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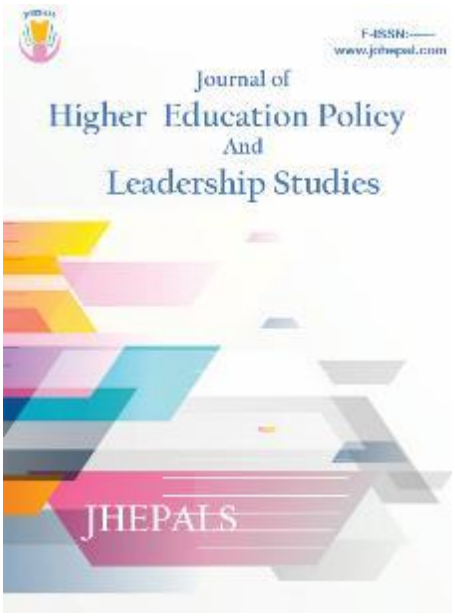

The Role of Higher Education in Developing Policy and Practice for the Development of the New Industrial Age

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Abstract

This article discusses a problem that education must address if it is to prepare people adequately for the new industrial age. Intelligent machines are rapidly taking over routine tasks both at home and work. New competencies are demanded now that we are becoming released from practices that have traditionally occupied time. This gives opportunity to communicate across disciplines to solve the challenging problems of today's world, like climate change, inequality and rapid people movements. It is exciting times as we move into the third decade of 2020. However, we need a more holistic approach to education at all levels- realising that personal, transferable intelligence need as much attention as academic ones in formal learning. In Higher Education (HE), a Practitioner Doctorate now compliments traditional Research models – sponsored by the United States of America (USA) Carnegie Foundation in universities. This produces leaders able to investigate their own work contexts, with ability to change policy and practice to improve performances that are relevant to the local area.

Keywords: Higher education; 21st Century education; Transferable abilities; Practitioner approaches; Developing policy; Industrial age

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Introduction

The World Is Changing and Education Must Evolve
We live in an ambiguous, complex, volatile, indeterminate realm

The present education system was established to create employees for the manufacturing model of the 19th and 20th centuries. The 21st century requires a rethink. Change is happening fast and students are emerging into a world where jobs are not guaranteed. Carl Frey et al (2013) suggests that around 60% of future occupations have not yet been developed and that 40% of 5 year olds will need to be *self-employed* to gain an income, so entrepreneurship needs encouragement. Educators must prepare students for a future that is difficult to predict, so it is vital to inspire them to *think* instead of *recall* for passing exams. Much content in our current system is either irrelevant for student lives today or can be found at the press of a button. Retaining formula for working out a circle area (*pi r-squared – which students must do*) has little value for most jobs and can be googled on the Web. *Thinking* must become more central to learning – not *memorisation of facts* to be forgotten after testing. This cognitive ability evolves from communicating with others and one-self and is neglected in education. When leading Clinical & Educational Studies at a London Medical School, our research found that misdiagnosis of human disorders was due to *ineffective communication* between those involved. Gaining & explaining information needs expert teaching, but our educators have limited knowledge and understanding of language form, content and use issues and the shift from oracy to literacy.

Traditionally, *transferable abilities* have been marginalised in formal education because they are harder to measure. They include: *listening with understanding and empathy, communicating clearly both informally (chatting) and formally (narrative talk), flexible thinking, metacognition, creativity, persistence, self-management,* while open to continual learning. Now robots are common, the need to explore, deepen and widen our communication and empathetic connection with others, refine social capacity and respect different cultures and beliefs is primary to all human experience in plural societies.

Education must change because whilst still accepting a 50% subject pass rate, there is demand for higher accuracy today. What accuracy rate do you want your newspaper deliverer, window cleaner, builder, mechanic, doctor, bus driver, airline pilot or hairdresser to work towards? This new age requires greater precision than our education system accepts. Fortunately, there is a world trend for more personalised learning, ensuring students are prepared for the future with practitioner models using internationally agreed criteria. We must work towards *competencies* not *test* scores and remain on content until demonstrating mastery, in relevant, real contexts rather than studying modular, abstract theme blocks.

