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## **‘Nobody is Watching but Everything I do is Measured’: Teacher Accountability, Learner Agency and the Crisis Of Control.**

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*Abstract: It is widely acknowledged that there is systemic pressure on teachers to enact assessment practices that raise student achievement. In this article assessment related discourses that influence teacher and student classroom practices are examined in relation to initial teacher education. In Australia, preservice teachers (PSTs) are required to demonstrate assessment capability, promote student agency and monitor their practice impact on student learning whilst working in schooling ecologies that are marked by high stakes accountability measures. Processes that bridge university and in-school PST teacher preparation are an important consideration in developing assessment capability. It is argued that there are tensions in the current policy environment associated with distributed classroom power relations that are emblematic of student agency in practice. The socially constituted nature of ecological agency that underpins generative assessment for learning practices is an important consideration for judgement about initial teacher assessment capability and associated graduate impact on student learning.*

**Key Words:** Student agency, teacher accountability, initial teacher education, assessment capability

### **Introduction**

Student agency and teacher accountability are salient assessment discourses in the current Education milieu. These discourses are aligned with the current impetus to ensure that both practitioners and graduates demonstrate assessment capability (AITSL, 2015). Responding to Booth, Hill and Dixon’s (2014) question, ‘What are the powerful influences on teacher and student adoption of practices leading to assessment capability?’ (p. 153), we address a lacuna in the corpus of assessment literature. In particular, we consider tensions inherent in the drive for both teacher accountability and the promotion of school student agency in initial teacher education (ITE). More broadly, this article seeks to further contribute to existing literature that critiques the hegemony of neoliberal schooling and ITE practices (Ball, 2015; Lingard, Martino, & Rezai-Rashti, 2013; Sellar, 2014). In so doing, it builds upon existing scholarship that has challenged the politics of assessment discourses (Thompson & Cook, 2014; Thompson & Mockler, 2016; Tuinamuana, 2011) and frames emerging conceptualisations of agency in ecological terms (Biesta, Priestley, & Robinson, 2017; Charteris & Smardon, 2017).

The first discourse, teacher accountability, has emerged from the macro politics of global assessment policies and the associated rise of national testing regimes (Lingard, Martino, & Rezai-Rashti, 2013). It has been argued, that through policy borrowing and associated dissemination (Lingard, 2010), the ‘global eye’ influences the ‘national eye’ (Novoa & Yariv-Mashal, 2003, p. 425). Lingard, Martino and Rezai-Rashti (2013) make the observation that policy makers exert influence over student, teacher, and school performance from a distance, by guiding schooling data collection, processing, and dissemination, and apportioning particular sanctions to organisations. The second discourse, student agency, has been of growing interest in recent years across Organisation for Economic Development (OECD) countries and is associated with a strong drive to inculcate responsibility in students for their own learning (Istance, 2015). In ecological terms, learner agency is a temporal process of social engagement that forges links with past experience, is oriented to future action, and is enacted in the decision making moment of the present (Biesta, Priestley, & Robinson, 2015).

Schooling ecologies are influenced by these two powerful, sometimes competing, discourses. As Bourke and Loveridge (2014) highlight, the aim to ‘influence system-wide educational achievement from outside educational settings, sometimes sits in uneasy tension with the equally laudable desire to promote greater learner agency and autonomy within educational settings’ (p. 126). When teacher accountability and learner co-regulation are simultaneously lauded (Heritage, 2016), there can be what we term a ‘crisis of control’. Practitioners are both in control of the learning process to meet external requirements, and encouraged to ultimately share responsibility for student learning through the promotion of learner agency.

Literature on the global assessment policy environment, the assessment for learning (AfL) agenda, and associated discourses of teacher accountability and student agency are presented as a theoretical framework for interrogating the role of ITE in preparing PSTs to negotiate assessment identity work in schooling contexts. In the following problematisation, we argue for pedagogic practices that foster learner agency in the classroom. Attention is drawn to the tensions that may exist for pre-service teachers as they develop assessment identities at the nexus of these two discourses, in situated schooling ecologies. Furthermore, we generate a definition of impact that holds these tensions in play.

## **Global Assessment Policy Environment**

In recent years, managerial professionalism (Day & Sachs, 2004) has resulted in the overhaul of Education systems in the USA, UK, Aoteroa/New Zealand and Australia. Key features of managerial professionalism include drivers for organisational change, regimes of accountability, and the increased emphasis on greater economic efficiency (Ryan & Bourke, 2013). Assessment practices serve as a ‘technology of control’ (Thompson & Cook, 2014, p. 133) that enable institutional and systemic surveillance, and are aligned with regimes of accountability. An influential political trend in ITE, teacher quality and accountability has received ‘unprecedented attention...with a heavy emphasis on policies related to entry pathways, certification, testing, and assessment’ (Cochran-Smith & Villegas, 2015, p. 13).

The global drive for improvement can be seen in the ‘practices of measurement and comparison through which performance data are generated and used for accountability purposes’ (Sellar, 2014, p. 2). The Organisation for Economic Co-operation and Development’s (OECD) international testing regime includes measures for national comparisons (See Programme for International Student Assessment (PISA), International Association for the Evaluation of Educational Achievement’s (IEA’s), Trends in International

Maths and Science Study (TIMSS), Progress in International Reading and Literacy Study (PIRLS)). As a metapolicy these international testing measures have an ongoing impact on global education. They drive 'educational systems in particular directions with great effects in schools and on teacher practices, on curricula, as well as upon student learning and experiences of school' (Lingard, Martino, & Rezai-Rashti, 2013, p. 540).

Systems competitively compare student test results in the interests of leveraging productivity. Like Lingard, Martino and Rezai-Rashti (2013), Smith (2016) notes the effect of this regime and the effects of these tests when translated into education contexts, deploying the term 'PISA Shock'. She describes the 'blame game' that is played out across education systems where 'shortly after the 'PISA shock', a new teacher education reform is likely to follow (p. 405).

The drive to intensify assessment practice associated with 'PISA shock' can be related to financial crises. Peters, Besley and Paraskeva (2016) note that the economic crisis has resulted in a popularised debate on 'budget cuts and austerity politics across the board for public services provided at the state level with massive cuts to education in all aspects' (p. 15). There are links between pedagogic practice and the ongoing drive to enhance the productivity of human capital through the promotion of the figure of 'homo economicus' (Lingard, 2015). 'Homo economicus' is integral to neoliberal ideology, where 'individuals are bereft of any social construction, but are simply rational-utility maximizers, pursuing their own self-interest' (Lingard, 2015, p. 182). This positioning, where teachers are seen to operate in their own self-interest and need to be evaluated to ensure both they deliver results and target ongoing improvement, results in the 'monitoring' and 'measuring' discourse of teacher accountability. We will return to this discourse, first outlining critical literature on AfL, assessment capability, and student agency.

