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Education as self-fulfilment and self-satisfaction

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Education as self-fulfilment and self-satisfaction

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Abstract

Key drivers of contemporary rapid changes in the educational realm relate to ongoing technological, demographic, economic and social developments in modern European societies. These developments are having an impact on education throughout the lifespan, including a shift to a focus on new types of competences. This shift is becoming increasingly profound in a dynamic, multicultural, and interconnected Europe. The evidence, from various fields of research, shows that non-cognitive competences such as resilience, creativity, and empathy – as well as those non-cognitive competences associated with social-emotional learning and active citizenship – have a positive impact on well-being and also performance. This paper takes a closer look at recent developments relating to these issues across the EU, both in terms of challenges and opportunities, and identifies practices that can serve as inspiration for future policies and practices. The paper reviews the literature as well as current practice related to trends, drivers, practices and future developments relating to four key sub-topics: non-cognitive competences as a broader topic; then resilience, creativity, and active citizenship as more specific sub-topics.

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Contents

1. Introduction

This paper summarises a literature review and a review of current practice covering trends, drivers, practices and future developments in relation to education as self-satisfaction and self-fulfilment. It focuses on four key sub-topics: non-cognitive competences as a broader sub-topic; as well as resilience, creativity and active citizenship as more specific sub-topics.

This introduction provides a brief overview of the main relevant policy developments at both EU and international level, and sets out a definition of each of the sub-topics covered in the paper. The following section reviews the key drivers for change, including the overall drivers of change in the field of education and the reasons for a policy focus on the four sub-topics both collectively and individually. The paper then focuses on the main new trends in education and training in relation to each sub-topic, including a summary of evidence of 'what works' based on available evidence in the literature. The final concluding section summarises some of key findings and learning points emerging from the paper across all the sub-topics covered.

Relevant policy developments

There has been an increasing policy focus at EU level on the broader functions of education and training, beyond a focus only on information-based learning and cognitive competences, to a focus on their role in improving both society more widely and the well-being of individuals. This shift reflects, in the terms of the seminal Delors Report[1], moving away from only 'learning to know' to 'learning to be', 'learning to do' and 'learning to live together'. This broader perspective on the functions of education is reflected in particular in the new [Council Recommendation on Key Competences for Lifelong Learning](2), adopted in January 2018. In its preamble, the Recommendation states that '*Supporting people across Europe in gaining the skills and competences needed for personal fulfilment, employability and social inclusion helps to strengthen Europe's resilience in a time of rapid and profound change*'. Half (four of the eight) key competences set out in the Recommendation are directly relevant to the focus of this paper: 'personal, social and learning to learn', 'citizenship', 'entrepreneurship' (noting its close link to creativity: '*Entrepreneurial skills are founded on creativity which includes imagination, strategic thinking and problem-solving, and critical and constructive reflection within evolving creative processes and innovation*') and 'cultural awareness and expression'. In addition, a Council Recommendation was adopted in May 2018 focusing [on common values, inclusive education and the European dimension of teaching](3), which sets out ways in which education can help to strengthen social cohesion and contribute to fight the rise of populism, xenophobia, divisive nationalism and the spreading of fake news, and promotes inclusive education for quality education for all pupils.

This new policy focus is also reflected at international level. UNESCO views self-fulfilment (referred to as 'human fulfilment') as one if its four key guiding principles in its Education Strategy for the period 2014–2021: '*Education is a foundation for human fulfilment, peace, sustainable development, economic growth, decent work, gender equality and responsible global citizenship*'[4]. It proposes to translate these principles into seven specific global targets, which include knowledge and skills for sustainable and peaceful societies, including global citizenship education and education for sustainable development. The Council of Europe also emphasizes the importance of the broader goals of education, as well as the complementarity of skills for personal development

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[1] UNESCO (1996). Learning: The Treasure within: Report to UNESCO of the International Commission on Education for the Twenty-First Century. Paris :Unesco Publishing, html: http://unesdoc.unesco.org/images/0010/001095/109590eo.pdf

[2] https://ec.europa.eu/education/sites/education/files/recommendation-key-competences-lifelong-learning.pdf

[3] https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1528379535771&uri=CELEX:32018H0607(01)

[4] UNESCO. (2014). *Education Strategy 2014-2021; 25,* http://unesdoc.unesco.org/images/0023/002312/231288e.pdf

with those for employability: '*The Council of Europe advocates quality education to prepare young people not only for employment, but also for their lives as active citizens in democratic societies, and to ensure their personal development and the development and maintenance of a broad, advanced knowledge base. All four purposes are equally important and compatible. They reinforce each other. Many of the competences you need to be an active citizen also help make you employable and they contribute to your personal development*'[5]. The Council of Europe also underlines the democratic mission of education, including personal development, in its Recommendation on higher education[6].

Other stakeholders also highlight the satisfaction of learning, as an end in itself. The Manifesto for Adult Learning in the 21st Century of the European Association for the Education of Adults (EAEA) for example highlights 'the power and joy of learning'[7].

Definitions

We set out below definitions of the four specific sub-topics covered in this paper: non-cognitive competences, resilience, creativity and active citizenship.

Non-cognitive competences

Competences refer to abilities to use knowledge, skills as well as personal, social and/or methodological abilities, in work or study situations and in professional and personal development[8]. While cognitive competences refer more to analytical, critical, and reflective thinking, **non-cognitive competences** refer more to the affective dimension of education. Gutman and Schoon (2013)[9] have identified eight non-cognitive competences (they speak of skills): self-perception of ability, motivation, perseverance, self-control, metacognitive strategies, social competencies, resilience and coping, as well as creativity. Such competences connect to intra-personal abilities and social abilities such as interpersonal communication, teamwork, conflict management and negotiation, as well as inter-personal and inter-cultural understanding. These reflect especially what is referred to in the Delors *Report on Education in the 21st Century* as 'Learning to Be' and 'Learning to Live Together'[10]. Social and emotional learning (SEL), according to UNESCO, refer to 'learning how to manage feelings and relationships with others. This includes ways to also recognise emotions and to maintain positive relationships in developing sympathy and empathy. It involves the acquisition of knowledge, skills and attitudes that learners need to create positive relationships, build resilience, handle challenging situations, make appropriate decisions and care for others. Commonly it focuses on skills such as self-awareness, self-management, social awareness, relationship skills and responsible decision-making'[11]. Empathy, regarded as a key component of

[5] https://www.coe.int/en/web/education/about

[6] Committee of Ministers of the Council of Europe. (2007). *Recommendation CM/Rec(2007)6 of the Committee of Ministers to member states on the public responsibility for higher education and research*, 16 May 2007.

[7] European Association for the Education of Adults. *Manifesto for Adult Learning for the 21st Century,* https://eaea.org/wp-content/uploads/2018/02/manifesto.pdf

[8] http://ec.europa.eu/education/sites/education/files/2016-future-skills-report_en.pdf

[9] http://unesdoc.unesco.org/images/0024/002455/245576E.pdf

10 Delors, J. (2013). The treasure within: Learning to know, learning to do, learning to live together and learning to be. What is the value of that treasure 15 years after its publication? *International Review of Education*, 59, 319–330.

[11] http://www.ibe.unesco.org/en/glossary-curriculum-terminology/s/social-and-emotional-learning-sel

SEL, can be viewed as the tendency to perceive and interpret others' perspectives and feel care and concern for them[12].

Resilience

The concept of **resilience** has been the object of significant theoretical and empirical interest in recent years. As a general concept, resilience can be defined as a primarily non-cognitive process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances[13]. It is seen as a person's ability to successfully adapt to life and developmental tasks in the face of highly adverse conditions or social disadvantage[14]. In the educational context, academic resilience refers to the successful navigation of acute education-related adversity – including disadvantaged learning conditions, low socio-economic status, and/or poor educational background – to achieve successful academic performance. Reflecting this, academic resilience has been defined as 'the heightened likelihood of success in school and other life accomplishments, despite environmental adversities brought about by early traits, conditions, and experiences'[15]. There has been increasing recognition over the years that resilience is not only defined by individual characteristics (e.g. autonomy, self-confidence, migrant status) but also by external factors, including family environment, school and education system features, and wider environmental factors[16].

Creativity

The literature generally defines **creativity** as a non-cognitive competence[17] that refers to the ability to produce work that is both novel and appropriate[18]. This generic definition is refined in a variety of ways and several authors have proposed different clusters for the definitions of creativity[19]. For example, Ferrari et al (2009)[20] identified five clusters of definition of creativity: a)

[12] Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology, 44*(1), 113-126.

[13] Howard, S., & Johnson, B. (2000). Resilient and non-resilient behavior in adolescents. In A. Graycar (Ed.), *Trends and issues in crime and criminal justice series* (pp. 1-6). Canberra ACT: Australian Institute of Criminology.

[14] Windle, M. (1999). Critical conceptual and measurement issues in the study of resilience. In M.D. Glantz & J.L. Johnson (Eds). *Resilience and development* (pp. 161-176). Springer US. See also e.g. Garmezy N. (1990) A closing note: Reflections on the future. In: Rolf J, Masten A, Cicchetti D, Nuechterlein K, Weintraub S, editors. Risk and protective factors in the development of psychopathology. Cambridge University Press; New York. pp. 527–534; Lindstroem, B. (2001). The meaning of resilience. *International Journal of Adolescent Medicine and Health, 13*, 7–12; Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*, 227–238.; Werner EE, Smith RS, editors. (1992) Overcoming the odds: High risk children from birth to adulthood. Cornell University Press; Ithaca, NY.

[15] Wang, M. C., Haertal, G. D., & Walberg, H. J. (1994). Educational resilience in inner cities. In M.C. Wang & E.W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects* (pp. 45–72). Hillsdale, NJ: Erlbaum.

[16] e.g. Masten A, Garmezy N. (1985). Risk, vulnerability, and protective factors in developmental psychopathology. In: Lahey B, Kazdin A, editors. Advances in clinical child psychology. Vol. 8. Plenum Press; New York: 1985. pp. 1–52.

[17] http://unesdoc.unesco.org/images/0024/002455/245576E.pdf

[18] Sternberg, R. J., & Lubart, T. I. (1999). The concept of creativity: Prospects and paradigms. in R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 3-15). Cambridge: Cambridge University Press. See also Feldman, D.H., Csikzentmihalyi, M., & Gardner, H. (1994). *Changing the world: A framework for the study of creativity*. Westport, CT: Praeger Publishing.;Sternberg, R.J., & Lubart, T. (1991). Creative giftedness: A multivariate investment approach. *Gifted Child Quarterly, 37*, 7-15.

[19] See for example Robinson, K. (2006). Do schools kill creativity, Ted talk Monterrey, February, URL: https://www.ted.com/talks/ken_robinson_says_schools_kill_creativity; Leunig, T. (2016). Why real creativity is based on knowledge, TedX Whitehall, October, URL: https://www.youtube.com/watch?v=vajIsWwHEMc; Sternberg, R. J., & Lubart, T. I. (1999). The concept of creativity: Prospects and paradigms. In R. J. Sternberg (Ed.), *Handbook of creativity*. Cambridge: Cambridge University Press, 3-15. Taylor, C. W. (1988). Various Approaches to and Definitions of Creativity. In R. Sternberg (Ed.), *The Nature of Creativity: Contemporary Psychological Perspectives,* New York: Cambridge University Press, 99-121; Villalba, E. (2008). *On Creativity: Towards an Understanding of Creativity and Innovation* CRELL, URL: http://crell.jrc.ec.europa.eu/Publications/CRELL%20Research%20Papers/EVillalba_creativity_EUR_web.pdf; Ferrari, A., Cachia, R., and Punie, Y. (2009). *Innovation and Creativity in Education and Training in the EU Member States: Fostering Creative Learning and Supporting Innovative Teaching Literature review on Innovation and Creativity in E&T in the EU Member States (ICEAC),* Luxembourg: Office for Official Publications of the European Communities.

psychometric approaches which concentrate on defining creativity as something which can be measured[21]; b) psychoanalytical approaches which see the manifestation of creativity as from the unconscious and for artistic purposes[22]; c) a self-expression and mythical approach where creativity responds to the need to express oneself and is inspired by the divine[23]; d) a cognitive approach where creativity is a cognitive skill[24]; and e) an end product approach where creativity is seen as an end-product[25]. Surprisingly, while there is a wide consensus regarding the creative potential of children[26]; the term is in fact seldom defined in education[27]. Going further, Sharp (2004), Beghetto (2007) and Runco (1999) showed that parents and teachers often form implicit theories of creativity which in fact harm the successful pursuit of creativity[28]. For example, one implicit assumption is that creativity is pure talent which only very few possess from birth (a 'big C' definition of creativity[29]). This contradicts the research showing that creativity is a skill to be learnt. A definition of creativity which recognises the potential of everyone to be creative, in everyday life (also referred to as a 'small c' definition of creativity in the literature[30]), may hold more potential and be more inclusive than thinking of creativity as only leading to major breakthroughs[31]. In addition, the literature emphasises that creativity in education may be more noticeable when it is process-oriented rather than focused on products – that children may seldom be evaluated on[32]. Across the EU Member States, curricula tend to conceive of creativity either as a creative task or activity, which is usually linked to specific subjects, such as art, music, languages and technologies; or as a skill, with a focus on 'creative thinking' or 'problem-solving'[33].

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[20] Ferrari et al., Idem., p. 6

[21] Guilford, J. P. (1950). Creativity. *American Psychologist*, 5, pp. 444-454; Torrance, E. P. (1974). *Torrance Tests of creative thinking*. Lexington, MA: Personnel Press; Lubart, T. Besancon, M., and Barbot, B. (2011) Evaluation of potential for creativity, Paris: Hogrefe.

[22] Freud, S. (1958). *On creativity and the unconscious*. [S.l.]: Harper Row; Eigen, M. (1983). A Note on the Structure of Freud's Theory of Creativity. *Psychoanalytic Review, 70*(1): 41-45; Heilman, K. M., Nadeau, S. E., & Beversdorf, D. O. (2003). Creative Innovation: Possible Brain Mechanisms. *Neurocase, 9*(5), 369–379.

