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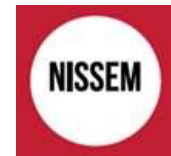
Sinclair, M. (2018). Social and Emotional, Cognitive and Behavioural Learning for Well-Being, Global (Including National and Local) Citizenship and Sustainable Development at Different Levels of Education: Focus on Adolescence

NISSEM Working Paper

NISSEM Working Paper

Social and Emotional, Cognitive and Behavioural Learning for Well-Being, Global (Including National and Local) Citizenship and Sustainable Development at Different Levels of Education: Focus on Adolescence

It's only when you hitch your wagon to something larger than yourself that you will realize your true potential - and become full-grown.—*Barack Obama[i]*

SDG Target 4.7: by 2030 ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development.

Abbreviations: ESD (Education for Sustainable Development); GCED (Global Citizenship Education); SEL (Social and Emotional Learning); SDG (UN Sustainable Development Goal)

Message from NISSEM: *SEL represents a core element of and underlying foundation for GCED and ESD skills and values - for SDG target 4.7 themes -so the evidence base for SEL may help in design of effective GCED and ESD (SDG target 4.7) content.*

Evidence shows multiple benefits from explicit teaching and learning of SEL skills and values in early and primary school grades – in terms of academic learning and of positive social and emotional behaviours, with continued impact in later life. At secondary level, institutional factors have often constrained explicit SEL teaching, and the evidence base for its impact is thin, but there are examples of positive impact.

The goals of GCED and ESD, reflected in governments' commitments to SDG target 4.7, are of especial importance in the adolescent years, corresponding to middle school and secondary school level. Adolescents are approaching adult citizenship, so it is at this stage that schools must seriously address both cognitive and social-emotional dimensions of GCED and ESD, to have sustainable impact. Adolescent students have increased cognitive capacity to understand complex issues, but success in conveying GCED and ESD messages may require programme design that is tailored to adolescents' concerns for peer approval, and to their growing desire for personal agency, the capacity to 'make a difference' to their society.

NISSEM asks how the different stages of SEL and associated GCED and ESD (SDG target 4.7) themes can be supported in particular through education materials for different levels of schooling, in the contexts of lower and middle income countries (LMICs), including conflict-affected and post-conflict settings.

NISSEM proposes that Ministries of Education and partner programmes may:
>   (a) *Research the key elements of SEL, GCED and ESD (SDG target 4.7) corresponding to national culture(s) as well as national policies for addressing 21st century needs.*
>   (b) *Create space for preparation of contextualised scope and sequence for GCED, ESD and SEL, introducing themes, skills, values and approaches in a sequential and age-appropriate way, across the years of formal schooling.*

       (c) *Develop and trial youth-informed exemplar materials for students (and teachers in training) that are contextualised and motivational, with built-in 'structured pedagogy' to assist teachers deal with these sometimes sensitive dimensions of curriculum.*

PURPOSE OF THIS WORKING PAPER

This paper is intended to complement a UNESCO-supported research project undertaken by the University at Albany-SUNY jointly with NISSEM and ESPN, analysing the cognitive, social-emotional and behavioural dimensions of intended learning for GCED and ESD at different grades of schooling, in two countries in each UNESCO region.[ii] The present paper asks: ***What age-related guidance do we have for helping students develop positive social and emotional skills and values, and their application in real life including GCED and ESD?***

The paper looks briefly at some relevant aspects of children's mental development, particularly during adolescence. It then reviews the limited evidence regarding the differences in impact of social and emotional learning (SEL) programmes at different levels of schooling.

The paper additionally reviews the implications for development of education materials in LMICs and suggests the need for institutional space to develop and trial creative approaches in support of good practice for ESD and GCED, including SEL, at different ages or levels of schooling in these settings.
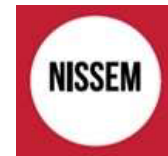
CHILD DEVELOPMENT

Caution: The child development literature often reflects western societies, in terms of both culture and life situations, and there is much research to be done on cross-cultural differences.[iii] Social determinants including inequality and culture affect child development for both health and education outcomes.[iv] The evidence below should be seen as a starting point for contextualised and 'bottom-up' studies including in low and middle income (LMIC) settings.