### **Assessment for Learning and Assessment Capability**

The promise of raising student achievement has led to a 'research epidemic' (Steiner-Khamsi, 2004, p. 2) into AfL which has permeated a range of disciplines and professional fields over the last two decades (Stobart & Hopfenbeck, 2014). Assessment for Learning is the 'everyday practice by students, teachers and peers that seeks, reflects upon and responds to information from dialogue, demonstration and observation in ways that enhance ongoing learning' (Klenowski, 2009, p. 264). It involves the use of assessment data by education leaders, teachers and learners, primarily for formative purposes. This description is deliberately broad to ensure that the approach is deployed richly and formulaic and rigid practices are avoided. Inflexibility diminishes the spirit of the endeavour (Marshall & Drummond, 2006) and reduces the potential for learner agency. Klenowski (2009) writes

*All AfL practices carried out by teachers (such as giving feedback, clarifying criteria, rich questioning) can eventually be 'given away' to students so that they take on these practices to help themselves, and one another, become autonomous learners. This should be a prime objective (p. 264)*

There has been a growing emphasis on AfL in higher education (Carless, Bridges, Chan, & Glofcheski, 2016) and ITE (Booth, Hill, & Dixon, 2014; Craven et al., 2014). Although it is almost twenty years since Black and Wiliam (1998) published their seminal work claiming that practices of AfL were 'not well understood by teachers' and were 'weak in practice' (p. 20), there are arguments to suggest that this is still a valid claim (Dann, 2014). There is a need for PSTs to be equipped both in AfL theory and practice.

The field of AfL has moved to incorporate the notion of capability, which sees assessment capable teachers as those who understand the ways students can use assessment to

improve their own learning, and ‘support them to become motivated, effective, self-regulating learners’ (Absolum, Flockton, Hattie, Hipkins & Reid, 2009; Smith, Hill, Cowie, & Gilmore, 2014). Flockton (2012) highlights the importance of assessment capability and its place in the current milieu.

*In placing students at the centre of assessment practice, the advice is consistent with the best of current thinking, including the ideas behind “assessment for learning”, the use of assessment feedback to enhance teaching and learning and professional learning designed to assist teachers to enhance their students’ assessment capabilities. (p.129)*

The development of PST assessment capability is more than an academic exercise of learning principles of AfL. Grainger and Adie (2014) point out that ‘to graduate competent and work-ready assessors’, PSTs require ongoing ‘opportunities to learn the *nature* and *purpose* of essential assessment practices related to marking, grading, moderating and providing feedback’ (p. 89, [emphasis added]). Assessment in ITE should not be atheoretical. Dann (2014) cautions that with no ‘clearly articulated theoretical stance,’ AfL will ‘become the victim of whatever dominant discourse might hijack the terminology’ (p. 151).

Assessment for Learning, with its promise of raised student achievement, has long been consigned an integral role in schooling improvement (Lodge, 2005; Timperley, 2014) and therefore sits within a number of competing discourses in Educational assessment. Of interest here are discourses that leverage teacher (Connell, 2009), school leader and system (Perry & McWilliam, 2009) in an ‘audit culture’ (Keddie, 2016) of responsabilisation – accountability and agency.

## **Discourse of Student Agency**

The role of the student has become increasingly prominent in assessment related research over the last three decades (Sadler, 2010; Hill, Smith, Cowie, Gilmore, & Gunn, 2013). The discursive shift from formative assessment to AfL emphasises the purpose for assessment (Carless, 2017) and, in particular, the ‘deep involvement of the learner in the assessment process’ (Davies, Busick, Herbst, & Sherman, 2014, p. 568). Integral to AfL is the agentic position of learners in classroom relations. Hill et al (2013) argue that children should be supported so that they can ‘assume control of their own learning’ and to do so they ‘need to develop the capability to assess their own learning and progress’ (p. 2). The conception of self-regulating, self-determining, sovereign individuals who are free to make choices (among other shared characteristics) and can ‘have’ agency as an integral quality is aligned with marketisation (Keddie, 2016) and neoliberal responsabilisation (Miller, 2016). Power as a gift of agency that can be given to students is well critiqued in student participation literature (Mayes et al., 2017).

Where student participation involves a holistic pedagogy, students are invited to contribute opinions and ideas for personal growth, increased motivation, and self-confidence. It is immersed in empowering, open and positive teacher–student (Smit, 2013) and student–student relationships (Harris & Brown, 2013). Student-centred learning has become a normative concept in education, with the term used often in policy in relation to ‘best practice’ in classrooms. It has not, however, necessarily been critically examined for positioning in the politics of Education. Student-centred practices can involve tailoring personalised programs but may not foster student participation and agency. Although agency as a discourse is widely interpreted and enacted in different ways (Charteris & Smardon, 2017), we use it here in its ecological sense.

Agency is therefore understood to refer to the capacity to take action and, in ecological terms, is produced temporally and relationally. It ‘occurs over time and is about the relations between actors and the environments in and through which they act’ (Biesta, Priestley, & Robinson, 2017, p. 40). Booth, Hill and Dixon (2014) posit that the ‘realisation of the assessment capable student will require norms of behaviour which encourage student autonomy and enable student agency during learning’ (p. 140). Student agency that requires ‘deep involvement’ is central to AfL practices, and the related identities that are afforded teachers and students within this discourse.

As reflected in Klenowski’s (2009) position on ‘giving away’ AfL practices to students, the assessment capable teacher, in turn, develops students’ assessment capabilities. Students are supported in their evaluative expertise (Sadler, 1989), agentially positioned in their own learning in ways that are mediated by the ecologies of the classroom. Mockler and Groundwater-Smith (2015) suggest that ‘democratic’ education in which student agency is exercised occurs in those schools where the ‘dynamic of power’ is made explicit and reflects well-defined and acknowledged roles (p. 35). Moreover, if we view that knowledge is not a ‘portable self-contained thing that may be transmitted by technically controlled conduits, but is socially constructed and located in socio-historical space’ (Groundwater-Smith & Mockler, 2009, p. 48), then assessment power relations and the relational positioning of students are important classroom considerations.

