Highlands College: Redesigning the Curriculum

Executive SummaryDr Lynne Rogers

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Introduction

This piece of work was commissioned by Highlands College in Jersey. Leading academics at the IOE, UCL's Faculty of Education and Society, completed a review of international best practice and drew on research evidence in key areas which cover: enrichment and global citizenship; future and digital skills; health and wellbeing; mentoring and coaching; and next steps into employment, further and higher education. Informed by the specific interests of the college, previous work undertaken by the Edge Foundation and guidance from Dr Lynne Rogers, it was agreed that the literature would focus on particular case studies (Australia/New Zealand, Canada, Finland, Scotland, US, International Baccalaureate, Northern Ireland and England), as an initial point of inquiry from which to investigate and build upon. This information confirmed the proposed approach to the College's developing curriculum offer.

The full report including all literature is available here.



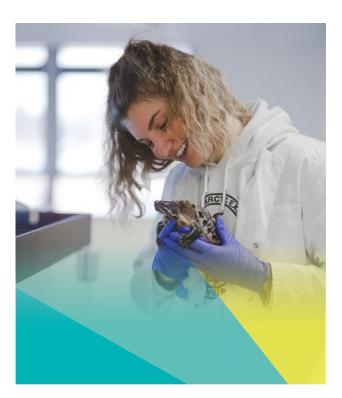
This executive summary sets out the key messages from the literature reviews undertaken.



Holistic Educational Frameworks and the Development of 21st Century Skills

Internationally there is a broad consensus that the curriculum offer for young people needs to be refreshed for young people to thrive in the world when they move into employment. Particular attention has been given to the importance of 21st century skills or competencies in recognition that subject siloed, high content knowledge-based curricula are not in themselves sufficient. These broader learning goals, often referred to as noncognitive skills, capabilities, competencies or 21st century skills include critical thinking, problem solving, creativity, curiosity, interpersonal and communication skills, self-regulation, grit, entrepreneurial skills, teamwork and craftsmanship.

Similar to the approaches taken to career education discussed in Next Steps, there are three different approaches to implementing curriculum frameworks that focus on 21st century competencies: adding new subjects or new content within existing subjects, integration as cross-curricular competencies or



transforming the curriculum (Voogt & Pareja Roblin, 2012). Alongside this are considerable pedagogic challenges that require a shift from teaching as the transmission of knowledge to learning environments that focus on authentic learning activities, collaborative learning, problem solving and one in which students actively construct knowledge.

In Finland, for example, transversal competences have been emphasized since 2014 and have been integrated into the aims of various school subjects. They include:

- 1. thinking and learning to learn
- 2. cultural literacy, communication and expression
- 3. managing daily life, taking care of oneself and others
- 4. multiliteracy
- 5. ICT-skills
- 6. entrepreneurial and work life skills
- participation and building sustainable futures (Finnish National Board of Education, 2016).

They are emphasized in collaborative classroom practices through engaging students in multidisciplinary, phenomenon- and project-based studies. Underpinning the implementation of the curriculum was a sustained teacher education development programme which offered a supportive environment for teacher educators and teachers to familiarize them with 21st century competences and to help them plan teaching and learning strategies that support these competences [Müller et al., 2010].

Successful implementation of new educational frameworks requires strong stakeholder engagement, professional training and development for staff and a clear vision. There remain challenges in reconceptualising assessment of 21st century competencies in a meaningful way.

Mentoring and Tutoring

The mentoring of students is an extremely popular intervention throughout the world. Mentoring programmes worldwide vary depending on whether they are based in schools, colleges or the community, on the type of support offered, whether informally or on a weekly basis, the duration of the programme, and on the aims of the mentoring provision, such as academic, behavioural, cultural, interpersonal, psychological, and/or vocational goals. Within this variation there is a consensus of three key elements:

- 1. The mentor is someone with greater experience than the mentee.
- 2. The mentor offers guidance or instruction to facilitate the mentee's growth and development, and
- 3. The importance of the emotional bond between mentor and mentee.



Meta-analyses have drawn attention to the positive impact of mentoring in relation to emotional, behavioural and educational domains [DuBois et al., 2011]. There is evidence that mentees are likely to perform better than their non-mentored peers (Eby et al., 2008) and they report positive interpersonal relationships (DuBois et al., 2011; Eby et al., 2008).