[23] Runco, M. A. (1999). Implicit Theories. In M. A. Runco & S. R. Pritzker (Eds.), *Encyclopedia of creativity* (2, 27-30). San Diego, California; London: Academic. Sternberg., & Lubart. Op Cit.

[24] Sternberg., & Lubart op cit; Finke, R. A., Ward, T. B., & Smith, S. M. (1992). *Creative cognition: Theory, research, and applications*: MIT press Cambridge, MA; Wallas, G. (1926). *The art of thought*. New York: Harcourt Brace and World; Osborn, A. F. (1953). *Applied imagination: principles and procedures of creative thinking* (Revised edition / By Alex F.Osborn. ed.). New York: New York Scribner's sons.

[25] Taylor, C. W. (1988). Various Approaches to and Definitions of Creativity. In Sternberg, R. (Ed.), *The Nature of Creativity: Contemporary Psychological Perspectives,* 99-121. New York: Cambridge University Press; Albert, R. S., & Runco, M. A. (1990). *Theories of creativity*. Newbury Park; London: Sage Publications; Sternberg, R. J. (1999). *Handbook of creativity*. Cambridge: Cambridge University Press.

[26] Malaguzzi, L. (1987). The hundred languages of children. *The hundred languages of children (I cento linguaggi dei bambini. Exhibition catalogue)*, 16–21; Meador, K. S. (1992). Emerging Rainbows: A Review of the Literature on Creativity in Preschoolers. *Journal for the Education of the Gifted, 15*(2), 163-181; Robinson, op cit; Runco, M. (2003). Education for Creative Potential. *Scandinavian Journal of Educational Research, 47*(3), 317-324.

[27] Beghetto, R. (2005). 'Does Assessment Kill Student Creativity?'. In *The Educational Forum, 69*, 254–263.

[28] Sharp, C. (2004) 'Developing Young Children's Creativity: what can we learn from research?' in *Topic*, 32, pp. 5-12.URL: https://nfer.ac.uk/publications/55502/55502.pdf

Beghetto, R. (2007) 'Creativity Research and the Classroom: From Pitfalls to Potential', in Tan, A. (Ed.), *Creativity: A Handbook for Teachers,* Singapore: World Scientific, 101-114.

Runco, M. (1999). 'Implicit Theories', in Runco, M. & Pritzker, S. (Eds*.), Encyclopedia of creativity* San Diego, California; London: Academic, 2, 27-30.

[29] Beghetto, idem. Sharp, C. (2004). Developing Young Children's Creativity: what can we learn from research? *Topic, 32*, 5-12.

[30] Bechetto, op cit; Sharp, op cit.

[31] Craft, A., Jeffrey, B., & Leibling, M. (2001). *Creativity in education*. London: Continuum; Ferrari et al., op. cit, 17-18.

[32] Ferrari et al., Op. Cit: 18; Runco, M. A. (2003). 'Education for Creative Potential', in *Scandinavian Journal of Educational Research*, 47(3), 317-324.

[33] Heilmann, G., & Korte, W. B. (2010). *The role of creativity and innovation in school curricula in the EU27: A content analysis of curricula documents*. Luxembourg: European Commission, Joint Research Centre, 8.

Active citizenship

In its 2009 technical report, entitled 'The characterisation of Active Citizenship in Europe', the JRC borrowed the definition of Hoskins and Mascherini (2009)[34] to define **active citizenship** as: 'Participation in civil society, community and/or political life, characterised by mutual respect and non-violence and in accordance with human rights and democracy'[35]. This echoes the definition of citizenship education put forward by the European Commission in a 2017 Eurydice report: 'Citizenship education is a subject area, which aims to promote harmonious coexistence and foster the mutually beneficial development of individuals and the communities in which they live. In democratic societies, citizenship education supports students in becoming active, informed and responsible citizens, who are willing and able to take responsibility for themselves and for their communities at the national, European and international level'[36]. The Lifelong Learning Platform (LLP) emphasises that active citizenship is about actively involving learners in their own learning[37]. UNESCO views what they term 'active democratic citizenship' as one of the defining features of a sustainable society and defines such education as: 'Educating caring and responsible citizens committed to peace, human rights, democracy and sustainable development, open to other cultures, able to appreciate the value of freedom, respectful of human dignity and differences, and able to prevent conflicts or resolve them by non-violent means.'[38]. For UNESCO, active citizenship education connects closely to Global Citizenship education[39]. The ICCS Report[40] from 2016 defines citizenship education in terms of a number of non-cognitive competences associated with civic engagement. According to the report, students should be able to: (a) gain information about issues that arise in civic and political life; (b) discuss aspects of civic and political life with peers and adults; and (c) be disposed to actively engage in society.

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[34] Hoskins, B. and Mascherini, M. 2009. 'Measuring Active Citizenship through the Development of a Composite Indicator.' Journal of Social Indicator Research. 90 (3) 459-488.

[35] URL: http://publications.jrc.ec.europa.eu/repository/bitstream/JRC54065/reqno_jrc54065_the_characterization_of_active_citizenship_in_europe%5B1%5D.pdf

[36] https://www.na.org.mk/tl_files/docs/eplus/eurydice/2018pub/Brief_CitizenshipEducation.en.pdf

[37] http://lllplatform.eu/policy-areas/xxi-century-skills/active-citizenship/

[38] http://www.unesco.org/education/tlsf/mods/theme_b/mod07.html

[39] http://unesdoc.unesco.org/images/0024/002456/245625E.pdf

[40] Schulz, W., Ainley, J., Fraillon, J., Losito, B., Agrusti, G., Friedman, T. (2016). *Becoming Citizens in a Changing World. IEA International Civic and Citizenship Education Study, 2016 Report*.

2. Key drivers of change

In this section, we begin with a consideration of the main drivers of change in the sphere of education. We then consider the reasons for increasing policy attention on the four sub-topics and their interrelation, before a consideration of the key drivers beyond the focus on each.

Main drivers of change in the world of education

Four main drivers – technological, demographic, economic and social – are prompting increasingly rapid changes in the world of education, including the need to focus on the four sub-topics of interest for this paper.

The acceleration of technological developments and digitisation[41] has led to rapid skills obsolescence especially for mid-career and older workers, as well as the need for all to constantly update skills throughout life, to acquire greater adaptability ('learning to learn') and to develop more soft skills and transversal competences[42]. All learners must be digitally competent, and there is an urgent need to combat the digital divide[43] to avoid new forms of exclusion and deprivation. While new means of connectivity provide unprecedented access to information and potential sources of knowledge, both in formal and non-formal education settings, the multiplicity of information and media channels can lead to digital dystopia[44], information overload, an inability to 'switch off', as well as the blurring of lines between professional and personal spheres. Unmediated and uninformed access to social media can lead to isolation, new forms of bullying both within and outside the classroom (e.g. cyber-bullying[45]), disinformation, propaganda, and a reinforcement of negative world views including personal lack of satisfaction based on perceptions that others have a better life. In light of the unprecedented access by learners of all ages to modern media and multiple viewpoints, there is a need to ensure sufficient media literacy and critical thinking skills[46].

Demographic change is also having major impacts. The ageing population pyramid in the EU[47] requires a renewed focus on mental and personal wellbeing throughout the lifespan, in order to ensure that longer lives are not only more fulfilling, but also healthier, to avoid unsustainable strain on health and social care budgets. The educational achievement of all learners, from all groups, must be fostered to full potential – for example by tackling barriers to participation for excluded groups – in order to support the ageing population through filling gaps in the labour market and generating wealth and tax income for the economy. The labour market requires additional care-related skills[48], and society needs to find new ways to support people to stay in employment longer. In our increasingly diverse society, socio-economic inclusion of all, and greater intercultural

[41] CEDEFOP Skills Panorama team. (2016). *Preparing for the age of the robots,* URL: http://skillspanorama.cedefop.europa.eu/en/blog/preparing-age-robots

[42] Brynjolfsson, E., McAfee, D. (2012). *Race against the machine: how the digital revolution is accelerating innovation, driving productivity, and irreversibly transforming employment and the economy.* Lexington: Digital Frontier Press.

[43] See e.g. Sparks, C. (2013). 'What is the "Digital Divide" and why is it Important?' *Javnost – The Public*, 20(2), 27-46.

[44] Diglin, G. (2014), Living the Orwellian Nightmare: New Media and Digital Dystopia, *Learning and Digital Media*, v11 n6 p608-618, URL: https://journals.sagepub.com/doi/abs/10.2304/elea.2014.11.6.608

[45] Kowalski, R. K.; Limber, S. L.; Agatston, P. W. (2012). C*yberbullying: Bullying in the Digital Age (2nd Edition)*, NJ: Wiley-Blackwell.

[46] McDougall, J., Zezulkova, M., van Driel, B., Sternadel, D. (2018). 'Teaching media literacy in Europe: evidence of effective school practices in primary and secondary education', *NESET II report.* Luxembourg: Publications Office of the European Union. doi: 10.2766/613204.

[47] Eurostat. (2015), *Demographic report – 2015 edition,* URL: https://ec.europa.eu/eurostat/web/products-statistical-books/-/KE-BM-15-003

[48] European Commission EU Skills Panorama. (2014). *Analytical highlight: Focus on skills for social care,* URL: https://skillspanorama.cedefop.europa.eu/sites/default/files/EUSP_AH_SocialCare_0.pdf

understanding, must become a priority to ensure a more harmonious society and avoid the risk of alienation and extremism. Increased migration[49] requires policies both to successfully integrate new migrants, including for example recognition of prior learning, but also – for countries or origin – to avoid brain drain.

In the economic sphere, rapid changes in employment patterns and forms of employment[50] (e.g. platform economy[51], end of jobs for life) mean that people require more soft skills be adaptable throughout life as well as the development of entrepreneurial and creative skills to foster forms of self-employment, but also that they need to find new forms of fulfilment outside stable employment. Better linkages need to be created between education and training systems and the labour market, while the focus of vocational training needs to be expanded, upgraded and made more attractive and more flexible to meet rapidly changing needs, including in the workplace[52]. The decrease in low/medium-skilled work[53] due to automation[54] provides a need for a renewed focus on tackling early school leaving and support for all to achieve to their full potential. Increasing globalisation[55] requires that all learners, at all ages, gain a greater understanding of the world and of other cultures.

Major changes in the social sphere are also strongly influencing changes in education. The decline in religious beliefs and intergenerational solidarity[56] has led to an increase in the expression for personal fulfilment and finding one's identity as goals in themselves, which can be achieved in part through learning. An increasing belief in the right to individual choice and opportunity, at all levels of society, has stimulated a demand for learning, over the life course, based on individual choice and patterns of availability. Countering the current tide of xenophobia, nationalism and populism[57] requires new forms and content in learning to ensure social cohesion. Lifelong learning and initial education are increasingly being used as tools to combat social exclusion and isolation, and promote inclusion.

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[49] Eurostat. (2018). *EU population up to nearly 513 million on 1 January 2018: Increase driven by migration,* URL: https://ec.europa.eu/eurostat/documents/2995521/9063738/3-10072018-BP-EN.pdf/ccdfc838-d909-4fd8-b3f9-db0d65ea457f

[50] Eurofound. (2015). *New forms of employment,* URL: https://www.eurofound.europa.eu/fr/publications/report/2015/working-conditions-labour-market/new-forms-of-employment

[51] Huws, U. et al. (2016). *Crowd work in Europe: preliminary results from a survey in the UK, Sweden, Germany, Austria and the Netherlands.* Hertfordshire: FEPS, UH, UNI Europa, URL: http://researchprofiles.herts.ac.uk/portal/files/10749125/crowd_work_in_europe_draft_report_last_version.pdf

[52] CEDEFOP. (2011). *Learning while working: success stories on workplace learning in Europe,* URL: http://www.cedefop.europa.eu/fr/publications-and-resources/publications/3060

[53] CEDEFOP. (2018). *Briefing note: More brain, less brawn for tomorrow's workers,* URL: http://www.cedefop.europa.eu/en/publications-and-resources/publications/9130

[54] Ford, M. (2016). *Rise of the robots: technology and the threat of a jobless future.* London: Oneworld Publications, URL: https://oneworld-publications.com/the-riseof-the-robots-pb.html

[55] https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/international-economic-relations/globalisation-and-eu-economy_en

[56] European Social Survey. (2014. 2016). URL: http://www.europeansocialsurvey.org/

[57] ECRI. (2018). *Annual Report on ECRI's Activities 2017,* URL: https://rm.coe.int/annual-report-on-ecri-s-activities-covering-the-period-from-1-january-/16808c168b

Figure 1: Overview of key drivers of change in education

Technology
- Vast access to information and people
- Rapid skills obsolescence
- Digital divide
- Interconnected classrooms
- Digital dystopia, information overload
- Cyber-bullying

Demographic change
- Ageing population
- Need for care-related skills
- Increasing diversity in society
- Risk of alienation and extremism
- Increased migration flows

Social
- Decline in religious beliefs and intergenerational solidarity
- Increase in desire for personal fulfilment
- Increased social democratisation
- Xenophobia, nationalism and populism

Economic
- Changes in employment patterns
- Need for more attractive, flexible and quality VET
- Decrease in low/medium-skilled work
- Increasing globalisation

Reasons for increasing policy attention in the four sub-topics and their interrelation

The rapid developments identified above with respect to technology, demographics, the economy and the social realm are having an impact on education throughout the lifespan, including a shift to a focus on new types of competences. This is especially profound in a dynamic, multicultural, and interconnected Europe. There is increasing evidence, from various fields of research, that non-cognitive competences such as resilience, creativity, and empathy – as well as those non-cognitive competences associated with social-emotional learning and active citizenship – have a positive impact on well-being and also performance[58]. The World Bank has for example underlined that 'Research at the international, national and school level is increasingly looking at the value of non-cognitive skills (also often referred to as socioemotional skills) and at how education systems impact their development […] For many countries, a big question for the future will be how their education systems can move to more effectively support and better address the development of non-cognitive skills in order to equip students with a flexible set of skills'[59]. The World Economic Forum also emphasises that 'To thrive in today's innovation-driven economy; workers need a different mix of skills than in the past. In addition to foundational skills like literacy and numeracy, they need competencies like collaboration, creativity and problem-solving, and character qualities

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[58] Ibid.
[59] http://blogs.worldbank.org/education/non-cognitive-skills-what-are-they-and-why-should-we-care

like persistence, curiosity and initiative'[60]. The diagram below provides an overview of the shift towards the need for non-cognitive competences, including some of the main types of competence on which we focus in this paper.

