social and emotional skills which may help translate intentions (for example healthy lifestyle) into actions. Those with higher social and emotional skills typically exhibit friendliness, empathy and self-esteem. They are also less likely to express hostility, anxiety and inconsequential behaviours. Such individual features may help reduce the likelihood of developing mental and behavioural disorders. Social and emotional skills may also help establish positive relationships with family, friends and the community and thus help reduce the likelihood of engaging in unhealthy lifestyles such as excessive drinking. Once individuals face health problems, resilience, self-esteem, locus of control and social skills may help them look for medical attention, comply with treatment and deal with the psychological difficulties and inconveniences associated with sickness or illness (OECD, 2010). Evidence suggests, social and emotional skills can directly improve some of the key measures of health-related lifestyles (OECD, 2015).

Resilience: Resilience refers to features that determine how adversity and stressful conditions are dealt with. More resilient individuals are more likely to respond to adversity in ways that are less damaging to their physical and mental health. Riley and Schutte (2003) find that poor psychological coping is correlated with drug-related problems, but not with alcohol-related problems. Peyrot, McMurry and Kruger (1999) show that diabetes sufferers better manage their condition when their coping style is "self-control" rather than "emotional response". Although the evidence on the impact of resilience on health is limited and sometimes inconclusive, resilience is considered an important element in the ability of individuals to achieve better health outcomes or manage ill health (OECD, 2010).]

Locus of control: Locus of control refers to the extent to which individuals believe that they can control events that affect them. As demonstrated earlier, students with high values in locus of control index tend to achieve better results in mathematics. In addition to improving academic outcomes, locus of control also contributes to better health outcomes.

Kenkel, Lillard and Mathios (2006), using the Rotter index of the locus of control, estimate that men with low locus of control are more likely to smoke and to be former smokers. According to Brunello *et al.* (2008) weight gains are mostly related to lower level of self-control rather than a lack of information. Locus of control is likely to be related to an individual's tendency to act on impulse. For instance, Kuntsche, Rehm and Gmel (2009) report that impulsiveness is an important risk factor for drinking and that weak self-control in the seventh grade is linked to heavy drinking in the twelfth grade. Lastly, Heckman, Stixrud and Urzua (2006) also show that locus of control (using the Rotter index) explains a variety of risky behaviours including smoking and alcohol use (OECD, 2010).

Self-esteem: Social-learning theorists define self-esteem in terms of a stable sense of personal worth or worthiness (Rosenberg, 1965). A variety of evidence points to a strong relationship between high self-esteem and better health. Emler (2001), after reviewing the evidence on the relationship between self-esteem and eating disorders, concludes that low self-esteem predicts later indications of eating disorders. Moreover, numerous studies find a relationship between low self-esteem and suicide attempts in a variety of age and cultural

groups. Lastly, self-esteem is closely associated with other measures of psycho-social features such as feelings about self, depression, negative effects, hopelessness, fatalism and locus of control (Feinstein *et al.*, 2006).

Social skills: Social skills are individual traits that facilitate interaction and communication with others. Carneiro, Crawford and Goodman (2007) find that these traits are strong predictors of adolescent social outcomes (*e.g.* lower probability of smoking at age 16 and teenage pregnancy), as well as adult social outcomes (poor or fair health and mental health problems). For instance, they show that a one standard deviation increase in social skills is associated with 2.8 percentage point decrease in the probability of having mental problems at age 42 (OECD, 2010).

The role of peer influence on health outcomes

Children can learn habits and norms of healthy lifestyles in school and through social interactions with other students. The characteristics of fellow students (peers) may have a bearing on mental health conditions as well as engagement in risky activities such as smoking, drinking and substance use (OECD, 2010). Peer effect is typically confounded with numerous forms of selection, as individuals may choose peers with characteristics and preference similar to their own. However, studies which have attempted to address the selection problem show that peers alter health-related behaviours such as smoking and drinking, and that peer effect tends to be more frequent among men (OECD, 2010). Given that schools are an important place for students to make social interactions, the school environment should foster the development of social skills, as those skills affect health outcomes (OECD, 2010).