This paper does not review the established literature around the ideas of Piaget (cognitive development), Kohlberg (moral development), Gilligan (development of 'caring'), Erikson (identity development) and others. More recent research shows the complexity of the development process, indicating that the cognitive, limbic and other areas of the brain are in constant interaction, and that social, emotional and cognitive capabilities are 'interdependent in their development, experience and use'.[v] Oyserman and Destin emphasise that identities are 'dynamically constructed' in context.[vi] [vii]

Neuroscience shows the brain to be incredibly active in the early childhood years, with new synapses created at a rate approximating a million per second, reaching a peak by during the pre-school years. Stimulation during this early period, including positive interactions with carers, is seen as critical for this process to go well.[viii] Synapses are being heavily pruned, largely on the basis of use (though new synapses are created throughout life).[ix] Educators have focused on helping young children practise executive function, linked to maturation of the pre-frontal cortex, notably paying attention and control of impulses such as aggression and shouting out answers in class. They likewise support empathic social and emotional learning (SEL) activities suited to the age-group, such as helping, sharing with and comforting others.[x]

Adolescence features another period of vigorous brain changes, with massive pruning of synapses and enhanced activity and connectivity in various brain areas.[xi] Famously, adolescents can be moody and make unwise decisions.[xii] Ernst et al. note that:

> 'adolescents frequently experience negative and volatile emotions. However, the period of adolescence is also marked by a nonlinear enhancement in risk-taking behavior, characterized

by approaching pleasurable experiences without appropriate reverence to their associated potentially negative consequences.' [xiii]

Bradford Brown suggested that adolescents have four developmental tasks: to stand out, fit in, measure up, and make commitments.[xiv]

Emotional turbulence is associated with enhanced sensitivity to social pressures, notably the desire to maintain status with – or impress – peers.[xv] Yeager (2017) summarises research on changes in outlook and emotional responses that take place in adolescence, at least in the US:

> 'The onset of puberty means that adolescents pay more attention to social cues that signal possible threats to status or respect, and they exhibit greater reactivity to feedback about status and respect (thrill of pride or admiration, fear of humiliation or shame, or anger at unfairness). They also experience increased motivation to engage in social learning situations relevant to status and respect (those that create acceptance).'[xvi]

For example: in an experiment related to healthy eating, Yeager *et al.* engaged adolescents in a review of exploitative and misleading advertising deliberately aimed at the young (by the management of food companies) which led to adolescents choosing a healthier snack option the next day, apparently in an enactment of their dignity and agency. The discussion below regarding adolescents' high 'discount rate' for the future and utilising the possible immediate reward of engaging in positive action can be considered in relation to GCED and ESD.

> 'Traditional self-regulation approaches focus on cognitive strategies to either counter the emotional power of the immediate reward or to bridge the cognitive divide between the present and the distant benefit (e.g., intermediate goal-setting). Neuroscientific research with adolescents has provided a reason for pessimism about such approaches in this age group.

> The present research transforms this problem by eliminating the need to think about long-term material benefit. Instead, it offers an immediate symbolic benefit (and, consequently, eudaimonic reward) for resisting temptation: feeling like a high-status and respect-worthy person right now because one is acting in accordance with important values shared with one's peers. Previous neuroscientific research shows that adolescents are especially likely to experience an immediate feeling of reward, comparable to what one feels in response to positive hedonic experiences, when they are made to feel socially valuable. We suggest that the immediacy of this eudaimonic reward gives it the emotional and motivational power to compete effectively with the anticipated hedonic reward of succumbing to temptation.' [xvii]

