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Core skills for learning,
work and society
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Our world is
moving quickly
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Foreword

Our world is moving quickly: no sooner is one challenge overcome and celebrated than another is upon us and demanding our energy and attention. While the security of vulnerable populations is under threat, digital channels are simultaneously offering possibilities for democratic engagement as never before.

Technologies can create new, but also supplant, existing labour markets with astounding pace. It is difficult to know how best to serve the UK and our partners across the world in such complex and emergent times. The future may be uncertain, but creativity abounds and opportunity and commitment to shared goals are evident globally as never before – and young people are at the heart of it.

As educators, our responsibility is to prepare every young person for their future in the best possible way. Qualifications and knowledge remain important but are no longer enough to secure a successful future. Rather, young people need and deserve the opportunity to grow into well-rounded, creative and critical citizens, ready to engage with labour markets and

shape the future for themselves and future generations. Our work in schools directly addresses these issues through contribution to education discourse, system development and provision of support services for teachers and leaders. Within these work areas, we have brought together international thinking and practice in core skills and competencies – we believe this is the most productive way to invest in our shared future.

We aim to increase the number of young people globally with access to these intrinsic and integrating skills. Through our work with teachers and school leaders, we aim to empower individual educators to make informed decisions about how they can best provide for their pupils. We know there is not one answer – no single

template for success – but we believe that developing young people’s core skills will enable them to engage critically with the world around them and this is worthy of our investment. And the British Council is uniquely placed to deliver on that investment: we have centres in over 100 countries worldwide and our track record in international educational transformation is second to none.

And so, with our partners and collaborators, I am pleased to present this publication which precedes new and exciting projects and programmes all over the world. With mutual respect, commitment and agency, I am certain we can enable more young people to play their part in a successful and prosperous future global community.

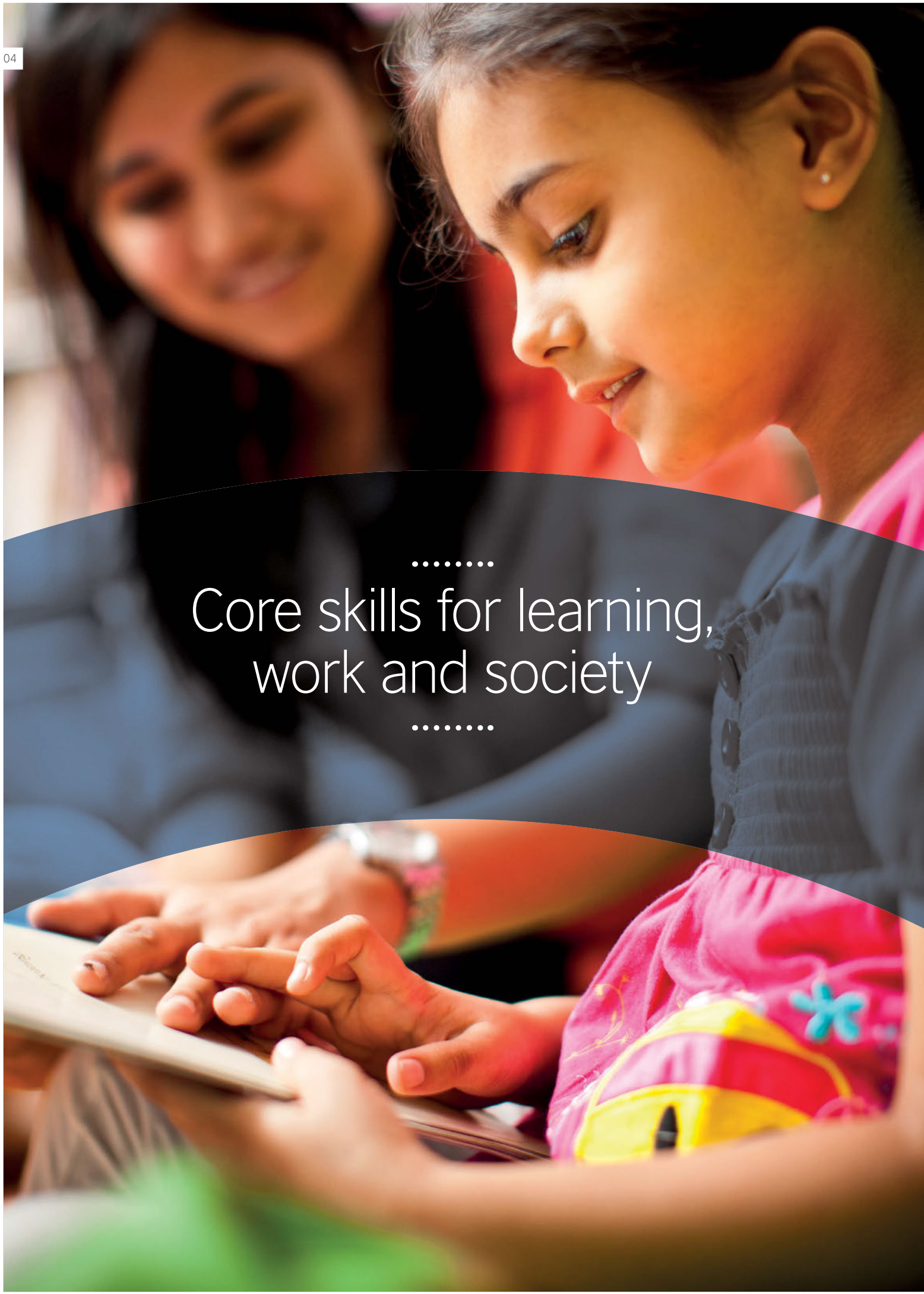


Dr Jo Beall

Jo Beall joined the British Council and the Executive Board in July 2011 as Director, Education and Society, reporting to the Chief Executive. Jo was formerly Deputy Vice-Chancellor, University of Cape Town, with responsibility for academic matters, social responsiveness and external relations, and the university’s international strategy. A graduate of the London School of Economics, Jo was formerly Professor of Development Studies in the LSE’s International Development Department, which she directed between 2004 and 2007. During her academic career Jo has published numerous books and academic articles in the areas of gender and social policy, urban governance and

development, and cities, conflict and state fragility. She has worked in Africa, Asia and Latin America, undertaking significant research projects and advisory work in Afghanistan, India, Pakistan and South Africa. Her move to the British Council signals her commitment to education as a force for global good. Jo is a Fellow of the Academy of Social Sciences, a Member of the British Academy’s South Asia Area Panel, and Honorary Professor of the School of Architecture and Planning at University of Witwatersrand, South Africa, and will be taking up the position of Chair of the Board of Trustees at INASP later this year.

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Core skills for learning,
work and society
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Introduction

Susan Douglas and Dr Björn Haßler

Every country in the world needs a high-quality, inclusive and equitable school system¹ that supports young people to develop the knowledge, skills and values to live and work in a globalised economy and to contribute responsibly both locally and globally.



‘We need to educate our children for their future, not our past.’

Sir Arthur C Clarke

However, our education systems, and the young people within them, face some daunting challenges. While many children remain out of school,² others are in school but not learning the basics³ or are intellectually disengaged from that schooling.⁴ Employers are demanding higher-order cognitive skills from their workforce, as opposed to the traditional manual and lower-order cognitive skills. If economies are to be successful in the long term, young people need to be enabled to:

- generate and implement new ideas, solutions and products
- use digital tools to enable knowledge discovery, creation of resources and communication
- apply their knowledge to solve real-world problems.⁵

In order to do so, there is growing consensus that school systems need to be clear about the purposes of education and develop young people with **core skills and competencies** that relate to the world in which they are living and will live (often known as 21st century skills or deep learning skills⁶), which include:

- ways of working: communication and collaboration

- ways of thinking: critical thinking, problem solving, creativity and innovation, learning to learn and metacognition
- tools for working: information literacy, information and communication technology (ICT) literacy
- ways of living in the world: global citizenship and civic responsibility, including cultural awareness and competence.⁷

Whether you are a young person in Lagos or Glasgow, Jakarta or Bogotá, accessing education that supports the development of academic mastery alongside the acquisition of core skills such as these will be crucial to your future success, to the future and wellbeing of others and to the prosperity of our global society as a whole.

The British Council's focus

Building therefore on the deep pedagogies framework⁸ and UNESCO's transversal skills,⁹ and in consultation with a wide range of stakeholders across our network, the British Council is championing the development of these core skills and competencies by supporting teachers to develop their pedagogy in the following areas:

- **Critical thinking and problem solving** – promoting self-directed thinking that produces new and innovative ideas and solves problems; reflecting critically on learning experiences and processes and making effective decisions.
- **Collaboration and communication** – fostering effective communication (orally, and in writing); actively listening to and engaging with others in diverse and multi-lingual environments and understanding verbal and non-verbal communication; developing the ability to work in diverse international teams, including learning from and contributing to the learning of others, assuming shared responsibility, cooperating, leading, delegating and compromising to produce new and innovative ideas and solutions.
- **Creativity and imagination** – promoting economic and social entrepreneurialism; imagining and pursuing novel ideas, judging value, developing innovation and curiosity.
- **Citizenship** – developing active, globally aware citizens who have the skills, knowledge and motivation to address issues of human and environmental sustainability and work towards a fairer world in a spirit of mutual respect and open dialogue; developing an

1. UNESCO Sustainable Development Goal 4.

2. UNESCO Global Monitoring Report 2012, 2013–14.

3. 2013–14 EFA Global Monitoring Report: Teaching and Learning – Achieving Quality for All, DFID education position paper *Improving learning, expanding opportunities*.

