***Critical Issues Document***

**REINVIGORATING THE ‘PUBLIC’ TO ENGAGE THE PROMISE AND PRECARITY OF PUBLIC EDUCATION**

## **The Purpose of this Critical Issues Document**

This is a stimulus document which aims to encourage an inspired conversation before, during and after the 2019 November Base Camp at Ashridge. While it draws on current research, it is not an academic paper or a thesis – it is intended to set out some major challenges which need to be addressed by those who are passionate about public education and care about our collective future.

The emphasis of this paper is on **public education** – education enabled by public funds for public good. While individuals benefit from education, a critical purpose of public education is to develop citizenship and shared social understanding. That is, the collective purpose is as important as the individual purpose. The “beautiful risk” of education, as framed by the educational philosopher Gert Biesta, is that it can unleash the creativity of people, enabling them to become significant in their own right by finding and then developing the talents that matter to them, but this work is undertaken in a social context: ultimately the bigger purpose of education is advancing the social good. However, given the environmental crises we are facing alongside of the growing precarity of civil societies at the end of the Anthropocene,[[1]](#footnote-1) we must also recognize that the threats to the public education are ultimately rooted in the breakdown in the consensus of what is meant by ‘the public’ and the growing pressures of commercialization and privatization.

**The Sponsors of this Paper**

This paper was prepared under the auspices of the Centre for Futures Leadership– a non-profit organization based in Canada dedicated to futures literacy and analysis so as to enable leadership for a preferred future.Stephen Murgatroyd was the lead author with contributions from J-C Couture and Jean Stiles.

## **The Key Challenges Facing Public Education**

This could be a substantial list, but here we highlight five key challenges. In your response, you may wish to add one or two more. The aim is not to produce a comprehensive catalogue, but to focus our energy and resources on the issues that matter most:

1. **The Privatization of Public Good**

Education is a human right and a public good. But the growing commercialization and privatization in and of the education sector represents the greatest threat to the achievement of quality free public education for all.

This challenge to public education – which is a $6 trillion global activity - is focused on, achieving market-share, technology and the capture of intellectual property. In addition, the application of private-sector management models (sometimes referred to as New Public Management) on educational institutions (schools, colleges and universities) and the undermining of the employment conditions in the education sector, the privatization of provision and the expansion of “low-fee” private schools, and the intrusion of for-profit motives or business interests in the governance of education institutions are all part of this development. Companies like Pearson, McGraw Hill, Google, Microsoft as well as philantho-capitalst organizations like the Gates Foundation, Chan-Zuckerberg, World Bank – have themselves as influential policy actors within public bodies like the OECD and are shaping a global educational agenda. Within nations and education ministries, these organizations are increasing their influence through the formal and informal processes known as network governance – further undermining the role of the public in decision-making and policy formation[[2]](#footnote-2). A recent review of the current and future global trajectories was recently completed for Education International by two leading researchers:

Pearson’s vision for education in 2025 laudably promotes the benefits of technological developments and their combination with new kinds  
 of teacher professionalism. However, its corporate strategy is premised upon creating disruptive changes to (a) the teaching profession, (b) the delivery of curriculum and assessment and (c) the function of schools, particularly public schooling. These disruptions do not follow a coherent set of educational principles, but capriciously serve the interests of the company’s shareholders (Sellar and Hogan, 2019).[[3]](#footnote-3)

The drivers of commercialization and privatization play out differently in various jurisdictions. One of the most compelling examples of how the intersection of market ideologies and specious claims about declining quality were mobilized to undermine public confidence in schools – supporting the push to the creation of academies or free schools. Despite any basis or research as to the efficacy of this move and strong opposition across civil society, the privatization of English education is well underway.[[4]](#footnote-4)

**Suggested Reading:**

* See the work of Education International [here](https://ei-ie.org/en/detail/15075/ei-research-reinforces-advocacy-against-growing-privatisation-of-public-education)
* Sam Sellar and Anna Hogan (2019) Pearson 2025 – [Transforming Teaching and the Privatization of Education Data](https://issuu.com/educationinternational/docs/2019_ei_gr_essay_pearson2025_eng_24).
* [Are profit-making academies the future of education?](https://www.theguardian.com/education/2011/jul/04/profit-making-academies) The Guardian, July 4th 2011.