Yeager et al. (2018) noted that this earlier study, which *inter alia* exposed students to supposed quotes from older peers about the food industry,

> 'capitalized on the psychology of descriptive norms—or the notion that individuals may conform to the choices of relevant others when presented with consensus information about their behaviors. Descriptive norms directly influence adolescents' willingness to conform to behavior, especially when norms come from high-status peers.' [xviii]

Yeager, Dweck and colleagues have also explored the impact of adolescents' mind-sets:

> 'Our research has shown that adolescents' beliefs that people's socially relevant traits and labels are fixed and unchangeable – called an entity theory of personality – can predict

whether social difficulty makes one feel permanently disrespected. [...] Research participants reporting more endorsement of an entity theory also reported greater shame and humiliation when they imagined being excluded or made fun of.'[xix]

The authors noted that teaching an incremental theory – the malleability of traits and labels - can increase adolescent coping after experimental threats to their social status and respect.[xx]

The authors note that in general, adolescents seem resistant to conventional messaging:

'We can conclude only that traditional interventions that have appeared in meta-analyses have not been effective, on average, for middle adolescents across multiple domains— including obesity prevention, depression prevention, bullying, recidivism, and social-emotional skill-building in general—even though evaluations of the same or similar programs found benefits for younger individuals.'[xxi]

This led them to propose the following hypotheses:

'Hypothesis 1: Compared with younger individuals, middle adolescents show a greater sensitivity to status and respect, resulting from pubertal maturation (e.g., changes in hormones), changes in social context (e.g., school transitions), and social-cognitive developments.
Hypothesis 2: Traditional interventions do not sufficiently honor this greater sensitivity to status and respect, making the interventions less effective.
Hypothesis 3: Improved interventions could honor the sensitivity to status and respect and thereby capture adolescent attention and motivation to create behavior change.'[xxii]

Approaches to GCED and ESD can take advantage of adolescents' enhanced cognitive skills to convey the complexity of social and environmental action. However, the education programmes should also be designed to get adolescent students 'on-side' emotionally, experiencing their present and imminent societal contributions as valuable and agentic (not 'imposed by adults'), to help build personal responsibility towards these domains into their developing identities. Theories of motivation are relevant here, as with the belonging, self-esteem, and self-actualisation needs identified by Maslow, additional to basic needs and security[xxiii]; but these have not been widely applied to adolescents in formal schooling.[xxiv]
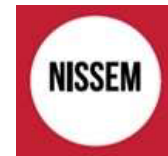
For purposes of policy development in other settings and cultures, these US findings need to be reviewed and seen as a starting point for curriculum development and research that is context-appropriate.[xxv]

SEL PROGRAMMING FOR DIFFERENT AGE-GROUPS
There has been extensive research on the impact of SEL programmes, especially in the US. The results suggest a need for SEL programmes to be age-sensitive, and for more research on programme design and impact for adolescent learners. The same need for age-sensitivity will apply to GCED and ESD programmes which incorporate and/or represent applications of SEL skills and values to these themes.

Impact of SEL programmes by level of schooling
Many SEL programmes have been found to promote academic success as well as improved behaviour patterns and life outcomes. In a landmark meta-analysis of 213 SEL evaluations, Durlak, Weissberg and colleagues (2011) found positive impacts on SEL and – in a subset of studies – on academic performance at all levels of schooling.[xxvi] The studies were predominantly of elementary schools, with

only 31% of students at middle school level, and 13% at high school level; 13% of locales were outside the US (p. 412). Significant here is that students' mean age was negatively correlated with skill outcomes (p. 146).

In a follow-up analysis, Durlak and colleagues cast doubt on this last finding, however, noting that:

> 'Initially, age emerged as a moderator in four of the five reviews but only remained significant in one after the relative influence of other variables was assessed'.