Our current system is often called "*Swiss Cheese Learning*" (*cheese with holes*). If a student passes exams at a 75% level we praise them. Therefore, a student thinks they have done well with a quarter of basic data missing, which they may not know. A curriculum builds on previously transmitted knowledge and lack of a foundation compounds as students move through the system, with many experiencing failure and loss of self-confidence. There are too many '*holes in the cheese*' to apply learning effectively. A 50% pass rate indicates half of the learning is questionable, but satisfactory for gaining a qualification. Current education means completing set assignments and passing exams with little room for individuality.

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Currently 150 USA schools have negotiated *portfolios of evidence* to top universities and employers rather than Grade Point Averages (GPA), which do not guarantee abilities for life success or demonstrate application of knowledge for real situations. Thankfully, project-based learning is more common, providing ways for students to demonstrate understanding and practical competencies according to individual interests and capabilities. This is practice in Japan and Italy with group projects presented to the class and at public and national performances (e.g. Maker Faire). The idea is to integrate knowledge and develop practical assignments from student interests.

I witnessed this on a Japan/UK study to prepare citizens for the 21st century, when the teacher initially asked the class what they would like to investigate. They decided on '*Fire Stations*' and the next lesson was a visit to a local one. Following this, each student had to tell the class, in 30 seconds, what they most enjoyed about the visit. Then students were organised into interest groups and free to choose how to gain material for final presentations. Girls tended towards fire-fighter uniforms (*which were gorgeous*) and job training, whilst boys preferred engines, drill systems and daily routines. No wonder these students on testing were four years head in language and cognitive abilities than English comparisons. There is little formal testing in schools although exams for university are competitive. The Japanese system of evaluation, however, is as much about transferable competencies as academic knowledge. It demonstrates flexible assessment. '*Since learning is so nuanced, so should be the means in which we assess it'* (Sackstem, 2015, p. 10).

Future education must centre around life-skills and how to be a contributing citizen, based on individual talents and desires. It should focus on thinking, practical application of knowledge and understanding. This requires a rethink of everything we know and understand about formal education. It must start by posing questions? Why do classes start at 9am? Why do we split learning into subjects? What is the role of a teacher? How might a learning journey be personalised? How could evidence of understanding be better demonstrated? What ways show this progress holistically? How might we teach and reinforce abilities for both present and future? Students deserve an education that is integral to challenging, life-long learning. We are not there yet but if brave enough to do things differently it is possible. Leaders who can develop policy and practice changes are vital for effective preparation of students.

Human Capital Theory

Tim Firth, The Head of the United Kingdom (UK) Wrekin College, says universities create an illusion that academic standards remain the same. '*Any fool can get into university',* he says in an interview with the Daily Telegraph (9.11.2019). Fierce competition means students are offered places regardless of exam grades. A leading university has so over-recruited that students cannot be accommodated for lectures, watching these on lap-tops – often in bed so it is reported! Higher Education (HE) acts like businesses, raking in students to maximise revenue. The UK Office of National statistics reports 31% of graduates are over-qualified for jobs- seen as a recipe for low cohesion. O'Boyle (1961) pointed out that European revolutions occurred because too many were educated for limited prestigious positions, condemning them to jobs below their capacity or unemployment, so meaning they felt cheated and rebellious.

Glendinning et al (2019) in *'Policies and Actions of Accreditation and Quality Assurance Bodies to Counter Corruption',* report that unsuitable students, teachers, courses and assessments lead to different forms of cheating with sobering evidence about world practices. Pok Wong graduated with a first-class degree from a middle-ranking UK university in 2018, receiving a £61,000 out-of-court

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settlement, claiming her qualification was '*Mickey Mouse*' and useless for securing a job. This indicates that graduates may not have achieved knowledge and competencies required by workplaces. The Institute for Fiscal Studies states that those attending lower-ranking universities earn less than non-graduates. They lack abilities, like effective informal and formal communication and initiative, demanded by employers. Businesses hiring staff are now looking at the academic pedigree of course leaders and tutors to assess quality of applicant awards. As universities now run on business models, there is a tendency to dismiss senior academics and employ cheaper, less qualified staff. Even Russell group universities advertise for educational assistants with limited educational pedigree to deliver student lectures. In my day, I was lucky to be taught by leading academics, which the university would buy in as visiting professors if not having expertise from resident staff. This custom is less common now economics are the driving force.