The role of school meals on health outcomes

School meals can raise the level of nutritional intake and help children acquire healthy and balanced eating habits. These benefits may also result in better cognitive, social and emotional development and further improve health outcomes, both in the short and long run. This is particularly the case for disadvantaged groups which are less likely to receive balanced and nutritious food elsewhere. Previous studies have shown that policies that promote quality school breakfast and lunch programmes can improve school performance, nutrition status and health outcomes (OECD, 2010). Additionally, the availability of low-nutrition, energy-dense food in vending machines at schools is strongly related to higher intakes of total calories, soft drinks and saturated fat. Studies based on the US evidence suggest that exposure to such food at schools may increase students' risk of obesity (OECD, 2010).

In sum, education can certainly help improve health behaviours and outcomes. This can be done in part by raising cognitive, social and emotional skills, and early launching of these competences would not only be an efficient way to improve individual health but also an effective way to reduce health inequalities when targeted at disadvantaged groups. Additionally, peers and the quality of food available play an important role in developing habits and attitudes towards healthy diet and healthy lifestyles (OECD, 2010). Health and

healthy lifestyles play an important role in enhancing life satisfaction and enhance personal fulfilment.

IMPLICATIONS FOR EDUCATION

As demonstrated, social and emotional skills are contributing to enhancement of motivation, intelligence, creativity and well-being. Social-emotional development is particularly important because it is clear that non-intellective factors are crucial for the emergence of talent and personal development. Although early investment in social and emotional skills is important, they are also malleable during later childhood (OECD, 2010).

Skills development

The rate of skill development largely depends on the individual's age and on their current level of skills. It is now recognised that there are sensitive periods for skill development. A child's early years matter tremendously in the development of skills, as they lay the foundations for future skill development. Investment in early childhood interventions brings the biggest returns in terms of securing higher levels of skills and positive adult outcomes (Kautz et al., 2014). During these years, family is of crucial importance and the patterns of interaction between parents and children have significant impacts on cognitive, social and emotional skills. However, later interventions can also be effective, especially in terms of social and emotional skills (OECD, 2015). During middle and late childhood and adolescence, schools, peer groups, and the community become increasingly important influences in shaping these skills. In addition, alternative programmes for those who drop out of school (i.e. in-work training) have also been found to be important for later skill development (Kautz et al., 2014).

Effective approaches for social-emotional skills development

There are a number of school-based (including early childhood) programmes specifically designed to increase social and emotional skills. These programmes typically provide specific lessons focusing explicitly on instruction of social and emotional skills and/or strategies to embed social and emotional learning in core curricular activities such as English and mathematics.

Embedding social and emotional learning in core curricular activities

The evidence, mostly United States-based, provides examples of successful programmes that embed social and emotional learning in core curricular activities. One of them is the RULER Approach, a school-wide programme designed to promote emotional literacy in kindergarten through eighth grade. This programme provides systematic professional development for the adults involved in the education of children (school leaders, teachers, support staff and families). It enables teachers to integrate emotional learning into a wide range of subject areas such as English (language arts). In the "Feeling Words Curriculum," students learn emotion-related vocabulary words and connect them to academic materials or current events. This approach, based on a randomised control trial, has been found to be effective in improving adaptability skills (social skills, leadership and study skills) (Brackett et al., 2012). The Responsive Classroom approach, a classroom-based programme for kindergarten through sixth grade, incorporates essential teaching practices and practical

strategies including morning meetings, rule creation, interactive modelling, and positive teacher language.

Peer support approaches

International evidence from effective intervention programmes suggests that peer support approaches can be effective in increasing social and emotional skills. For example, the Caring School Community programme provides Cross-Age Buddies activities in which pairs of older and younger students promote bonding through academic and recreational activities. Several randomised control trials and quasi-experimental studies show that programme participation improved children's social behaviours, and reduced conduct problems and emotional distress (e.g. Solomon et al., 2000).

In Japan, Taki (2000; 2004) has developed the "Japanese Peer Support Program" that aims at developing students' self-efficacy through multi-grade activities, where older students take care of younger students. The programme is expected to provide young students with role models while increasing older students' sense of self-worth. Such multi-grade interaction activities have been found to be effective in enhancing students' sociality (National Institute for Educational Policy, 2008).