4. Jenkins, L (2013) Wilms and colleagues. (2009) Student Disengagement Data.

5. National Research Council (2012) *Education for life and work: Developing Transferable Knowledge and Skills in the 21st Century*. National Academies Press.

6. New Pedagogies For Deep Learning: A Global Partnership. Available online at: www.newpedagogies.info

7. Fullan, M and Langworthy M, Assessment and Teaching of 21st Century Skills. Available online at www.atc21s.org; Binkley, M, Erstad, O, Herman, J, Raizen, S, Ripley, M, Miller-Ricci, M and Rumble, M (2012). 'Defining Twenty-First Century Skills', in Griffin, P, McGaw, B and Care, E (eds) *Assessment and Teaching of 21st Century Skills*. Springer Netherlands.

8. Fullan, M and Langworthy, M (2013) *Towards a new end: New Pedagogies for Deep Learning*. Seattle: Collaborative Impact.

9. UNESCO, (2013) *Integrating Transversal Competencies in Education Policy and Practice*.



understanding of what it means to be a citizen of their own country and their own country's values.

- **Digital literacy** – developing the skills to discover, acquire and communicate knowledge and information in a globalised economy; using technology to reinforce, extend and deepen learning through international collaboration.
- **Student leadership and personal development** – recognising the importance of honesty and empathy; recognising others' needs and safety; fostering perseverance, resilience and self-confidence; exploring leadership, self-regulation and responsibility, personal health and wellbeing, career and life skills; learning to learn and life-long learning.

In so doing, the British Council supports the argument that equal importance be given to the economic, social, cultural and civic dimensions of learning, as recently recalled and recontextualised in UNESCO's *Rethinking Education*.¹⁰

Skills and knowledge

Developing pedagogy in relation to these core skills cannot, however, come at the expense of the development of knowledge and, indeed, mastery. Knowledge and skills are interwoven, and when students are developing both simultaneously, they learn more efficiently.

As Joe Kirby explains: 'Knowledge and skills are like a double helix, progressing in tandem from surface learning to deep learning... skill progression depends upon

knowledge acquisition.'¹¹ The timing of the introduction of core skills is therefore crucial – students need surface knowledge first (facts), and once they have mastered these, teachers can phase in deep learning skills that test the application and manipulation of these facts and how students use them to develop their skills.

Effective classroom practice

The way teachers implement the teaching of such skills needs to focus on highly effective techniques and teaching approaches. Interactive learner-centred pedagogy will therefore play an important role, and the most effective approaches include:¹²

- drawing on students' backgrounds and experiences in teaching (with a positive attitude towards students)
- increasing metacognition, self-regulation and self-directed learning
- responsive feedback to students (including teacher feedback; sustained and inclusive)
- collaborative learning (with mastery learning and peer-support; peer tutoring, pair and group work)
- lesson planning that incorporates variety (that is, drawing on a variety of teaching approaches)
- oral language interventions (interactive questioning style, dialogue, language learning and the use of local languages and/or code switching)
- the use of learning materials (digital and non-digital, local resources).

Professional development

Teachers acquire the practical ability to teach these skills through carefully planned teacher professional development which has a strong relationship with teachers' practice, and which seeks to create supportive and reflective communities of practice – John Hattie's collective efficacy.¹³ Such professional development programmes ideally support student acquisition of the intended core skills.

The British Council is approaching the development of these skills by advocating a school-based professional development model¹⁴ based on teachers working together across subjects and year groups¹⁵ and which lets teachers design the assessment and measurement for student progress based on what works best in their context.

This approach is supported by Darling-Hammond and colleagues, who stress the importance of professional development being job-embedded¹⁶ while also suggesting that learning should be collaborative, active and sustained. This is further emphasised in research commissioned by the British Council which stresses that professional development be 'recognised as an integral part of teachers' work'.¹⁷ In addition, research conducted in Sub-Saharan Africa identifies that effective professional development should:¹⁸

- focus on classroom implementation, be based on teachers' existing knowledge and offer opportunities for practice in different contexts
- be long term and structured, involving several spaced interactions



- encourage and create opportunities for teachers to work together, to improve and sustain their learning after intensive training has been concluded
- develop teacher agency and leadership
- offer opportunities for modelling, reflecting on teachers' own practice, being observed and receiving high-quality feedback
- encourage and support teachers in obtaining resources.

This aligns with a growing body of research upon which our work in this area is based.¹⁹

Sharing is a critical component of learning communities,²⁰ and this structured professional collaboration between diverse

groups that focuses on improved teaching in core areas ultimately benefits both teachers and young people. Effective programmes can make an impact on student attainment even in the most challenging circumstances.

In addition, teachers who are offered opportunities to share and collaborate internationally are able to learn from each other across cultural contexts, further informing effective practice. Barber and colleagues²¹ argue that successful innovation will only occur if certain key conditions are in place, including ensuring people have the opportunity to work in diverse teams: 'Top teams bring individuals with diverse backgrounds and perspectives together around a shared mission and set of values.'

The focus on professional development should always be to support teachers in raising student attainment, particularly in an equitable and inclusive way, heeding international commitment towards Education for All.²²

The chapters to follow

In the following chapters, we will examine the six core skills, offering a more detailed definition of each one plus a rationale as to its importance. Working with experts in the field, the British Council has sought to apply an evidence-based methodology that has a strong relationship with teachers' practice, and which seeks to create supportive and reflective communities of practice. Thus the techniques and approaches outlined above underpin each chapter.

10. UNESCO (2015) *Rethinking Education: Towards a Common Good*.
11. Cited in *Seven Myths About Education* Christodoulou, D (2014), London, Routledge.
12. Westbrook, J, Durrani, N, Brown, R, Orr, D, Pryor, J, Boddy, J, and Salvi, F (2013) *Pedagogy, curriculum, teaching practices and teacher education in developing countries: final report*. (No. EPPI-Centre reference number 2110). Retrieved from <https://eppi.ioe.ac.uk/cms/Default.aspx?tabid=3433>; Nag, S, Chiat, S, Torgerson, C, and Snowling, M J (2014) *Literacy, Foundation Learning and Assessment in Developing Countries*. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/305150/Literacy-foundation-learning-assessment.pdf; Hennessy, S, Haßler, B, Hofmann, R. (Forthcoming). Challenges and opportunities for teacher professional development in interactive use of technology in African schools. *Technology Pedagogy and Education: Special Issue 'Capacity Building for 21st Century Learning in Africa: A Focus on ICT Integration in Education.'*
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14. Wiliam, D (2007–08) December/January. Changing classroom practice. *Educational Leadership*.
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17. Borg, S (2015) *Contemporary perspectives on continuing professional development*. London: British Council.
18. Haßler, B, Hennessy, S, and Hofmann, R (forthcoming) *Experiences of developing and trialling the OER4Schools professional development programme: Implications for sustaining pedagogic innovation in sub-Saharan Africa*; Hennessy, S, Haßler, B, and Hofmann, R (forthcoming). *Pedagogic change by Zambian primary school teachers participating in the OER4Schools professional development programme for one year*.
19. Cordingley, P, Miranda Bell, Colin Isham, Donald Evans and Antonia Firth (2007) *Continuing Professional Development (CPD) What do specialists do in CPD programmes for which there is evidence of positive outcomes for pupils and teachers?*; EPPI-Centre, Social Science Research Unit, Institute of Education, University of London Education Endowment Foundation (2014) *EEF Toolkit*. Available online at: http://educationendowmentfoundation.org.uk/uploads/toolkit/EEF_Toolkit_21st_November_2014.pdf; Joyce, B, Showers, B (1999) *Student Achievement through Staff Development: Fundamentals of School Renewal*. 2nd Edition London, Pearson.
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21. Barber, M and colleagues (2013) *Oceans of Innovation* London, Institute for Public Policy Research.
22. UNESCO Education for All Movement. www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-all

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Critical thinking and
problem solving
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Luxury or necessity? Critical thinking and problem solving should be at the core of learning for all

Artur Taevere

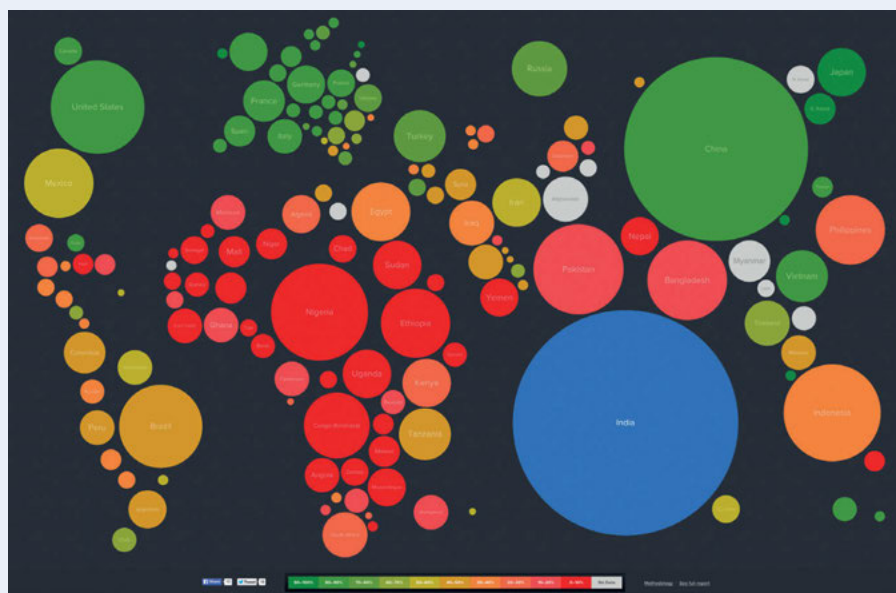
Even in a world where most children are still learning basic skills, critical thinking and problem solving can and should be taught.