What is the result of graduates not achieving work equable to degree levels?

A lack of suitable employment possibilities questions whether degraded work results in not just dumbing down but a diminishing morality. Recruiter Surveys complain about lawless, lazy, laid-back employees, compared to the efficient, reliable, diligent ones of years ago! Does degraded work play a role in shaping us into disengaged, disgruntled workers? The process begins in schools. Murray (2008) reports that 90% of students are encouraged to go on to HE, with little interest in personal qualities suggesting a different pathway. Some bright people are ill-suited to both HE and work following graduation, as demonstrated by a friend with a genetics PhD working as a plumber - preferring practical to academic pursuits. Another with a first class chemistry degree is now a bus driver, as he could not stand the suppression of intelligence in the corporate world. Pushing everyone into colleges creates job perversities. Collins (2002), describes the cycle of endless credential inflation until babysitters are required to graduate in child-care. If corporate knowledge work is intellectually undemanding then academic achievement recruits ineffectively. Brown & Scase (1994) say there is no correlation between degree and job progression. The irrelevance of what you formally learn for job performance, is hard to equate with a meritocratic belief and necessity for qualifications.

This is known as '*human capital theory',* with educational institutions helping society get competencies needed and people their social positions, based on traditional learning ideas (Laboree, 1997). After World-War 2, life became more complex, suggesting university graduates were needed with superior knowledge and abilities. However, Berg (1970) found an inverse correlation between academic achievement and job performance. Education is seen as good for society but tends to have a corrupting effect on genuine learning and personal performances because of a focus on passing tests. Research suggests only 15% of learning is achieved in formal contexts (Chicago University Studies, 2006). Labaree (1997) says grades, credits and degrees have greater weight than substantive characteristics, being more important than personal, practical abilities. Today, it is necessary to know *how* to acquire knowledge as it is easily obtained by the press of a button and no longer needs to be memorised as in the past.

Hymas (2019) discusses how Artificial Intelligence (AI) now recruits for jobs, focusing on verbal and non-verbal responses, analysing 25,000 bits of facial and linguistic information, including diction, speed and tone. If not a competent communicator you are disadvantaged, as this is the priority ability assessed. Candidates rank 1-100 as good, moderate or weak and gain interviews from this analysis. It confirms employer demand for effective communicators - seen as a diminishing UK competence

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(Sage, 2017). What can education do about this? *Communication*, with ability to discuss, share, reflect, review and refine ideas, is viewed as essential to creativity needed for a competitive world. Are we preparing people effectively? Do teachers understand the oracy-literacy shift and issues of moving from informal to formal communication learning processes? This is not major input in teacher training, which concentrates on implementing a prescriptive academic curriculum.

Is Creativity a British Myth?

When introducing the Queen's Speech in October 2019, Prime Minister Johnson promised to '*release the talent, creativity, innovation and chutzpah that exists in every corner of the United Kingdom*'. In the 'Brexit' debate the thing that '*remainers'* and '*leavers'* agreed about is that Britain is a fountain of creativity. There is a view that we are a nation of explorers, pioneers, innovators and creators. Those on the political '*right*' interpret creativity as the drive for new businesses and industry, with means to trade globally. On the '*left*' creativity is regarded as artistic prowess - as in the 2012 London Olympic ceremonies and other endeavours.

If you listen to political and professional discourse it promotes visionary thinking and means to solve world problems. However, the evidence does not support such extraordinary powers. A highly creative country would expect to be highly productive but our record does not match many other countries. A creative nation should generate new ideas but our patents per head of population are not even in the top ten (wipo_pub_941_2017- Chapter 2 Patents). Therefore, thinking we are exceptionally creative is misguided and delusional. To make ideas reality you need technical understanding and practical ability, which are strengths of engineers and managers. A government sponsored report by Tamkin (2014) found Britain's management capability weaker than that of Germany, Japan, Sweden and the USA, with a review of effective training (MBAs – *Masters in Business Administration*) showing this lags behind leading nations.