### **Discourse of Teacher Accountability**

Preservice teachers enter a profession where in recent years there have been moves to promote accountability with a strengthened link between legislated ‘quality teaching’ and competitive student outcomes. Both ‘tracking of data’ and ‘keeping the data on-track’ has resulted in teachers being literally ‘captured *through* data’ (Thompson & Cook, 2014, [original emphasis]). In this discourse, schools, leaders and teachers ‘must be seen to perform, and to perform in ways that are measurable and thus are rendered visible to all’ (Perry & McWilliam, 2007, p. 30). Teacher accountability discourse has its roots in managerial discourses associated with New Public Management (NPM) approaches to education. A term coined over 20 years ago (Hood 1991), NPM is a well-recognised characteristic of public management across the world (Hall, Gunter, & Bragg, 2013). Supported by influential international agencies such as the Organization for Economic Co-operation and Development (OECD) and the World Bank, features of NPM include an emphasis on markets, competition, private sector approaches to management, entrepreneurial leadership, an explicit drive to exact standards, and incorporate associated measures of performance (Hall, Gunter, & Bragg, 2013). NPM informs the regimes of teacher standards and associated mechanism of practitioner accountability as currently executed in much of the western world (Mockler, 2013a).

Termed the ‘age of compliance’ (Groundwater-Smith & Mockler, 2009) managerialism of this sort has been influential, with accountability and the requirement to furnish ‘evidence’ of quality seen as an integral element of teacher professionalism (Tuinamuana, 2011). Mausethagen and Mølsted (2015) observe that commissioned international research portrays a linear interpretation of changes in teachers’ work and professionalism. They observe that pressure for accountability ‘reduces teacher autonomy and typically leads to more standardisation and micromanagement of teaching... [E]mpirically, such tensions between autonomy and accountability are more likely to co-exist and be negotiated within the local context’ (Mausethagen & Mølsted, 2015, p. 31).

Enactments in schools are therefore context related and it is important that practitioners are aware of the machinations of this discourse.

Through ‘technologies of measurement and comparison’ teachers are held accountable for their work in order to ensure that they positively influence learning and the learner (Singh, 2015, p. 364). In short, teachers’ work is governed by numbers (Ozga, 2008). According to Ball (2015), ‘numbers bite deep into practice, into subjectivity and... do the work of governing us better’ (p. 300). Numbers are integral to the constitution of the modern school in the form of tests and examination – a technology of classification, division and exclusion (Ball 2015, p. 299). In Australia, this can be seen in the wide-sweeping influence of the Naplan (The National Assessment Program – Literacy and Numeracy) test scores where data are published to profile school performance. This transparency is reported in the media to foster competition between schools. It is premised on a ‘belief that not all children and all schools can indeed succeed’ and, more perversely, there is ‘a kind of delighted interest in who are the current winners and losers’ (Mockler, 2013b, p.13).

Communities use published information to make judgements about the ‘quality’ of schools in the Education marketplace (See My School, 2017). Rankings where education systems and schools are pitted against one another are facilitated through these ‘codes and grids of visibility’ (Lingard, Martino, & Rezai-Rashti, 2013, p. 542) like NAPLAN and MySchool. ‘Codes and grids’ both include the evidence generated from testing regimes (e.g. PISA, TIMSS and PIRLS) and utilitarian use of student voice that does not necessarily directly improve the lot of the voicing students themselves (Mitra & Serriere, 2012).

In classroom pedagogy the discourse of accountability translates into a ‘structurally deterministic’ approach where individuals are monitored and measured to make them competitive and productive contributors to their country’s economy (Lingard, 2015, p. 182). ‘Governing knowledge, produced and analysed by government agencies, mobilised by actors taking that knowledge and “drilling down” ... to the individual school, classroom and pupil – provides a resource through which surveillance can be exercised’ (Ozga, 2008, p. 264). Not only is the panoptical gaze activated, ‘someone could be watching, so I better watch myself’, but there is audit through distance – ‘nobody is watching me but everything I do is being taken into account’ (Thompson & Mockler, 2016, p. 2).

From the outset of their enrolment PSTs are inculcated into accountability discourses, with teacher professional standards ‘being entrenched and institutionalised through policy design and accountability processes’ (Tuinamuna, p. 72). In Australia, this framing of teaching practice places a focus firmly on teachers’ positive impact on school student learning. The ‘Australian Professional Standards for Teachers’ at Graduate career stage require pre-service teachers to provide evidence of their impact on the students that they teach (AITSL, 2015).

The standards are couched in terms that imply that they enhance the profession (AITSL, 2015), yet they can work as a form of ‘cruel optimism’ (Berlant, 2011) in that they appear beneficial but actually work as a hegemonic policy move. Ryan and Bourke (2013) highlight that standards can be hegemonically welcomed among practitioners.

*Teachers may welcome this type of discourse, as they perceive it as an enhancement of status, without recognising that professional values are substituted by organisational values. Bureaucratic, hierarchical and managerial controls replace cultures of collaboration; there are competencies and licensing rather than trust. (Ryan & Bourke, 2013, p. 412)*

The discourse of teacher accountability, sold to teachers under the guise of enhanced professionalism (‘competencies and licensing’), emerges from global assessment discourses. It permeates schools and classrooms and governs the day-to-day practices of teachers and students. In recent years, links have been made between assessment practices and student

agency, with a paradox that students can appear to be agentic in that they are compliant, undertaking personalised programmes, yet they are highly dependent on teacher direction (Charteris & Thomas, 2016).

Having explored the impact of global assessment policy on schooling contexts, moves to support and promote assessment capability across the sector, and associated discourses of teacher accountability and student agency, we now turn to discuss implications of these competing tensions for ITE.

### **Context of ITE Practice – A Crisis of Control**

Initial teacher education is framed by an education policy context that positions PSTs and graduates as problems to be ‘solved’ through mechanisms such as the Australian Professional Standards for Teachers (AITSL, 2014), the introduction of literacy and numeracy testing of PSTs and increasing oversight of ITE curriculum (Mockler, 2017). Accountability is multi-layered in ITE. While PSTs/graduates are accountable for the learning of their students, they are themselves operating in an environment of accountability. Similarly, the Australian ITE institutions in which they study are responsible and accountable for preparing classroom ready graduates (Craven et al., 2014). As discussed earlier, assessment capability is positioned as a key skill for graduates, who are required to prove their impact on student learning in order to meet the Graduate career stage level of the Australian Professional Standards for Teachers (AITSL, 2014). In this climate, it is necessary for ITE courses to be designed to support PSTs in recognising and navigating assessment discourses in the range of performance contexts (school practicums and university assessment).