In a low-income community in South Delhi, India, students are reading *Harry Potter and the Philosopher's Stone*. Today's discussion is about the potions master. The teacher encourages students to think independently. 'I don't want solutions which the author gave you. I want you to be thinking, to imagine a better solution.' What happens next? It is visible that students are thinking hard; they are trying to come up with different answers. Deeper learning is happening. You can see an inspiring video of this classroom when you search for 'Learning to be a Superhero Teach For India'²³ on YouTube.

Learning to think critically and solve problems is not easy, but classrooms like this one suggest that all children are capable of it. However, the reality in most schools around the world is quite different. Even if children were capable of critical thinking and problem solving, they are currently not mastering these skills. Only four out of ten primary school students reach a basic level of competence in numeracy, literacy and science.²⁴ Given this reality, what is the role of critical thinking and problem solving? Can these skills be taught at all?

Percentage of children who reach a basic learning level in reading, writing and arithmetic²⁵

Each country is represented by a circle sized in proportion to its population



23. YouTube (2015) Student voice: Learning to be a superhero (Teach For India). [online]. Available online at: www.youtube.com/watch?v=sylcrIjN1T0&feature=youtu.be

24. Whelan, F (2014) *The learning challenge: How to ensure that by 2020 every child learns*. Available online at: www.acasus.com/wp-content/uploads/2014/02/Acasus-The-Learning-Challenge-Report.pdf, p. 6.

25. Acasus (2014) *Almost all children are in school – but how many are learning?* [online.] Available online at www.acasus.com/who-learns/circle-map



The meaning of critical thinking and problem solving

Cognitive scientists suggest there are three types of thinking: reasoning, making judgments and decisions, and problem solving. Critical thinking is a specific way of thinking. This means that reasoning may be uncritical or critical, and the same applies for the other two types of thinking. It is critical if it has three features:

Effective – critical thinking avoids common mistakes such as only seeing one side of an issue, discounting new evidence when it conflicts with your previously held views, reasoning from passion rather than logic, and failing to support statements with evidence.

Novel – critical thinking involves thinking in new ways, not just remembering solutions or situations that are similar enough to guide you.

Self-directed – critical thinking involves thinking independently, in a way that is not overly controlled by anyone else, such as a teacher.²⁶

When young people choose what to study, they can think critically by considering multiple perspectives: the opinion of family members, possible job openings, wages and graduation placement rates. A recent international survey suggests that fewer than half of young people have the necessary knowledge about all of these different perspectives.²⁷

Effective thinking also involves an open mind: being open to new evidence even if it is in conflict with one's previously held views. For example, some people think that the disease HIV spreads by sharing baths, towels or cutlery, or using the same toilets or swimming pools.²⁸ In fact, none of this is true. But discrimination continues in many communities, because people's views are based on misinformation and prejudices. How will people react when they are presented with evidence on how HIV really spreads? It is not easy to change one's mind, especially if the issue is very emotional. That's why the attitude of having an open mind and being open to new evidence needs to be practised at school, so that it becomes a habit.

Is it important?

Critical thinking and problem solving may sound like terms that a young philosophy student would talk about at university, but these are important skills for everyone.

One of the main reasons is an economic one: it is about jobs and livelihoods. Critical thinking enables people to make better decisions and improve their livelihood. This is vital for everyone. For example, 78 per cent of people living in poverty are in rural areas and are farmers. Being able to think critically about different approaches to water and grassland management may boost productivity and increase income. In some communities, adopting different breeds has grown milk yields by 65 per cent, and better grassland management has doubled the income of herders.²⁹

The economic argument has far-reaching implications. Because of technological change and productivity growth, the nature of work is changing in agriculture and many other industries. A growing proportion of jobs now require teams of people working together to solve unique problems, as opposed to routine problems.³⁰ However, relatively few students learn these skills at school. In most countries, fewer than one in ten (15-year-old) students are able to solve fairly complex problems creatively, according to the PISA tests in 2012.³¹

Creative problem solving among 15 year olds

According to management consultants McKinsey & Company, 75 million young people around the world are unemployed, and a shortfall of 85 million high- and middle-skilled workers is expected by 2020. In a recent international survey, four out of ten employers said a skills shortage is a leading reason for entry-level vacancies. Alongside general work ethic and teamwork skills, problem solving is among the skills that are highly valued among employers – but where the competence of new employees does not meet expectations.³²

Critical thinking and problem solving are also important for another reason, which goes far beyond jobs. The purpose of education is also about enabling learners to fulfil their potential and make a positive contribution to the world. Better critical thinking and problem solving would enable both.

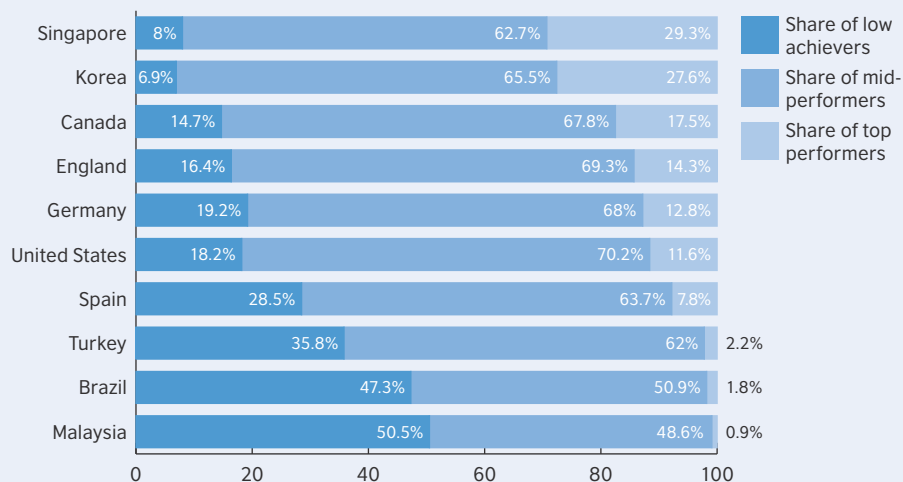


Can it be taught?

This brings us to the question: if critical thinking and problem solving are important, can these skills be taught?

General critical thinking programmes have been relatively popular in the past. These have often focused on learning 'how to think', but research suggests that this approach usually brings about a modest benefit.³³ Why? Critical thinking is not a general skill; you always think about something. Being able to think critically about historical events does not mean that the same person is able to think critically about the nuances of farming. Both critical thinking strategies and content knowledge are needed.³⁴

Therefore, a more promising approach involves integrating critical thinking into subjects. Critical thinking strategies – such as looking at an issue from multiple perspectives – need to be made explicit by the teacher, and practised extensively by students.



All of the above can only be achieved if we invest in high-quality professional learning programmes for teachers – how to model critical thinking, how to ask open questions, and how to provide feedback that enables students to solve non-routine problems. Teachers need new skills and better tools to meet these expectations. Curriculum resources have to be redesigned with

critical thinking and problem solving in mind. And finally, the focus of exams needs to shift to evaluate these skills as well.

If students learn how to think critically and solve problems, it would make a big difference to their livelihood and happiness. This is not a question of luxury.

26. Based on Willingham, D (2007) *Critical thinking: why is it so hard to teach?* *American Educator*, Summer 2007, pp. 8–19. Available online at: www.aft.org/sites/default/files/periodicals/Crit_Thinking.pdf p. 11.

27. Mourshed, M, Farrell, D and Barton, D (2012) *Education to Employment: Designing a System that Works*. McKinsey Center for Government. Available online at: http://mckinseysociety.com/downloads/reports/Education/Education-to-Employment_FINAL.pdf, p.31.

28. National AIDS Trust: *What everyone should know about HIV: facts and myths*, [online.] Available online at: www.hivaware.org.uk/facts-myths/faqs-myths.php

29. The World Bank (2014) *Brief: Raise Agricultural Productivity*. Available online at: www.worldbank.org/en/topic/agriculture/brief/raise-agricultural-productivity

30. Autor, Levy and Murnane (2001) cited in Cisco Systems, Inc, 2010. *The Learning Society*. Available online at: www.cisco.com/web/about/citizenship/socio-economic/docs/LearningSociety_WhitePaper.pdf

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Communication and
collaboration
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Communication and collaboration: a new significance

Lynne Parmenter

All humans communicate. All humans collaborate.
Communication and collaboration are basic human survival skills.

A newborn baby cries to communicate hunger. People collaborate and co-operate to do everything from farming to surgery to driving safely through a city. So why are collaboration and communication the subject of so much attention now? What is the difference between communication and collaboration as survival skills dating back to the earliest humans, and communication and collaboration as core skills now? This paper examines communicative and collaborative competence through discussion of definitions, followed by purposes, then approaches.