Figure 2: Evolution in education needs
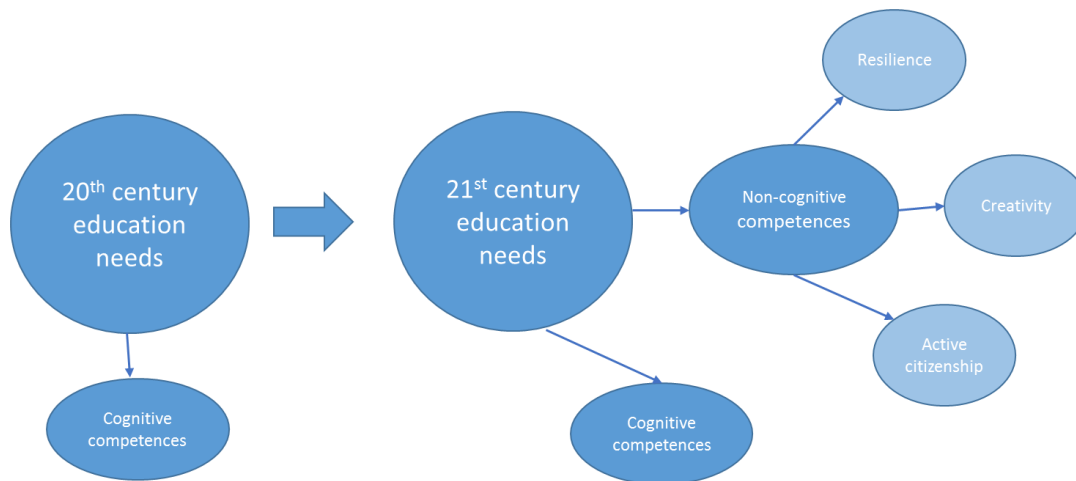
These observations are confirmed and expanded upon in a 2018 NESET II report on Social and Emotional Education[61]. The report emphasises that socially cohesive societies in the 21st century will require both cognitive – as well as social and emotional (non-cognitive) – learning, with active citizenship education at the basis of such learning. Increasing policy-related attention for active citizenship education has been triggered by findings that point to limited active civic engagement among EU residents'[62], concerns that key European values are under threat, as well a perceived need for the strengthening of key democratic attitudes[63].

Engagement with various forms of active citizenship, given the rapid developments sketched above, poses significant challenges. It becomes critical to develop the necessary competences that allow individuals and communities to deal with adversity, threats, and negative experiences; in short, to develop resilience. Acquiring resilience is increasingly being identified as a key individual and community attribute that can contribute to well-being and an active civic life[64]. Several European nations have introduced resilience into the curriculum in recent years, for instance to help young people attain the competences they need once they enter the workplace[65]. Building resilience is also a useful tool in combating early school leaving[66]. 12.1 % of young men and 8.9 % of young women in the EU were early leavers from education and training in 2017, according to Eurostat. The EU

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[60] World Economic Forum, *New Vision for Education – Unlocking the Potential of Technology*, https://widgets.weforum.org/nve-2015/chapter1.html

[61] http://nesetweb.eu/wp-content/uploads/AR3_Full-Report.pdf

[62] https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20170914-1; There were significant differences across the EU. France (24.6%), Sweden (22.1%) and the Netherlands (24.6%) were characterised by the highest level of participation, while Cyprus (2.1%), Slovakia (2.8%) and Romania (3.6%) the lowest.

[63] https://eaea.org/why-adult-education-2/active-citizenship-democracy-and-participation/

[64] See, for instance, https://www.bosch-stiftung.de/sites/default/files/publications/pdf/2018-11/CivicEducationDiverseSocieties-FINALWEB.pdf

[65] See for instance the UK: https://www.telegraph.co.uk/education/2018/01/22/schools-should-teach-children-resilience-help-workplace-new/; and also Finland: https://www.independent.co.uk/news/world/europe/finland-schools-subjects-are-out-and-topics-are-in-as-country-reforms-its-education-system-10123911.html

[66] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Early_leavers_from_education_and_training

2020 strategy aims to reduce early leaving to less than 10%. An important component of accomplishing such aims is the promotion of creativity and innovation in education. This constitutes one of the four strategic objectives of the 2020 strategy, within the Lifelong Learning framework.

The European Commission has, in recent years, urged Member States to invest in non-formal learning that can lead to increased capacity for innovation and creativity in young people to enhance their employability[67]. Furthermore, the OECD stresses the growing consensus that formal education needs to better cultivate creativity (and critical thinking skills) to meet the requirements of the 21st century[68]. The OECD is also considering adding a possible module on creativity for PISA 2021, an added incentive for policy-makers in education to devote more attention to creativity. UNESCO has noted that creativity is one of several key non-cognitive competences in education, which also includes, among others, resilience, motivation and social competences[69].

Key drivers for a focus on non-cognitive competences

Traditionally, learning and education in European education have been associated primarily with what the Delors report[70] has referred to as 'learning to know' and developing what Gardner (2010)[71] has referred to as verbal-linguistic and logical-mathematical intelligences. This approach to learning is limited in terms of preparing individuals for life in the 21st century. A recent analytical report for the European Commission identifies some of the challenges facing young people in today's world as follows: '*poverty and social inequality, bullying and cyberbullying, family conflict, consumerism, media exploitation and technological addiction, academic pressure and stress, loneliness and social isolation, migration, human trafficking, mobility, and changing family and community structures*'[72]. Traditional approaches to education fail to provide the competences that individuals need during their lifespan to fully participate in today's society and gain a sense of belonging and well-being. In response to the many challenges of the 21st century, policymakers have increasingly embraced social-emotional learning or social emotional education as a remedy. There is clear and consistent evidence that social and emotional education has a positive impact on individuals in educational settings along a variety of dimensions[73]. Also, recent advances in neuroscience have shown that non-cognitive processes in human reasoning and consciousness play a key role in solving problems[74].

The new Council Recommendation on Key Competences for Lifelong Learning[75], adopted in 2018, identifies multiple key competences in its recommendations that relate to non-cognitive competences, including: (1) learning to learn; (2) social and civic competences; (3) sense of initiative and entrepreneurship;[76] and (4) cultural awareness and expression[77].

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[67] http://ec.europa.eu/assets/eac/youth/news/2014/documents/report-creative-potential_en.pdf

[68] Lancrin, S. (ongoing) *Teaching, assessing and learning creative and critical thinking skills in education*, Paris: CERi OECD, URL: http://www.oecd.org/education/ceri/assessingprogressionincreativeandcriticalthinkingskillsineducation.htm

[69] http://unesdoc.unesco.org/images/0024/002455/245576E.pdf

70 Delors, J. (2013) The treasure within: Learning to know, learning to do, learning to live together and learning to be. What is the value of that treasure 15 years after its publication? *International Review of Education*, 59, 319–330.

[71] Gardner, H. (2010). Multiple intelligences. http://www.howardgardner.com/MI/mi.html

[72] Cefai, C., Bartolo P. A., Cavioni. V, Downes, P. (2018). *Strengthening Social and Emotional Education as a core curricular area across the EU. A review of the international evidence*, NESET II report, Luxembourg: Publications Office of the European Union, doi: 10.2766/664439

[73] Ibid.

[74] http://www.ibe.unesco.org/en/glossary-curriculum-terminology/s/social-and-emotional-learning-sel

[75] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32018H0604%2801%29

[76] The EU's Entrecomp Entrepreneurship Competence Framework aims to build a bridge between the worlds of education and work, and sees entrepreneurship as a key competence in becoming an active participant in society, and highlights the importance of personal and social development. See:

Figure 3: Overview of the Key Competences for Lifelong Learning
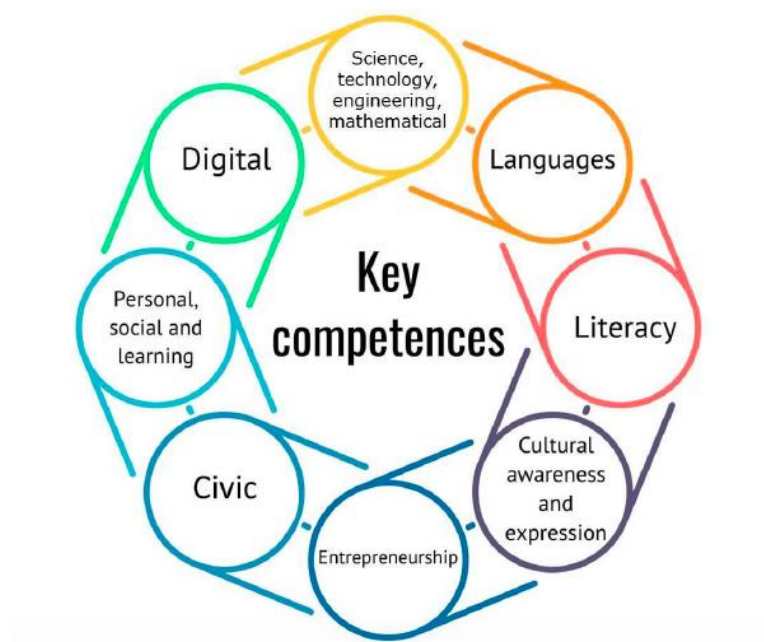
There has been considerable discussion about the effects of social media and digital media on the socio-emotional well-being of especially young people and on social-emotional competences. There is some evidence that the pervasive nature of social media has led to a decrease in non-cognitive competences such as empathy in the last decade, while other evidence points to the positive effects of increased use of social media[78]. Impact depends, according to the evidence, on the manner in which social media is used. Social media can be detrimental to the development of non-cognitive competences or beneficial for psychosocial development and the development of non-cognitive competences such as empathy if individuals, for instance, see prosocial acts on social media or play prosocial video games[79].

Key drivers for a focus on resilience

Building resilience has increasingly been identified as a fundamental function of learning systems, contributing to well-being and performance within education, but also to successfully navigating life and employment. In its 2015 Recommendation on Adult Learning and Education, UNESCO for example underlined that '[fostering] resilience in young and older adults' was one of the key objectives of adult learning[80]. Within learning systems, it is recognised that developing resilience contributes to improved retention rates, particularly among 'non-traditional' students facing particular forms of adversity[81], and to learning to overcome disappointment or setbacks[82], which both significantly impact life and employment prospects.

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https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/entrecomp-entrepreneurship-competence-framework http://publications.jrc.ec.europa.eu/repository/bitstream/JRC101581/lfna27939enn.pdf

[77] https://ec.europa.eu/education/sites/education/files/recommendation-key-competences-lifelong-learning.pdf

[78] Vossen, H.G.M. and Valkenburg, P.M. (2016) Do social media foster or curtail adolescents' empathy? A longitudinal study. *Computers in Human Behavior*, 63, 118-124.

[79] http://www.researchmaze.com/2017/07/17/does-technology-affect-empathy/

[80] UNESCO. (2016). *Recommendation on Adult Learning and Education, 2015*. UNESCO Institute for Lifelong Learning.

[81] Cotton, D. R., Nash, T. & Kneale, P. (2017). *Supporting the retention of non-traditional students in Higher Education using a resilience framework*. European Educational Research Journal, 16, 1, 62-79. Available: DOI: 10.1177/1474904116652629.

[82] Collet, V.S. (2017). *'I Can Do That!' Creating Classrooms That Foster Resilience*. YC: Young Children, March 2017, Vol. 72 Issue 1.

The importance of 'engineering' resilience in individuals has been reinforced by increasing employment insecurity and non-linear career pathways, often requiring regular up- and reskilling to adapt to the changing nature of work, driven by rapid globalisation, social, economic and technological change[83]. The increasing diversity of our societies and learning systems, e.g. due to migration or better inclusion of people with disabilities, has also prompted interest for learning providers to develop resilience to ensure that all can succeed, irrespective of the adversity they may face, rather than reproducing inequalities. For example, the Roma Education Fund '*underlines messages of resilience, emancipation, pride and self-determination of the Romani people to support [...] the Roma education movement*'[84]. There is increasing evidence that resilience is also being used as a selection criterion in high-performing economies such as Singapore[85]. Developing resilience is also increasingly being used to combat radicalism and extremism[86], as highlighted by a recent report on developing resilient communities in Macedonia[87].

Key drivers for a focus on creativity

The topic of creativity in education has become more prominent in the literature over the past few years, despite having previously been overshadowed by other fields[88]. This increasing prominence of publications on the topic reflects recent policy developments: enhancing creativity and innovation is one of the objectives of the EU's ET 2020 strategy. And the Center for Educational Research and Innovation (CERI) at the Organisation for Economic Cooperation and Development (OECD) has launched a large-scale project on creativity in education[89].

The literature highlights that changes in the knowledge and skills required by modern societies, and more specifically the uncertainty about the future knowledge which will be needed, drive this heightened attention to creativity (and resilience) and the need to think of how to teach creativity in schools. The main function of education is not to provide pupils with knowledge which will last a lifetime anymore, but to enable them to become creative learners able to address the changes of the future[90].

In addition, advances in robotics and ICTs – meaning that a range of professions may disappear – together with the fact that information has become ubiquitous, has increased the perception of the inadequacy of the educational framework[91]. Indeed, Robinson (2010) explained that public education systems in the West were designed to respond to the needs of the industrial revolution in the 19th century, with a high focus on imparting content knowledge in certain disciplines such as mathematics and languages. Subjects such as the arts and music, which are traditionally perceived

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[83] Cefai, C., Bartolo, P. A., Cavioni, V., et al. (2018). *Strengthening social and emotional education as a core curricular area across the EU. A review of the international evidence: analytical report.* European Commission, NESET II.