In this review, the authors noted that:

> 'There is support from meta-analytic studies to show that universal interventions focused on promoting social-emotional competence are equally effective at middle and high school (Durlak et al., 2011); however, there are also examples of interventions producing unintended negative outcomes (Multisite Violence Prevention Project, 2009). During adolescence when students are more susceptible to the influence of peers, the intervention delivery structure is extremely important, and small group formats may make low-risk students vulnerable to deviance training […] findings suggest interventions that combine [SEL] skills instruction and strategies to improve school climate may be more effective. While there are successful examples of this at the elementary level, more research is needed to determine how best to create effective models at the secondary level.' [xxvii] [xxviii]

A recent comparison of SEL and Positive Youth Development (PYD) is of especial interest given the challenges of effective messaging to adolescents. Durlak, Weissberg and colleagues undertook a meta-analysis of impact using a combined 'youth development' indicator of negative and positive effects of SEL, with data from 44 US studies and 30 from countries 'outside the US': there was a negative correlation between age and impact, with stronger positive results for the youngest age group.[xxix]

Yeager (2015) suggests that the adolescent phenomenon in US classrooms may often be at 8th grade. [xxx]

Self-transcendent purpose for adolescent learning

Yeager and colleagues found that some high school-aged adolescents spontaneously generated a purpose for learning during interviews – mentioning both a self-transcendent motive and an intrinsic, self-oriented motive for their future work, such as "being a doctor to help people *and* because it would be enjoyable."[xxxi] [xxxii] In later research, Yeager and colleagues showed that students who see their studies as contributing to their wider society perform better and later show higher retention in college compared to those who cite only benefits to their future selves.

> 'In correlational, experimental, and longitudinal studies involving roughly 2,000 high school and college students, a purpose for learning predicted or caused more effective academic self-regulation in the immediate term and over time. A self-transcendent purpose was correlated with more diligence in the face of tempting alternatives and also greater college persistence rates among low-income, urban predominately minority students (Study 1). A brief experimental intervention to promote a self-transcendent purpose increased overall STEM-course grades several months later (Study 2). Studies 3 and 4 clarified the nearer-term effects of this manipulation. A self-transcendent purpose doubled the amount of time students spent on tedious exam review questions (Study 3) and increased by 35% the number of boring math problems students solved compared to controls, even when they had the option to consume entertaining Internet media at any time (Study 4). Adolescents with more of a self-

transcendent purpose for learning also literally saw learning tasks differently. They were more likely to say that pictures and descriptions of quotidian academic tasks were linked to important and personally-meaningful academic goals (…) All told, it seems that when adolescents had a personally-important and self-transcendent "why" for learning they were able to bear even a tedious and unpleasant "how".

Previous research has shown that having a prosocial, self-transcendent motive for engaging in a behavior can lead to greater persistence on repetitive and uninteresting tasks at work. The present research extended this by examining situations in which a person was completing skill-building tasks that have no immediate payoff for others but may prepare one to make a contribution in the future—such as doing single-digit subtraction or completing tedious multiple-choice questions. We found that a self-transcendent purpose for learning could alter a person's self-regulation in such circumstances.' [xxxiii]

Linkage to the higher levels of Maslow's theory of needs might be useful in thinking this through. Other literature on motivation is often drawn from workforce concerns.[xxxiv] The challenge of motivation for personal and societal well-being through secondary education, additional to passing examinations with a strong cognitive base, will require much attention in the years to come, and will require culture- and context-specific initiatives and their evaluation.

Relevant here may be new types of brain research including with young people, which show the association of the brain's Default Mode Network (DMN) with empathy and creativity; it 'is thought to be responsible for narrative construction (i.e. for thinking about the self and others across time and in relation to values and ideas.'[xxxv] Instrumental tasks such as solving maths problems for practice or checking a cell phone reduce DMN activity. Adolescents thus need the opportunity to reflect creatively on the wider implications of GCED and ESD themes, linking to the DMN's wide linkages across the brain – to generate and commit to 'gut' feelings to support societal needs.