One of the clearest definitions of communication and collaboration as core skills is provided by the Partnership for 21st Century Learning.³⁵ Their definition of communicating clearly states that it requires effective listening and an ability to communicate in different models (oral, written, non-verbal) for a variety of purposes, working confidently in diverse environments including multilingual contexts and using technologies effectively. Their definition of collaborating with others involves the ability to work responsibly and willingly in diverse teams to achieve common goals, demonstrating respect for the contributions of each group member, as well as the ability to be flexible and make compromises when necessary.

These definitions indicate what is necessary to cope in and contribute to the economy and workplace of the 21st century. However, communicative and collaborative competence are more than this. An important report from UNESCO, known as the Delors Report,³⁶ laid out a foundation for education beyond the economic rationale, and one of its four pillars was 'learning to live together', which is fundamentally about communication and collaboration. The goals of education need to go beyond employability-focused skills, to 'address the... moral issues that face the planet such as conflict, inequality, lack of resources, poverty and citizenship'.³⁷ Communication and collaboration are at the heart of such education, alongside other focus areas such as citizenship, leadership and critical thinking.

There is tension in debates over the development of skills through education. Policies of the World Bank and OECD, especially in previous decades, have focused on skills for economic competitiveness, with priorities such as employability, productivity, economic development and the improvement of socio-economic indicators. An alternative emphasis is on development of core skills that enrich each individual and contribute to improvements and greater equity in society. The two purposes for developing these skills are not mutually exclusive, of course, and it is important to note that

the development of communication and collaboration aligns with both purposes; they are important for economic, humanistic and social justice reasons, at local, national and global levels.

In more concrete terms, communication and collaboration are vital for the purposes of obtaining, sharing, creating and disseminating information, knowledge, opinions, skills, values and ways of thinking and seeing. Whether it is in the classroom, in the playground, in the home, in the neighbourhood, in a place of worship, or through television and the internet, children and young people spend a huge amount of their time building and sharing knowledge and experiences through these core skills.

At another level, communication and collaboration are also essential for dealing with change and coping in society. Education professionals who want to make improvements in their classrooms, schools, communities or systems can only do so through the effective use of these skills and to do so with all the people they work with. They also have a responsibility to develop these competencies among young people because, as Fullan noted, 'the ability to collaborate on both a small and large scale is becoming one of the core requisites of society'.³⁸ The importance attached to this competence is reflected in the PISA 2015 Collaborative Problem

35. Partnership for 21st Century Learning (2015) *P21 Framework Definitions*. Available online at: www.p21.org/storage/documents/docs/P21_Framework_Definitions_New_Logo_2015.pdf

36. Delors, J and colleagues (1996) *Learning: the treasure within. Report to UNESCO of the international commission on education for the twenty-first century*. Paris: UNESCO.

37. Acedo, C and Hughes, C (2014) Principles for learning and competencies in the 21st century curriculum. *Prospects* 44: 503–525.

38. Fullan, MG (1993) Why teachers must become change agents. *Educational leadership* 50: 1–13.



Children (and adults) in today's globalised world not only need to be able to communicate and collaborate; they also need to be prepared to do so interculturally, in diverse and often multilingual settings.

Solving Framework.³⁹ Additionally, as societies and economies become ever more interdependent, the ability to learn and work in other languages is increasingly important for effective communication.

Having discussed definitions and purposes the next issue is to consider approaches to the development of these core skills. Approaches based on theories of social constructivism, deriving from the work of psychologist Lev Vygotsky, provide a solid base for understanding how and why the development of communicative and collaborative competence should be a focus in schools. These approaches show that children learn through social engagement with the teacher and with each other. The role of the teacher here is to scaffold children's learning through collaboration and communication, facilitating children's learning as they build their knowledge, skills and experiences through social interaction with others.

Going back to the question in the introduction about how these core skills differ from communication and collaboration as human survival skills, the key concept

is diversity. Children (and adults) in today's globalised world not only need to be able to communicate and collaborate; they also need to be prepared to do so interculturally, in diverse and often multilingual settings. The role of languages and language learning is central to this as it opens doors to other cultures as well as providing tools to enhance understanding of your own language and culture.

Byram's framework for conceptualising and developing intercultural communicative competence⁴⁰ suggests that this involves: knowledge of self and others and of interaction; the ability to discover, interpret and relate information from another culture (often through another language); the ability to use that information and knowledge effectively; the ability to interact and mediate between cultures and languages, and the possession of attitudes conducive to intercultural competence; including openness to otherness, relativising self, and critical cultural awareness. Extending this model to intercultural collaborative competence, abilities such as working together to share and create knowledge also become paramount.

Using theories such as these, it becomes possible to examine and understand ways in which core skills can be practised in schools and classrooms. One important point here is to emphasise that communication and collaboration skills need to be embedded in the curriculum and in classroom practice, not treated as optional extras or discrete skills to be squeezed into an already full timetable.

In conclusion, communication and collaboration are core to the development of every child as an individual, as a learner, as a member of school, and as a citizen of their community, nation and world. Communicative and collaborative skills are universal and have a history as long as humans themselves, but as competencies for today's world, they have a new significance in the context of globalisation, diversity, and intercultural dependency and co-existence.

39. OECD (2013) *PISA 2015 Draft Collaborative Problem Solving Framework*. Available online at: www.oecd.org/pisa/pisaproducts/Draft%20PISA%202015%20Collaborative%20Problem%20Solving%20Framework%20.pdf

40. Byram, M (1997) *Teaching and Assessing International Communicative Competence*. Clevedon: Multilingual Matters.



Body

3. Medical ethics

1. How far should a doctor's responsibility for his patients extend? Should a doctor be allowed to perform an experiment on a patient if the patient is healthy and the experiment is for the benefit of the patient? The doctor should be allowed to perform an experiment on a patient if the patient is healthy and the experiment is for the benefit of the patient.

2. How far should a doctor's responsibility for his patients extend? Should a doctor be allowed to perform an experiment on a patient if the patient is healthy and the experiment is for the benefit of the patient? The doctor should be allowed to perform an experiment on a patient if the patient is healthy and the experiment is for the benefit of the patient.

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4. How far should a doctor's responsibility for his patients extend? Should a doctor be allowed to perform an experiment on a patient if the patient is healthy and the experiment is for the benefit of the patient? The doctor should be allowed to perform an experiment on a patient if the patient is healthy and the experiment is for the benefit of the patient.

5. How far should a doctor's responsibility for his patients extend? Should a doctor be allowed to perform an experiment on a patient if the patient is healthy and the experiment is for the benefit of the patient? The doctor should be allowed to perform an experiment on a patient if the patient is healthy and the experiment is for the benefit of the patient.

6. How far should a doctor's responsibility for his patients extend? Should a doctor be allowed to perform an experiment on a patient if the patient is healthy and the experiment is for the benefit of the patient? The doctor should be allowed to perform an experiment on a patient if the patient is healthy and the experiment is for the benefit of the patient.

7. How far should a doctor's responsibility for his patients extend? Should a doctor be allowed to perform an experiment on a patient if the patient is healthy and the experiment is for the benefit of the patient? The doctor should be allowed to perform an experiment on a patient if the patient is healthy and the experiment is for the benefit of the patient.

8. How far should a doctor's responsibility for his patients extend? Should a doctor be allowed to perform an experiment on a patient if the patient is healthy and the experiment is for the benefit of the patient? The doctor should be allowed to perform an experiment on a patient if the patient is healthy and the experiment is for the benefit of the patient.

4. Out-of-body experiences

1. What are the implications of being able to see and hear things that are not physically present? The implications of being able to see and hear things that are not physically present are that it could lead to a new understanding of consciousness and the self.

2. What are the implications of being able to see and hear things that are not physically present? The implications of being able to see and hear things that are not physically present are that it could lead to a new understanding of consciousness and the self.

3. What are the implications of being able to see and hear things that are not physically present? The implications of being able to see and hear things that are not physically present are that it could lead to a new understanding of consciousness and the self.

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Discussion A.2. Advanced PHOTOGRAPHY © Cambridge University Press



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Citizenship
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What is education for citizenship?

Clive Belgeonne, Rob Unwin and Helen Griffin

Education must fully assume its central role in helping people to forge more just, peaceful, tolerant and inclusive societies. It must give people the understanding, skills and values they need to co-operate in resolving the interconnected challenges of the 21st century.⁴¹

Unpacking citizenship

As a contested concept, there are many ways of defining citizenship. One helpful model, developed by Osler and Starkey⁴² sees it as a status, a feeling and a practice:

Status: Whatever the political regime in a country, states generally seek to protect citizens through laws and policing and provide some collective benefits such as education, healthcare and a justice system. In return, citizens are generally required to contribute to such benefits through paying taxes and possibly through jury or military service. The status of a national as 'citizen' will have changed over time and can be contrasted with that of 'subject' to an absolute power, where there may be a greater emphasis on obedience, rather than having rights and freedoms.