1. **Datafication – The Growing Use of Data and Analytics to Shape Actions in Education**

*‘Datafication’ refers to the collective tools, technologies and processes used to transform an organization to a data-driven enterprise. This buzzword describes an organizational trend of defining the key to core business operations through a global reliance on data and its related infrastructure.*

One feature of the privatization of education is the use of data and data-driven systems (Power School, Teacher Logic/SIRS, School Zone and learning management systems like Moodle, Backboard, D2L) and the analytics they enable to shape educational practice. In some systems – for example, in China – facial recognition systems are also being used to “measure” (*sic*) student engagement.

Various kinds of performance data are now collected and analyzed not

just for national and sub-national policymaking, but also for the purposes of school inspection and accountability, as well as for the day-to-day operation of schools, including school administrators, planning and classroom teachers’ pedagogical decisions. Because the data can be accessed by “controllers” and “administrators”, many feel that the power to make decisions is shifting away from those nearest to the classroom to those who have access to data and the skills to interpret and leverage them. For example, in Denmark national test data has been put to a variety of managerial uses, not all of which support or are in the interests of teachers and learners[[5]](#footnote-5).

A specific example is the reaction of Ministers of Education and other system “actors” to the publication of the OECD Program of International Student Assessment (PISA) results every two years. The OECD ranks countries by their performance on “snapshot” measures of students on tests of science, mathematics and literacy (and this year the additional measure of “global competence”). The position on the global league table[[6]](#footnote-6) [can lead to bizarre public policy decisions](https://ora.ox.ac.uk/objects/uuid:26c9fccd-ae47-424e-ba40-0c84ebedfc3e/download_file?file_format=pdf&safe_filename=Policy%2Beffects%2Bof%2BPISA.pdf&type_of_work=Report), but positions the OECD as a new arbiter and new form of global governance[[7]](#footnote-7) – as can be seen in their most recent statements about the future of education ([OECD Education 2030 – The Future We Want](https://www.oecd.org/education/2030-project/teaching-and-learning/learning/well-being/)).

In the global south, the worry about datafication is that algorithms developed in the global north will be “imported” and become a new form of colonialism. This is a major theme of the book [Algorithms of Oppression](https://nyupress.org/9781479837243/algorithms-of-oppression/), which looks at the way algorithms now in use in Africa discriminate against black women and the poor.

**Suggested Reading**

1. Thoutenhoofd, E.D. (2018) The Datafication of Learning – Data Technologies as a Reflection Issue in the System of Education. *Studies in Philosophy and Education*, Volume 37(5), pages 433-449. Available at <https://link.springer.com/article/10.1007/s11217-017-9584-1>
2. Buckingham, D. (2017) Learning in the Matrix: The Datafication of Education. Available at <https://davidbuckingham.net/2017/12/18/learning-in-the-matrix-the-datafication-of-education/>
3. **Learnification**

The quickest way to express what is at stake here is to say that the point of education is never that children or students learn, but that they learn **something,** that they learn this for particular **purposes**, and that they learn this from **someone**. The problem with the language of learning and with the wider ‘learnification’ of educational discourse is that it makes it far more difficult, if not impossible, to ask the crucial educational questions about content, purpose and relationships” (Gert Biesta, 2016[[8]](#footnote-8)).

This may seem an odd issue to raise. But is very substantial. By reducing learning to components or learning objects and using technology to provide these learning objects to students, students can learn content, knowledge and develop skills independently of both context and a teacher. The social and interactive nature of education is replaced by an ambiguous construct called “personalized learning” – meaning a learning system that responds to tests taken by the learner and re-arranges the sequence of learning activities until the learner scores a specific score on a test of competence.