The tensions between the intensified accountability of teachers and the expectation that they foster student agency is essential to achievement and success. This provides challenges for pre-service teachers who may well see these as competing rather than complementary discourses. The ‘giving over’ of control to students in the classroom can also be problematic for PSTs, as a result of pre-existing notions of assessment from their own experiences. Looney, Cumming, van Der Kleij, & Harris’s (2017, p. 3) observation that teachers’ ‘assessment beliefs [are] shaped by their past experiences of being assessed, rather than by anything they had been taught about assessment theories or the requirements of policy’, has significance for the diverse range of students now enrolling in higher education (Dargusch, Harris, Reid-Searl, & Taylor, 2017). Some PSTs’ assessment experiences are recent, but this may not be the case for those PSTs coming from non-traditional backgrounds (mature age and/or through the TAFE sector), whose assessment experience may not be very recent or may have occurred in a different assessment regime from the one in which they will be expected to teach. It is also significant that the PSTs’ own assessment experiences are ongoing, and that they themselves are, simultaneously, the assessors and the assessed.

The need for PSTs to negotiate issues around teacher and student agency takes place in an environment that prioritises the collection and analysis of students’ achievement data, with value also given to opportunities ‘for students to be brought into assessment practice as a shared enterprise’ through the analysis of such data to inform planning (Wyatt-Smith, Klenowski, & Colbert, 2014, p. 4). There is some initial empirical evidence available that ITE can change the beliefs of PSTs about assessment, bringing them to an understanding about the role of assessment in learning. A study across four New Zealand universities into the changes in PST’s assessment beliefs during candidature found a need for further consolidation (Smith et al., 2014). Recommendation was made for closer liaisons between schools, where practicums were undertaken, and universities in order for enhanced



alignments between PSTs' beliefs and praxis (Smith et al., 2014). Emphasis should therefore be given to the ways in which PSTs' assessment capability is developed in both the university and school environments (Hill et al, 2017).

### **Co-constituting Assessment Identities**

Initial teacher education practices are not just simply learned in one context and transferred unproblematically to another. Consideration of the practice ecologies that students experience, provides nuanced understandings of this process of PST professional learning. Practices function interdependently with other practices in 'ecologies of practices' (Kemmis, Edwards-Groves, Wilkinson, & Hardy, 2012, p. 33). A theoretical understanding of schooling ecologies, enables us to recognise that agency is located at the nexus of semantic, physical and social spaces (Edwards-Groves & Kemmis, 2016). Thus in schooling ecologies, agency is co-constituted in the 'sayings', 'doings' and 'relatings' (Kemmis, Wilkinson, Edwards-Groves, Hardy, Grootenboer, & Bristol, 2014, p. 30) of particular 'spatial-temporal' events (Schatzki, 2010, p 171).

The events in the past and the situated action projected in the future, are mediated in the sayings, doings and relatings of the present. Agency is situated, linked with identities that are produced within particular schooling ecologies. When considering the question of how PSTs can best be supported to become assessment capable, the work done in schools to form situated assessment identities must be foregrounded. University coursework provides students with strategies and approaches to assessment, feedback and reporting, but not with 'real-world' contexts (Hudson, Hudson, Weatherby-Fell, & Shipway, 2016, p. 145). Authentic, situated learning occurs in schools, and it is widely acknowledged that mentor teachers play a central role in PST transitions to the profession (Ambrosetti, 2014). Mentored students can take on the role of teacher under the guidance of an experienced other.

The extent to which mentor teachers' views and experiences about assessment influence PSTs is largely unexplored. This is significant, given the evidence that teachers' conceptions of assessment are not consistent or universal, and they change in relation to different assessment purposes (Brown, 2011; Brown, Lake, & Matters, 2011). In their analysis of existing scales of teacher identity related to assessment, Looney et al. (2017) concurred that teachers may have internally conflicting attitudes to assessment and their role in assessment. Moreover, while it is clear that policy from a range of contexts focuses on the development of student agency (Klenowski, 2009; Booth, Hill, & Dixon, 2014), it is less apparent that this is in evidence in classrooms (Dixon et al., 2011; Flockton, 2012). It is also unclear the degree to which PSTs are purposefully mentored to gain experience in classrooms pertaining to assessment capability (Hill, Ell, & Eyers, 2017). This introduces another level of complexity for PSTs whose understandings of assessment practices are strongly influenced by those of their mentor teachers; there is a reliance on the demonstrations of practice they see from mentor teachers in the day to day of their practicum classrooms. If, as discussed above, mentor teachers are not clear about their own assessment identities, PSTs may not be witnessing assessment capable demonstrations. Moreover, they may not have opportunities to develop the skills necessary to become assessment capable, and their own practices may be compromised.

## Key Messages for ITE

The rest of this article is given over to presenting key messages and considerations for ITE in relation to assessment capability and PSTs: the importance of recognising the impact of competing discourses in the current education milieu; the importance of defining impact in ways that assist students to be assessment capable; and, the need to equip students to navigate the complexity of the schooling ecologies in which they will find themselves. This is followed by a set of considerations for ITE.

### PSTs and the Confusion of Competing Discourses

When ITE institutions prepare students to be assessment capable, they are required to develop the skills and knowledge of assessment processes that bridge universities and schools. Within this interdiscursive space, there are competing assessment discourses. Powerful discourses influence teacher and student enactments of classroom assessment practices, and therefore recognition of the politics of assessment and the tensions of managing both demands for accountability and student agency with the associated complexity of classroom power relations is a challenge for teacher education. Navigating accountability and student agency discourses is elemental to PST assessment capability, with graduates and education providers required to monitor and profile the impact of PST practice on student learning (AITSL, 2015).

As a 'politics of distraction' (Smith, 2009), a focus on teacher accountability may mitigate against the development of PST and student assessment capability if it undermines practices of power sharing in classrooms. We are mindful of Perry and McWilliam's (2007) 'cautious argument' that emphasis on audit (discourse of teacher accountability) 'does not fulfil our intellectual and social responsibility to students; indeed, it may distract us from that very important and time-consuming work' (p. 33). PSTs can experience tensions associated with distributed classroom power relations when supervising teachers do not have a shared interest in student agency in the classroom and may not have awareness of, or interest in, the development of student assessment capability. As a result the existing classroom ecologies (sayings, doings, relating) may not support learner agency (PST or school student). This is particularly problematic in the context of final in-school placements, where it is understood that PSTs will move to take on the lead teaching role in the classroom, with associated responsibilities for acting as assessor in the classroom, and provide evidence of their work in this role.

The introduction of a performance assessment for final year PSTs in Australia as a requirement for graduation (AITSL, 2015), gives pause for reflection on how they should best be prepared to complete its requirements in the assessment culture we have described here. There are important considerations for how PSTs will enact this task in schools. It is a consideration that in some classroom ecologies a focus on the requirements of a performance assessment (AITSL, 2015) could undermine the richness of the relationality between teachers and students that supports co-regulation of learning (Heritage, 2016). An emphasis on gathering evidence (AITSL, 2015) could, under some circumstances, shift the emphasis away from working in the immediacy of classroom ecologies (Leahy, Lyon, Thompson, & Wiliam, 2005) to enable student assessment capability and agency, to capturing data to be used as evidence for accountability purposes.