Feeling: Even when someone has legal status as a citizen, they may not feel fully included in a society because of disability, gender, ethnicity, faith, language, social class or caste, or sexuality. This can act as a barrier to citizenship. Many members of a nation may also feel an allegiance to their communities that exist within, and often also beyond, the boundaries of the state. The Runnymede Trust suggests that a multicultural country can be

reconceived as both a 'community of citizens' and a 'community of communities' where individuals may be, for example both British and Asian.⁴³

Practice: Active citizens know their rights and freedoms and may act individually, or collectively, to achieve a more inclusive and sustainable society. This might include raising public awareness, fundraising, voting, lifestyle or consumer choices and active campaigning.

Citizenship education

These features of citizenship, their interrelationships, associated competences and underpinning values can be explored and developed in school.

Teaching and learning needs to take place:

- about citizenship – knowledge and understanding

- for citizenship – which requires active methods of learning by doing
- and also through citizenship in an atmosphere which reflects a concern for the ideals and practice of citizenship.⁴⁵

Learning may be seen as a process of 'dialogic encounters within a community of learners who together pose problems, enquire and seek solutions for change.'⁴⁶ Values and a range of key concepts related to citizenship can be explored and audits used to evaluate citizenship across the curriculum and school life. It should also be recognised, however, that there may be considerable challenges to the teaching of citizenship within school systems and structures that may not always give voice or agency to students – or even teachers.

Citizenship as a status
(rights and duties)

Citizenship as a feeling
(identity and belonging)

Citizenship as a practice
(making a difference)

Citizenship as a competence
(participation skills)⁴⁴

41. UN Secretary General's Office (2014) *Global Education First Initiative on Education. Foster Global Citizenship (Priority 3)*. Available online at: www.globaleducationfirst.org/220.htm; UNESCO (2014) *Global Citizenship Education*. Available online at: www.unesco.org/new/en/global-citizenship-education

42. Osler, A and Starkey, H (2005) *Changing citizenship: democracy and inclusion in education*. Maidenhead: Open University Press.

43. Runnymede Trust (2000) *The Future of Multi-ethnic Britain: the Parekh Report*. London: Profile Books.

44. Based on Richardson, R (1996) *The Terrestrial Teacher*, in Steiner, M (ed) *Developing the Global Teacher: Theory and Practice in initial teacher education*. Stoke-on-Trent: Trentham.

45. Lister, I (1984) *Teaching and Learning about Human Rights*. Strasbourg: Council of Europe.

46. Kumar (2008) cited in Bourn, D (2015) *The Theory and Practice of Development Education: a pedagogy for global social justice*. London: Routledge.



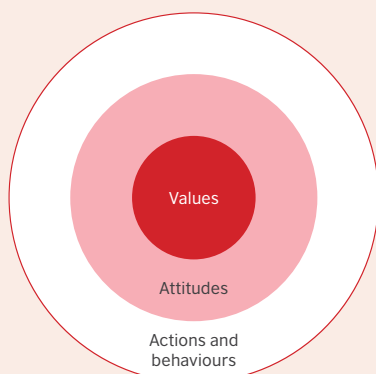
As citizenship is as much about feeling and practice as it is about status, it is also about behaviour and actions.

Citizenship in a globalised world

Citizenship is usually defined as the status of a person recognised under custom or law as being a member of a state, so is often seen as synonymous with nationality. However, 'Rapid globalisation and modernisation are posing new and demanding challenges to individuals and societies alike. Increasingly diverse and interconnected populations, rapid technological change... and the instantaneous availability of vast amounts of information are just a few of the factors contributing to these new demands.'⁴⁷ People are being increasingly bound together by common interests, and a shared fate and 'As a result humankind is acquiring some of the broad features of a political community.'⁴⁸

Importance of values

As citizenship is as much about feeling and practice as it is about status, it is also about behaviour and actions. As the diagram below shows, values are at the core of what determine our attitudes which in turn determine our behaviour and actions.



The Schwartz Values Survey⁴⁹ identified ten basic values recognised in cultures around the world. The values 'circumplex' explains the dynamic relations between values and shows two motivational continua: self-enhancement versus self-transcendence and openness to change versus conservation. Individual people and even countries may differ in the importance that they attribute to particular values, but the same structure of opposition and compatibility between values seems to apply universally. There is evidence of the link between two of the values – universalism and benevolence – and people's attitudes towards the environment, human rights, difference, and global poverty,⁵⁰ key issues for citizenship in a globalised world.

Values also help to determine whether one sees oneself as a citizen in a globalised world, where some of the key challenges may be human rights, democracy, inequality and social justice or as a 'planetary creature'⁵¹ where the challenges may also include interdependence, sustainability and our relationship with the biosphere.

An exploration of values and concepts is central to understanding and implementing citizenship education. It is useful to give both teachers and students an opportunity to identify some of their own values, consider how these relate to those of their countries and to explore those perceived to be needed for active citizenship. Values underlie what people are motivated to take action on and exploring them critically with school students can support their understanding of what it means to be an active citizen.

An ability to unpack and problematise key concepts in relation to issues of human and environmental sustainability is important, as is an understanding of how power operates and the ability to use a range of techniques to generate and select potential courses of action to take in relation to such issues. These skills help support young people in taking informed and effective action as citizens.

47. OECD (2005) *Pisa And The Definition Of Key Competencies*. Available online at: www.oecd.org/pisa/35070367.pdf

48. Parekh, B (2003) Cosmopolitanism and Global Citizenship. *Review of International Studies* 29: 3–17.

49. Schwartz, SH (2006) *Basic human values: an overview*. Available online at: http://segr-did2.fmag.unic.it/Allegati/convegno_7-8-10-05/Schwartzpaper.pdf

50. Crompton, T (2010) *Common Cause: the Case for Working with Cultural Values and Frames*. WWF-UK. Available online at: <http://valuesandframes.org/>

51. Spivak in Andreotti, V (2011) The political economy of global citizenship education. *Globalisation, Societies and Education* 9/3–4: 307–310.





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Creativity and
imagination
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Preparing children for the future: the essential role of creativity and imagination in learning

Pat Cochrane

Creativity and imagination are essential human capacities. They enable us to express thoughts, feelings and aspirations, and help us to fashion our ever changing culture.

They underpin scientific and technological development. They drive forward our economies and social development through entrepreneurship, and enable us to contribute fully as citizens. In this fast-changing world, the capacities of creativity and imagination are more crucial to our lives than ever before.

Education systems across the world are increasingly recognising the importance of preparing young people for the growing challenges, uncertainties and complexities they face.⁵² For young people to thrive in the future the curriculum needs to nurture skills, capacities and habits of mind as well as knowledge.⁵³ Our children are inheriting a world characterised by increasing inequality and competition within and between countries, a world in which some of the challenges we face, such as global warming, a growing population, migration and poverty, seem insurmountable. The ability to imagine new ways of approaching these challenges and to seek and craft creative solutions is surely one of the most important capacities we need to nurture in our children and young people.

The economic imperative for creativity has been made by business leaders across the globe. They recognise that creativity and imagination are essential ingredients

for enterprise, development and growth. The ability to imagine, connect, create and innovate is crucial to success.⁵⁴

The cultural imperative for creativity and imagination is equally compelling. We need to find ways 'to live together in a world which is more dynamic, more nuanced, more connected, more independent' than ever before.⁵⁵

There is also a personal imperative. Creativity and imagination enable us each to lead fulfilled and satisfying lives. And so, nurturing the creativity and imagination of future generations is not a choice, but a necessity.

It is possible to promote an environment that favours creativity, innovation and calculated risk-taking, whilst also focusing on the acquisition of knowledge and the promotion of excellence and high levels of achievement. Both creativity and imagination can be nurtured by schools, but they can also be suppressed. Repetitive and uninspired teaching can reduce children's capacity to be imaginative and creative, particularly when there is an over emphasis on testing and examinations. However, there are schools and education systems that are rising to the challenge and

making remarkable changes to practice that unlock the creative and imaginative capacities of our future citizens.

What do we mean by creativity in learning? And why does it matter?

The term creativity is often strongly associated with the arts, and creative capacities are often nurtured through arts learning. Mastery in the arts can free students to explore and experiment. In a context where there are no right or wrong answers, imagination and experimentation are encouraged. The arts support our ability to introspect and find personal meaning.⁵⁶

However, creativity has a vital role to play across all areas of learning including science, technology, engineering and maths (STEM) subjects. When we are being creative we are inquisitive; we wonder and question, explore and investigate; we challenge assumptions; we are persistent, sticking with difficulty, daring to be different and tolerating uncertainty. We are imaginative, collaborative and disciplined, and work through challenges to create outcomes.⁵⁷ It is hard to imagine any aspect of life where we do not draw on this repertoire of capacities or habits of behaviour. Therefore the imperative to nurture creativity in schools is compelling.

52. *Global Education Leaders' Partnership*, supported by the Innovation Unit. Available online at: <http://gelponline.org>

53. Hannon, V, Gillinson, S, Shanks, L (2013) *Learning a Living: Radical Innovation in Education for Work*. Bloomsbury Academic.

54. IBM (2010) *Capitalising on Complexity: Insights from the 2010 IBM Global CEO Study*. Available online at: www.ibm.com;

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55. Adobe Education (2012) *Why is Creativity Important in Education? Sir Ken Robinson Video Series*. Video available online at: <https://www.youtube.com/watch?v=ywlhJ2goiGE>

56. Winner, E, Goldstein, TR, Vincent-Lancrin, S. (2013) *Art for Art's Sake? The Impact of Arts Education*. Centre for Educational Research and Innovation. Available online at: www.oecd.org/edu/ceeri/arts.htm

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What are the implications for teachers' practice?