The duration of the mentoring relationship is important. Mentoring relationships over one year, with frequent and consistent meetings, are associated with better outcomes (DuBois et al., 2011; Farruggia et al., 2011; Rhodes & DuBois, 2006). Those of short durations are associated with negative outcomes, including a decrease in global self-worth and self-esteem.

Mentors and mentees need to be matched appropriately and with thought (DuBois et al., 2002; 2011). Research suggests that matching mentors and mentees based on similar interests is more important than matching on race or ethnicity.

The recruitment of mentors, the training offered, and their ongoing motivation are all factors that contribute to effective programmes (DuBois et al., 2011). Ongoing training is imperative to sustain mentoring relationships and ensure good-quality relationships (DuBois et al., 2002). International research (e.g. DuBois et al., 2002; Rhodes et al., 2000) has found that parental support and involvement in mentoring enhanced the effectiveness of programmes.

Decisions need to be made about the aims of the mentoring programme, whether this is one-to-one or in groups, face-to-face or online, and how provision needs the meets of all young people. The literature also draws attention to the importance of evaluating mentoring provision. Examples of frameworks for evaluation can be found in MENTOR (2015) and Taylor et al. (2017).

Health and Wellbeing

For over twenty years the health and wellbeing of children and young people has become an increasing concern and focus in many jurisdictions across the world. Alongside this schools and colleges, policy makers and governments have become aware of the importance of education in developing students' wellbeing and health in addition to academic outcomes and performance.

Overall, the literature suggests that:

- 1. Students with better health and wellbeing are likely to achieve better academically.
- 2. Effective social and emotional competencies are associated with greater health and wellbeing, and better achievement.
- 3. The culture, ethos and environment of a school or college influences the health and wellbeing of students and their readiness to learn.
- 4. A positive association exists between academic attainment and physical activity levels of students (Public Health England, 2014, p. 4).

Since the late 1980s there has been a shift in approach to health and wellbeing, from focusing on the behaviour of the individual to a more holistic approach that recognizes the wider social, environmental and political influences on health (Langford et al., 2014). Consistent with the ecological-systems perspective (Bronfenbrenner, 2005), this approach sees schools and colleges as a part of the wider community, and wellbeing as a function of the interactions between various levels of the system, thereby making its promotion a shared responsibility. The strength and efficacy of a whole-school or college approach lies in its holistic approach that emphasizes consistency in policies and practices, and wellbeing promotion as a shared responsibility of all (Weare & Markham, 2005).

Generally, the evidence from several meta-analyses for whole institutional approaches to supporting health and wellbeing is positive. Well-implemented programmes strengthen social and emotional skills such as stress management and decision-making; enhance attitudes to school or college and higher academic performance [CASEL, 2008; Durlak et al., 2011; Weissberg et al., 2015].



Colleges and schools have an important role to play in supporting the health and wellbeing of their students. To do this effectively requires a whole institutional approach that is sustained and embedded in the culture and curriculum across an institution over time. This includes inclusive institutional policies where students and staff are afforded meaningful opportunities for signposting and support; pedagogic approaches that embrace collaborative approaches to teaching and learning including role plays and peer to peer learning; the fostering of student voice and community and parental engagement. Important too, is that institutions foster an approach to health and wellbeing that includes and recognizes the needs of teaching and non-teaching staff.

Enrichment and Global Citizenship

Enrichment activities including global citizenship education (GCE), enterprise and entrepreneurship and youth social action broaden the experiences of young people while in education and support the development of social, physical and intellectual skills. Evidence suggests that they enable young people to develop wider social networks and support the development of transferable skills. Several studies have identified an association between engagement in enrichment activities and better academic achievement and higher academic aspirations (Blomfield & Barber, 2010; Mahoney et al., 2003; Pitts, 2013) although this is not always the case (Farb & Matjasko, 2012). Research also suggests that engaging young people in enrichment activities can be a means to enhance feelings of belonging within the school or college community (Blomfield & Barber, 2010; Martinez et al., 2016).



In many countries the development of entrepreneurship and entrepreneurship education is seen of key importance within upper secondary education and is strongly linked to 21st century skills, such as critical and creative thinking, problem-solving, communication and collaboration and digital literacy (Foundation for Young

Australians, 2016; World Economic Forum, 2016) in addition to developing non-cognitive skills such as teamwork.