[84] http://www.romaeducationfund.org/go-after-world-creating-roma-education-movement

[85] Cheng, K.-M. (2017). *Advancing 21st Century Competencies in East Asian Education Systems* Asia Society. Published February; Cheng, L. L. (2017). *Why high-flying Singapore is scrapping grades.* British Broadcasting Corporation (BBC).

[86] Kerr, D. & Bonnell, J. (2011). *Teaching approaches that build resilience to extremism among young people: Evidence-based learning for decision makers, policy makers, school leaders, teachers and other practitioners, including youth and community workers,* NFER.

[87] Shabani, S. & Kadri, A. (2018). *Working towards resilient communities,* Skopje https://www.analyticamk.org/images/2018/CVE-EN-FINAL-WEB_272e4.pdf

[88] Beghetto, R. A. (2005). Does Assessment Kill Student Creativity? *The Educational Forum, 69*, 254–263; Craft, A. (2005). Creativity in schools : tensions and dilemmas. London: Routledge.

[89] Lancrin, S. (ongoing) *Teaching, assessing and learning creative and critical thinking skills in education,* Paris: CERi OECD, URL: http://www.oecd.org/education/ceri/assessingprogressionincreativeandcriticalthinkingskillsineducation.htm

[90] Schleicher, A. (2017). The Case for 21st century learning, Paris: OECD, URL: http://www.oecd.org/general/thecasefor21st-centurylearning.htm

[91] Selinger, M., Stewart-Weeks, M., Wynn, J., & Cevenini, P. (2008). *The Future of School*: Cisco Internet Business Solutions Group (IBSG)

as 'creative' subjects, were placed lower in the hierarchy[92]. These considerations lead the literature to question whether creativity is being squeezed out of formal education, where the focus is on looking for a known answer rather than a question posed[93].

Other research[94] has also underlined that non-formal learning also has a role to play in fostering creativity. A 2013 study[95] for example showed that participants in the EU's Youth in Action programme reported increased entrepreneurial skills (relevant to creativity because creativity is implicit in entrepreneurship). This evidence motivated the European Commission's efforts to support non-formal learning for enhanced creativity[96].

Key drivers for a focus on active citizenship

As life expectancy increases and individuals remain healthier throughout the life span, older adults have the potential to remain societally engaged for a significantly longer time than in the past, and remain a productive resource to society by contributing to the civic life of their communities[97]. According to Eurostat (2017), however, only 11.9% of the adult population in the European Union (EU) indicated that they were active citizens.

Figure 4 : Active Citizenship in the EU

[92] Robinson, 2006, Op. Cit.
[93] Malaguzzi, L. (1987). The hundred languages of children. *The hundred languages of children (I cento linguaggi dei bambini. Exhibition catalogue)*, 16–21; Robinson, K. (2001). *Out of our minds: learning to be creative*. Oxford: Capstone; World Economic Forum web forum (2018) Education systems can stifle creativity, here's how to do things differently, URL: https://www.weforum.org/agenda/2018/04/education-systems-can-stifle-creative-thought-here-s-how-to-do-things-differently/
[94] Redecker, C., Leis, M., Leendertse, M. Punie, Y., Gijsbers, G., Kirschner, P., Stoyanov, S. & Hoogveld, B. (2011). *The future learning. Preparing for Change*. Seville: Institute for Prospective Technological Studies.
[95] Fennes, H., Gadinger, S., Hagleitner, W. and Lunardon, K. (2013). *Learning in Youth in Action. Results from the surveys with project participants and project leaders in May 2012*. Interim transnational Analysis. Innsbruck, URL: http://www.researchyouth.net/documents/ray_specialsurvey_learning.pdf
[96] European Commission (2014). *Developing the creative and innovative potential of young people through non-formal learning in ways that are relevant for accountability*, expert group report, URL: http://ec.europa.eu/assets/eac/youth/news/2014/documents/report-creative-potential_en.pdf
[97] Martinson, M, and Minkler., M. (2006). Civic Engagement and Older Adults: A Critical Perspective, *The Gerontologist*, Volume 46, Issue 3, 318–324, https://doi-org.libproxy.uhcl.edu/10.1093/geront/46.3.318

This implied that they had '*attended meetings, signed petitions, or otherwise participated in activities related to political groups, associations or parties*.'[98] Those with a higher level of education tended to be more active (20.8 % of the EU population with a tertiary education indicated they were involved in such activities versus 5.6% with a lower level of education).

The European Association for the Education of Adults (EAEA), which focuses on EU policies relating to non-formal and adult education and lifelong learning, notes how at the moment key European values are under threat and that 'democratic attitudes, tolerance and respect need to be reinforced'[99]. They argue that active citizenship and participation can bolster democracy and increase participation levels in society through empowerment and critical thinking, citing examples of good practices including the *Citizens First* project in Romania and the Swedish Muslim study association *Ibn Rushd*. The ICCS Report from 2016[100] looked at active citizenship internationally and found that, on average, less than 50% of students in the EU indicated that they learned about civic issues in school. A further finding was that very few teachers indicated that their students worked on projects that involved gathering information outside the school. This varied from 3% in the Netherlands to 22% in Latvia.

Support for democratic values is not necessarily strong across the EU. In some EU countries there is even a tendency among young people to eschew key democratic values, and under certain circumstances they indicate they are willing to sacrifice democratic principles and support a less democratic, stronger-handed, more authoritarian approach[101].

Findings such as these point to the importance of promoting active citizenship education among both adults and youth. A variety of European organisations have stressed the critical role that active citizenship education can play in promoting democracy in contemporary Europe. The European Commission, in its new Council Recommendation on Key Competences for Lifelong Learning[102], refers to the need to harness the full potential of education and culture as drivers for jobs, social fairness, active citizenship, as well as a means to experience European identity in all its diversity.

The proposal encourages Member States to take steps to prepare people to adjust to changing labour markets and become active citizens in more diverse, mobile, digital and global societies, and also to engage in learning at all stages of life[103]. The European Commission has also embraced the Paris Declaration from 2015 as its touchstone in promoting active citizenship education as a key vehicle to move towards social inclusion and democratic citizenship. The Paris Declaration states that: '*The primary purpose of education is not only to develop knowledge, skills, competences and attitudes and to embed fundamental values, but also to help young people – in close cooperation with parents and families – to become active, responsible, open-minded members of society*.'

The European Economic and Social Committee (EESC) speaks of active citizenship as the glue that keeps society together and as a form of literacy[104]. The Council of Europe (CoE), which uses the

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[98] https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20170914-1; There were significant differences across the EU. France (24.6%), Sweden (22.1%) and the Netherlands (24.6%) were characterized by the highest level of participation, while Cyprus (2.1%), Slovakia (2.8%) and Romania (3.6%) the lowest.
[99] https://eaea.org/why-adult-education-2/active-citizenship-democracy-and-participation/
[100] Schulz, W., Ainley, J., Fraillon, J., Losito, B., Agrusti, G., Friedman, T. (2016).
Becoming Citizens in a Changing World. IEA International Civic and Citizenship Education Study, 2016 Report, 177.
[101] See e.g. https://www.opensocietyfoundations.org/voices/active-citizenship-can-change-your-country-better;
https://www.ndi.org/sites/default/files/NDI%20Poland%20Youth%20Polling%202018_0.pdf;
https://www.ndi.org/sites/default/files/NDI%20Slovakia%20Youth%20Polling%202018.pdf
[102] https://ec.europa.eu/education/sites/education/files/recommendation-key-competences-lifelong-learning.pdf
[103] https://ec.europa.eu/education/sites/education/files/recommendation-key-competences-lifelong-learning.pdf
[104] https://www.eesc.europa.eu/resources/docs/eesc-2011-35-en.pdf

concept 'education for democratic citizenship', points to participation in political and cultural life as a fundamental human right[105]. The CoE also sees education for democratic citizenship as a way to combat the rise of violence, racism, extremism, xenophobia, discrimination and intolerance. The increased focus on the role of education in promoting active citizenship led to the adoption of the *Council of Europe Charter on Education for Democratic Citizenship and Human Rights Education* in 2010[106]. At the global level, UNESCO points to the importance of active democratic citizenship and global education since 'while the world may be increasingly interconnected, human rights violations, inequality and poverty still threaten peace and sustainability[107].

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[105] https://www.coe.int/en/web/compass/citizenship-and-participation
[106] https://rm.coe.int/16803034e5
[107] https://en.unesco.org/themes/gced

3. New trends

In this section, we set out the new trends in policy and practice in relation to each of the sub-topics: non-cognitive competences, resilience, creativity and active citizenship. At the end of each sub-section, we present a boxed summary of the key evidence on 'what works' based on evidence in the literature.

New trends in developing non-cognitive competences

There is an emerging consensus that educational institutions need to go beyond subject teaching and support a person's emotional development[108]. This is motivated by findings that the creation of safe, caring and participatory classroom environments influence a person's engagement and their readiness to learn[109]. Based on an extensive literature review of key studies, a recent NESET II report[110] argues for a novel framework in European education, focused on the integration of social and emotional education as a key curricular area across the EU. The framework proposes a balance between '*intra- and inter-personal competences with regular instruction in SEE[111] skills, supported by cross-curricular activities, the classroom climate, and a whole-school approach*'. The proposed framework contains 8 key components: (1) Implementing curriculum interventions, especially through experiential learning; (2) Creating a positive climate, especially through a whole school approach and active participation; (3) engaging in early intervention; (4) moving towards targeted interventions; (5) encouraging student voices; (6) promoting teacher well-being and competences; (7) promoting parental collaboration through a bottom-up approach; and (8) focusing on quality and adaptation.

There is considerable evidence that shows the positive impacts of SEE approaches (as the PATHS programme detailed below), and these have inspired the implementation of SEE across the EU in recent years. In addition to the afore-mentioned NESET II report for the European Commission, which concluded that: 'the international research evidence strongly supports the benefits of SEE in social, emotional and academic outcomes', there is further research evidence. An international review of 368 studies[112] demonstrated that students in well-designed and carefully executed SEE programmes demonstrated superior pro-social attitudes and higher levels of pro-social behaviour. The review found that implementing a quality SEE curriculum could lead to both improved student behaviour and academic outcomes. The most successful programmes incorporated components such as sequenced step-by-step training, active forms of learning, focusing sufficient time on skill development and explicit learning goals. Longitudinal research has revealed that social and emotional competencies are predictive of children's ability to learn and solve problems non-

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[108] E.g. M. Wigelsworth, M, Lendruma, A. Oldfield, J., Scotta, A. ten Bokkel, I., Tatea, K., and Emery, C. (2016).The impact of trial stage, developer involvement and international transferability on universal social and emotional learning programme outcomes: a meta-analysis, *Cambridge Journal of Education*, 2016 VOL. 46, NO. 3, 347–376.

[109] Ibid.

[110] Cefai, C., Bartolo P. A., Cavioni. V, Downes, P. (2018). *Strengthening Social and Emotional Education as a core curricular area across the EU. A review of the international evidence*, NESET II report, Luxembourg: Publications Office of the European Union, doi: 10.2766/664439

[111] Social and Emotional Education, defined here as education that intends to: help children 'develop competences in both self-awareness and self-management, and to raise social awareness and improve the quality of their relationships' (p.8)

[112] Durlak, J. A.; Weissberg, R. P.; Dymnicki, A. B.; Taylor, R. D.; Schellinger, K. B., 'The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions', *Child Development*, 82, 2011, pp. 405–432.

violently[113]. A US study, in highly diverse classrooms (urban schools), showed that social-emotional learning approaches can be particularly effective in helping minority students get to know themselves, participate in the school community, build bridges with others and empower themselves[114]. Multiple studies have also shown that SEE programmes have a greater (positive) impact on youth from socially disadvantaged backgrounds[115] and that they can re-engage youth in danger of dropping out of education altogether[116].

An example of a SEE programme used across Europe is the comprehensive *PATHS (Promoting Alternative THinking Strategies)* programme[117], developed for pre-school and primary school children. PATHS is a curriculum intended to be used approximately 20-30 minutes a day. The aim is to promote emotional and social competences, reduce aggression and also enhance children's academic performance. Evaluations of the project in the UK[118,119] have shown that there tends to be a modest (positive) impact, though one study found that the impact on academic success was weak. This was partly attributed to the finding that many of the schools that took part in the study did not implement the programme fully and consistently. Evaluations outside the USA of projects like PATHS point to the importance of assessing the value of copying such programmes in diverse cultural contexts.

Education towards empathy has become common across the EU and is often a core ingredient of SEE programmes. It is seen as critical in the development of emotional intelligence and is considered to be a necessary condition for dialogue[120]. Empathy education has been consistently shown to lead to long-term improved attitudes towards other individuals and groups[121] and to be a competence that allows individuals to improve their relations with others[122]. It is a lifelong process associated with intercultural understanding. Recent neurological research indicates that young children naturally feel empathy for others in need[123], and that empathy can be developed through training at later ages. Empathy education can thus make a difference, regardless of age. Individuals who report high levels of empathy across the adult lifespan perceive their interactions to more meaningful, feel more positive about such interactions, and think that their interaction partners also feel more positive[124].

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[113] Zins, J.E., Elias, M.J., and Weissberg, W.P. (2004), Social and Emotional Learning. Association for Supervision and Curriculum Development.

[114] Hamedani, M. G.; Zheng, X.; Darling-Hammond, L.; Andree, A.; Quinn, B. (2015) *Social emotional learning in high school: How three urban high schools engage, educate, and empower youth—Cross-case analysis.* Stanford, CA: Stanford Center for Opportunity Policy in Education.

[115] ibid

[116] Main, K. and Whatman, S. (2016). *Building social and emotional efficacy to (re)engage young adolescents: capitalising on the 'window of opportunity'.* International Journal of Inclusive Education, 20, 10, 1054-106. Available: http://dx.doi.org/10.1080/13603116.2016.1145265.