Many teachers teach creatively. They use imaginative and innovative approaches to deliver the curriculum, to make learning more interesting, exciting and effective and provide memorable lessons.

Even so, in order to teach **for** creativity, in other words, in ways that enable children themselves to develop their creative capacities, teachers need to change their stance, to enable solutions and ideas to emerge through questioning and exploration.

Teachers can encourage a spirit of enquiry, the generation of ideas and the use of imagination by asking enabling questions that encourage dialogue and exploration such as 'what if?', 'why?', and 'what would happen if?'. Imagination can be encouraged by extended role play, exploring issues from a particular perspective and experimenting with thoughts and options. Teachers can model possibility thinking,⁵⁸ an important element of creativity.

Shaping learning around a provocation, a big question or a series of questions is more likely to generate creative thinking and behaviours than a curriculum which focuses solely on the transfer of knowledge.

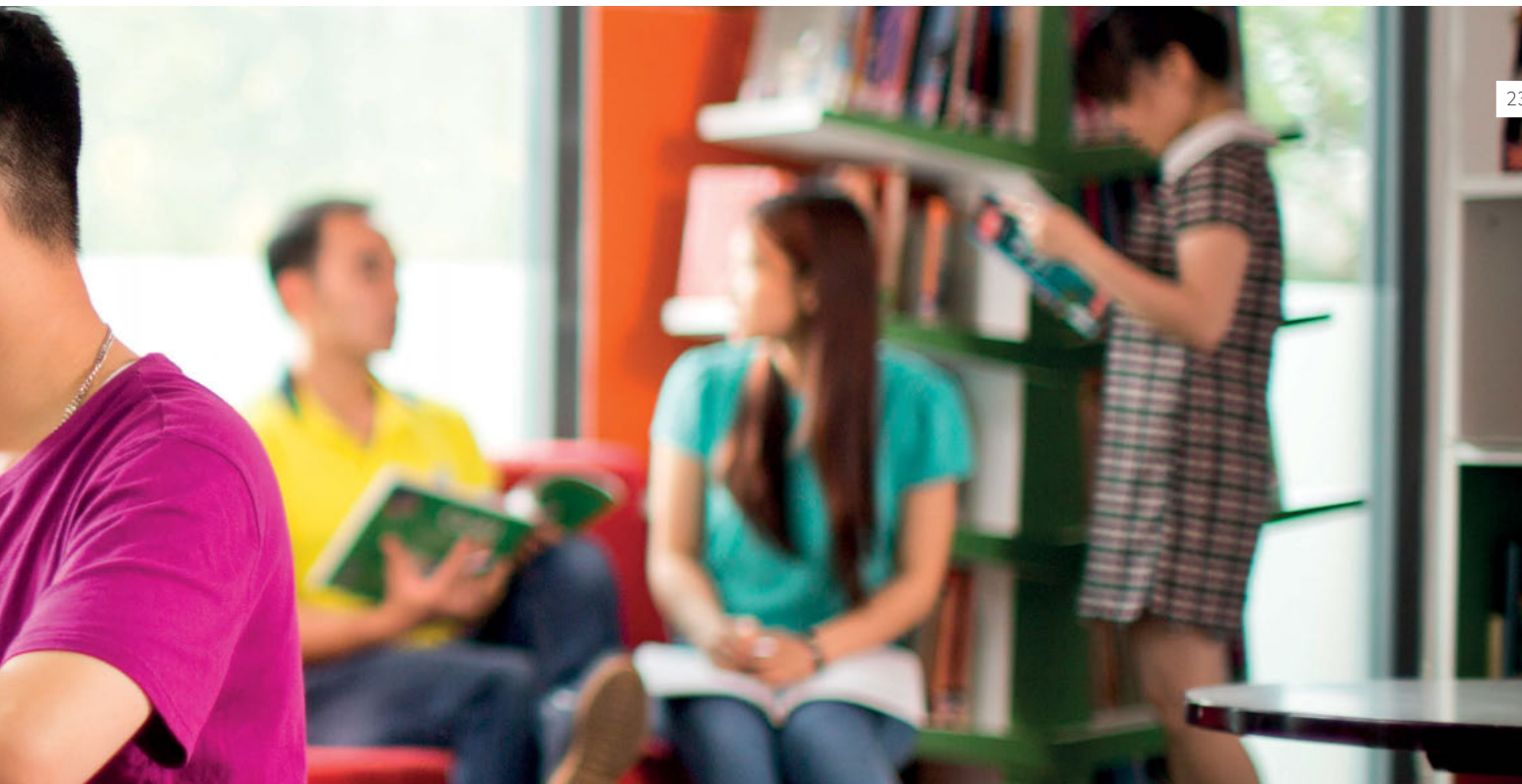
A teacher who is focused on developing learners' creativity will encourage their students to work towards an outcome or product. They will work with students to co-construct the approaches used during the lesson, and will support risk taking, while ensuring challenge and rigour.⁵⁹

Such a transformation of the teacher's role requires effort, practice and careful planning. It has implications for teacher training and also their professional development.

What is the role of leadership in schools?

School leaders have a key role in encouraging and enabling their staff to embrace creativity in both teaching and in how they facilitate learning. Meeting the challenge of a powerful drive for raising standards, as well as promoting the development of creativity, may at times appear to be in tension. However, there is increasing evidence that schools can, and do, achieve both.⁶⁰

Leaders do more than promote creativity. They sustain and nurture it in the way that they provide opportunities for others, license innovative practice, and model the characteristics of creativity themselves. One of these characteristics is using imagination. School leaders' ability to imagine what might be, and share that with others, is one of the most important contributions they can make to promoting creativity in their school.



Wider research consistently highlights a number of common leadership strategies in generating creativity. When leaders and staff feel creative, they:

- collaborate and explore which approaches really work in the context of their school and community
- review and reflect on their teaching process
- control and take ownership of their practice
- are innovative and ensure relevance to learners
- enable teachers, pupils and others to engage in calculated risk-taking
- envisage possibilities and differences, and see these through.⁶¹

Conclusion

Creativity and imagination are central to the human condition. They are critical to success in relation to real-world challenges, whatever the context. If we are serious about nurturing the creative and imaginative capabilities of our students, we need to think carefully about all aspects of our education systems including curriculum design, assessment of learning, the culture of classrooms and schools and the way in which teachers work.

58. Craft, A (2008) Possibility Thinking and Wise Creativity: Educational Futures in England? In Beghetto, A and Kaufman, JC (eds) 2012 *Nurturing Creativity in the Classroom*. Cambridge University Press. pp.289–312. Available online at: <http://ebooks.cambridge.org>

59. Berger, R *Beautiful work*. Available online at: http://bie.org/object/document/beautiful_work

60. Ofsted (2010) *Learning: creative approaches that raise standards*. Available online at: www.creativitycultureeducation.org; Arts Council of Wales and Welsh Government (2015) *Creative learning through the arts: an action plan for Wales 2015–2020*. Arts Council of Wales. Available online at: www.artswales.org.uk/c_engagement-and-participation/action-plan-creative-learning-through-the-arts

61. Drawn from a range of sources, spanning work since the early 1990s. Main sources: Jeffrey, B and Woods, P (2009) *Creative Learning in the Primary School*. Abingdon: Routledge; Cremin, T, Burnard, P, and Craft, A (2006) *Pedagogy and possibility thinking in the early years*. *Thinking Skills and Creativity* 1/2: 108–119. Donaldson, G (2015) *Successful Futures: Independent Review of Curriculum and Assessment Arrangements in Wales*. Welsh Government. Available online at: <http://gov.wales/topics/educationandskills/schoolshome/curriculuminwales/curriculum-for-wales/?lang=en>; Smith, D (2013) *An independent report for the Welsh Government into Arts in Education in the Schools of Wales*. Welsh Government. Available online at: <http://gov.wales/docs/dcells/publications/130920-arts-in-education-en.pdf> Education Scotland. *Research summary – fostering creativity*. Available online at: www.journeytoexcellence.org.uk/resourcesandcpd

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Digital literacy
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Why schools and teachers need to take action

Dr Tim Rudd

Digital technologies are rapidly becoming embedded in more and more aspects of our daily lives. Our personal and social lives are increasingly influenced by them, and our culture is constantly being shaped by new developments.

Digital literacy skills, therefore, are becoming increasingly important and essential skills for both learning and employment, as well as being vital in enabling us to function effectively in an increasingly complex and digitised world. As more and more services and transactions occur online, the need to ensure young people are aware of the potential and pitfalls that new technologies can bring becomes more and more important.

Many major international organisations, and a growing number of governments, are also recognising the need to develop digital literacy, with claims that such skills will become ever more important in assuring economic competitiveness in a globalised world. They highlight that the need to develop digitally literate citizens is necessary so that future workforces have the skills required to handle information and create new resources, and also that individuals become effective problem solvers who can participate fully in all aspects of society.

Increasingly, employers will expect staff to be able to use a range of digital tools and programmes, make sense of complex materials and information, and communicate and collaborate using various tools and

media. Young people will also need to develop the capabilities that will enable them to search, analyse, create, edit and remix digital resources.