Mobilising extra-curricular activities

Extra-curricular activities are expected to provide effective learning opportunities for enhancing children's social and emotional skills. In Japan, the curriculum standards specify minimum hours that schools should secure for special activities such as homeroom activities, student government, club activities and school events. Moreover, international evidence suggests that service learning programmes and apprenticeship programmes that offer experience outside school are also effective in strengthening social and emotional skills (OECD, 2015).

Clubs and other after-school programmes

International research generally suggests that extra-curricular activities help enhance social and emotional skills. A meta-analysis of after-school programmes that seek to enhance the personal and social skills of children and adolescents indicates that, compared to the control group, participants demonstrate significant increases in their self-perceptions (e.g. self-esteem, self-concept and self-efficacy) and bonding to school, positive social behaviours and academic achievement, and significant reductions in problem behaviours (Durlak, Weissberg & Pachan, 2010). The analysis indicates that programmes that are "sequenced, active, focused, and explicit (SAFE)" are particularly effective. Another meta-analysis of extracurricular activities both in and out of school suggests that participation in performing arts and pro-social activities had a strong relationship with identity and self-esteem (Lewis, 2004).

A United States-based study by Covay and Carbonaro (2010) suggests that elementary school children who participate in music lessons, dance lessons, performing arts activities, art lessons, sports and clubs outside of school hours demonstrate greater attentiveness, organisation, flexibility, task persistence, learning independence and eagerness to learn, as compared to their peers who do not participate in such activities. A study based on the

German Socio-Economic Panel, a large-scale longitudinal study in Germany, suggests that adolescents who receive music training tend to be more conscientious, open and ambitious (Hille and Schupp, 2015). There are also studies suggesting that performing arts activities such as theatre and dance activities can enhance social and emotional skills, such as self-esteem, self-control, perseverance, social skills, emotion regulation and sympathy (for a review of the studies see Winner, Goldstein and Vincent-Lancrin, 2013).

Service learning programmes

In the United States, service-learning is an activity that combines meaningful service in the community with formal educational curriculum and structured time for participants to reflect on their service experience. Melchior et al. (1999) evaluated service learning programmes called **Learn and Serve** programmes at 17 middle and high schools in the United States, and found that students who participated in service learning improved acceptance of cultural diversity, service leadership, civic attitudes and volunteer behaviour and reduced engagement in risky behaviour (i.e. arrested during the past six months, ever pregnant/made pregnant). A meta-analysis by Celio, Durlak and Dymnicki (2011) of 62 international studies indicates that, compared to controls, students participating in service learning programmes demonstrate significant gains in five outcome areas: attitudes toward self, attitudes toward school and learning, civic engagement, social skills and academic performance. Another meta-analysis by Conway, Amel and Gerwein (2009) suggests that service learning had small but positive effects on personal, social and civic outcomes, such as self-evaluations, skill in interacting with others and personally responsible citizenship.

Improving school and classroom climate

The international evidence provides many examples of successful programmes that promote positive school and/or classroom climate, among other approaches, to facilitate social and emotional learning (OECD, 2015). For instance, the Open Circle Programme (OCP), a programme with 34 structured lessons that cover relationship building and communication skills, understanding and managing emotions, and problem solving, generates school and classroom climates that provide safe settings for children to discuss important issues. The programme introduces a highly interactive climate, incorporating large and small group discussions, role-playing and community-building activities. The above mentioned RULER Approach is designed to improve the classroom's atmosphere by enhancing positive emotional support (e.g. creating warmth and respect in classroom interactions), reducing negative climates (e.g. reducing hostility in classroom interactions), improving teacher sensitivity (e.g. the extent to which teachers respond to students' emotional and academic needs) and raising teachers' regard for student perspective (e.g. the extent to which classroom activities incorporate students' points of view).

Community

Communities provide children with informal and non-formal learning opportunities. In particular, some programmes provided by communities can be factors that directly influence children's social and emotional skills. This section covers mentoring programmes, volunteering activities and outdoor adventure programmes among such programmes.