[117] http://www.pathseducation.com/

[118] https://files.eric.ed.gov/fulltext/ED581278.pdf

[119] Ross, S. M., Sheard, M. K., Slavin, R., Elliot, L., Cheung, A., Hanley, P. and Tracey, L. (2011). 'Promoting primary pupils' social-emotional learning and pro-social behaviour : Longitudinal evaluation of the Together 4 All Programme in Northern Ireland', *Effective Education*, 3, 61–81.

[120] Žalec, B. (2011). Critical Thinking, Empathy and Dialogue in Education. In J. Kolenc (ed.), The Miscellenium of the Summaries of the Polish–Slovenian Scientific Symposium Educational Sciences and their Concepts (pp. 7). Ljubljana: The Educational Research Institute.

[121] Batson, C. D. (2011). Altruism in humans. New York, NY: Oxford University Press.

[122] Vrecer, N (2015), Empathy in Adult Education. Andragoška spoznanja, 2015, 21(3), 65–73

[123] Decety, J.; Michalska, K. J.; Akitsuki, A., 'Who caused the pain? An FMRI investigation of empathy and intentionality in children', *Neuropsychologia*, 46, 2008, pp. 2607–2614.

[124] Grün, D., Rebucal, K., Diehl, M., Lumley, M. and Labouvie, G. (2008) .Empathy across the adult lifespan: Longitudinal and experience-sampling findings. *Emotion*, 8(6), 753-765.

An example of a wide-scale empathy-focused programme is *Roots of Empathy[125]*. This programme has been implemented in Australia, Canada, Germany, Ireland, New Zealand, Switzerland, United Kingdom, United States. The programme focuses on raising levels of empathy, resulting in more respectful and caring relationships as well as reducing levels of bullying and aggression. The programme is delivered in 27 sessions of 30-40 minutes' duration each, by an instructor, to a classroom of children. The children participate in lessons through stories, art projects and general classroom activities, in which they reflect and discuss their own emotions and the emotions of others. The programme has been evaluated repeatedly[126] and shows increases in pro-social behaviour, increases in social and emotional understanding and increases in empathy. The evidence also shows decreased aggression and anti-social behaviour.

Figure 5 : Roots of Empathy: the Wishing Tree

A recent trend in schools across Europe has been the focus on 'mindfulness training'. Mindfulness training focuses on experiential learning and can be described as 'a mode of attention that is characterised by openness, acceptance and an enhanced ability to respond to the present moment'[127]. Mindfulness training has been shown to have measurable and multiple positive impacts in adults and adult learning[128]. Though a significant amount of research has been conducted with adults, research among children is becoming more common. Mindfulness is used as a stress reduction approach in schools, allowing students to relax better. The research shows that stress reduction programmes in schools, like mindfulness, lead to improvements in academic performance, self-esteem, mood, concentration and also mitigate behavioural problems[129,130]).

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[125] https://rootsofempathy.org/about-us/

[126] For results see: http://www.rootsofempathy.org/wp-content/uploads/2018/07/ROE-Research-Summary_Dec-20162docx.pdf; also: http://guidebook.eif.org.uk/public/files/pdfs/programmes-roots-of-empathy.pdf

[127] https://www.mentalhealth.org.nz/assets/Our-Work/.../mindfulness-in-education.doc

[128] See e.g. Congleton, C., Holzel, B.K. and Lazar, S.W. (2015). Mindfulness can literally change your brain. Harvard Business Review. https://hbr.org/2015/01/mindfulness-can-literally-change-your-brain; Hyland, Terry. 'Mindfulness, adult learning and therapeutic education: integrating the cognitive and affective domains of learning.' (2010). Education: Journal Articles. Paper 17. http://digitalcommons.bolton.ac.uk/ed_journals/17; also: https://www.mentalhealth.org.nz/assets/Our-Work/.../mindfulness-in-education.doc

[129] Napoli, M., Krech, P.R. and Holly, L.C. (2005). Mindfulness training in elementary school students, *Journal of Applied School Psychology*, 21, 1, 99- 125.

[130] Klingbeil, D. A., Renshaw, T. L., Willenbrink, J. B., Copek, R. A., Chan, K. T., Haddock, A., ... & Clifton, J. (2017). Mindfulness-based interventions with youth: A comprehensive meta-analysis of group-design studies, *Journal of school psychology*, 63, 77-103.

Examples of mindfulness programmes in formal education include a recent project initiated by the World Health Organisation in Østfold, Norway as part of a health-promoting schools initiative[131]. The aim, according to the project's website, is to 'improve students' and teachers' attention and mental health through sessions of mindfulness exercises during the school day. The goal is to increase students' motivation regarding schoolwork, improve learning outcomes, reduce stress, enhance concentration and reduce the number of students who drop out of school. Initiatives aimed at educators include the *Europass Teacher Academy*[132], which offers one-week courses for teachers within the framework of Erasmus+. Participants learn how to integrate mindfulness into their teaching. The target group is teachers (primary, secondary, vocational, adult, special needs); teacher trainers; careers officers, educational guides and counsellors; headteachers; principals; and managers of schools/organisations offering adult education.

Figure 6: The Europass Teacher Academy

Another initiative at the European level is the work conducted by the *Institute for Mindfulness-based Approaches* (IMA)[133]. It organises training for mindfulness in multiple European countries. The Institute trains professionals in various professions, including social workers and school teachers. A study in the Netherlands showed that such mindfulness training has a positive impact on teachers[134]. The Dutch study showed that teachers experienced less stress, were more nuanced and that it helped them in their organisational capacities.

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[131] http://www.euro.who.int/en/about-us/networks/regions-for-health-network-rhn/news/news/2016/07/mindfulness-at-school-the-stfolds-pilot-project

[132] https://www.teacheracademy.eu/en/school-innovation/mindfulness.html

[133] https://www.institute-for-mindfulness.org/

[134] https://www.trainingsbureauvoormindfulness.nl/mindfulness-in-het-onderwijs-voorbij-de-hype/

Box 1: Summary of findings: what works to promote the development of non-cognitive competences?

- Educational institutions need to be made aware that the affective dimension of education deserves much more attention. More focus on intra-personal and social competences will improve educational outcomes

- The rapidly changing nature of society poses challenges for educational institutions at all levels and requires more focus on non-cognitive competences.

- The creation of safe, caring and participatory learning environments influence a person's engagement and readiness to learn

- Social and emotional education (SEE) should be integrated as a key curricular area in education

- SEE programmes need to be well-designed and carefully executed to be successful; when such criteria are met participants demonstrate superior pro-social attitudes and higher levels of pro-social behaviour; academic outcomes also improve

- The most successful SEE programmes have incorporated components such as sequenced step-by-step training, active forms of learning, focusing sufficient time on skill development and explicit learning goals

- Empathy education, as a component of SEE, can play an important role in the development of emotional intelligence; empathy education has been consistently shown to lead to long-term improved attitudes towards other individuals and groups

- Empathy education should start early and is effective throughout the lifespan; novel approaches such as mindfulness training have also been shown to have measurable positive impacts

New trends in developing resilience

Research on resilience has sought to identify the individual, school, education system, and wider environmental factors which characterise resilience, focusing on groups of learners facing different forms of adversity (e.g. disability, poverty, migrant status), with the aim of subsequently developing policies, projects and programmes which can help to foster resilient children, young people and adults. Based on the research findings, a range of approaches have been implemented, which provide a rich source of learning on what works and are shaping current and future trends. New approaches include policies and programmes targeted at supporting parents and teachers, boosting social networks, creating positive learning environments, violence prevention and pedagogical methods.

Studies have shown that students who achieve positive outcomes during their education trajectory usually have at least one stable and committed relationship with a supportive adult[135]. It is well documented that the role of teachers is crucial in this respect[136]: among others, good student-teacher relationships motivate students to persist in the face of adversity[137]; and, teachers can play

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[135] https://www.gse.harvard.edu/news/uk/15/03/science-resilience

[136] Croesnoe, R., Kirkpatrick Johnson, M. & Elder, G.H. (2004). Intergenerational bonding in school: The behavioral and contextual correlates of student-teacher relationships. *Sociology of Education*, 77, 60-81.

[137] Furrer, C.J., Skinner, E.A., & Pitzer, J.R. (2014). The influence of teacher and peer relationships on students' classroom engagement and everyday motivational resilience, *National Society for the Study of Education, 113,* 101-123

the role of mentor[138], also helping to overcome feelings of alienation[139]. Research has shown that teachers should be supported to create accommodating classrooms that suit all learners[140]. Yet, teachers continue to report the need for additional training and support to work effectively in increasingly multicultural classrooms; around one in ten teachers participating in the 2013 Teaching and Learning International Survey (TALIS) reported the need for additional professional development when teaching in multicultural settings[141].

Box 2 : Examples of programmes aiming to support teachers and trainers in boosting resilience

Initiatives such as the EU-funded *HOPEs (Happiness, Optimism Positivity and Ethos in Schools)[142]* project – an innovative training programme for primary school teachers focusing upon five core pillars in teaching: Positive Emotions, Values and Character Strengths, Positive Purpose, Positive Coping and Positive Relationships, and designed to boost resilience, wellbeing and positivity, to nurture positive relationships and improve overall academic success – or EMPAQT (Empathetic and Supportive Teachers)[143] – which has pioneered an innovative training programme for teachers aimed at introducing inclusive pedagogies – are reported to have positive impacts, including boosting the confidence of teachers. Other EU programmes, such as the *ENTREE (Enhancing Teacher REsilience in Europe)[144]* actively seek to develop the resilience of teachers themselves. Learning mindfulness is a tool increasing used to help teachers (and learners) become more resilient[145]. Team teaching has also been shown to have beneficial impacts on the expanding the learning opportunities for all students[146].

Supporting positive parental involvement also often plays a key role in emotional well-being and achievement[147], as shown by studies for example of the *Incredible Years*[148] Parent and Teacher training initiative in Ireland[149]. A recent review of international evidence underlined that '[…] engaging parents as active, collaborative partners is imperative' as part of a whole school approach, also ideally involving the local community, to developing social and emotional education, including resilience[150]. A case study applying a whole school approach as part of the *Worth-It* project to support mental health and resilience in a UK school[151] provides an example of potential benefits. Research has also highlighted the benefits of grouping heterogeneous learners with the participation of adult volunteers from the local community[152]. Successful approaches should not be one-way, top-down approaches (e.g. newsletters, parent meetings), but rather approaches that are

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[138] Martin, A.J., & Dowson, M. (2009). Interpersonal relationships, motivation, engagement, and achievement: Yields for theory, current issues, and practice. *Review of Educational Research, 79*, 327-365.

[139] Schnell, P., Keskiner, E., & Crul, M. (2013). Success against the odds. *Education Inquiry, 4*, 125-147.

[140] McLeskey, J. and Waldron, N. (2007). 'Making differences ordinary in inclusive classrooms' *Intervention in School and Clinic*, 42 (3), 162–168; McLeskey, J. and Waldron, N. (2006). 'Comprehensive school reform and inclusive schools: Improving schools for all students' *Theory into Practice*, 45 (3), 269–278.

[141] OECD. (2018). *The Resilience of Students with an Immigrant Background: Factors that Shape Well-being*, 221.

[142] http://www.icepe.eu/currentprojects/Erasmus-HOPEs_Project

[143] http://empaqt.eu/

[144] http://entree-project.eu/en/

[145] Emerson, L.M., Leyland, A., Hudson, K., Rowse, G., Hanley, P. Hugh-Jones, S. (2017). Teaching Mindfulness to Teachers: a Systematic Review and Narrative Synthesis. *Mindfulness, 8*, 1136.

[146] Wilson, G.L. and Michaels, C.A. (2006). General and Special Education Students' Perceptions of Co-Teaching: Implications for Secondary-Level Literacy Instruction, *Reading and Writing Quarterly, 22*, 205–225.

[147] Council of Europe. (2015). *Guidelines for Teachers for Social Inclusion of Roma, Ashkali and Egyptians in Schools*.

[148] http://www.incredibleyears.com/programs/parent/

[149] McGilloway, S. et al. (2012). *The Incredible Years Ireland Study: Parent, Teacher and Early Childhood Intervention: Long-term outcomes of the Incredible Years Parent and Teacher Classroom Management training programmes*, Archways.

[150] Cefai, C., Bartolo, P. A., Cavioni, V., et al. (2018). *Strengthening social and emotional education as a core curricular area across the EU. A review of the international evidence: analytical report*. European Commission, NESET II, p.74.

[151] https://www.worthit.org.uk/blog/schools/whole-school-resilience-case-study/

[152] Elboj, C. and Niemela, R., 2010. 'Sub-communities of mutual learners in the classroom: the case of interactive groups' *Revista de Psicodidáctica*, 15 (2), 177–189.

more empathetic to the diverse needs of parents[153]. One example is the *Together at School* programme in primary schools in Finland[154] and includes collaboration with parents and the wellbeing of the school community, which are all essential parts of the programme; although research on impacts show limited effects in the short term[155]. The EU project *INCLUD-ED*[156] puts forward five types of family participation: informative (i.e. families are informed about what learners do at school); consultative (i.e. families take part in the school's statutory bodies); decisive (i.e. families are required to make decisions); evaluative (i.e. families participate in their children's evaluation process); and finally educative (i.e. families participate in children's learning and their own learning)[157].

A consequence of learning – especially lifelong learning – is that it provides learners with new social networks and expands horizons. The contact that learners gain with tutors, other staff and fellow students have a positive impact on self-esteem, optimism and self-confidence[158]. For example, a study of Turkish students from disadvantaged families in France and the Netherlands showed that interpersonal teacher-student relations increased the likelihood of successful navigation through the education system[159]. Teachers, but also peers and schools, can be used to fill the void of social contacts which disadvantaged learners may experience[160].