The potential of a Teaching Performance Assessment lies in the opportunity that it provides for PSTs to demonstrate classroom readiness as evidenced in planning, teaching, assessing and reflecting (AITSL, 2015). It is important to consider whether the emphasis on

PSTs' assessment practices for credentialing undermines important moment by moment assessment practices, where teachers spontaneously make data informed decisions, responding to the immediate needs of their learners. Further, PSTs may be judged on performances that do not prioritise practices that support deep involvement in assessment practices. If 'what we measure matters' and 'what can be counted counts', will subtle AfL elements that are difficult to capture through conventional data gathering practices be marginalised in the push for PST quality and ITE accountability. The sayings, doings and relatings that afford student agency and assessment capability may not easily translate into a performance assessment (AITSL, 2015) that captures the richness of practice eg. student led dialogue, student use of achievement data to determine next steps in learning, or student input into curriculum and associated planning for learning. As the assessment nets designed by policy makers define what is caught, and what is valued becomes what is assessed (Eisner, 1985), this may result in less value placed on 'giving away' AfL practices to students (such as giving feedback, clarifying criteria and rich questioning) (Klenowski, 2009). Ironically, the requirement that PSTs provide evidence of their impact on student learning (AITSL, 2015) could result in reductionist practices.

### **Defining Impact**

Given the emphasis on measurement, marks and accountability in discourse about education, it is surprising that no definition or measurement of impact is widely used in research. As Mockler (2017, p. 13) notes, the 'question of "impact"... suggest(s) the opening of new discursive spaces and accountabilities and new opportunities for audit of teachers' work'. In light of the discursive tensions we have discussed in this article, we believe a new definition of impact should be considered. We define impact ecologically (Kemmis, Edwards-Groves, Wilkinson, & Hardy, 2012), taking consideration of the role of teacher judgement and learner agency. *Impact is the tangible and non-tangible enhancement of student learning that supports learner agency and is manifest through the sayings, doings and relatings of classroom practice.* Impact, when defined in this way, specifically targets teacher and student assessment capability fostered through the particular classroom ecology in which it occurs.

### **Navigating the Complexity of Schooling Ecologies**

We address the notion of schooling ecologies by first considering the way in which notions of accountability, measurement and impact have become embedded in the policy fabric of education in recent years. Mockler's (2017) examination of the marked differences in representations of early career teachers and their work in 1998 and 2015 policy documents showed the earlier policy had a 'greater tolerance for both ambiguity and variability' and 'a greater understanding of education as a complex, contextualised undertaking' (p. 10). While this article does not argue for a return to the past, it does bring the reader's attention to the need for bringing schooling ecologies to centre stage in this discussion of PST assessment capability.

As has already been discussed, the existing classroom ecologies in which PSTs find themselves (sayings, doings, relatings) may not support key assessment capable skills such as the recognition and fostering of learner agency. While it is understood that meeting the graduate career stage AITSL standards will allow ITE graduates to 'successfully make the transition to the profession' (Hudson et al., 2016, p. 135), we argue that they need to have the

skills to be assessment capable and to be able to apply this across contexts in different schooling ecologies. Processes that bridge university-based ITE and in-school PST teacher preparation are necessary in order to support PSTs to meet this goal.

It is important to provide PSTs with the critical frame for viewing teacher practice, and tools with which to reflect on their own practices in relation to understandings about assessment capable practices. In order to cultivate PSTs' assessment capabilities, we suggest that opportunities are made available during ITE for PSTs to examine their practices as existing at the nexus of competing discourses. In this way, they can learn to be discursively agile, critiquing their own position, the way in which the schooling ecology influences their positioning, and how to specifically support and foreground AfL in the support of student agency. In addition, we suggest that the Teaching Performance Assessment is positioned as a platform for further developing their assessment capability and understanding of the broad range of teacher and student roles in learning.

### Considerations for ITE

We offer here a series of considerations for ITE that reflect the concerns raised in this article. Firstly, PST assessment capability development should be a primary concern of ITE. This assessment capability includes the skills and dispositions to critically analyse the current assessment milieu, and the assessment practices they experience in both the ITE university environment and the schools in which they complete practicums. It involves PSTs recognising the tensions that exist between the competing discourses of accountability and learner agency and the potential for the former to lead to less scope for the latter. This will lead to a growing understanding about the temporal nature of agency and recognition how it occurs in the doings, sayings and relatings of the schooling ecologies in which they are working as PSTs. It is appropriate for ITE providers to make explicit both pedagogic practices that foster learner agency and the role of the teacher assessor in meeting accountability requirements. In addition, consideration could be given by ITE providers to the extent that supervising teachers enable space in classroom ecologies for their students' agentic decision-making. Influenced strongly by the particular assessment identities adopted, these are the models influencing PST practice.

Secondly, it is fundamental for PSTs to understand and value the development of learner agency and its relationship to their impact on student learning. The notion of impact needs careful unpacking, so that the tendency to foreground accountability requirements does not overwhelm PSTs, but that it references wider understandings about effective teaching practice and student agency. When PSTs recognise that impact manifests in the sayings, doings and relatings of their classroom practices, they could come to see learner agency as inherent in assessment capability.

Thirdly, given the issues related to the types of assessment opportunities afforded through practicums, the extent to which universities mediate PSTs' in-school placement becomes an important matter. If, as discussed earlier, PSTs' assessment identities are co-constituted between ITE providers and schools, then it is logical that the greater liaison urged by Smith et al (2014) could better support students' growing assessment capabilities. Consideration could be given to the ways in which the mentor teachers can themselves be supported to be assessment capable through their work with PSTs, with the goal of alignment between the practices of teachers in schools and the assessment expectations on PSTs. There is scope for capacity building in the system in ways that target impact to enhance and strengthen teacher judgement and encourage teachers to give up control of the language of improvement (criteria and standards). It is this discourse of accountability and its language of

improvement that, for the various reasons identified above, works against supporting student agency (Dargusch, 2014). If there are competing ideas of teachers' assessment identities, then surfacing them in ITE may better support PSTs to critically analyse the practices they observe.

### Considerations for Further Research

Further investigation is warranted into how ITE providers can support PSTs' assessment capability through providing assessment opportunities that develop PST agency. As Teaching Performance Assessment trials and implementation are undertaken (AITSL, 2015), further examination of the relationships between these opportunities and the quality of graduates will naturally follow. Further investigation is also warranted into the ways in which ITE providers and schools can work together to co-constitute PSTs' emerging assessment identities, and to understand how to facilitate their growing assessment capability in classroom ecologies.