Chambers (2019) provides evidence showing the City of London is not a fan of *'new-fangled tech*' and does not consider engineering as valuable. We disbanded prestigious UK engineering research laboratories 50 years ago, resulting in many British experts pursuing interests and ideas in Europe, America, China and Japan. The present scale of these overseas national developments contrasts starkly with those in Britain. The financial system in Britain does not support business but focuses on property. UK markets have scant interest in engineering or technology. It is hard to fund their projects from the public market because the view is short- rather than long-term required for technical developments. If you review UK activity, there is a story of companies swallowed up by better supported foreign ones. An example is *Cadbury* of Birmingham, a renowned chocolate-making industry established in 1824, now run since 2010 by the American Mondelez International, (*formally Kraft Foods*). With takeovers British technology and skills have disappeared, along with long-term assets needed to be in the top-rank of industrial nations. Education and training of UK experts has declined as a result of foreign control. Many firms prefer engineers from Europe, because of the value it has for technical education and support, so that professionals can perform at high, effective levels as they have developed personal as well as academic abilities.

Despite attempts to re-balance our education system, which recently has encouraged people to follow university academic rather than technical, practical pathways, there are insufficient students pursuing apprenticeship training. The HERO EU project, based at the UK College of Teachers in 2015, aimed to develop the personal, practical abilities of students. Research revealed that British education and training for these did not match that of other European nations, showing a lack of

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value and status for practical intelligence. By allowing manufacturing industries to run down, we have forgotten the intellectual rigours and organisational competencies that they taught people.

Leslie (2019) describes the pernicious effects of such a situation. He suggests they are manifest in a governing class that values *generalists* over *specialists*. According to Leslie, few politicians understand anything in depth. This was reinforced when working on the *Universalisation* project with Cuba and South America (2003-7), which aims to educate people according to their interests, abilities and the needs of the nation. The Cuban Minister of Education visited the University of Leicester, where the study was located in the UK. There was shock that our own Minister was not an educational professional and that this was not a requirement for leading policy and practice in British government areas.

Success as a nation in the past was due to *specialised* knowledge. In the 2019 exhibition on *Artificial Intelligence,* at the London Barbican, was Alan Turing's magnificent code-breaking machine. It was inspiring and demonstrated deep, extensive specialised knowledge. Turing was a clever man and showed immense commitment to learning. A recent survey has revealed that our university students study for less than 2 hours daily for the first time. The proportion of undergraduates committing 11+ hours to classes weekly has dropped by nearly 10% in the past 3 years, dipping to 46% in 2019. A survey of more than 29,000 students, carried out by Advance HE, found undergraduates spend less time studying both in class and independently. This year, 44% of students studied for 11+ hours independently - down from 52% in 2016 and the lowest point since the survey began in 2015. Class study hours have progressively slid over the same period, with 55% of undergraduates spending 11+ hours learning on campus in 2016. Students now regularly complain about quality of courses and lecturers and many feel they have poor value for the fees they pay.

The slump in student study hours may be partly explained by students working part-time, but the proportion has remained stable. Jonathan Neves, author of the *UK Engagement Survey 2019,* expressed concern at the apparent drop in hours committed to independent learning by students. Studying away from class had '*links to a wide range of skills which help students develop in a rounded way*' p 3. We can speculate about reasons, but working for pay, along with a decline in recognition of formal educational benefits, may contribute to students being less able and willing to prioritise time. Ministers suggest universities operate like businesses and run threadbare courses to *get 'bums on seats'*. A lift on the cap for student numbers has led to rapid expansion and stokes fears that degrees may not be value for money.

This situation is now a problem for Britain and needs attention. If we lose ability to create technological talent what then? Our fast-changing world requires ever-increasing investment in complex technology that is key to global success. Where is the UK's equivalent of Amazon, Facebook and Google? Where are our Robot makers, AI companies and database giants? We find ourselves the tortoise with the hares racing ahead. Are we willing to lose the technology race to others?