Actively developing positive learning environments to foster resilience is an increasing trend, ideally starting from early childhood education. Research has highlighted that group motivational climates are significantly linked to academic outcomes[161]. The learning environment can also be designed to bridge the gap between school and home life[162], helping to navigate the expectations, language and culture[163], and seeking to counter prejudice and discrimination[164]. The importance of developing the right school culture and ethos has been underlined in this respect[165]. Examples include the EU-funded *RESCUR (RESilience CURriculum) Surfing the Waves*[166] or *Resilience*[167] projects, which include a range of approaches to improve the learning environment.

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[153] Cefai, C., Cavioni, V. (2016). Parents as active partners in social and emotional learning at school. In B.Kirkcaldy (ed) *Psychotherapy in Parenthood and Beyond. Personal enrichment in our lives.* Turin, Italy: Edizoni Minerva Medica.

[154] Cefai, C., Bartolo, P. A., Cavioni, V., et al. (2018). *Strengthening social and emotional education as a core curricular area across the EU. A review of the international evidence: analytical report.* European Commission, NESET II, p.80.

[155] Kiviruusu, O., Björklund, K., Koskinen, H., Liski, A., Lindlblom, J., Kuoppamäki, H. et al. (2016). Short-term effects of the 'Together at School' intervention program on children's socio-emotional skills: A cluster randomized controlled trial. *BMC Psychology*, 4(1).

[156] https://www.includ-ed.eu

[157] European Agency for Development in Special Needs Education. (2013). *Organisation of Provision to Support Inclusive Education: A Literature Review*, p.36.

[158] Tett, L. & Maclachlan. (2007). *Adult literacy and numeracy, social capital, learner identities and self-confidence*. Studies in the Education of Adults, 39 (2). P. 150-167.

[159] Schnell, P., Keskiner, E., & Crul, M. (2013). Success against the odds. *Education Inquiry, 4*, 125-147.

[160] Stanton-Salazar, R.D. (1997). A social capital framework for understanding the socialization of racial minority children and youths. *Harvard Education Review*, *67*, 1-40.

[161] E.g. Martin, A.J., Anderson, J., Bobis, J., Way, J., & Vellar, R. (2012). Switching on and switching off in mathematics: An ecological study of future intent and disengagement amongst middle school students. *Journal of Educational Psychology, 104*, 1-18; Martin, A.J., Way, J., Bobis, J., & Anderson, J. (2015). Exploring the ups and downs of mathematics engagement in the middle years of school. *Journal of Early Adolescence, 35*, 199-244.

[162] Motti-Stefanidi, F., & Masten, A. S. (2013). School success and school engagement of immigrant children and adolescents. *European Psychologist, 18*, 126-135.

[163] e.g. Staudenmeyer, A., Macciomei, E., Del Cid, M., & Patel, S. G. (2016). Immigrant youth life stressors. In S. G. Patel, & D. Reicherter (Eds.), *Psychotherapy for immigrant youth* (pp. 3-24). Cham: Springer; Sugarman, J. Morris-Lange, S., & McHugh, M. (2016). *Improving education for migrant-background students: A transatlantic comparison of school funding.* Washington DC: Migration Policy Institute.

[164] Motti-Stefanidi, F., & Masten, A. S. (2017). A resilience perspective on immigrant youth adaptation and development. In N. Cabrera & B. Leyendecker (Eds). *Handbook on positive development of minority children and youth* (pp. 19-34) Springer, Cham.

[165] European Agency for Development in Special Needs Education. (2013). *Organisation of Provision to Support Inclusive Education: A Literature Review*, p.35.

[166] http://www.rescur.eu/

[167] http://www.resilience-project.eu/fileadmin/documents/Guidelines_en_2014.pdf
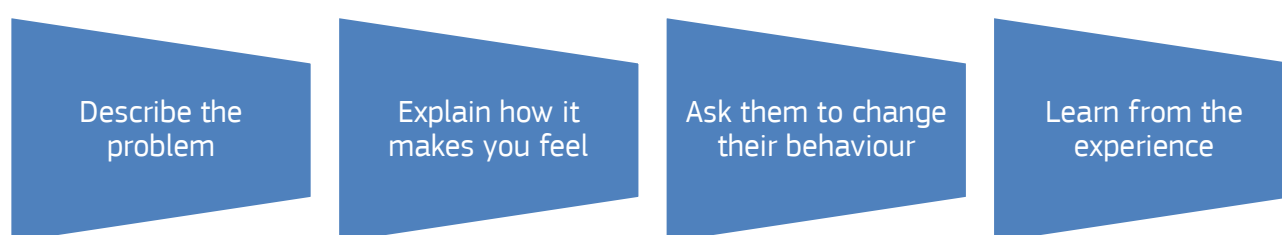
Figure 7 :RESCUR
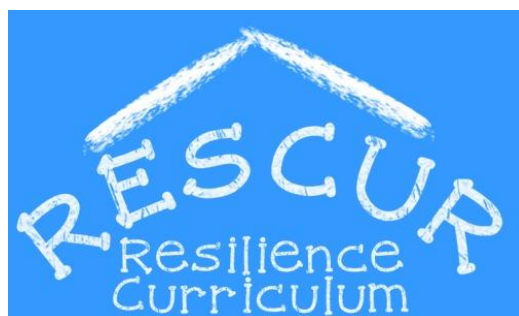
Violence prevention in learning environments, linked to tackling bullying but also radicalisation, is also an increasing focus of approaches to develop resilience. For example, between 2011 and 2013, an international consortium of five European institutions implemented a project that aimed to promote violence prevention and resilience promotion in schools[168].The approach involved: (1) supporting schools in developing a prevention and intervention concept; (2) teachers, social workers and other pedagogical staff received training to be able to promote resilience; (3) strengthening the self-efficiency of students in dealing with violent and aggressive behaviour; (4) Prevention through parental participation. The results showed that such interventions, among pupils, can build resilience, reduce anxiety about peers, promote feelings of social acceptability, and reduce bullying; among school staff, the interventions reduced emotional exhaustion and increased self-efficacy.

Different instructional methodologies are also being used to foster resilience. Studies point to the importance of the development of interactive[169] and cooperative learning (including peer tutoring, co-operative teaching, collaborative problem-solving, heterogeneous grouping)[170], as well as using inclusive pedagogies more generally[171]. Evidence from the UK in developing resilience among young people to extremism and radicalisation also underlines the effectiveness of pedagogical approaches for assertiveness such as the *DEAL* approach[172], which provides an approach to help young people challenge others in the classroom safely (i.e. if they felt that the behaviour or opinion of another person had threatened the safe space)*:*

Figure 8 : DEAL approach

Describe the problem | Explain how it makes you feel | Ask them to change their behaviour | Learn from the experience

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[168] https://files.eric.ed.gov/fulltext/EJ1156096.pdf

[169] Elboj, C. and Niemela, R., 2010. 'Sub-communities of mutual learners in the classroom: the case of interactive groups' *Revista de Psicodidáctica*, 15 (2), 177–189.

[170] Meijer, C.J.W. (Ed.), 2005. *Inclusive Education and Classroom Practice in Secondary Education.* Middelfart: European Agency for Development in Special Needs Education.

[171] European Agency for Development in Special Needs Education. (2013). *Organisation of Provision to Support Inclusive Education: A Literature Review*.

[172] Kerr, D. & Bonnell, J. (2011). *Teaching approaches that build resilience to extremism among young people: Evidence-based learning for decision makers, policy makers, school leaders, teachers and other practitioners, including youth and community workers*, NFER, html: https://www.nfer.ac.uk/publications/OPXZ02/OPXZ02.pdf

It also underlines the effectiveness of approaches to promote intercultural understanding such as *Tools for Trialogue*, which encourages young people to think about their identity in terms of a series of lenses through which they see the world, as if they were putting on different pairs of coloured glasses[173]. Modelling is an example of another approach for developing communication competences which is linked to well-being. Modelling appropriate behaviour, when coping with challenges, has been found to be an effective vehicle to improve creative potential and self-organisation, which are connected to satisfaction and self-actualisation[174], and points to the importance of critical incident methods to overcome barriers[175]. Resilience can also be promoted by reducing the academic burden on students, in particular at-risk students, for example through an approach called *Load Reduction Instruction (LRI)* which encompasses five key principles: (1) reducing the difficulty of instruction during initial learning, (2) instructional support and scaffolding, (3) ample structured practice, (4) appropriate provision of instructional feedback, and (5) independent application[176].

Resilience is increasingly visible in learning curricula across Europe. A report[177] for example highlights the steps taken in Finland to introduce resilience in upper secondary education. Key features of the national curriculum which contribute to developing resilience include: fostering cooperation between home and schools; ensuring 'due consideration for the independence and personal responsibility of young people'; providing education 'in tolerance and international co-operation […] based on respect for life and human rights'; ensuring that students are seen as 'constructors of their own learning, competence and views of the world'; providing students with 'experiences of how to shape the future through joint decisions and efforts'; placing emphasis on 'the ability to co-operate with other people in different groups and networks'; and ensuring that education 'strengthens students' self-esteem and helps them recognise their personal uniqueness'.

Box 3: Summary of findings: what works to promote resilience in education?

- Ensuring a stable and committed relationship with a supportive adult

- Fostering strong student-teacher relationship, including teachers acting as mentors

- Supporting teachers to create accommodating classrooms that suit all learners, implementing inclusive pedagogies and develop their own resilience

- Supporting positive parental involvement as part of a whole school approach, also involving the local community

- Instructional pedagogies including interactive and cooperative learning (including peer tutoring, co-operative teaching, collaborative problem-solving, heterogeneous grouping), team teaching, modelling, reducing academic burden, and techniques for developing assertiveness, mindfulness and intercultural understanding

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[173] Kerr, D. & Bonnell, J. (2011). *Op cit.*

[174] Dmitrienko et al. (2017). Formation of Students' Professional Self-Actualization in Modern Educational Environment. *Journal of Social Studies Education Research*, 2017:8 (2), 161-177.

[175] For an explanation of the critical incident method in education, see; https://set.et-foundation.co.uk/professionalism/teaching-resources/critical-incident-analysis/. See also: https://www.tandfonline.com/doi/abs/10.1080/14675986.2012.724877

[176] Martin, A.J., & Evans, P. (2018). *Load Reduction Instruction: Exploring a framework that assesses explicit instruction through to independent learning.*

[177] Leppäkari, M. (2013). *Resilience: a key skill for education and job. Country report Finland.*

New trends in fostering creativity

Arts education is the best known way to promote creativity. Yet, the literature also points out that art can only foster creativity if the concepts and approaches which underpin it are explicitly transferred into teaching across all subjects[178]. For this transfer to occur successfully, the literature stresses that stakeholders need to recognise that creativity is about different things for different parties. Students and teachers may focus on creativity as problem-solving and idea generation, while artists look at creativity in terms of thinking, imagining and creative empathy[179]. Examples of successful arts education initiatives include arts-school cooperation programmes – such as the Danish culture schools (*Kulturskoler*) and culture laboratories, or the Norwegian *Cultural Rucksacks* – which involve exchanges and visits between artists and primary and lower secondary school pupils and teachers. 85% of school principals in Norway agreed that the cultural rucksacks helped students to fulfil their learning objectives in general[180].

The Erasmus+ project *Drama improves Lisbon Key Competences in Education* worked with 5,000 young people across 12 partner countries to look at how drama fulfils the competences of learning to learn and entrepreneurship. The project evaluation reported a positive correlation between drama and theatre and five of the Lisbon key competences, including entrepreneurship[181]. In the UK, *Artsmark* connects schools to a network or cultural organisations and provides a clear framework for teachers to plan, develop and evaluate arts, culture and creativity across the curriculum[182].

Despite the relevance of arts education, the literature emphasises that creativity is not only within the remit of arts education and needs to be taught across the curriculum. Creativity is applied differently in each subject: for example, creativity may be akin to problem-solving in mathematics, while it may mean creating a new story in literature[183]. An approach to creativity which encompasses all subject types is however not the norm in the EU; Heilman et al. (2010) noted that creativity was more prominent in arts education curricula across the EU-28[184]. Some examples of how the concept of creativity is woven into national curricula and guidelines are set out below.

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[178] Hunter, M., Baker, W., & Nailon, D. (2014). Generating cultural capital? Impacts of artists-in-residence on teacher professional learning, in *Australian Journal of Teacher Education, 39*, 75–88.

[179] Hall, C. (2016). Creativity in teaching: what can teachers learn from artists. *Research papers in education*, 32(1): 106-20.

[180] Chemi, T. (2017). How do we use the arts to develop students' creativity in schools?, conference presentation: Fostering creativity in children and young people through education and culture, in Durham, United Kingdom: OECD and Durham University, 4-5 September 2017. URL: https://www.dur.ac.uk/resources/library/asc/projects/duoecdconf/TatianaChemi.pdf . For further information on culture rucksacks, see Christophersen, C., Breivik, J.K., Homme, A., Rykkja, L. (2015) The Cultural rucksacks: a national programme for arts and culture in Norwegian schools, Kulturrådet: Arts Council Norway, p. 37, URL: https://www.kulturradet.no/documents/10157/a7464045-2cb6-4988-9948-ffd834508a5d. For an impact evaluation in the context of Australia, see: Imms, W., Jeanneret, N., & Stevens-Ballenger, J. (2011). *Partnerships between schools and the professional arts sector: Evaluation of the impact on student outcomes*. Melbourne: Arts Victoria.

[181] http://www.dramanetwork.eu/

[182] https://www.artsmark.org.uk/

[183] For example, see: Astle, J. (2018). Do schools really kill creativity?, blog, London: Society for the encouragement of Arts, Manufactures and Commerce, URL: https://www.thersa.org/discover/publications-and-articles/rsa-blogs/2018/04/do-schools-kill-creativity

[184] Heilmann, G., & Korte, W. B. (2010). *The role of creativity and innovation in school curricula in the EU27: A content analysis of curricula documents*. Luxembourg: European Commission, Joint Research Centre, 8.