A related area of research that has only been touched on in this article is the notion of power relationships in classrooms, and how that power can be mediated in the current educational climate. How teachers broker an impetus for control, to enable spaces for co-regulated learning (Heritage, 2016), is especially important in the context of ITE and is aligned with the student voice movement and its interrogation of student voice in schooling power relations (Mayes et al, 2017).

### Conclusion

There is a systemic tension or crisis of control for PSTs generated through the nexus of learner agency and teacher accountability discourses. Teacher assessment capability can be eroded by pressures associated with high stakes testing and accountability. This examination has provided a space to consider the implications for ITE of two assessment-related discourses and their influence on the assessment capability of PSTs. It has been argued here that in this environment emphasis must be given to the ways in which PSTs' assessment identities are co-constituted by ITE and schools. Impact is a highly charged notion in the current teacher preparation environment, yet for learner agency to be realised, recognition of both tangible and non-tangible elements associated with student learning are of value and the subtleties of the sayings, doings and relatings of classroom ecologies are important to acknowledge.

### References

- Absolum, M., Flockton, L., Hattie, J., Hipkins, R., & Reid, I. (2009). *Directions for assessment in New Zealand (DANZ): Developing students' assessment capabilities*. Wellington: Ministry of Education.
- Aliusta, G. O., & Özer, B. (2016). Student-centred learning (SCL): roles changed? *Teachers and Teaching*. <https://doi.org/10.1080/13540602.2016.1205014>
- Ambrosetti, A. (2014). Are you ready to be a mentor? preparing teachers for mentoring pre-service teachers. *Australian Journal of Teacher Education*, 39(6), 30-42. <https://doi.org/10.14221/ajte.2014v39n6.2>

- Australian Institute for Teaching and School Leadership. (2014). *Australian teacher performance and development framework*. Melbourne: AITSL. Retrieved from <http://www.aitsl.edu.au/professional-growth/australian-teacher-performance-and-development-framework>.
- Australian Institute for Teaching and School Leadership (AITSL). (2015). *Classroom ready: demonstrating the impact on student learning of initial teacher education programs*. Melbourne: AITSL. Retrieved from: <https://www.aitsl.edu.au/tools-resources/resource/classroom-ready-demonstrating-the-impact-on-student-learning-of-initial-teacher-education-programs>.
- Ball, S. J. (2015). Education, governance and the tyranny of numbers. *Journal of Education Policy*, 30(3), 299-301. <https://doi.org/10.1080/02680939.2015.1013271>
- Berlant, L. (2011). *Cruel optimism*. Durham and London: Duke University Press. <https://doi.org/10.1215/9780822394716>
- Biesta, G., Priestley, M., & Robinson, S. (2017). Talking about education: exploring the significance of teachers' talk for teacher agency. *Journal of Curriculum Studies*, 49(1), 38-54. <https://doi.org/10.1080/00220272.2016.1205143>
- Black, P., & Wiliam, D. (1998). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan*, 80, 139-149.
- Booth, B., Dixon, H., & Hill, M. (2016). Assessment capability for New Zealand teachers and students: Challenging but possible. *SET*, 2, 3-10. <https://doi.org/10.18296/set.0030>
- Booth, B., Hill, M., & Dixon, H. (2014). The assessment-capable teacher: Are we all on the same page? *Assessment Matters*, 6, 137-157.
- Bourke, R., & Loveridge, J. (2014). 'Radical collegiality' through student voice: Challenging our understandings of educational experience, policy and practice. *New Zealand Journal of Educational Studies*, 49, 126-130.
- Brevik, L. M., Blikstad-Balas, M., & Engelién, K. L. (2017). Integrating assessment for learning in the teacher education programme at the University of Oslo. *Assessment in Education: Principles, Policy & Practice*, 24(2), 164-184, <https://doi.org/10.1080/0969594X.2016.1239611>
- Brown, G. T. L. (2011). Self-regulation of assessment beliefs and attitudes: A review of the students' conceptions of assessment inventory. *Educational Psychology*, 31 (6), 731-748. <https://doi.org/10.1080/01443410.2011.599836>
- Brown, G. T. L., Lake, R., & Matters, G. (2011). Queensland teachers' conceptions of assessment: The impact of policy priorities on teacher attitudes. *Teaching and Teacher Education*, 27 (1), 210-220 <https://doi.org/10.1016/j.tate.2010.08.003>
- Carless, D. (2017). Scaling up assessment for learning: progress and prospects. In D. Carless, S. Bridges, C. K. Y. Chan & R. Glofcheski, (eds.), *Scaling up Assessment for Learning in Higher Education* (pp. 3-17). Singapore: Springer. <https://doi.org/10.1007/978-981-10-3045-1>
- Carless, D., Bridges, S. M., Chan, C. K. Y., & Glofcheski, R. (2016). *Scaling up Assessment for Learning in Higher Education*. Singapore: Springer.
- Charteris, J., & Smardon D. (2017). A typology of agency in new generation learning environments: emerging relational, ecological and new material considerations. *Pedagogy, Culture and Society*, 26(1), 51-68. <https://doi.org/10.1080/14681366.2017.1345975>
- Charteris, J., & Thomas E. (2016). Uncovering 'unwelcome truths' through student voice: Teacher inquiry into agency and student assessment literacy. *Teaching Education*, 28(2), 162-177. <https://doi.org/10.1080/10476210.2016.1229291>