Some organizations are dedicated to achieving just this. In China, a company like [*Squirrel*](http://squirrelai.com/) uses AI and chatbot tutors to teach across the school curriculum and is amongst the fastest growing companies in China. It currently has 2,000 learning centres in 200 cities and registered over a million students – about the same size as the school system in New York City. It plans to expand to 2,000 more centres domestically within a year and then to operate globally. The company has a current valuation of $1 billion. A variety of similar systems are emerging in North America. A course in mathematics is broken down into up to 1,000 “components”. Students master each component, are assessed and then move on to the next component. Meaning, purpose, context and relationships are non-existing in this student:machine:test interface.

Part of the challenge here is language. “Personalizing learning” is evocative and compelling – who would not want learning to be focused on the needs, talents and abilities of each person, but that is not what this term is now taken to mean. Too often ‘personalization’ has been equated with slicing and dicing learning into discrete digital packets, driven by a desire by growing commercial interests to commodify learning and assessment. Ultimately the teachers’ role is marginalized.

Teachers are the core to learning, whether in school, college or university. The attempt to marginalize their role, to regulate and control ~~them~~ their individual practice and the profession collectively is counter-productive.

**Suggested reading:**

1. Biesta, G. (2015) What is Education For? On Good Education, Teacher Judgment and Educational Professionalism. *European Journal of Education*, Volume 50(1), pages 75-87. Available at <https://set.et-foundation.co.uk/media/2045578/reading-11-gert-biesta.pdf>
2. Biesta, G. (2012) Giving Teaching Back to Education – Responding to the Disappearance of the Teacher. Phenomenology and Practice, Volume 6, pages 35-49. Available at <https://journals.library.ualberta.ca/pandpr/index.php/pandpr/article/download/19860/15386>
3. **The Policing of Performance: New Public Management**

There is nothing wrong with the public asking for evidence of performance and value added: they are making significant investments in education. The question is: “given the ambiguities and uncertainties surrounding our shared futures globally, how might the public assume responsibility for supporting public education?”

The current dominant view is in part answered by the observations above about datafication. But the deeper answer relates to the emergence of new public management (NPM) as the basis for the work of the public service. Developed as a result of the third way movement, spawned by Anthony Giddens (now Lord Giddens)[[9]](#footnote-9) and Sir Anthony Barber’s “deliverology”[[10]](#footnote-10). Their work built strongly on previous work in the US by David Osborne and Ted Gaebler[[11]](#footnote-11).

NPM has these key features:

* The use of private sector management practices (predominantly accounting practices, but also project management) in public service.
* The redefinition of students as “customers” and parents and teachers as “stakeholders”.
* Shifting away from policy frameworks towards direct and interventionist management.
* Strengthening the power of central units to steer the system.
* Ensuring performance through control, accountability and inspection.
* Optimizing information technology and the use of data.
* Strengthening regulatory control – e.g. introduction of teaching standards, leadership standards, etc.
* Developing competition and choice through enabling private and public services to co-exist and compete, especially in health, education and prison services.
* Less focus on process management and more focus on outcomes and results.
* Elimination of waste, duplication and “red tape” so as to secure “efficiencies”.

The result has been the demoralization of teachers and the de-professionalization of the teaching profession, no real improvement in performance and a faster growth of management versus teaching positions. At Canadian universities, academic rank salaries as a percentage of total expenditures have steadily declined from 34% in 1973 to 23% in 2016 (CAUBO 2018:22) - spending on administration and general funds increased by 228% during the same period. The predominant staff for teaching at universities in North America are “gig” workers rather than tenured or tenure track teaching staff. The academy is under siege in many respects as neoliberal and accountability-driven culture encloses the parameters of what constitutes academic excellence and research and evidence informed policy making.[[12]](#footnote-12)

Students are economic units and schools, colleges and universities are cost centres which need to demonstrate the value they add to learning[[13]](#footnote-13). Some systems now calculate value added per teacher to learning on a periodic basis[[14]](#footnote-14), reporting the results to parents (e.g. in Los Angeles[[15]](#footnote-15)). Others use proxies – how quickly someone who finishes school or higher education secures a job, income within three years etc. – for looking at the economic benefit of an “investment” in education. Many systems are developing other performance indicators and undertaking site reviews and systematic and rigorous performance reviews and setting performance targets. So much so, in fact, that many teachers (especially in the UK[[16]](#footnote-16) and Ontario[[17]](#footnote-17)) feel bullied and bruised.