> **Box 4: Creativity in curricula, examples from Member States**
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> The mention of creativity across all the subject groups appeared only clearly in a few countries, especially Northern Ireland and Scotland, but also Estonia and Ireland, with the Netherlands considering a curricular reform in this direction185. Being creative is one of the five thinking and capability skills at the heart of the curriculum of the primary and secondary levels in Northern Ireland[186]. In Scotland, the document introducing the Scottish syllabi highlighted the importance of creativity and how to teach it in all subjects[187]. In Estonia, creativity appeared as a teaching goal in the arts, as well as economic and business studies[188]. Finally, being critical and creative is one of the five key skills that learners are expected to develop in the junior and senior cycles in Ireland[189].

To encourage the adoption of a whole of curriculum approach to creativity, Ferrari et al. (2009) proposed statutory time for cross-curricular work (such as enterprise or robotics clubs as is the case in Singapore, the champion of the PISA results)[190]. In addition, various authors stress that enhancing creativity in education relies more broadly on a **change in mindset** from teaching to learning and toward accepting newness and developing an ability to take risks[191]. The EU has launched some encouraging initiatives to support such a change in mindset. For example, the Entrepreneurship competence framework (*EntreComp*) can be used as a common tool for stakeholders to work within a shared definition of entrepreneurship as a competence (which is relevant to creativity given that creativity is implicit in entrepreneurship)[192].

The literature emphasises that teachers are key drivers of this change in mindset, and that they need to be supported to learn creatively themselves in order to be able to teach creativity. Teachers could benefit from more professional development to engage with the ever expanding academic explorations on how to teach creativity for example[193]. In the case of Singapore, teachers

[185] Heilmann et al., Van de Tas R. (2017). Towards a new curriculum in the Netherlands, conference presentation: Fostering creativity in children and young people through education and culture, in Durham, United Kingdom: OECD and Durham University, 4-5 September 2017. URL: https://www.dur.ac.uk/resources/library/asc/projects/duoecdconf/RosavandeTas.pdf

[186] Council for the Curriculum Examinations and Assessment (n/a) Northern Ireland Curriculum: Primary, URL: http://ccea.org.uk/sites/default/files/docs/curriculum/area_of_learning/fs_northern_ireland_curriculum_primary.pdf

[187] Smarter Scotland, Scottish Qualifications Authority and Education Scotland (n/a) Curriculum for Excellence URL: https://education.gov.scot/Documents/All-experiencesoutcomes18.pdf

[188] Ministry of Education and Research of the Republic of Estonia (2014) National Curricula 2014 URL: https://www.hm.ee/en/national-curricula-2014

[189] National Council for Curriculum and Assessment (n/a) Curriculum Online, URL: https://www.curriculumonline.ie/Primary

[190] Chng, M. (2017). Developing students' creativity in schools: Singapore's approach, conference presentation: Fostering creativity in children and young people through education and culture, in Durham, United Kingdom: OECD and Durham University, 4-5 September 2017. URL: https://www.dur.ac.uk/resources/library/asc/projects/duoecdconf/MelvinChng.pdf ; Ferrari et al., Op. Cit, pp. 33-35.

[191] Fennel, A. (2017). Designing a creativity friendly learning environment, conference presentation: Fostering creativity in children and young people through education and culture, in Durham, United Kingdom: OECD and Durham University, 4-5 September 2017. URL: https://www.slideshare.net/OECDEDU/designing-a-creativity-friendly-learning-environment

[192] European Commission (2017). *EntreComp: the entrepreneurship competence framework.* EU Science Hub. 15 July, URL: https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/entrecomp-entrepreneurship-competence-framework

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benefit from 100 hours of professional development and a collaborative approach to lesson building which is acknowledged as favouring reflection and creative thinking[194]. The literature also details good practices in teaching, including for example using games, discussions, computing, hands-on tasks, experiments or debates, and project-based learning[195], in order to encourage pupils to take responsibility for their discovery, to pose question, take risks, or to operate in immersion and make connections and to eventually become more creative[196]. For example, 15 primary schools in the UK have formed a partnership to get 45 children to write a novel together during a series of five workshops. The novel, *The Wishroom*, was published in June 2017[197].

Figure 9 : The Wishroom by David Waugh
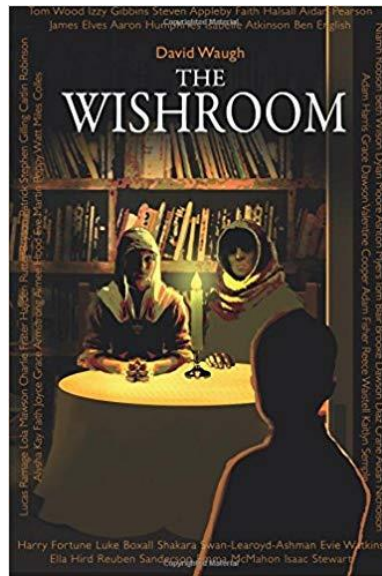
Another way to promote creativity could include using technology[198]. This approach is inspired by Seymour Paypert, who showed that computers could be used as a creative tool in education and has been recently adopted in Singapore with the use of teaching robots in pre-schools[199]. A variety of tools are available. For example, teachers could encourage learners to design their own

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[197] For further information, see URL: https://www.dur.ac.uk/education/news/?itemno=31853

[198] Florida (2002) argued that environments fostering creativity needed to include a mix of technological development, talent and openness toward different people. Florida, R. L. (2002). The rise of the creative class: and how it's transforming work, leisure, community and everyday life. New York: Basic Books.

[199] Vasagar, Op. Cit.

infographics, using sites such as *Wordle, Tableau* or *Inkspace*; or to take part in educational games such as the ones provided by *Capital Penguin*[200]. The approach remains less popular in the EU, where most curricula do not connect to ICTs[201]. In addition, the literature emphasises that technology requires teachers and learners to apply their critical skills to foster their use creatively and as part of an active learning process[202].

Finally, the literature places a question mark on whether to evaluate or assess creativity. Tests to evaluate critical thinking in pupils, such as the Torrance tests (1962) have been criticised for failing to define creativity in sufficient depth[203]. Ferrari et al. (2009) underline the need to rethink how answers are graded, for example by placing a higher weight on originality. The literature finally highlights that the culture of accountability placed on teachers' performance may refrain teachers from trying creative approaches and that a better balance needed to be struck between the need to show value-for-money in education and the freedom of teachers to try creative approaches. This would in turn foster creative learning in pupils[204]. One of the most high profile efforts to advance the assessment of creativity comes from the OECD, which proposes to include a measure of creativity in the Programme for International Student Assessment (PISA) 2021[205].

Box 5: Summary of findings: what works to promote creativity in education?

- Work on a common definition of creativity, which focuses on creativity as a skill to be learnt rather than a natural talent, and highlights processes rather than outcomes

- Emphasize how education can prepare learners to face the challenges of the future by being creative (rather than imparting knowledge)

- Rethink formal education and take non-formal education into account to foster creativity

- Teach creativity across the curriculum

- Support a change in mindset and provide teachers with greater support to teach creativity

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New trends in developing active citizenship

There are many models and approaches to active citizenship education throughout Europe. For instance, Casey and Bruce (2011)[206] recommend the *Inquiry Cycle* (ask-investigate-create-discuss-reflect-ask again) to promote the active engagement of school students in their learning, while de Lange (2011)[207] recommends a *Plan, Go-through and Evaluate* (PGE) approach, which gets students actively involved in planning and assessing educational interventions.

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[201] Heilmann et al., Op. Cit, p. 9
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[207] De Lange, T. (2011). Formal and Non-Formal Digital Practices: Institutionalizing Transactional Learning Spaces in a Media Classroom. *Learning, Media and Technology*, *36*(3), 251–275.

Figure 10 : The Inquiry Cycle
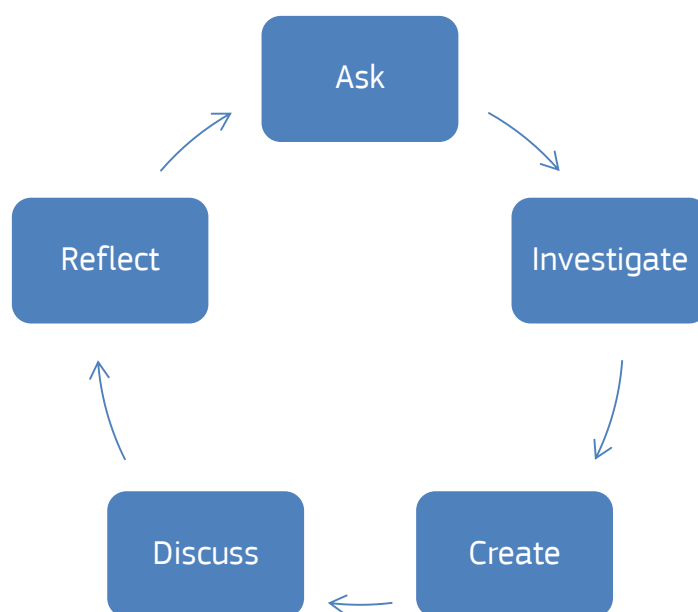
At the policy level, there are multiple initiatives in the EU to promote active citizenship education with a focus on the local, national and also international level[208]. In 2017, the European Commission noted that 33 education systems in Europe provided national guidance on citizenship education for at least one level of education. Twenty-eight education systems provided recommendations on extracurricular activities related to citizenship education. The most common approach was 'learning by doing' and reflecting the recent societal concerns, environmental awareness was a priority[209]. A few years earlier, in 2012, the Commission had noted that, in about a third of European countries, 'steering documents such as national curricula, as well as other recommendations and regulations promote the involvement of young people in citizenship-related activities outside school'[210].

Active citizenship education also brings together the formal and non-formal sectors of education, connects schools, NGOs and training institutes. The importance of non-formal education has been emphasised by the European Commission[211], Council of Europe[212], and UNESCO[213]. An example of non-formal active citizenship education is the work conducted by Pro Demos in the Netherlands[214]. This organisation is active in schools and has schools visit its premises in The Hague. In both cases students are actively engaged in learning about both their rights and responsibilities as citizens. Pro-Demos also offers programmes for adult learners.

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[208] The EU Europe for Citizens Programme is worth mentioning as an example of an initiative that encourage the democratic and civic participation of citizens at EU level.
[209] https://www.na.org.mk/tl_files/docs/eplus/eurydice/2018pub/Brief_CitizenshipEducation.en.pdf
[210] European Commission/EACEA/Eurydice (2012), *Citizenship Education in Europe*, Eurydice Report, Luxembourg: Publications Office of the European Union.
[211] http://ec.europa.eu/education/sites/education/files/recommendation-common-values-inclusive-education-european-dimension-of-teaching.pdf
[212] https://www.coe.int/en/web/enter/non-formal-education-youth-work
[213] https://en.unesco.org/themes/gced/action
[214] https://prodemos.nl/english/

A key development in active citizenship education is the Council of Europe's Reference Framework of Competences for Democratic Culture[215] launched in April 2018. The Framework offers a 'reference and a toolbox for designing, implementing and evaluating educational interventions', and is intended for all sectors of education, including all levels of formal education and adult education. It presents a model of competences that need to be mastered in order to function effectively in culturally diverse democratic societies. The model highlights the importance of issues of teacher education and whole school approaches.

The importance of going beyond ad hoc and temporary implementation strategies with respect to active citizenship, and embracing whole school approaches, as emphasised by the Council of Europe, was confirmed by the evidence introduced in a 2016 NESET II report[216], published by the European Commission. The report, entitled 'Education policies and practices to foster tolerance, respect for diversity and civic responsibility in children and young people in the EU' looked at the present evidence, especially in formal education settings, and highlights the importance of interactive, student-centred whole school approaches and also community-school partnerships. The report cites the vast evidence that shows that for instance cooperative learning strategies and project based learning have a positive impact on self-esteem, problem solving skills, inter-personal competences, etc. KeyCoNet (European Policy Network on Key Competences in School Education) has documented how project-based learning can better equip children and young people with key competences, cultural awareness and (inter) cultural understanding[217].

The NESET II report also cites evidence that other effective strategies to foster respect, empowerment and civic responsibility include: peer education, teacher preparation for diversity, the involvement of NGO's, culturally sensitive curriculum, multilingual education, inclusive history education, intercultural and interfaith education, socio-emotional learning, empathy education, and service learning.

The importance of whole school approaches in fostering active citizenship has been emphasised in multiple European documents[218]. The positive impact of whole school approaches has been well documented, especially outside Europe[219]. UNESCO has implemented a whole school approach to educate about climate change in some of the schools in its UNESCO *Associated Schools network*[220]. The approach involves mainstreaming sustainability through comprehensive and coordination in the school at all levels, and includes mobilizing all school stakeholders and the community. It also empowers the students to play an active role in not only the school, but also in their communities and families. Further interventions include a reorientation of teaching content and methodology, as well as the creation of a 'green' campus. *Schools without Racism*, originally from Belgium, takes a whole school approach when creating school environments that are inclusive, sensitive to diversity and that oppose all forms of racism and discrimination.

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[215] http://www.theewc.org/Content/Library/Research-Development/Literature/The-Council-of-Europe-Reference-Framework-of-Competence-for-Democratic-Culture

[216] Van Driel, B., Darmody, M., Kerzil, J. (2016). '*Education policies and practices to foster tolerance, respect for diversity and civic responsibility in children and young people in the EU*', NESET II report, Luxembourg: Publications Office of the European Union. doi: 10.2766/46172.

[217] http://keyconet.eun.org/c/document_library/get_file?uuid=d2e33016-9c19-4901-aa00-5d25c5d734f2&groupId=11028

[218] e.g. European Commission. (2015). *A whole school approach to tackling early school leaving*, Report produced by Working Group on Schools Policy.
ec.europa.eu/assets/eac/education/...groups/...2015/school/early-leaving-policy_en.pdf

[219] See e.g. Rogers, B. (2006). Behaviour Management : A Whole-School Approach. Sydney : Scholastic Books. 2 nd edition; Knight, O.; Benson, O. (2013). *Creating outstanding classrooms: a whole-school approach*, London: Routledge.