The related experiments showing deep gut level responses to highly inspirational true stories is also highly relevant to making GCED and ESD 'work'.[xxxvi] Inspirational stories can be shared across the globe but significant resources should be devoted to finding local, national and regional stories that can form part of a young person's mental tools and orientation. Some of these too can be more widely shared in due course.

Self-transcendence through GCED and ESD programming

How can we get across the message, 'As youth, we are the future'? It is important (as 'agents') that youth see how they can contribute to building social capital and better their society with actions that are realistic in their own context. Not all can become doctors, but those who are good at football can build local leagues which cross ethnic boundaries, for example. All can help younger children do better in school by helping them learn to read, especially if their parents are illiterate. In terms of the environment, there are many actions that youth can undertake at a local level, with some later building on this experience to have wider influence.

Upper primary and secondary school programmes should enable students to see SEL and its applications as something they wish to take ownership of from conviction shared with their peers and not because adults say they must. Young people are forming their individuality, often with hesitancy and doubts, and need to become convinced that the future of their country – their society and their natural environment – is in their hands. The peer group needs to buy into this together, otherwise the teaching might even be counter-productive. This is a big challenge, which is why NISSEM advocates for engaging selected youth in developing programme content that will resonate with the students.
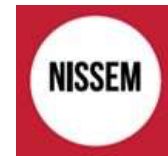
Engaging youth in developing ideas and examples for textbook content

In order to create ways of thinking and find models that can help youths face their future, educators may thus work with young people – inclusively, with males and females of all societal groups – to make content both relevant and motivational as well as memorable, in the pursuit of peaceful and sustainable futures.[xxxvii xxxviii xxxix xl] Ideally, young people who have undertaken some course of peace education, learning to live together, volunteerism with the Red Cross or Red Crescent or similar pro-social training can work with curriculum and textbook developers to generate inspirational or at least realistic examples of how young people can develop their societies, prevent violent extremism, build gender equality, and protect the natural environment.

SOME IMPLEMENTATION ISSUES

Relationship between SEL and GCED and ESD

First, there are conceptual links to clarify: SEL, GCED, ESD and all SDG target 4.7 themes aim to educate young people towards pro-social behaviour in daily life and in terms of societal function and sustainable development. But what are the key concepts, behaviours, and examples, that should be prioritised in curriculum in a particular setting? A balance is needed between what is familiar in the society and the goals set by national policies (e.g. gender equality) – this can present huge challenges.[xli]

Second, there are practical issues in spelling out how the cognitive, social-emotional and behaviour dimensions of GCED and ESD, or SDG target 4.7 themes, should appear in the curriculum and syllabi. For pre-adolescent children it is possible to teach SEL concepts in relation to personal life and extend them to broader societal concerns. Each skill can be illustrated as having simple GCED or ESD applications, eg 'cooperation' to grow and plant out tree seedlings and care for them, or 'conflict resolution' when one child intentionally or unintentionally makes difficulties for another. In contrast, for secondary level students, all SEL skills – from empathy to non-stereotyping to cooperation and negotiation as well as advocacy – are needed to achieve almost any of the more adequately conceptualised GCED or ESD goals, together with relevant cognitive knowledge and skills.

Complex real-world concerns such as GCED and ESD themes require the underlined combined application of most of the SEL skills, and hence the individual skills may not be repeatedly highlighted in syllabi, even if intended. The need for action, using combined SEL skills, may indeed be implicit in syllabus topics rather than explicitly stated (eg. syllabus entries such as 'deforestation' or even 'forest cover' or 'the life cycle of the mosquito' are seemingly cognitive but imply the need for societal action). In social studies, there may be a list of ethnic groups in the country – without a specification that writers and teachers should add in the concept of harmonious existence, even though this may be a national policy.