Some commentators have also interpreted digital literacy as the ability to operate digital technologies in a safe and secure manner. However, while e-safety and security are essential aspects of digital literacy, this does not represent the whole picture or the breadth of the concept. Digital literacy also includes the ability to understand how digital tools can be used meaningfully, and how they can be harnessed to solve problems and create opportunities that were not previously possible. Being digitally literate also means individuals can fully participate in democratic, economic and social processes in informed, safe and meaningful ways. It means that they can critically assess the nature of information, and consider how technology might be harnessed to support and enhance society and the environment.

So what does this mean for schools?

Developing digital literacy should be a key area of concern and development for schools, colleges, universities, teachers and students themselves. However, it is

often assumed that young people are already digitally literate and that teachers can do little to help them enhance their digital literacy skills. This is clearly an over-generalisation at best and a dangerous assumption at worst. Educators have a crucial role to play in guiding, supporting and modelling acceptable practices, and in encouraging students to think critically about digital technologies and the opportunities and risks they present. Educational institutions have a responsibility to consider how they might support the development of digital literacy among students, and also how they can support the professional development of teachers so that they are better informed as to how they might provide students with appropriate guidance.

Many argue that digital literacy is now so important that it has become a pre-requisite for the development of other skills and capabilities, which are crucial to an individual's life chances and necessary for engaging successfully in a whole range of activities we could not have foreseen even a decade ago. Perhaps, therefore, we should now consider digital literacy as a core entitlement for young people.



‘One size fits all’ approaches would not be appropriate, given the wide variations in technology, knowledge and approaches between schools and across different national and local contexts.

However, there is still a very long way to go. Many countries, governments and educational institutions still do not have adequate strategies, policies, plans or practices in place that are capable of adequately developing digital literacy skills among young people or educators. There are currently many misunderstandings about what digital literacy is. Many mistakenly believe that digital literacy is merely the practical ability to use digital technologies. However, such narrow interpretations miss the point and must be addressed. Being able to use a tool tells us nothing about the quality or the purpose of its use. Technology can be and is used poorly, and can be used to detrimental and harmful effect. Moreover, as the availability of different technologies, hardware, software and applications increases, we need to shift our emphasis to the quality of use and how it can best be harnessed to support learning and development, rather than merely on the basic competences required to use various tools, which themselves may soon become obsolete or outdated.

The need to take action

The need to take action is why an increasing number of international organisations now consider digital literacy as one of a number of core, interrelated skills for learning and

life in the 21st century. The most effective training programmes are those designed specifically to help practitioners and school leaders gain a better understanding of what digital literacy is, highlight how it might be developed among students and staff alike, and which support teachers to conduct their own interventions and enquiries in their own specific and unique contexts. As digital literacy has no single or precise definition, for the concept to have power and meaning, it has to be co-created and implemented. This helps convey the nature of its meaning through tangible changes in actions and practice. Moreover, digital literacy should be viewed as an evolving social practice whereby learners, and staff, seek to develop new skills, artefacts and outcomes from their learning, and where practices change regularly to best utilise new technological developments. This is why better training programmes emphasise the development of individual interventions or enquiries suited to the specific context of the teacher and school. ‘One size fits all’ approaches would not be appropriate, given the wide variations in technology, knowledge and approaches between schools and across different national and local contexts. Instead, the emphasis is on changing teaching and professional development

practices by empowering teachers to become leaders and deliver change in their own schools. There is a need, therefore, for training and resources that help practitioners gain an understanding of digital literacy from theory to practice, and which help develop a greater awareness of how digital literacy is related to wider skills for life and learning in the 21st century. Similarly, there is a need for training programmes and projects that also seek to challenge practitioners’ current thinking and practice, through a process of understanding, planning, implementing, reviewing and reflecting, communicating and refining and developing new practices, so that they become active and powerful change agents in their own contexts.

In considering digital literacy in its broadest sense, we can better understand the key skills teachers need to help students develop, and which can be applied in various knowledge, subject, and skills areas. The active, creative and constructive nature of learning and teaching are central to digital literacy. In many cases, digital literacy can be viewed as a means of challenging existing thinking and practice, leading to more innovative, creative, and, in some cases, transformational learning.



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Student leadership and
personal development
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Actively engaging students as partners

Nicholas Garrick

The future of a global society is dependent on those that lead it. It sounds dramatic, but the students of today are the leaders of an unknown future.



‘Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has.’

Attributed to Margaret Mead

Within living memory, the world has changed at an exponential rate, with many adults being left behind either by their engagement with education or their access to technologies.

Brown-Martin argues the new, connected world is transforming education:⁶² it is not the other way round. Technological changes have had a visible influence and enable the world to communicate in ways previously unseen and certainly not yet fully understood. This has resulted in a divide between those that can access new technologies and those that cannot. Social and political boundaries have expanded and blurred to such a degree that many schools in the world have as many non-native as native language speakers. This blend of ethnicities, cultures and faiths also brings with it diverse expectations and attitudes, unlike previously isolated micro-communities.

The future world, according to some, may therefore go one of two ways: total integration both physically and digitally, or increased isolation as new communities are formed with new ideals and traditional cultural values.⁶³ Whichever future prevails, for the first time in history, our children will

have a greater awareness of the world than their parents; the balance has shifted and this brings opportunities as well as challenges.

Fletcher believes that the ethical imperative of teaching in a democratic global society demands that educators actively engage students as partners. Therefore, the need for teachers to be deliverers or conduits of information is slowly becoming defunct.⁶⁴ Students have as much – if not more – access to information than teachers. They communicate in multiple ways simultaneously. These differences can lead to differing interpretations of the same world developing in parallel and, in some cases, in conflict. Denoting students as digital natives (the generation born during or after the rise of digital technologies), and teachers as digital immigrants (people born before the advent of digital technology), refers to more than just the use of technology however. According to DeGraff,⁶⁵ the real issue is that the two world views of digital natives and digital immigrants, and the content that defines them are so different. The digital immigrants value ‘legacy’ content – information and skills passed down through generations – while the digital natives

value ‘future’ content, which refers to the potential of legacy content to affect the future.

As Prensky points out:

‘Legacy’ content includes reading, writing, arithmetic, logical thinking, understanding the writings and ideas of the past, etc – all of our ‘traditional’ curriculum. It is of course still important, but it is from a different era. Some of it (such as logical thinking) will continue to be important, but some (perhaps like Euclidean geometry) will become less so...

‘Future’ content is to a large extent, not surprisingly, digital and technological. But while it includes software, hardware, robotics, nanotechnology, genomics, etc., it also includes the ethics, politics, sociology, languages and other things that go with them. This ‘future’ content is extremely interesting to today’s students. But how many Digital Immigrants are prepared to teach it? Someone once suggested to me that children should only be allowed to use computers in school that they have built themselves. It’s a brilliant idea that is very doable from the point of view of the students’ capabilities. But who could teach it?’⁶⁶

62. Brown-Martin, G (2014) *Learning (Re)imagined*. Bloomsbury: London.

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The need for adventurous leadership

According to Reed and colleagues, in order to mitigate the potential friction in viewpoints, today's educators of tomorrow's leaders need to demonstrate authenticity, appreciation, affiliation, animation, altruism,⁶⁷ and embrace the process of 'leading future' as opposed to 'delivering legacy'.

Leaders in the next decade will not just be leading organisations: they will be leading life.⁶⁸ This requires adventurous leadership from educators in how they teach and how they lead students to become adventurous leaders of this unknown, integrated, global life. Educators need to provide situations whereby they balance absorption of legacy content through experiences of self-awareness, altruism and adventure. They need to both model adventurous leadership as well as use it as a vehicle to enable leadership skills to flourish in students. Students need to discover the

importance of purposeful, real and moral teamwork in leadership, and be able to differentiate between being a hero and a role model.

It is also important to distinguish between student voice and student leadership. While student voice activities are important in creating more confident and democratic school communities, student leadership is more than that; it is what happens to the voice and how this is taken further: the 'so what?' It cannot be assumed that providing students with conduits to express thoughts will necessarily develop future leaders. Educators must resist the temptation to identify and invest heavily in individual pupils as future leaders; instead, they must awaken leadership and enhance the self-awareness of **all** students.

This difference is exemplified in the international Student Leadership Challenge posed by Kouzes and Posner.⁶⁹ The project seeks to demonstrate how any student can be a leader, regardless of age and experience. The authors have identified '... the Five Practices of Exemplary Leadership® that are common when leaders are able to make extraordinary things happen.' They list these practices as leaders being able to:

- model the way
- inspire a shared vision
- challenge the process
- enable others to act
- encourage the heart.

So, if student leaders are so imperative to the development of a democratic, global society, how can schools develop the specific competencies that enable students to be adventurous and achieve extraordinary things?



Leadership for all

Much research focuses on developing student leaders within higher and further education, but many believe that the foundations, skills and attitudes can, and should, be embedded as early as possible. In addition to the age of leadership exposure, student leadership is about more than simply extracurricular activities for those that choose to engage in them. Using only extracurricular time to develop leadership precludes 'hidden' or 'secret' leaders who may choose not to be identified. Therefore, educators need to consider how they can teach legacy content while also enhancing students' confidence, negotiation skills, responsibility, problem solving and teamwork, as well as their planning, management and decision-making skills.