Drawing on workplace research from nursing, a ground-breaking study on “moral distress” amongst 180 teachers illustrated the intersection of work intensification and inadequate supports for students with special needs.[[18]](#footnote-18) One of the key findings of the study was the growing gap teachers perceived between the policy pronouncements supporting equity of governments and organizations such as the OECD, while learning conditions and supports for students continue to decline.

This preoccupation with performance, metrics, costs and efficiency is also creating what is known as moral distress for teachers and school-based leaders: they know just what is needed in relation to a student’s needs, but feel unable or seriously constrained by costs, optics or politics. Numerous studies over recent years have documented the unsustainable expectations and role confusion experienced by school principals.[[19]](#footnote-19) [[20]](#footnote-20)

**Suggested Reading:**

1. Tolofari, S. (2005) New Public Management and Education. *Policy Futures in Education*, Volume 3(1), pages 75-89. Available [here](https://www.researchgate.net/profile/Sowaribi_Tolofari/publication/250151957_New_Public_Management_and_Education/links/575ec70b08aec91374b4044c/New-Public-Management-and-Education.pdf?_sg%5B0%5D=syxTzBkr7DcUJeBVibi1IG-aCUEQ8l9FYH0bmH0BnooSOVL2LEtIus3FAPTq5UtANAmCWza-Te2oLgM_mdRDHA.DkGFCAkb7wZyNjTsT1TNGiVXB2-LNStrPZo1B2NdlvYuLBhnfztybvxZzL2KvZK5r8_w3WR9EOuBjvF1VO_AaQ&_sg%5B1%5D=dvhlsiKJ2bLhKNHZmvSwiS8PUZeN9CzqYqxGE4ohnKYDUmuPkadxwfs3hTC8kwsnQhS4XpkvBPy-4CHFIg2YsWzwQ4PZms5SeEpTPg7Xex11.DkGFCAkb7wZyNjTsT1TNGiVXB2-LNStrPZo1B2NdlvYuLBhnfztybvxZzL2KvZK5r8_w3WR9EOuBjvF1VO_AaQ&_iepl=).

2. Lorenz, C. (2002) If You're So Smart, Why Are You under Surveillance? Universities, Neoliberalism, and New Public Management. *Critical Inquiry*, Volume 38(3), pages 599-629. Available at https://research.vu.nl/ws/portalfiles/portal/3147794

1. **Education, Inequality and Skills**

One hope for public education was that it would give rise to a new meritocracy – and enable social mobility through learning.

Epidemiologists Richard G. Wilkinson and Kate Pickett synthesized global education data from the OECD, UNICEF, the World Health Organization and the World Bank. They found that for children aged 15 years and younger, mathematics achievement scores are [inversely correlated](https://www.bmj.com/content/335/7629/1080) to economic inequality: as inequality increases, test scores decline. Scholars have studied this phenomenon since [at least the 1960s](https://books.google.ca/books?hl=en&lr=&id=gwfcAgAAQBAJ&oi=fnd&pg=PR9&ots=JjcB_V0vF4&sig=1pEtxo8AZp1rkDsgnreBRR4NMMM#v=onepage&q&f=false). Not surprisingly, [economic inequality within a population is a significant indicator of student performance](https://www.oecd-ilibrary.org/docserver/9789264102873-en.pdf?expires=1554927840&id=id&accname=guest&checksum=DA94E5E0027B254CE204688EC595BED8). The performance gap related to inequality [widens in adolescence](http://files-eu.clickdimensions.com/ei-ieorg-a4ucu/files/oecd2018equityineducation-embargoedcopy.pdf?1539877267533&_cldee=aGVsZW5hLnNjaHVsekBlaS1pZS5vcmc%3D&recipientid=contact-cd8fdaf713b0e3118e4d005056ad0002-7ecf26c888e24500b2d9ecda6e8fc31f&esid=d6ac42ea-15df-4e5d-ad99-b2a835d93d34), and Canadian performance deterioration has occurred in the context of [increasing socioeconomic inequality](https://www.oecd-ilibrary.org/docserver/9789264266490-10-en.pdf?expires=1554930139&id=id&accname=guest&checksum=CC4ED450B62FEFB9791C4DC6B4E262A0). The same is true in all economies, as [the World Bank report of 2018](https://www.worldbank.org/en/publication/wdr2018) documents. Rather than reduce inequality, educational systems (especially those with significant private components), act as accelerants. As David Berliner (2009)[[21]](#footnote-21) notes a decade ago, teachers cannot counter the effects of poverty, hunger, chronic health challenges and growing economic inequality. When looking at PISA data, for example, we can see the direct impact of poverty on learning – poor students scored 100 points less than the students of wealthy parents in the 2012 PISA sample from the US (a score of 425 *versus* 528)[[22]](#footnote-22).