[220] https://aspnet.unesco.org/en-us/climate-education-education

Figure 11 : UNESCO Associated Schools Network
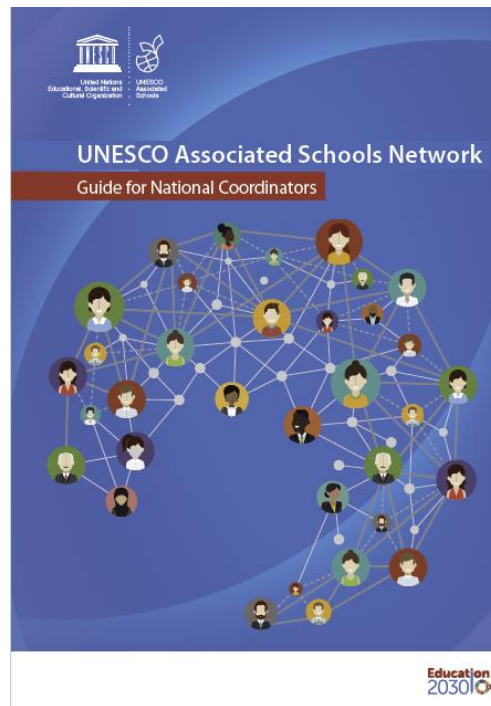
In the EU, volunteering has been recently encouraged as a core expression of civic participation and personal development. The European Economic and Social Committee (EESC) places this in a rights-based framework[221]. Estimates in 2016 showed that more than 90 million adults in the EU – nearly 23 % of Europeans aged over 15 – have been involved in volunteering in some manner, most at the local level[222]. Volunteering and volunteerism throughout the life span is a way to remain an active citizen and improve health. Volunteering, as a form of active citizenship, has been shown to have multiple benefits. A recent study, looking at the evidence, notes that these benefits include: '*better mental and physical health, life satisfaction, self-esteem, happiness, lower depressive symptoms, psychological distress, and mortality and functional inability*'[223]. It has also been shown that volunteering is often a first step in future social action and activism[224]. The European Volunteer Centre is an example of a European-wide initiative to promote volunteering. It promotes volunteerism as a path to building a more 'cohesive and inclusive societies based on active citizenship'[225]. The European Voluntary Service (EVS) aims at 18-30 year olds[226]. The 2008 EU Council recommendation on the mobility of young volunteers across the European Union focuses on young volunteers, primarily in a non-formal context.

At the school-age level, other research[227] notes that service learning is increasingly being adopted within active citizenship education in Europe, both in formal and non-formal contexts. Service learning is a teaching strategy in which students work to address a community problem using a multidisciplinary approach. It combines community service with curriculum-based learning. The

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[221] https://www.eesc.europa.eu/resources/docs/eesc-2011-35-en.pdf

[222] See: https://epthinktank.eu/2016/10/20/volunteering-in-the-eu-plenary-podcast/

[223] Yeung, J. W. K., Zhang, Z., & Kim, T. Y. (2018). Volunteering and health benefits in general adults: cumulative effects and forms. *BMC Public Health*, *18*, 8. http://doi.org/10.1186/s12889-017-4561-8

[224] https://www.vsointernational.org/sites/default/files/VSO_ImpactBeyondVolunteering_MainReport_web.pdf

[225] https://www.europeanvolunteercentre.org/about

[226] https://europa.eu/youreurope/citizens/education/volunteering/index_en.htm

[227] Folgueiras, P.; Luna, E. (2012). 'How Service Learning is Understood Within Catalonian Secondary Schools', *Journal for Civic Commitment,* 19.

approach has mostly been applied at the higher education and secondary school levels[228,] though there are primary school examples as well[229.] Analyses of service learning show that in most – but not all cases – it is highly effective. It has been pointed out that service learning projects, to be successful, need to be well designed and that they require a sufficient commitment to providing resources, staffing, finance, and time[230.] The mandatory nature of some programmes can also lead to mixed results[231.] An evaluation of national service learning projects in the Netherlands, conducted among 12-18 year olds, showed that, in the course of one school year, the large majority (77%) of students reported positive or very positive experiences. Those who completed the service learning programmes scored higher on civic-mindedness and had stronger civic values, social support behaviour, engagement in charities and also engagement in politics[232.] Europe Engage is a European wide initiative in the field of service learning, involving universities from across Europe and supported by the Erasmus+ programme. It targets primarily the higher education level, and involves students, staff and also the wider community with the aim of helping to develop a culture of civic engagement through service learning[233.]

Wider access to new media has provided EU citizens with opportunities to access increasing amounts of information as well as opportunities for self-expression, active forms of citizenship and communication with a broad audience[234,235]). However, there have also been growing concerns about disinformation and so-called 'fake news', and their impact on democratic attitudes, trust in science and professional journalism. This has led to increased attention by educators across Europe to implement media literacy across the life span, and especially at the secondary school level. Media literacy has been shown to be an effective way to protect citizens of all ages[236]) against the deleterious effects of disinformation. According to the evidence, a successful element of some media literacy campaigns is what is referred to as 'inoculation'. Inoculation approaches, much like a vaccination, prepare students for potential exposure to disinformation by introducing them to small amounts of the 'virus' and then expose the logical fallacies that are commonplace in disinformation. The aim is to get students to move beyond superficial processing of information and engage in a more critical, deeper analysis of the information presented to them in the media, and to reflect on their own thought processes (and emotions)[237]. An example of an inoculation approach is an initiative in France, in which professional journalists show students a mini-documentary with

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[228] For instance, in Spain, service learning can be found at both the higher education and secondary school level: For higher education level, see e.g. Spain: http://www.urv.cat/en/studies/teaching-model/service-learning/; For secondary school level: https://www.mesacc.edu/community-civic-engagement/journals/how-service-learning-understood-within-catalonian-secondary

[229] Billig, S.H. (2018). Implementing service-learning in elementary schools to enhance inclusion. In: S. Lavery, D. Chambers and G. Cain (Eds.), *Service-Learning: Enhancing Inclusive Education.* Emerald Publishing. 3-20.

[230] Lavery, S., and Chambers, D. Introduction to service learning and inclusive education. In: S. Lavery, D. Chambers and G. Cain (Eds.), *Service-Learning: Enhancing Inclusive Education.* Emerald Publishing. 3-19.

[231] For a cautionary experience: Dull, L.J. (2009) *Some people don't deserve help: Service Learning in Serbia. Intercultural Education*, Vol. 20, 51-60.:

[232] https://renebekkers.wordpress.com/an-evaluation-of-service-learning-programs-in-secondary-education-in-the-netherlands/

[233] https://europeengage.org/

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[235] Buckingham D. (2015), Do We Really Need Media Education 2.0? Teaching Media in the Age of Participatory Culture. In: Lin TB., Chen V., Chai C. (eds.) *New Media and Learning in the 21st Century*. Education Innovation Series. Singapore: Springer.

[236] E.g. Jeong, S., Cho, H. and Hwang, Y. (2012). Media Literacy Interventions: A Meta-Analytic Review. *Journal of Communication*, Jun 1; 62(3): 454–472. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3377317/; Kahne, J., & Bowyer, B. (2017). Educating for Democracy in a Partisan Age: Confronting the Challenges of Motivated Reasoning and Misinformation. *American Educational Research Journal*, *54*(1), 3–34.

[237] See: Banas, J. A., & Rains, S. A. (2010). A meta-analysis of research on inoculation theory. *Communication Monographs*, 77(3), 281–311; Cook, J., Lewandowsky, S., Ecker, U. K. H. (2017). Neutralizing misinformation through inoculation: Exposing misleading argumentation techniques reduces their influence. *PLoS ONE*, 12(5): e0175799. https://doi.org/10.1371/journal.pone.0175799.

false and outrageous information that contain a conspiracy[238]. The deceit is later exposed and students reflect on why they might believe a conspiracy theory in the first place. Utilising professional journalists to help students better understand media disinformation, and to promote responsible use of new media is being introduced across Europe. For instance, the Finnish project *Faktana, kiitos*! (Facts please!)[239], launched in 2017, aims, among other things, to convince students that they carry responsibility for the kinds of media content they forward to others. More than 120 journalists participated in 2017, reaching more than 7,000 students.

Box 5: Summary of findings: what works to promote active citizenship?

- Increasing awareness that as life expectancy increases, older adults have, more than ever, an opportunity to actively contribute to their communities; policy makers need to help create opportunities for this

- Active citizenship goes beyond simply becoming active as a citizen; that taking action needs to be rooted in respect for diversity, human dignity and democratic principles

- Active citizenship needs to be constructed in ways that are sustainable; At the school level, whole school approaches have shown to be especially effective

- Developing active citizenship is a lifelong process that starts early in life

- Many EU countries have guiding documents that promote active citizenship and Ministries of Education have taken an active role in this area; improvement with respect to implementation is needed however since not enough students learn about civic issues in school

- Successful examples of active citizenship education for school aged children involve collaboration between formal and non-formal education sectors

- Developing active citizenship competences is best done through interactive, engaging, student-centred methods' empowering learners should to play an active role in their own learning is crucial

- Promoting a dynamic relationship between the (local) community and educational institutions will anchor citizenship education

- The growth of the digital world, and social media in particular, presents both opportunities and threats; active citizenship education in the 21st century needs to integrate digital literacy into existing and future programmes, at all ages

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[238] The documentary had already been placed on the web, which led to many conspiracy theory websites taking the information and disseminating it as fact.
[239] https://ipi.media/new-finnish-project-brings-journalists-to-schools-to-teach-media-literacy/

4. Conclusions

This paper, entitled *Education as self-fulfilment and self-satisfaction,* summarises the literature and highlights current practice in Europe related to trends, drivers, practices and future developments. It comes at a time when major developments are taking place with respect to demographics, technology, the social sphere and the economy. These changes provide both opportunities and challenges for European societies.

The paper focuses on four key sub-topics: non-cognitive competences in general, with special attention for resilience, creativity, and the multiple competences associated with active citizenship. For each we provide a definition, an overview of the key drivers and a review of the trends and new approaches, drawing on the evidence in the literature as well as examples of approaches. Throughout the paper, identifying evidence of effectiveness is a guiding concern.

The paper documents the growing body of research relating to the four sub-topics highlighted in this paper, and the increasing awareness of the importance of these sub-topics among the many stakeholders in the educational field. The recent and continual involvement of international organisations with respect to the four sub-topics is reflected in reports, policy statements and recommendations. The paper attempts to capture the most important of these.

On the whole, the evidence shows that the initiatives taken to promote self-fulfilment and self-satisfaction throughout the lifespan have a positive impact on individuals and communities. They help Europeans at all ages expand their understanding of modern society, develop 21st century (cognitive and non-cognitive) competences, attain a lifelong learning mind set, build resilience to the many challenges in an increasingly complex and dynamic world, and become creative, flexible, and agile learners. On the other hand, the evidence also shows that there are gaps with respect to access and opportunity. These gaps relate to gender, education level, income level, heritage, social class, etc. For instance, the relatively low level of civic engagement among European citizens, and limited exposure to civic topics in schools, is both a cause for concern and a call for action.

Nevertheless, the many examples of effective and often innovative practice mentioned in this paper show that European citizens and institutions are already engaged in making some of the necessary adjustments to face the challenges of the 21st century, for instance those posed by accelerating technological possibilities and threats. The key elements of the effective practices highlighted in the four sub-sections have a great deal in common, and have many policy implications. The following summary identifies policy elements that can be derived from all four sub-sections:

- Policy documents and concrete initiatives use a variety of definitions for the various non-cognitive competences addressed in this paper, and it is not always clear how concepts are operationalised. There are few agreed upon ways to measure and assess creativity and resilience, for instance. This makes it difficult to compare policies and initiatives, and also to comprehend what aspect of a particular policy or initiative is effective or less effective. Agreeing upon criteria, however subjective, will help policy makers create appropriate policies and communicate more effectively.

- A life learning attitude and policies that support lifelong learning lie at the basis of effective measures. This also implies the development of policies that more explicitly link the competences learned at a young age to those needed during the lifespan, and that build on competences already mastered.

- Successful implementation of policies and practices to promote self-fulfilment and self-satisfaction requires collaboration between the formal and non-formal education sectors, as well as the employment sector. Such collaboration needs to be structural and sustainable.

- Policies, measures and initiatives are especially effective when they are inclusive, involve all stakeholders and promote active participation in decision-making processes. Extra policy efforts need to be made to engage traditionally underserved communities.

- Effective policies and practices need to be comprehensive and fully implemented to be effective. Lack of full implementation or *ad hoc* approaches can be ineffective or counterproductive. Too many practices are presently ad hoc and dependent on funding cycles, Policy measures need to support sustainable rather than *ad hoc* practices. This does require that sufficient means be allocated on a continual basis..

- There is a need for solid evaluation research to assess which practices are effective, and which practices can be transferred to other (educational) environments. Too often, solid evaluation is lacking.

- Educational learning environments are not neutral places. They need to be safe, comfortable, caring and participatory. Policy measures and evaluation schemes need to include such concerns in educational planning, and also monitor to what extent such conditions are met.

- Non-cognitive competences, including resilience, creativity, and those associated with active citizenship, all represent departures from traditional education, which traditionally focuses on rote memorisation, factual knowledge and cognitive competences. Refocusing on more non-cognitive competences implies changes to the curriculum, both initial teacher education and continuous professional development, and teaching methods.

- Although many good practices exist in Europe (and beyond), they are not always visible or easily accessible, especially if little information is available in the English language. Nevertheless, they can be inspirational and highly developed. Best practices should be recognised, disseminated, mainstreamed and awarded at both the European and national levels.

- Educators often do not have sufficient training and experience to effectively use new tools that promote self-fulfilment and self-satisfaction. Such training should be a high policy priority. It implies integrating optional and also mandatory courses, both stand-alone and transversal, into teacher education programmes, but also programmes for youth workers and related professions. Ministries of Education in particular play a key role here, as well as utilising the expertise of specialist NGOs.

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