Predictions about the world: Implications for Education

Some things can be predicted about the future world with reasonable certainty – how many people will be on the planet and where they will live. We can be fairly confident of how demography and economic growth will change major economies. McRae (2020) has 5 predictions for 2050:

1. Population: There will be at least 10bn people in the world with the demographic being one of age. Africa will grow fast as will the Indian subcontinent. Older regions, like continental Europe and Japan, will be more cautious and inward-looking. The European

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Union is likely to have a looser association and Russia's falling population will curb global ambitions.

2. The Largest Economy: China will be the largest economy but an ageing, declining population will reduce its vision of global dominance, so likely to concentrate on making life secure and comfortable.
3. The Wealthiest Region: The United States of America (USA) will remain outward-looking and the wealthiest area of the world, winning the tussle with China for global influence. The remaining English-speaking-world will align themselves with the USA. The British Isles will probably become a looser association.
4. Technology: Advances will enable the world to give most of the population a decent lifestyle, with intelligent machines taking over dangerous, dirty, boring tasks. Humankind's environmental burden will be a relentless struggle. However, technology will bring service and manufacturing industry efficiencies to improve living and working standards.
5. Class Movement: Three-quarters of the world's population will be *middleclass* and ideas of China, India and Africa will become influential in the developed world. The USA will retain intellectual leadership with more numerous, better-educated people globally. There is a need to be '*smarter*' now that AI is taking over routine tasks and leaving complex, challenging issues to be resolved by highly-educated interdisciplinary teams.

Of course, actual circumstances could change everything, such as the recent coronavirus completely altering the normal pattern of life as we self-isolate. People now look *outwards*. Investigations regarding a possibility of moving to other planets, to solve population issues, might discover other civilisations to rethink our species. From looking *within*, we could come to understand ideas like the *paranormal*, to make the world a better, more stable place.

Whatever the future, experts agree that *language and culture* will become more important unifying factors than physical proximity. Education will need to take more interest in linguistic and cultural issues that presently divide populations and cause tension, distrust and problems in understanding and learning effectively. Research, at the University of Leicester, showed how in city schools, children all entered with language and cognition ages about 2 years below chronological ones. This was a tremendous barrier to effective learning (Sage, 2000).

Why HE must promote a Practitioner Doctorate to solve current problems

The current research PhD system is not up to the mark in a world demanding better policies and practices. About a third of PhD students are at risk of mental disorders, like depression, (Pain, 2017). A high number of dropouts is worrying, as on average 50% of PhD students leave without finishing. Those who complete usually take longer than envisaged. A PhD in Germany is supposed to take 3 years, from university regulations, but most students take 5 to complete. The same is seen in Britain. In the US, however, the average completion time for a PhD in Education Sciences exceeds 13 years (Cassuto, 2013).

Although 80% of students start PhD studies to further a career only 55% plan to continue in academia. Most are unlikely to be able to remain in research. A 2015 study found that for every 200 people who complete a PhD, only 7 will obtain a permanent academic post (Roach & Sauermann,

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2017). Many people enter science or arts areas to change the world for the better but present academia is more about chasing citations and fulfilling research assessment exercises. Most academic work is shared only with a specific scientific or arts community rather than policymakers or businesses and so fails to influence practice (Roach & Sauermann, 2017). In my case, the Medical Research Council asked me to investigate why children, testing as normally intelligent, failed to progress in schools. Studies convincingly proved that the problem was lack of formal narrative thinking and language structures. These are not tested on routine intelligence tests but are vital for learners to make meaning from quantities of information presented in formal education contexts. Although discussing this issue with Education Ministers, there has been little influence of these studies in UK policy and practice. However, some countries took note with Japan, Cuba and Germany sending over teams to translate the data for their use.

Since the 1970s, academics have questioned doctorates based on *linear* theories, codifying and applying abstract ideas, often in ways not translating to normal situations. These views are in Taylor's (2011) paper: '*Reform the PhD or close it down'.* Experts view both *first generation research* and *second generation professional* doctorates as developing MODEL 1 Knowledge - produced objectively and generated from a research design collecting data to answer a question based on theoretical constructs (*research on practice*). Considered remote from reality, there has been a move towards MODEL 2 Knowledge, created and used by practitioners *within* daily work (Maxwell & Shanahan, 2001). The model pursues a *constructionist rather than a positivist* stance (Schon, 1987; Deutsch, 2013, Orton, 2017, 2019), with research and practice existing in a *spiral, observant, reflective relationship*, leading to new knowledge for informing practice. This emerges from quests to understand '*reality*' and develop professionals able to judge what is possible and impossible. Cognition limits prevent humans from getting '*the big picture*', so a *practitioner model* emphasises broader knowledge and experience to transform the ambiguous quantum world. It restricts motivated reasoning and confirmation bias producing ineffective judgments, which experts have noted in some traditional doctorates. Targeting personal abilities, knowledge and data collection relevant for job-roles, whilst accounting for political, economic and social issues influencing actions, brings confidence and competence for candidates to pursue effective practice in workplaces.