- Cochran-Smith, M., & Villegas, A. M. (2015). Framing teacher preparation research: An overview of the field, part 1. *Journal of Teacher Education*, 66(1), 7-20. <https://doi.org/10.1177/0022487114549072>
- Connell, R. (2009). Good teachers on dangerous ground: towards a new view of teacher quality and professionalism. *Critical Studies in Education*, 50(3), 213-229. <https://doi.org/10.1080/17508480902998421>
- Craven, G., Beswick, K., Fleming, J., Fletcher, T., Green, M., Jensen, B., Leinonen, E., & Rickards, F. (2014). *Action Now: Classroom Ready Teachers*. Teacher Education Ministerial Advisory Group. Retrieved from [https://docs.education.gov.au/system/files/doc/other/action\\_now\\_classroom\\_ready\\_teachers\\_accessible.pdf](https://docs.education.gov.au/system/files/doc/other/action_now_classroom_ready_teachers_accessible.pdf).
- Dann, R. (2014). Assessment as learning: blurring the boundaries of assessment and learning for theory, policy and practice. *Assessment in Education: Principles, Policy & Practice*, 21(2), 149-166. <https://doi.org/10.1080/0969594X.2014.898128>
- Dargusch, J. (2014). Teachers as mediators: formative assessment practices with assessment criteria and standards. *Australian Journal of Language and Literacy*, 37(3), 192-204.
- Dargusch, J., Harris, L. R., Reid-Searl, K., & Taylor, B. A. (2017). Creating first-year assessment support: lecturer perspectives and student access. *Distance Education*, 38(1), 106-122. <https://doi.org/10.1080/01587919.2017.1299566>
- Davies, A., Busick, K., Herbst, S., & Sherman, A. (2014). System leaders using assessment for learning as both the change and the change process: developing theory from practice. *The Curriculum Journal*, 25(4), 567-592. <https://doi.org/10.1080/09585176.2014.964276>
- Day, C., & Sachs, J. (2004). Professionalism, performativity and empowerment: discourses in the politics, policies and purposes of continuing professional development. In C. Day, & J. Sachs (Eds.), *International handbook on the continuing professional development of teachers* (pp. 3-32). Maidenhead: Open University Press.
- Dixon, H. R., Hawe, E., & Parr, J. (2011). Enacting assessment for Learning: the beliefs practice nexus. *Assessment in Education: Principles, Policy and Practice*, 18, 365-379. <https://doi.org/10.1080/0969594X.2010.526587>
- Edwards-Groves, C., & Kemmis, S. (2016). Pedagogy, education and praxis: understanding new forms of intersubjectivity through action research and practice theory. *Educational Action Research*, 24(1), 77-96. <https://doi.org/10.1080/09650792.2015.1076730>
- Eisner, E. (1985). *The Educational Imagination on the Design and Evaluation of School Programs*. New York, NY: Macmillan.
- Flockton, L. (2012). Commentary: Directions for assessment in New Zealand. *Assessment Matters*, 4, 129-149.
- Grainger, P. R., & Adie, L. (2014). How do preservice teacher education students move from novice to expert assessors? *Australian Journal of Teacher Education*, 39(7), 89-105. <https://doi.org/10.14221/ajte.2014v39n7.9>
- Groundwater-Smith, S., & Mockler, N. (2009). *Teacher professional learning in an age of compliance: Mind the gap*. Dordrecht: Springer.
- Hall, D., Gunter, H., & Bragg, J. (2013). Leadership, New Public Management and the remodelling and regulation of teacher identities. *International Journal of Leadership in Education*, 16(2), 173-190, <https://doi.org/10.1080/13603124.2012.688875>
- Harris, L. R., & Brown, G. T. (2013). Opportunities and obstacles to consider when using peer-and self-assessment to improve student learning: Case studies into teachers' implementation. *Teaching and Teacher Education*, 36, 101-111. <https://doi.org/10.1016/j.tate.2013.07.008>

- Heritage, M. (2016). Assessment for Learning: Co-Regulation in and as Student–Teacher Interaction. In D Laveault & L. Allal. (eds.), *Assessment for Learning: Meeting the Challenge of Implementation*. Volume 4 of the series *The Enabling Power of Assessment* (pp 327-343). New York, NY: Springer.
- Hill, M. F., Ell, F. R., & Evers, G. (2017). Assessment capability and student self-regulation: The challenge of preparing teachers. *Frontiers in Education*, 2(21), 1-15.  
<https://doi.org/10.3389/educ.2017.00021>
- Hill, M., Smith, L., Cowie, B., Gilmore, A., & Gunn, A. (2013). *Preparing initial primary and early childhood teacher education students to use assessment. Final Summary Report*. Retrieved from  
[www.tlri.org.nz/sites/default/.../Hill\\_Final%20Summary%20Report\\_signed%20off.pdf](http://www.tlri.org.nz/sites/default/.../Hill_Final%20Summary%20Report_signed%20off.pdf)
- Hudson, S. M., Hudson, P., Weatherby-Fell, N. L., & Shipway, B. (2016). Graduate Standards for Teachers: Final-year Preservice Teachers Potentially Identify the Gaps. *Australian Journal of Teacher Education*, 41(9).  
<https://doi.org/10.14221/ajte.2016v41n9.8>
- Istance, D. (2015). *Schooling Redesigned: Towards Innovative Learning Systems*. Paris: OECD.
- Keddie, A. (2016). Children of the market: performativity, neoliberal responsabilisation and the construction of student identities. *Oxford Review of Education*.  
<https://doi.org/10.1080/03054985.2016.1142865>
- Kemmis, S., Edwards-Groves, C., Wilkinson, J., & Hardy, I. (2012). Ecologies of practices. In P. Hager, A. Lee, & A. Reich, (Eds.), *Practice, learning and change. Theory Perspectives on Professional Learning* (pp. 33-49). Dordrecht, Netherlands: Springer.  
[https://doi.org/10.1007/978-94-007-4774-6\\_3](https://doi.org/10.1007/978-94-007-4774-6_3)
- Kemmis, S., Wilkinson, J., Edwards-Groves, C., Hardy, I., Grootenboer, P., & Bristol, L. (2014). *Changing Practices, Changing Education*. Singapore: Springer.  
<https://doi.org/10.1007/978-981-4560-47-4>
- Klenowski, V. (2009). Assessment for learning revisited: An Asia-Pacific perspective. *Assessment in Education: Principles, Policy and Practice*, 16(3), 263-268.  
<https://doi.org/10.1080/09695940903319646>
- Leahy, S., Lyon, C., Thompson, M., & Wiliam, D. (2005). Classroom assessment: minute by minute, day by day. *Assessment to Promote Learning*, 63(3), 19-24.
- Lingard, B. (2010). Policy borrowing, policy learning: Testing times in Australian schooling. *Critical Studies in Education*, 51(2), 129–147.  
<https://doi.org/10.1080/17508481003731026>
- Lingard, B. (2015). Thinking about theory in educational research: Fieldwork in philosophy. *Educational Philosophy and Theory*, 47(2), 173-191.  
<https://doi.org/10.1080/00131857.2013.793928>
- Lingard, B., Martino, W., & Rezai-Rashti, G. (2013). Testing regimes, accountabilities and education policy: commensurate global and national developments. *Journal of Education Policy*, 28(5), 539-556. <https://doi.org/10.1080/02680939.2013.820042>
- Lodge, C. (2005). From hearing voices to engaging in dialogue: problematising student participation in school improvement. *Journal of Educational Change*, 6(2), 125-146.  
<https://doi.org/10.1007/s10833-005-1299-3>
- Looney, A., Cumming, J., van Der Kleij, F., & Harris, K. (2017). Reconceptualising the role of teachers as assessors: teacher assessment identity. *Assessment in Education: Principles, Policy & Practice*. <https://doi.org/10.1080/0969594X.2016.1268090>