An important UK study makes this point powerfully. Using a range of data collected between 158 to the late 1990’s, Machin and Vignoles (2004)[[23]](#footnote-23) look at the nature of inequality in the UK and the impact of education on it. This is their own summary of their own findings:

* The link between parental income and educational achievement strengthened during this period.
* The link between parental social class and educational achievement also strengthened over this time.
* A person’s early ability (as measured by test scores) became a poorer predictor of how well they do at the end of their education.
* The rapid expansion of the higher education system disproportionally benefited children from richer families.
* The labour market success or failure of individuals became more closely connected to their parent’s income than was the case in the past, revealing a fall in intergenerational mobility.
* Cognitive ability, as opposed to education, became marginally more important in the labour market. However, parental income and social class became increasingly important determinants of this ability, thereby strengthening the role of family backgrounds in determining both educational and labour market outcomes.

Even Massive Open Online Courses (MOOCs) in higher education are more often taken by those with strong prior educational performance rather than the unemployed, poor or job-change seekers. Free, open and accessible is still not making inroads into inequality.

**Suggested Reading:**

1. Berliner, D. (2009) Are Teachers Responsible for the Low Achievement by Poor Students? *Kapp Delta Pi,* Fall. Available at <https://pdfs.semanticscholar.org/cf2d/ee9e263b143ad4edf22800453d1293ec6e38.pdf>
2. UNESCO World Inequality Database on Education – at <https://www.education-inequalities.org>

**Assumptions**

The [OECD Education 2030 agenda](https://www.oecd.org/education/2030-project/) and the related “[learning compass](https://www.oecd.org/education/2030-project/teaching-and-learning/learning/all-concept-notes/)” will reshape educational policy and practice world-wide, as the OECD seeks to define both what education should focus on and then measure whether it is achieving what the OECD matters most. This is, according to the OECD, the “future we want” – though how the “we” might be and who determined what we “want” are important questions being raised by both teachers and the international research community. For example, the OECD’s “uses of the future” to redesign PISA 2021 while developing a global curriculum framework raises important questions about the trajectory of global education policy-making and the diminishing role of local communities and civil society in shaping the purposes of public education.[[24]](#footnote-24) By measuring both soft skills (global competencies) and hard skills (proficiency in science, mathematics and literacy), they essentially seek to shape the policies of the 170 countries they intend to sign up for PISA by 2030. Given that they are also focused on adult skills and competencies (via the Program for the International Assessment of Adult Competencies – PIAAC), the OECD is becoming a global governance organization (Evans, 2019)[[25]](#footnote-25).

Meantime, the role of the teacher as a professional is under significant threat. Whether this is from the rapid advances of technologies ([the AI can transform learning narrative](https://www.brookings.edu/research/why-we-need-to-rethink-education-in-the-artificial-intelligence-age/)), new public management or from privatization and the work of organization like [Bridge Academies](https://www.theguardian.com/global-development/2017/aug/03/uk-urged-to-stop-funding-ineffective-and-unsustainable-bridge-academies) or [ARK Schools](https://www.localschoolsnetwork.org.uk/2017/08/ark-flips-the-script-accountability-privatisation-and-ed-tech) the latter of which uses highly scripted lessons which removes the need for a certified teacher. What is at stake is the gradual loss of a shared understanding of the purpose of school and the abduction of purpose by bodies which are not accountable for their actions.