Distinctive to FE, given the large size of colleges and the high level of industry and technical equipment on site, is how colleges can become anchor institutions in their locality often in support of community regeneration and social cohesion. At South Eastern Regional College in Northern Ireland, in an innovative approach to college induction, students work on enterprise activities where problems are sourced from local companies who are keen to have new ideas presented to them (Irwin, 2019). There are links here to youth social action which can involve formal or informal activities for example volunteering, fundraising, giving time to a charity, mentoring, supporting people, helping improve the local area and campaigning for social causes (Bratsa et al., 2020). Indeed, youth social action in England is now seen as a significant part of contributing to careers education in addition to the benefits to the local community and beyond (Birdwell et al., 2015).

Overall, the evidence suggests that to be effective GCE needs to be fully embedded across schools or colleges, viewed as a priority and teachers need to have received professional development. It is apparent that young people are interested in GCE and do want to make a difference to the world (see for example, Bourn, 2016), yet there remains limited research about how the implementation of GCE in schools and colleges impacts on the breadth and depth of student learning about global issues (Arts, 2020; Buchanan et al., 2018).

Young people are engaged with the world that they live in and yet inequalities of access are seen across many areas of enrichment. Efforts to embed enrichment activities within educational institutions need to take proactive steps to ensure that all young people can participate. Like other literature reviews in this series facilitatory pedagogic approaches that foster enquiry-based learning underpin effective practice. Pertinent here is the importance of teacher dispositions and experience especially in relation to GCE and entrepreneurship.

Next Steps into Employment, Further and Higher Education

Where careers education, information, advice and guidance (CEIAG) work well, then the provision of high quality, impartial, accessible, and personalized advice is key to supporting transitions into education, training and employment (Hooley et al., 2012; Keele et al., 2020). Effective careers education can also result in a range of other positive outcomes for young people including the promotion of motivation and positive attitudes towards learning (Harkins, 2001) and enhanced self-awareness (Palladino Schultheiss, 2005), in addition to acting as a tool for promoting social equity (Archer et al., 2014) and social mobility (Hutchinson, 2012). Problematic then is that internationally there are concerns about the quality of CEIAG (e.g. Australia: Gonski et al., 2018, Canada: Connelly et al., 2013, and the US: Jacob, 2017). Provision varies in terms of quality and quantity, it often reflects old paradigms of work and tends to focus on subjects and courses that follow a linear pathway rather than encouraging young people to take a broader career outlook (Gonski, et al., 2018). Enabling young people to make the right choices is central to successful transitions into higher education (HE), training or work.

The evidence suggests that quality CEIAG and preparation for progression to employment, further training or HE is personalized, makes strong connections with employer engagement and the world of work and necessitates staff training. CEIAG needs to be recurrent and increasingly should enable young people to develop career management skills to enable them to navigate the many challenges that they will face throughout their lives. Within a rapidly changing career future, and the spread of possible occupations, the new challenge for careers education and guidance is therefore to support young people, their parents and teachers to a) understand occupational change and b) corresponding skill change and c) make rational decisions about academic, technical and vocational routes into employment.

Employer engagement is an essential aspect of enabling young people to consider multiple pathways for their post-18 transition. Employer engagement as part of careers provision includes mentoring activities, enterprise competitions, work experience, job shadowing, workplace tasters, and employers setting briefs for project work [Mann et al., 2018; Williams et al., 2018].

Employer engagement increases young people's understanding of jobs and careers and thereby helps young people decide what to study and where. It provides the knowledge and skills demanded by modern workplaces such as problem-solving and team-working. Through work experience and placement opportunities, young people gain the knowledge and skills required for successful college to work transitions and through engaging employers to support teaching resources, it enables young people to see the connection between what they learn at college and employment outcomes [Mann et al., 2018].

Employer engagement also offers valuable opportunities for teachers to keep up to date with industry standards and requirements, to understand different and emerging occupations, to update their understanding of contemporary work-based practice and to enrich the curriculum offer by embedding authentic activities (Rogers et al., 2020). Allied to this are the benefits from teacher externships. In Australia, for example, teachers undertake an industry-based work placement relevant to their subject area. They work with industry professionals to design learning activities and participate in industry supported workshops, online courses, or conferences. The partnerships enable teachers to develop their skills so that they can enrich the curriculum and equip teachers with the latest research and industry relevant knowledge (Education Services Australia, 2018).