In the UK, the practitioner model was developed and sponsored by the European Commission (EC) at the College of Teachers, involving 7 European partnerships (PEEP 2011-16). The submission record begins with an academic CV and a 4,000+ word career review, detailing a theme for selecting evidence under 4 internationally agreed professional criteria: *acquisition & application of knowledge, continual professional development, mobility (work across nations) & partnerships*. A literature review demonstrates up-to-date research and practice knowledge of a chosen theme arising from work contexts (*e.g. professional ethics*), evaluating how data develops this in practice. Evidence, according to 20 *International Standard Classification of Education* (ISCED) Level 8 criteria, has witness statements to verify events, with feedback on achievements (Kouptsov, 1994). These expand the 4 professional requirements in a detailed appraisal. A final, reflective statement shows how this has contributed to policy, practice and professional development. The submission is around 100,000 words, including visual and auditory material if appropriate. A 300 word summary is supplied in hard copy in addition to an e-portfolio. A review of the doctoral process on social media commented on this approach being less open to abuse, with evidence of doctorates bought from unscrupulous institutions and websites.

This is the reason for the USA's *Carnegie Foundation's* decision to sponsor a *Practitioner Doctorate,* where the focus is on a participant researching their own practice and proving they are

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making a difference in workplaces. In Europe, this model has been sponsored by the EC*. Now Harvard University promotes this practitioner route, rather than the professional doctorate. Experience has shown that it has positive impact in contexts where participants work. Buckingham University implemented this model in the UK (2017-20) and 30 participants are indeed changing practice, aiming to solve problems specific to work. The programme was led by Professor Rosemary Sage (PEEP Academic Lead), Dr Kim Orton (Peep Research Coordinator) and two others on the research pilot doctorate. Practitioner experts, Professor Pierre Frath (France) and Professor Riccarda Matteucci (Italy) provided support and opportunities for students to gain *mobility* and *partnership* evidence. Evaluations show benefits from 43 questionnaire respondents:

1. Consolidates & structures participant activities in a customised, self-managed programme
2. Assists articulation of theoretical ideas - evaluating these for practice and wider benefits
3. Provides a framework to develop a career from the observation & reflection process adopted
4. Improves the quality & nature of practical outcomes, sustaining & maintaining them through work-place communication, co-operation & collaboration to benefit stakeholders
5. It has long-term impact on candidate professional practice as well as that of colleagues
6. It has potential for creating system changes, with participants in leading positions & influence to make improvements from collected, relevant evidence
7. Produces creative, observant, reflective, interpretative leaders from MODEL 2 Knowledge and understanding from reflecting and reviewing one's own practice
8. Develops *process* rather than abstract *product* knowledge to assist improved appreciation of real problems from a greater understanding of the context and behaviour of politics and people
9. Targets political, economic, social and contextual issues to explain situations, as the background for integrating these influences with informed, practical wisdom for local and global adequacy in '*making maps that work*' (Leston, 2004)
10. Focuses on mobility and partnerships, so enabling participants to become aware of international practice for preparing citizens with an effective global orientation

Table 1.
Rank Order of Responses to the Practitioner Doctorate Model above a 95% confidence level (N =43)

1.	0pportunity to research own practice for greater workplace impact & personal satisfaction	100%
2.	Focus on proving oneself personally & professionally to ensure workplace impact	98%
3.	The holistic model reviews issues for improved personal development & problem solutions	97%
4.	Emphasis on mobility & partnerships builds lasting connections & extends understanding	96%
5.	Greater confidence in decision-making evolves from a *process* not *product* approach	95%

The new industrial world means that professionals need higher-level abilities. They will increasingly be required to work in interdisciplinary teams to solve world problems. The practitioner doctorate

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has a broader approach to solving problems than seen in traditional doctorates and is likely to be a necessary qualification for future leading workplace roles. It aims to develop personal as well as academic competencies. This enables participants to understand the political, economic and social influences on education, to fit them for leadership for solving real workplace problems.