Mentoring programmes

Mentoring can be an effective way to enhance youth's social and emotional skills. A meta-analysis of mentoring programmes among children and adolescents by DuBois et al. (2011) concludes that mentoring programmes can improve behavioural, social and emotional, and academic outcomes of youth. The authors observe that mentoring can serve both promotion and prevention aims.

In the United States, a number of community-based mentoring programmes for at-risk youth are in place. At the Big Brothers Big Sisters of America (BBBSA), a well-known mentoring programme for vulnerable children aged 10-16, adult volunteers regularly meet with children and share activities over one year. Evaluation of the BBBSA suggests that the programme reduces a variety of antisocial behaviours, such as hitting, stealing, damaging property and skipping class or day of school (Tierney, Grossman and Resch, 2000).

Following the success of community-based mentoring programmes, many school-based mentoring programmes have been introduced in the United States. In a typical school-based mentoring programme, volunteer mentors and students from the participating school are matched on a one-to-one basis, and spend their time together participating in a range of activities at school throughout the academic year (Wheeler, Keller and DuBois, 2010). The analysis of effects of the school-based BBBSA programme by Herrera et al. (2007) suggests that effects were more favourable when adults rather than high school students were mentors, when mentors reported receiving adequate levels of support, and when schools provide adequate access to school resources and space.

Experiencing volunteering activities

International research suggests positive impact of community volunteering activities on youth's social and emotional skills, while the effect appears smaller than service learning (Gutman and Schoon, 2013). Some studies suggest that those who experienced volunteering activities during childhood are more likely to demonstrate higher pro-sociality in adulthood. The Canada Survey of Giving, Volunteering and Participating (CSGVP) suggest that those who reported being active in religious organisations, belonging to a youth group, or volunteering as youth were more likely than others to report making charitable donations and volunteering as adults (Hall et al., 2009). Similarly, a study on American adults suggests that those who began volunteering as youth are twice as likely to volunteer as those who did not volunteer when they were younger (Toppe, Kirsch and Michel, 2001).

Outdoor adventure programmes

International research generally finds that adventure programmes are beneficial for developing social and emotional skills. Meta-analyses suggest effects of adventure programmes on locus of control (Hans et al., 2000), self-efficacy, behavioural observations, personality measures and self-esteem or self-concept (Gillis and Speelman, 2008). In Japan, several studies also suggest potential positive impacts of outdoor adventure programmes on social and emotional skills. For example, Kataoka et al. (2011) suggest that participation in the Girl Scouts may increase high school and junior high school girls' self-esteem. The National Institution for Youth and Education (NIYE) (2010) reports a potential link between

community and outdoor activities during childhood and social and emotional skills in adolescence and adulthood. The Institution analysed responses from 11 000 high school students and 5 000 adults on their childhood experiences and found that those who reported experience with nature, playing with peers and participation in community activities in childhood tended to be more open to new experiences, have higher normative consciousness and have higher interpersonal skills.

Lifelong learning

Personal development is a lifelong process and lifelong learning contributes greatly to it. This concept recognises that learning is not exclusive to the early years but continues throughout the lifespan; it acknowledges that learning takes place not only in schools and universities, but in many different formal, non-formal and informal learning environments. Different rationales can be forwarded for lifelong learning (Istance *et al.*, 2002). For some commentators, the economic and instrumental arguments have excessively dominated the political discourse and they remind us that lifelong learning should equally recognise “that each individual has a learning potential” (Longworth and Davis, 1996, p. 21) and is “an essential ingredient to the growth and development of the human person” (Jarvis, 2009). In this spirit, thorough-going lifelong learning should not only be viewed as a means to a dynamic economy, but also for effective community and social engagement, participatory democracy and for living fulfilling and meaningful lives. The broad sweep of lifelong learning notwithstanding, the extent and quality of initial schooling during the formative years are crucial for learning later in life (Gorard, 2009; Hargreaves, 2003). The knowledge, skills, values and attitudes acquired during this early life-stage provide the foundation for the lifelong learning habit. Therefore, schools are pivotal organisations of the learning society yet their contribution in laying the foundation for lifelong learning has tended to be neglected. One key measure of the success of schools in achieving this is the extent to which they equip young people both with a meaningful knowledge base and with the 21st century competences outlined next.