Future and Digital Skills

Continued advancements in technology-driven transformations are impacting on education, the economy and society world-wide. New careers are emerging while others disappear. Many countries have skill shortages and yet at the same time skill mismatches are growing.

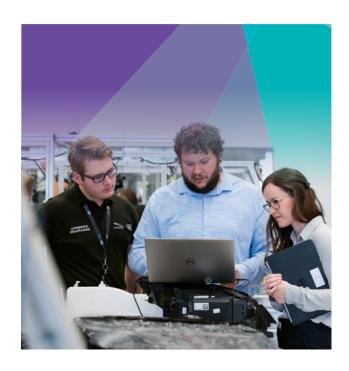
Education has a role to play in preparing young people for digitally driven work and must also empower young people to gather the understanding and resilience that will enable them to become lifelong learners who continually develop digital competencies, in addition to other demands of the changing world of work. It is therefore disappointing that despite the promises of digital education and the amount of investment internationally, the evidence about the impact on student learning outcomes remains mixed. Undoubtedly there are challenges with the quality of the research evidence, in part due to the complexity of different contexts and conditions, and yet, there are numerous examples of the benefits of digital innovation identified in the literature which demonstrate future potential.

The digital transformations brought about by the Covid-19 pandemic have accelerated change within education, including alternative credentials, such as micro-credentials, digital badges and nanocredentials. For the most part, alternative credentials have been the province of higher education with an emphasis on the importance of technical education and skills development and the need for increased flexibility and responsiveness to the needs of employers and society. There is, however, growing interest across schools and colleges in alternative approaches to credentials particularly since these may better support the assessment of 21st century or transferable skills (Gibson et al., 2015), the possibilities for the types of activities that are assessed in addition to formative and summative feedback (Newby & Cheng, 2020) and the potential to recognize learning across many contexts both in and outside of school or college.

Governments internationally are renewing digital education strategies. Several digital capability frameworks have emerged specifically for educators, in addition to those for citizens and students and attention is being paid to pedagogical approaches that support the embedding of digital education.

Effective skill needs anticipation is essential here also in underpinning policy directions and decisions. Successful skill needs anticipation systems share several features. They are focused on a specific problem; clear about the main objectives, whether these are to support policy making and contribute to strategic planning or to provide data for better-informed career choices, or both, user-oriented, stakeholder owned and well-coordinated. In addition, they make effective use of institutional platforms for social dialogue on education and training and can rely on competent institutions and expert networks. These systems have good data coverage and are able to produce assessments for all levels – macro, sector, subnational (ILO et al., 2017).

Central to maximizing the potential of digital technologies in education will be the empowerment of teachers through developing skills and confidence so that students can flourish now and in the future. It is unlikely that one-off individual institutionalized approaches will be sufficient, rather attention needs to be paid to developing digital educational ecosystems that embrace multiple stakeholders in a meaningful way: collaboration is central to this.



References

- Archer, L., Dewitt, J. & Willis, B. (2014) Adolescent boys' science aspirations: Masculinity, capital and power, *Journal of Research in Science Teaching*, 51(1), 1–30.
- Arts, I. (2020) School partnership and school visits in a global citizenship context: Scottish secondary schools and their links with developing countries. Edinburgh: The Scottish Government.
- Birdwell, J., Scott, R. & Reynolds, L. (2015) *Service nation* 2020. London: Demos.
- Blomfield, C. & Barber, B. (2010) Australian adolescents' EC activities participation and positive development: is the relationship mediated by peer attributes, *Australian Journal of Education and Developmental Psychology*, 10, 114–128.
- Bourn, D. (2016) Global citizenship and youth participation in Europe report. UK: Oxfam.
- Bratsa, Y., Mollidor, C. & Stevens, J. (2020) *National youth social action survey 2019. Summary report.*London: Ipsos MORI.
- Bronfenbrenner, U. (2005) Making human beings human: Bioecological perspectives on human development. Thousand Oaks: Sage.
- Buchanan, J., Burridge, N. & Chodkiewicz, A. (2018)
 Maintaining global citizenship education in
 schools: A challenge for Australian educators and
 schools, *Australian Journal of Teacher Education*,
 43(4). DOI: 10.14221/ajte.2018v43n4.4.
- CASEL (2008) Social and emotional learning and student benefits: Implications for the Safe School/Healthy Students core elements. Available at: https://eric.ed.gov/?id=ED505369 (accessed 15 February 2022).
- Connelly, G., Blair, G. & Ko, A. (2013) It's their future: A pan-Canadian study of career education. Toronto, Canada: The Learning Partnership.
- DuBois, D. L., Holloway, B. E., Valentine, J. C. & Cooper, H. (2002) Effectiveness of mentoring programs for youth: A meta-analytic review, *American Journal* of *Community Psychology*, 30, 157–197.