Conclusion

I have chatted to a young lady, who last summer (2019) achieved 3 A levels but had the confidence not to be pushed into HE. Presently, she is working in the village – serving behind the bar in the local pub, helping in the shop and doing cleaning jobs for people needing help. She is loving the experience and achieving the personal competencies not targeted at school, like communicating with a range of people, establishing relationships and dealing with routine issues creatively and quickly. My own niece did the same - post-A levels – feeling that university was not for her. She obtained qualifications in food and wine and now runs a successful catering business, making people happy with delicious bakes!

HE, in its present form, is not for everyone and pushing this as the route after A level exams is not serving either the individual or society well. We lack competencies for practical careers and regard people with them as having less social status. Practical abilities require high intelligence to perform well and must be valued equally with intellectual ones. Many feel academic standards have declined in the UK, due to students pursuing studies without genuine interest or potential. Career-specialists have vanished in educational contexts, but used to carry out assessments of students and match them to suitable education and employment. Academia needs a practical focus, with opportunities for students to research *within* their workplaces and demonstrate the impact of initiatives to solve problems. Andreas Schleicher, Director of the Organisation for Economic Cooperation and Development (2020), suggests that Britain has made the slowest educational progress of all OECD nations because memorisation remains the dominant learning strategy in a narrow, exam driven culture. He says that education today is not about teaching people something but helping them develop a compass. Work-readiness requires understanding of *globalisation,* which comes from *mobility* and *partnerships.* A Practitioner Doctorate rebalances HE to develop a more holistic, world approach to solving personal & professional life problems, with a focus on real rather than abstract issues. Since 60% of students worldwide do not reach required educational standards (Luckin, 2020), it is time to review present policies and practices.

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References

Arnot, M., David, M., & Weiner, G. (1999). *Closing the Gender Gap: Postwar Education and Social Change*. Cambridge: Polity Press.

Berg, I. (1970). *Education and Jobs: The Great Training Robbery.* New York: Praeger.

Brown, P., & Scase, R. (1994). *Higher Education and Corporate Realities*. London: UCL Press.

Chambers, C. (2019). Money & markets: *Why the UK markets do not show the love to engineers.* Engineering & Technology (E&T), available online at https://eandt.theiet.org/content/articles/2019/10/money-markets-why-the-uk-markets-do-not-show-the-love-to-engineers/

Chicago University Communication Research Team (2006). *Learning is both Informal and Formal.* British Telecommunications International Conference. Centre for Management. University of Manchester, UK

Collins, R. (2002). The dirty little secret of credential inflation. *The Chronicle of Higher Education, 49*(5), B20. Available online at https://www.chronicle.com/article/The-Dirty-Little-Secret-of/20548

Deutsch, D. (2013). Constructor theory. *Synthese, 190,* 4331-4359. https://doi.org/10.1007/s11229-013-0279-z

Frey, C. B., & Osborne, M. (2013) *The Future of Employment: How Susceptible are Jobs to Computerisation?* Available Online at http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf

Glendinning, I., Orim, S. M., & King, A. (2019). *Policies and Action of Accreditation and Quality Assurance Bodies to Counter Corruption in Higher Education.* Council for Higher Education Accreditation (CHEA). Available online at https://www.chea.org/sites/default/files/2019-03/CHEA_Corruption-Report-Final-underlines.pdf

Hymas, C. (2019). AI used for first time in job interviews in UK to find best applicants. *The Telegraph,* available online at https://www.telegraph.co.uk/news/2019/09/27/ai-facial-recognition-used-first-time-job-interviews-uk-find/

Kouptsov, O. (1994). (Ed.). *The Doctorate in the European Region.* CEPES Studies on Higher Education. Bucharest: UNESCO, CEPES.