Thus, the underlying challenge is to shift the conception of education as the development of “work ready” human capital and to return to broader conceptions of the purpose of education which gives greater emphasis to the development of the whole person, communities and society. Schools should enable the work of learning in relation to the four Delors pillars (developed by the Delors Commission for UNESCO in 1966) for education:

* **Learning to Be** – the all-round development of the whole person, to fulfill his/her highest potential in all the richness of their personality, the complexity of their forms of expression, and to be able to think, decide and act independently – the source of creativity, innovation and entrepreneurship.
* **Learning to Know** involves the development of knowledge and skills that are needed to function in the world. The skills include literacy, numeracy and critical thinking.
* **Learning to live together** in peace and harmony is a dynamic, holistic and lifelong process through which (the shared values) are internalized and practised. Learning to Live together. The process begins with the development of inner peace in the minds and hearts of individuals engaged in the search for truth, knowledge and understanding
* **Learning to Do** - putting knowledge and learning into practice innovatively through skill development and, practical know-how, the development of competence, Life skills, personal qualities, aptitudes and attitudes.

In focusing on this work, we should not lose sight of the importance of the collective impact of this work – we need to recognize that schools shape culture and community and that, in many ways, the collective is as important as the work of all in enabling individual learning and development. This work is more than a mere aspiration – there are examples of students leading change through networks of schools committed to rekindling the purposes of ‘school’ and its place in an increasingly precarious world.[[26]](#footnote-26)

**Possible Actions**

In 2018 the Base Camp team suggested: *The work is to change the way we think, talk about, support and resource schools and those who function within them. The work is about building an agreed commitment to the purpose of public school (or higher education institutions).*

We noted that:

* Some would like to see curriculum change – more emphasis on creativity and the arts, more focus on resilience and personal growth, more focus on skills…
* Some would like to see a change in how we train, develop, support and sustain teachers
* Some would like to refocus the work of schools on achieving more tangible outcomes that matter – ensuring that all students leave school with at least Level 3 literacy[[27]](#footnote-27) (or better).
* Some would like to see greater differentiation of instruction so that equitable outcomes can be achieved
* Some want to return to “old” math and get rid of “new math” – some would like to stop any personal kind of education (sex education, resilience, parenting, etc.) being part of the work of school, instead they want a focus on skills and competences needed for work.
* Some want financial literacy and life-skills to be a larger part of the curriculum..
* Some want teachers to be more accountable for outcomes
* and there are more voices.

We cannot address what schools should do in particular (*processes*) and how they should do it (*tools*) without first securing an agreement on *purpose*. It was our view that the purpose of school is now a highly contested space and that we are in danger of losing “public education” as its purpose is being corrupted and abducted by corporate interests.

This is the real work:

If the work is to start a vigorous, robust conversation about the purpose of schools, who should we have the conversation with?

This is a key question if the intention is to mobilize, leverage and stimulate those who have real influence here. Our conclusion: there are three groups we need to mobilize: (a) the student voice[[28]](#footnote-28); (b) the power of parents as partners in education; and (c) teacher organizations around the world.

Our conclusion: student voices, parent partnership and unions are a route to shifting the context by which we understand the purpose of school.[[29]](#footnote-29)

Since the November 2018 event, table members have convened or participated in union / parent / researcher meetings in Canada, US, Australia, Chile, Brazil and Paraguay. A European meeting will be held in Manchester in November (11-13th) 2019. Some of the team developed a course on foresight for leadership in education which has been taught at the University of Alberta and will be taught elsewhere in the coming years – aimed at ensuring that leaders who work in schools and school systems (or colleges and universities) can develop a futures literacy and change their leadership habits to reinforce what matters most to them.