Due to space limitations or tradition, subject syllabuses for older students may under-represent the affective and behavioural elements of GCED and ESD. The different cognitive themes may be covered but not their implications for responsible citizenship and environmental stewardship. Many social and emotional skills and related values are important for each aspect of GCED and ESD and it would be repetitious to list them each time a relevant topic is touched upon. Textbook writers will focus on the specifics mentioned and the 'non-cognitive' aspects critical for impact on values and behaviour may be neglected. Finding ways for syllabi to signal more explicit attention to the crucial SEL components associated with GCED and ESD themes at all levels of schooling would be helpful; and as noted earlier much work is then needed to stimulate student motivation and commitment.

Curriculum planning

One of the biggest problems in mainstreaming issues such as ESD and GCED themes and values is that they cut across subject areas, so that planning for them is operationally challenging. One of the findings of the NISSEM comparative study for UNESCO may be that some countries have addressed this challenge more directly than others.

> Vertical sequencing: Spiral reinforcement of learning requires progressive widening and deepening of knowledge on a given theme over the years of schooling: this requires coordination between subject specialists working with a subject at pre-primary, primary and secondary school level.
> Horizontal allocation between subjects: Cross-cutting issues require the collaboration of specialists from different subjects. Often a particular theme, skill or behaviour can appear under different subject headings, so decisions are needed on how to make these allocations between subjects.

The logistics of preparing a matrix relating to ESD and GCED themes – and their cognitive, social-emotional and behavioural dimensions, covering the sequence of learning from pre-primary to upper secondary – present an immense organisational challenge. This challenge may be faced by a national curriculum centre or – where schools have the autonomy to organise their own scheme of studies – this challenge may be felt at every school.

A major recommendation is thus to find coordination mechanisms that make for effective and contextualised scope and sequencing of ESD and GCED themes across subjects and years of schooling, working towards outcomes identified as relevant by stakeholders including youths themselves. This may be difficult to achieve in real-life settings without strong leadership from senior management. Practical implementation challenges may arise as different levels of education and different subject specialists may work in separate units at curriculum centres and elsewhere in the education system.

Matters are made more complicated where private sector publishers produce different versions of school textbooks. How can the managers and writers achieve the 'joined up' SEL, GCED and ESD planning described above? How indeed can they be encouraged to prepare education materials that embed appropriate active learning methods to help teachers engage students and earn their commitment to the intended personal and societal goals? How – as an institutional group – can they engage with youth?

Development partners may therefore aim to help create a space (intellectual and physical) where these challenges can be worked through. National education authorities may strengthen the guidance on these cross-cutting issues in their textbook approval criteria.[xlii]

Development and trialling of lesson materials
For LMICs where the textbook is a significant channel for conveying GCED and ESD themes and supporting SEL, it is critical that writers have exemplar lessons to inspire them, and that training is provided around the underlying concepts and the incorporation of 'structured pedagogy'. Resources are needed to generate real-life examples of GCED and ESD themes that can be incorporated in the various school subjects to complement science or social science lessons or to spur empathy and respect for diversity through the opportunities provided by language studies. Examples may include inspirational personalities or well-functioning young people in occupations that benefit the community as well as activities that build inclusive social capital across the nation. These examples can be treated in different ways in different school subjects and levels of education. Thumbnail stories may illustrate concepts in science (e.g. life as a young officer in the national forest service, for topics related to the carbon or oxygen cycle, or forest cover, habitats, erosion or climate); or Henri Dunant's response to the battlefield of Solferino and the founding of the Red Cross movement in social studies

or language), as well as the experiences of young Red Cross or Red Crescent volunteers in helping those in difficulties.