Labaree, D. F. (1997). *How to Succeed in School without Really Learning: The Credentials Race in American Education.* New Haven, CT: Yale University Press.

Leslie I. (2019) *Left Field.* New Statesman. 8-14 November, 2019. London: Standard House

Lester, S. (2004). Conceptualizing the practitioner doctorate. *Studies in Higher Education, 29*(6), 757-770. https://doi.org/10.1080/0307507042000287249

Luckin, R. (2020). I, teacher: AI and school transformation. *NewStatesman,* available online at https://www.newstatesman.com/spotlight/skills/2020/02/i-teacher-ai-and-school-transformation

Maxwell, T. W., & Shanahan, P. J. (2001). Professional doctoral education in Australia and New Zealand: Reviewing the scene. In B. Green, T. W. Maxwell, & P. J. Shanahan (Eds.), *Doctoral Education and Professional Practice: The Next Generation?* (pp. 17–38). Armidale, NSW: Kardoorair Press.

Murray, C. (2008). *Real Education: Four Simple Truths for Bringing America's Schools Back to Reality.* New York: Crown Forum.

[DOI: 10.29252/johepal.1.1.64]

McRae, H. (2020). What will the world look like in 2050? Lessons from a past attempt to look far ahead. *The Economist: The World in 2020,* available online at https://worldin.economist.com/edition/2020/article/17383/what-will-world-look-2050

Sage, R., & Orton, K. (2017). Theories informing teaching of success abilities. In R. Sage (Ed.), *Paradoxes in Education: Learning in a Plural Society* (pp. 45-67). UK: Brill.

Orton, K. (2017). Evaluating communicative approaches in education. In R. Sage (Ed.), *Paradoxes in Education: Learning in a Plural Society* (pp. 209-229). UK: Brill.

Orton, K. (2019). Reflective Practice. Available online at http://www.educationblog.buckingham.ac.uk/2019/11/reflective-practice

O'Boyle, L. (1961). The democratic left in Germany, 1848. *The Journal of Modern History, 33*(4), 374-383. https://doi.org/10.1086/238910

Neves, J. (2019). UK engagement survey 2019. *Advance HE,* available online at https://www.advance-he.ac.uk/knowledge-hub/uk-engagement-survey-2019

Sage, R. (2017). (Ed.) *Paradoxes in Education.* UK: Brill.

Sage, R. (2000). *Class Talk: Successful Learning through Effective Communication.* Stafford, UK: Network Educational Press, Ltd.

Sackstein, S. (2015). *Hacking Assessment: 10 Ways to Go Gradeless in a Traditional Grades School.* Cleveland, OH: Times 10 Publications.

Schleicher, A. (2020). Preparing the next generation for their f, not our past. *NewStatesman,* available online at https://www.newstatesman.com/politics/education/2020/02/preparing-next-generation-their-future-not-our-past

Schön, D. A. 1987. Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions. San Francisco, CA: Jossey-Bass Inc., Publishers.

Tamkin, P. (2014). Management capability and performance. *HR Network Paper MP26: Institute for Employment Studies.* Available online at https://www.employment-studies.co.uk/system/files/resources/files/mp26.pdf

Taylor, M. (2011). Reform the PhD system or close it down. *Nature, 472*, 261. https://doi.org/10.1038/472261a

Pain, E. (2017). Ph.D. students face significant mental health challenges. *Science,* https://doi.org/10.1126/science.caredit.a1700028

Cassuto, L. (2013). Ph.D. attrition: How much is too much? *The Chronicle of Higher Education.* Available online at https://www.chronicle.com/article/phd-attrition-how-much-is/140045

Roach, M., & Sauermann, H. (2017). The declining interest in an academic career. *Plos One, 12*(9), e.0184130. https://doi.org/10.1371/journal.pone.0184130

World Intellectual Property Indicators. (2017). Available online at https://www.wipo.int/edocs/pubdocs/en/wipo_pub_941_2017.pdf

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Research: Initially asked by the Medical Research Council to investigate why students were failing in school although testing normally intelligent, findings pointed to problems with formal narrative thinking & language processes not assessed on IQ assessments. Therefore, language, education & employment issues have been pursued in research nationally & internationally over 30 years.

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