**Next Steps**

The 2019 Base Camp may arrive at different conclusions, but the 2018 Base Camp team will continue to work on the agenda above and would welcome new colleagues or new suggestions. The future is not a straight line from the past and we intend to shape that future through our actions.

1. See jagodzinski, j, (ed). 2017. *The Precarious Future of Education: Risk and Uncertainty in Ecology, Curriculum, Learning, and Technology*. New York:Palgrave Macmillan. [↑](#footnote-ref-1)
2. We note here especially the research on network governance undertaken by Greg Thompson, Queensland University of Technology, presented at the summit, *Advancing the influence and impact of educational research in the public interest 2019-2022*. March 25th to 26th 2019, Sydney, Australia. [↑](#footnote-ref-2)
3. Sellar, S. & Hogan, A. 2019. Pearson 2025 - Transforming teaching and privatising education data. Brussels: Education International. [↑](#footnote-ref-3)
4. Howard Stephenson. England Rushes Forward with Privatization Agenda – But Outcomes Far From Certain. 2019. Education International.

   20 https://www.unite4education.org/global-response/england-rushes-forward-with-school-privatisation-agenda-but-outcomes-far-from-certain/ [↑](#footnote-ref-4)
5. Ratner et al. (2019) Configuring the Teacher as Data-User: Public:Private Sector Mediations of National Test Data*. Learning, Media and Technology*, Volume 44(1), pages 22-35. [↑](#footnote-ref-5)
6. Sellar, S., Thompson, G. and Rutkowski, D. (2017) *The Global Education Race - Taking the Measure of PISA and International Testing.* Edmonton: Brush Education. [↑](#footnote-ref-6)
7. Sam Sellar and Bob Lingard (2013) The OECD and the Expansion of PISA – New Global Models of Governance in Education. *British Education Research Journal*, Volume 40(6), pages 917-936. [↑](#footnote-ref-7)
8. Biesta, G. (2016) Giving teaching back to education: Responding to the disappearance of the teacher”. *Phenomenology & Practice*, *6*(2), 35–49. [↑](#footnote-ref-8)
9. Giddens, A. (1999) *The Third Way – The Renewal of Social Democracy*. London: Polity. [↑](#footnote-ref-9)
10. Barber, M., Rodriguez, N.C and Artis, E. (2015) *Deliverology in Practice – How Education Leaders are Improving Student Outcome*s. San Francisco: Corwin. [↑](#footnote-ref-10)
11. Osborne, D. and Gaebler, T. (1992) *Reinventing Government \_ How the Entrepreneurial Spirit is Transforming the Public Sector.* New York: Addison-Wesley. [↑](#footnote-ref-11)
12. For a comprehensive review of this growing condition see Spooner, M., & McNinch, J. (Eds.) 2018. *Dissident Knowledge in Higher Education*. Regina: University of Regina Press. [↑](#footnote-ref-12)
13. See Kinsler, J. (2012) Beyond Levels and Growth – Estimating Teacher Value-Added and its Persistence. *Journal of Human Resources*, Volume 47(3), pages 722-753. [↑](#footnote-ref-13)
14. See <http://hanushek.stanford.edu/sites/default/files/publications/Hanushek%202013%20Focus%2029%282%29.pdf> [↑](#footnote-ref-14)
15. See <http://projects.latimes.com/value-added/faq/#what_is_value_added> [↑](#footnote-ref-15)
16. See <https://www.tes.com/news/bullying-teachers-endemic-my-school?fbclid=IwAR1lqcrz7YYINQeBWjK2RWaqs5YxIuyLzhDc17DxrqUtIRkbcX94y5BIEPQ> [↑](#footnote-ref-16)
17. See <https://www.theglobeandmail.com/news/national/half-of-ontario-teachers-are-bullied-study-says/article18253159/> [↑](#footnote-ref-17)
18. Servage, L. and Couture, J-C. Moral Distress in the Teaching Profession. Symposium-Panel “Conceptualizing Teachers' Mental Health”. *Canadian Society for Studies in Education*. June 2, 2019. [↑](#footnote-ref-18)
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