- DuBois, D. L., Portillo, N., Rhodes, J. E., Silverthorn, N. & Valentine, J. C. [2011] How effective are mentoring programs for youth? A systematic assessment of the evidence, *Psychological Science in the Public Interest*, 12, 57–91. DOI:10.1177/1529100611414806.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D. & Schellinger, K. (2011) The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions, *Child Development*, 82(1), 405–432.
- Eby, L. T., Allen, T., Evans, S. C., Ng, T. & DuBois, D. L. (2008) Does mentoring matter? A multidisciplinary metaanalysis comparing mentored and non-mentored individuals, *Journal of Vocational Behaviour*, 72(2), 254–267.
- Education Services Australia (2018) Optimising STEM industry-school partnerships: Inspiring Australia's next generation final report. Carlton South, Victoria: Education Council.
- Farb, A. F. & Matjasko, J. L. (2012) Recent advances in research on school-based extracurricular activities and adolescent development, *Developmental Review*, 32(1), 1–48. DOI:10.1016/j.dr.2011.10.001.
- Farruggia, S. P., Bullen, P., Davidson, J., Dunphy, A., Solomon, F. & Collins, E. (2011) The effectiveness of youth mentoring programmes in New Zealand, New Zealand Journal of Psychology 40(3).
- Finnish National Board of Education (2016) *National core* curriculum for basic education 2014. Helsinki: Finnish National Board of Education.
- Foundation for Young Australians. (2016) The new basics:

 Big data reveals the skills young people need for the new work order. Available at https://www.fya.org.au/app/uploads/2021/09/The-New-Basics_2016.pdf (accessed 15 February 2022).
- Gibson, D., Ostashewski, N., Flintoff, K., Grant, S., & Knight, E. (2015) Digital badges in education, *Education* and *Information Technologies*, 20, 403–410.

- Gonski, D., Arcus, T., Boston, K., Gould, V., Johnson, W.,
 O'Brien, L., Perry, L-A. & Roberts, M. (2018) Through
 growth to achievement: The report of the review
 to achieve educational excellence in Australian
 schools. Available at: htttps://docs.education.
 gov.au/system/files/doc/other/662684_tgta_
 accessible_final_0.pdf (accessed 19 October
 2020).
- Harkins, M. A. (2001) Developmentally appropriate career guidance: Building concepts to last a lifetime, *Early Childhood Education Journal*, 28(3), 169–174. DOI:10.1023/A:1026543201937.
- Hooley, T., Devins, D., Watts, A. G., Hutchinson, J., Marriott, J. & Walton, F. (2012) *Tackling unemployment, supporting business and developing careers.*London: UK Commission for Employment and Skills.
- Hutchinson, J. (2012) Career-related learning and science education: The changing landscape, *School Science Review*, 94(346), 91–98.
- ILO, Cedefop, ETF and OECD (2017) Skills needs anticipation: Systems and approaches. Analysis of stakeholder survey on skill needs assessment and anticipation. Geneva: ILO.
- Irwin, T. (2019) Further education and skills in Northern Ireland: policy and practice in a post-conflict society, *Journal of Education and Work*, 32(3), 266–276, DOI:10.1080/13639080.2019.1621275.
- Jacob, B. A. (2017) What we know about career and technical education in high school. Washington, DC: Brookings Institution. Available at https://www.brookings.edu/research/what-we-know-about-career-and-technical-education-in-high-school/ (accessed 15 February 2022).
- Keele, S. M., Swann, R. & Davie-Smythe, A. [2020] Identifying best practice in career education and development in Australian secondary schools, Australian Journal of Career Development, 20[1], 54–66.
- Langford, R., Bonell, C. P., Jones, H.E., Pouliou, T., Murphy, S. M., Waters, E., Komro, K. A., Gibbs, L. F., Magnus, D. & Campbell, R. (2014) *The WHO Health Promoting School framework for improving the health and well-being of students and their academic achievement.* Cochrane Database of Systematic Reviews 2014, Issue 4. Art. No.: CD008958. DOI:10.1002/14651858.CD008958.pub2.