Margaret Sinclair, 14 October 2018
This note draws on comments from NISSEM and other colleagues but the responsibility for errors rests with the author. Comments on this evolving document are most welcome, and may be sent to ma.sinclair@gmail.com

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[i] 2006 speech to Campus Progress: http://obamaspeeches.com/082-Campus-Progress-Annual-Conference-Obama-Speech.htm

[ii] The UNESCO project includes high income countries.
[iii] See, for example, Correa-Chavez and Rogoff, B. (2005).
[iv] Bell, Donkin and Marmot, M. (2013)..
[v] Aspen Institute (2017).
[vi] Oyserman and Destin (2010)..
[vii] Choudhury (2017)
[viii] Shonkoff and Phillips (2000). Center on the Developing Child (2009). See also http://www.urbanchildinstitute.org/why-0-3/baby-and-brain for helpful explanation.

[ix] Sackman and Terway (2016).
[x] Jones et al. (2017).
[xi] Immordino-Yang et al. (2018). See also Sparks (2018).
[xii] See, for example, IOM (Institute of Medicine) and NRC (National Research Council) (2011:38 'The limbic system develops on a steeper curve than the prefrontal cortex, …so that the disparity between these two regions is greatest during adolescence. The result can be an imbalance that may favor behaviors driven by emotion and response to incentives over rational decision making. It is this imbalance—not just the protracted development of cognitive control alone—that contributes to the prevalence of risk-taking in adolescents.' For a detailed discussion, see Somerville et al. (2010). Likewise, Dahl and Suleiman (2017: 21-26).
[xiii] One schema (Ernst et al.,2006) proposes that 'the balance between reward-driven and harm-avoidant behavior is tilted toward reward-driven in adolescents compared to adults. This pattern may be the results of a stronger reward-related system, weaker harm-avoidant system, and/or poor regulatory controls.'

[xiv] National Research Council, Committee on the Science of Adolescence, and Institute of Medicine (2011: 48) *The Science of Adolescent Risk-Taking Workshop Report* (Washington, DC: National Academies Press). The developmental tasks identified were: '(1) To stand out: to develop an identity and pursue autonomy; (2) To fit in: to find comfortable affiliations and gain acceptance from peers; (3) To measure up: to develop competence and find ways to achieve, and (4) To take hold: to make commitments to particular goals, activities and beliefs.'
[xv] In experimental settings, an adolescent can respond to risk as intelligently as adults, but there can be a sudden increase in risk-taking if other adolescents are brought into the room to watch. (This is in line with accident statistics, showing enhanced casualties if adolescent drivers are accompanied by their peers.)
[xvi] Yeager (2017).

[xvii] Bryan et al. (2016). ,

[xviii] Yeager et al. (2018: 108)
[xix] Ibid. p. 111.
[xx] Ibid., p.111

See aksi Scales at https://www.search-institute.org/get-bang-school-sports-buck-promote-student-coach-developmental-relationships/ on how coaches should help kids develop in what we could term SEL.

[xl] For a literature review of 'soft skills' relevant to the workforce, sexual and reproductive health, and violence prevention, see Gates, S., Lippman, L., Shadowen, N., Burke, H., Diener, O., and Malkin, M. (2016). *Key Soft Skills for Cross-Sectoral Youth Outcomes.* Washington, DC: USAID's YouthPower: Implementation, YouthPower Action. Also, Alvarado, G., Skinner, M., Plaut, D., Moss, C., Kapungu, C., and Reavley, N. (2017). *A Systematic Review of Positive Youth Development Programs in Low-and Middle-Income Countries*. Washington, DC: YouthPower Learning, Making Cents International. For a framework of positive youth development in the development assistance context, see http://www.youthpower.org/positive-youth-development-pyd-framework; this framework focuses on youth assets; agency; contribution; and enabling environment.

[xli] Jukes (2018).

[xlii] It is likely that some academic specialists may prefer to focus textbooks on the cognitive content, in line with a 'discipline-building' concept of cognitive development, with (older) textbook criteria being interpreted to exclude social and emotional dimensions (personal communication from Mary Kangethe)**.**

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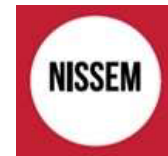
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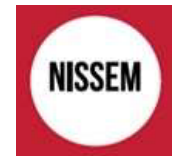
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