Bildung

When we extend our concept of education to include “Bildung” – Von Humboldt’s term that refers to the shaping of the human being with regard to his/her own humanity as well as his/her innate intellectual skills – we need to reflect on our own view on the nature of humans and human society. For our own view and expectations of human beings, which is so much shaped – often unconsciously – by our surrounding culture, we carry with us when we think about education in the broad sense of Von Humboldt (1767-1835).

Frans de Waal a Dutch/American biologist in his famous book ‘*Good Natured*’ (Harvard University Press, 1996) discusses how social animals like primates as well as some other social mammals maintain harmony in their group by developing and maintaining strategies to regulate aggression and greed among its members. These strategies also imply that as a member of the group one cannot afford to turn a blind eye on the needs, desires and anger of other members. Each member needs to be *mindful* of all that. Protecting this harmony and educating the younger ones accordingly enhances the ability of primates to survive as a species. That is their form of ‘Bildung’. This good nature, however, is not based on preconceived ethics or morality or religion. It is more basic than our humanistic or religious concepts of moral goodness (De Witt, 2014).

Basic goodness

These qualities are genetic and older than the appearance of the human species. We could call it *basic goodness*. This term denotes a natural innate quality that is not governed or shaped by any moral thought of good or bad. The term therefore does not imply a moral judgment on the nature of primates – or humans for that matter. It is on the basis of this quality that any society can exist. Maintaining, cultivating and strengthening this quality from the heart is the essence of what we call *Bildung* or *character education*.

In the words of the *Dalai Lama*: “Many of the problems we face are man-made, for which incomplete education is partly responsible for. Thus, in addition to basic education, we need to encourage warm-heartedness, concern for others and compassion. Otherwise, when our marvellous intelligence is led by powerful negative emotions, it invites disaster. The real source of trouble is in our mind and emotions.” This means that in terms of *Bildung* we also have to explore:

- 1) *our own way of thinking about ourselves and others and*
- 2) *the ego centered emotions that we hold onto.*

In brief what Confucian and Buddhist education share is their trust in human nature. According to Confucian thought and Buddhism (see e.g. the *Cakkavatti Sihananda Sutta* and the *Kutadanta Sutta*) a good human society both supports and is supported by the basic goodness of its members. When we turn to education we have to deeply search ourselves how we ourselves think and feel about human nature. Because, as parents or professional teachers, these thoughts and feelings determine what we will teach the younger generation in terms of *Bildung* or character education. If we do not see, acknowledge or trust this basic goodness in ourselves and others, what do we then consciously or unconsciously transmit in terms of *Bildung*?

First of all, just like king Asoka, king Suchandra, Confucius and many others looked for elements and qualities in their own society, we can look for those aspects of our society that *resonate with our own experience of basic goodness*. And highlight those in schools and in our education system. Second, we can only do so, if we ourselves cultivate the experience of basic goodness and learn to trust it. And, simultaneously, we need to cultivate clarity of mind, in order to see what needs to be accepted and what need to be rejected (De Witt, 2014).

Conclusion

Education has great potential to enhance personal development of students. In particular, social and emotional skills can play an important role in driving outcomes such as health, well-being, motivation, intelligence and creativity. Children are not born with fixed levels of intelligence, creativity or motivation and contrary to popular misconceptions they do not possess a fixed set of abilities with little room for improvement. They are not born as a “maths person”, a “creative person” or an “attentive person”. Undoubtedly, children’s innate intelligence and abilities differ but they begin their lives with considerable potential to develop these aptitudes. Whether they flourish or not depends on the learning contexts that they are exposed to between early childhood and adolescence. These constructs are malleable and education systems can help facilitate children’s skill development by improving the learning environments in which they develop. Particularly, social and emotional skills such as perseverance, self-esteem, locus of control and social skills enhance and contribute to ultimate development of motivation, intelligence, talent, and overall well-being. Schools can help improve students’ social and emotional skills by mobilising some of the earlier mentioned curricular and extra-curricular activities.

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