- Mahoney, J. L., Cairns, B. D. & Farmer, T. (2003) Promoting interpersonal competence and educational success through extracurricular activity participation, *Journal of Educational Psychology*, 95(2), 409–418.
- Mann, A., Rehill, J. & Kashefpakdel, E. T. (2018) *Employer* engagement in education: Insights from international evidence for effective practice and future research. London: Education and Employers and Education Endowment Foundation.
- Martinez, A., Coker, C., McMahon, S. D., Cohen, J. & Thapa, A. (2016) Involvement in extracurricular activities: Identifying differences in perceptions of school climate, *The Educational and Developmental Psychologist*, 33(1), 70–84.
- MENTOR/National Mentoring Partnership. (2015) Elements of effective practice for mentoring. Researchinformed and practitioner-approved best practices for creating and sustaining impactful mentoring relationships and strong program services. 4th Edition. Boston: MENTOR: The National Mentoring Partnership.
- Müller, J., Norrie, C., Hernández, F. & Goodson, I. (2010) Restructuring teachers' work-lives and knowledge in England and Spain. *Compare: A Journal of Comparative and International Education*, 40(3), 265–277.
- Newby, T. J. & Cheng, Z. (2020) Instructional digital badges: effective learning tools, *Education Technology Research Development*, 68, 1053– 1067. DOI: 10/1007/s11423-019-09719-7.
- Palladino Schultheiss, D. E. (2005) Elementary career intervention programs: Social action initiatives, Journal of Career Development, 31(3), 185–194. DOI:10.1007/s10871-004-2226-1.
- Pitts, S. E. [2013] Would you credit it? Navigating the transitions between curricular and extra-curricular learning in university music departments, *Arts and Humanities in Higher Education*, 12(2–3), 194–203.
- Public Health England. [2014] The link between health and well-being and attainment. A briefing for head teachers, school governors and teachers. London: Public Health England.
- Rhodes, J. & Dubois, D. L. (2006) Understanding and facilitating the youth mentoring movement, Social Policy Report: Society for Research in Child Development, 20(3) 3–19.

- Rhodes, J. E., Grossman, J. B. & Resch, A. L. (2000) Agents of change: Pathways through which mentoring relationships influence adolescents' academic adjustment, *Child Development*, 71, 1662–1671.
- Rogers, L., McQueen, H. & Spours, K. (2020) *Evaluation of career colleges*. London: The Edge Foundation and Commercial Education Trust.
- Taylor, P., Quinlan, O., Maskrey, S., Managan, L. & Batka, M. [2017] One-to-one support: A collaborative quality framework. London: Teach First, Brightside and Nesta.
- Voogt, J. & Pareja Roblin, N. (2012) A comparative analysis of international frameworks for 21st century competencies: Implications for national curriculum policies, *Journal of Curriculum Studies*, 44(3), 299–321. DOI:10.1080/00220 272.2012.668938.
- Weare, K. & Markham, W. (2005) What do we know about promoting mental health through school? *Promotion & education*, 12, 118–22. DOI:10.1177/1025 3823050120030104.
- Weissberg, R. P., Durlak, J. A., Domitrovich, C. E. & Gullotta, T. P. (2015) Social and emotional learning: Past, present, and future. In J. A. Durlak, C. E. Domitrovich, R. P. Weissberg & T. P. Gullotta (Eds.), Handbook for social and emotional learning: research and practice (pp. 3–19). New York, NY: Guilford.
- Williams, J., Buzzeo, J., Spiegelhalter, K. & Dawson, A. [2018] *Careers provision in colleges: What works?*London: The Careers & Enterprise Company.
- World Economic Forum. [2016] The future of jobs:

 Employment, skills and workforce strategy for the fourth industrial revolution. Available at https://www3.weforum.org/docs/WEF_Future_of_Jobs.pdf [accessed 15 February 2022].