In order to develop future global leaders who will be part of an interconnected and blended global society, we need to consider students as: 'people that live in places, that form communities, that seek change, which leads to innovation, that calls for sustainability, and ultimately, equality.'⁷⁰ This has to be intelligently planned for and carefully mapped into, and across, school curricula. No one said it was going to be easy, but that makes it all the more interesting. As Facer puts it:

'start from the premise that the challenge ... isn't to figure out how to predict the future. The challenge is to figure out how to live well, how to uncover the creative possibilities of the present because we don't know the future.'⁷¹

67. Reed, J and colleagues (2012) *The Adventurous School*. Institute of Education: London.

68. Johansen, B (2010) *Leaders Make The Future*. Berrett-Koehler: San Francisco.

69. Kouzes, J and Posner, B (2013) *The Student Leadership Challenge*. Available online: www.studentleadershipchallenge.com

70. Garrick, N and Weaver, S (2015) *The Tree: Learning and Life at Wallscourt Farm Academy*.

Available online: <http://wallscourtfarmacademy.org.uk/wp-content/uploads/2013/08/CurriculumTreeOfLearningForLifeWFA.pdf>

71. Facer, K cited in Brown-Martin, G (2014) *Learning (Re)imagined*. Bloomsbury: London p114; Groves, M (2003) *Exploring the potential for student leadership to contribute to school transformation*. From Exchanges: the Warwick Research Journal (Volume 1, Issue 1, October 2013) Available online: https://www.google.co.uk/search?client=safari&rls=en&q=Exchanges:+the+Warwick+Research+Journal+Volume+1,+Issue+1,+October+2013&ie=UTF-8&oe=UTF-8&gfe_rd=cr&ei=VnVgVa_RBvLt8wfy14DQDg

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Teacher
as researcher
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Innovation from within: the power of appreciation in comparative studies

Barrie Joy and Stephen Hull

Careful comparative studies can provide educators with rich insights and understanding of educational practices in other contexts, whether these are located internationally, nationally, locally or within the same school. When conducted rigorously, they can help confirm, or challenge powerfully, the appropriateness of our own particular educational provision and practices.

In order to gain optimal benefit from such studies, it is important that we try to come fresh to an unfamiliar situation. As Gubrium and Holstein explain, such analysis enables us not only to understand ‘how teachers and students give meaning to their lived worlds in light of the social and cultural forms they reflect and help produce’, it also helps us understand the ‘ambiguous process by which education initiates us into *our* culture’.⁷²

Learning to recognise complexity

It would be naïve to assume that educational ideas and practices, however successful and attractive in one context, will necessarily thrive if simply transplanted elsewhere. For example, let’s say a particular country has excellent results in mathematics, so you attempt to mirror its methods of teacher training, the number of mathematics lessons pupils have and how much homework pupils are given. You assume that controllable variables, if replicated, will result in improved mathematics in another context. However, this information is deeply limited in value and policies are not transplantable without an in-depth understanding of other associated factors. What about the value placed on

mathematics in society; whether the students do additional practice; the ethos of lessons; teacher motivation; and the dynamics of student–teacher relationships?

We need to understand from an insider’s perspective how practices have developed within their unique context over time. Their success is critically dependent on the culturally nuanced understandings and assumptions of those directly involved. We must be determined to understand – as thoroughly as possible – the detailed differences and similarities between contexts in order to accurately determine the potential for successful exchange.

Rigorous, comparative studies in education involve accessing and reflecting on the dynamic multiple realities of other cultures and of unique individuals operating in those cultures. Only through first understanding them can we begin to consider the implications and possibilities for our own practices. A variety of theories and methods are now available to the teacher as individual researcher or as a member of a research learning community wishing to undertake comparative studies. They are informed by their particular *ontology*

(what there is to be found out) and their *epistemology* (how it can be found out). Introductory texts often contrast positivist and interpretive approaches: in the former, empirical truths are sought by identifying causes and effects; in the latter, the researcher adopts an open, exploratory orientation in order to understand the beliefs, intentions and circumstances behind behaviour in a given situation. Fundamentally, interpretivism recognises the continuous construction, reimagining and appropriation of social norms by individuals and institutions. In education, interpretivist research can engage practitioners in critical discourse about practice and provision and shine new light on complex and ambiguous phenomena.

So, if subjective, emergent realities exist across cultures, what kind of observations do we need to make, if we are to understand them? Because other teachers’ and students’ realities differ from our own, we can best make judgements by discovering the underlying patterns and principles through the careful, in-depth analysis of the host cultures that empathic, interpretive dialogue facilitates. Constructing in advance a set list of questions relative to your own policy

72. Gubrium, J and Holstein, J (2000) *Analyzing interpretive practice*, in Denzin, N and Lincoln, Y (eds.) *Handbook of Qualitative Research*, 2nd edition. Thousand Oaks: Sage Publications Ltd.



context with which to interrogate another educational context would not necessarily produce useful findings. This approach is problematic because it imposes a way of seeing things without considering whether it is appropriate for what you are looking at. Such pitfalls can easily distort what we see and hear and consequently prevent us from experiencing and therefore appreciating how insiders perceive and experience things.

Fortunately, the researcher now has a variety of interpretivist approaches that can be used to powerful effect in comparative study visits. One such approach is appreciative inquiry, which, in marked contrast to problem-based approaches, focuses on the positive energy present in the education system, the principles and drivers underpinning what is working positively, how these can be built upon and, where appropriate, nurtured selectively in other areas. This is not to deny that human systems have problems or that these problems have to be acknowledged and sometimes addressed as a matter of urgency. Put simply, appreciative inquiry focuses on the positive successes already achieved with a view to building on these with an energising virtuous spiral. Problem-based analyses seek to leave

less of what is unwanted, but importantly, the very focus on problems frequently mires in a language and spiral of negativity.

It follows that we should visit and act as genuinely appreciative inquirers – as learners, not tellers or judges. Bear in mind Bob Dylan's warning: 'don't criticize what you don't understand!'⁷³ Rather, our primary aim should be to seek to understand why, what and how our hosts do what they do – in the words of Novalis 'to make the strange familiar and the familiar strange'. We will learn most by appreciating and importantly, making sure that we are seen to be appreciative of the opportunity and of our hosts' assistance in helping us to see things as they see them. As the pioneers of appreciative inquiry explain, 'we are more effective the longer we can retain the spirit of inquiry of the everlasting beginner'.⁷⁴ This will require us to become versed in the essential foundation of appreciative inquiry – the asking of genuinely unconditional positive questions of a non-invasive and non-judgemental kind that invite, encourage and sustain positive and energising relationships based on openness, mutual respect, trust, candour and collaboration. By encouraging them to tell us about the positive – their underpinning philosophies, their

aspirations, their successes and their future plans – we are more likely to elicit more numerous and richer accounts, upon the basis of which we can subsequently reflect, distil collaboratively the essences of successful practices and 'seed' these, where appropriate, in our own educational contexts.

Unlocking the potential

Through this critical, reflective process, teachers can experience the transformative, reimagine accepted norms, and truly innovate. Educators themselves are empowered and responsible for democratic processes of intellectual reasoning in their local, national and international contexts of educational content and policies. As Kincheloe argues, 'only by engaging in complex, critical research will teachers rediscover their professional status, empower their practice in the classroom and improve the quality of education for their pupils'.⁷⁵

73. Dylan, B (1965) *The Times They Are a-Changin'* (Lyric) Columbia Studios, New York.

74. Cooperrider, DL and Whitney, D (2005) *A Positive Revolution in Change: Appreciative Inquiry*. San Francisco: Berrett-Koehler.

75. Kincheloe, JL (2012, classic edition) *Teachers as Researchers: Qualitative Inquiry as a Path to Empowerment*. Abingdon: Routledge.



Susan Douglas

Since leaving headship in 2006, Susan has worked as a Senior Adviser at the British Council providing sector expertise and advice to a wide number of educational programmes involving ministries, school leaders, teachers and young people in around 60 countries worldwide.

Since 2012, she has also held the role of Chief Executive Officer of the Eden Academy Trust in West London, a multi-academy trust comprising five schools providing education for children aged three to 19 with a range of complex needs.



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Dr Björn Haßler is a Senior Researcher at the University of Cambridge, working on open education, teacher professional development and mobile technology. This includes the OER4Schools teacher development programme across a range of countries in sub-Saharan Africa; the Open Educational Resources Guidance for Schools; the Open Resource Bank on Interactive Teaching (ORBIT) for

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Artur Tevere

Artur Tevere is the Co-Founder and CEO of Creative Generation. Artur works with schools to foster students' ability to think critically and solve problems collaboratively, in England and internationally. This work usually involves two main strands: supporting teachers with practical professional learning programmes, and creating high-quality learning resources. Artur is Governor of School 21, an innovative school in

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Lynne Parmenter

Lynne Parmenter began her career teaching in schools, and then moved to faculty posts at Fukushima University and Waseda University in Japan, followed by Manchester Metropolitan University in the UK, and then Nazarbayev University in Kazakhstan. She has a PhD in Education from the University of Durham (UK),

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Drawing on rigorous comparative educational studies, Barrie now works as an independent

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Stephen Hull

Stephen's first job in teaching was at a vocational college in Santiago, Chile. After leaving the classroom, he joined the British Council in Bogotá as a graduate of the University of Manchester. He has since held a number of positions and is now based in London, where he is Senior Project Manager of the Connecting Classrooms programme in the UK.

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