- Marshall, B., & Drummond, M. J. (2006). How teachers engage with assessment for learning: Lessons from the classroom. *Research Papers in Education*, 21(2), 133–149. <https://doi.org/10.1080/02671520600615638>
- Mausethagen, S., & Mølsted, C. (2015). Shifts in curriculum control: contesting ideas of teacher autonomy. *Nordic Journal of Studies in Educational Policy*, 1(2), 20–41. <https://doi.org/10.3402/nstep.v1.28520>
- Mayes, E.L, Bakhshi, S., Wasner, V., Cook-Sather, A., Mohammad, M., Dishop, D. ...Cowley, E. (2017). What can a conception of power do? Theories and images of power in student voice work. *International Journal of Student Voice*, 1(1), 1–44.
- Miller, E. R. (2016). The ideology of learner agency and the neoliberal self. *International Journal of Applied Linguistics*, 26(3), 348–365. <https://doi.org/10.1111/ijal.12129>
- Mitra, D., & Serriere, S. (2012). Student voice in elementary school reform: Examining youth development in fifth graders. *American Educational Research Journal*, 49(4), 743–774. <https://doi.org/10.3102/0002831212443079>
- Mockler, N. (2013a). Teacher Professional Learning in a Neoliberal Age: Audit, Professionalism and Identity. *Australian Journal of Teacher Education*, 38(10). <https://doi.org/10.14221/ajte.2013v38n10.8>
- Mockler, N. (2013b). Reporting the ‘education revolution’: MySchool.edu.au in the print media. *Discourse: Studies in the Cultural Politics of Education*, 34(1), 1–16 <https://doi.org/10.1080/01596306.2012.698860>
- Mockler, N. (2017). Early career teachers in Australia: a policy historiography. *Journal of Education Policy*, 32, 1–18. <https://doi.org/10.1080/02680939.2017.1332785>
- Mockler, N., & Groundwater-Smith, S. (2015). *Engaging with student voice in research, education and community: Beyond legitimation and guardianship*. Singapore: Springer. <https://doi.org/10.1007/978-3-319-01985-7>
- My School. (2017). *The My School website*. Retrieved from <https://www.myschool.edu.au/>
- Novoa, A., & Yariv-Mashal, T. (2003). Comparative Research in Education: A Mode of Governance or a Historical Journey? *Comparative Education* 39(4): 423–438. <https://doi.org/10.1080/0305006032000162002>
- Ozga, J. (2008). Governing knowledge: research steering and research quality. *European Educational Research Journal*, 7(3), 261–272. <https://doi.org/10.2304/eeerj.2008.7.3.261>
- Perry, L. A., & McWilliam, E. (2009). Accountability, responsibility and school leadership. *The Journal of Educational Enquiry*, 7(1). 32–43.
- Peters, M. A., Besley, T. & Paraskeva, J. (2015). The global financial crisis and educational restructuring. *Citizenship, Social and Economics Education*, 14(1), 15–18. <https://doi.org/10.3726/978-1-4539-1492-2>
- Ryan, M., & Bourke, T. (2013). The teacher as reflexive professional: making visible the excluded discourse in teacher standards. *Discourse: Studies in the Cultural Politics of Education*, 34(3), 411–423 <https://doi.org/10.1080/01596306.2012.717193>
- Sadler, R. (1989). Formative assessment and the design of instructional systems. *Instructional Science*, 18, 119–144. <https://doi.org/10.1007/BF00117714>
- Sadler, D. R. (2010). Beyond feedback: developing student capability in complex appraisal. *Assessment & Evaluation in Higher Education*, 35(5), 535–550. <https://doi.org/10.1080/02602930903541015>
- Schatzki, T. (2010). Materiality and social life. *Nature and Culture*, 5(2), 123–149. <https://doi.org/10.3167/nc.2010.050202>
- Sellar, S. (2014): A feel for numbers: affect, data and education policy. *Critical Studies in Education*, 56(1), 131–146. <https://doi.org/10.1080/02680939.2014.961968>

- Singh, P. (2015). Performativity and pedagogising knowledge: globalising educational policy formation, dissemination and enactment. *Journal of Education Policy*, 30(3), 363-384. DOI: 10.1080/02680939.2014.961968
- Smit, B. (2013). Young people as co-researchers: enabling student participation in educational practice. *Professional Development in Education*, 39(4), 550-573. <https://doi.org/10.1080/19415257.2013.796297>
- Smith, G. (2009). Transforming leadership: A discussion paper. Presentation to the 2009 Simon Fraser University Summer Institute 'Leading Change in Education'. Retrieved from <https://www2.viu.ca/integratedplanning/documents/DrGrahamSmith.pdf>
- Smith, K. (2016). Functions of assessment in teacher education. In J. Loughran & M. L. Hamilton (eds.), *International Handbook of Teacher Education Volume 2* (pp. 405-428). Singapore: Springer. [https://doi.org/10.1007/978-981-10-0369-1\\_12](https://doi.org/10.1007/978-981-10-0369-1_12)
- Smith, L.F., Hill, M.F., Cowie, B., & Gilmore, A. (2014). Preparing teachers to use the enabling power of assessment. In C. Wyatt-Smith, V. Klenowski & P. Colbert (eds.), *Designing Assessment for Quality Learning* (pp. 303-324). Netherlands: Springer. <https://doi.org/10.1007/978-94-007-5902-2>
- Steiner-Khamsi, G. (2004). *The global politics of educational borrowing and lending*. New York, NY: Teachers College, Columbia University.
- Stobart, G., & Hopfenbeck, T.N. (2014). Assessment for learning and formative assessment. In J. Baird, T.N. Hopfenbeck, P. Newton, G. Stobart A.T. Steen-Utheim (Eds.), *State of the Field Review of Assessment and Learning*. Oxford, UK: Oxford University, Centre for Educational Assessment
- Thompson, G., & Cook, I. (2014). Manipulating the data: Teaching and NAPLAN in the control society. *Discourse: Studies in the Cultural Politics of Education*, 35(1), 129-142. <https://doi.org/10.1080/01596306.2012.739472>
- Thompson, G., & Mockler, N. (2016). Principals of audit: testing, data and 'implicated advocacy'. *Journal of Educational Administration and History*, 48(1), 1-18. <https://doi.org/10.1080/00220620.2015.1040376>
- Timperley, H. (2014). Using assessment information for professional learning. In C. Wyatt-Smith, V. Klenowski & P. Colbert (eds.), *Designing assessment for quality learning* (pp. 137-149). Dordrecht, Netherlands: Springer.
- Tuinamuana, K. (2011). Teacher professional standards, accountability, and ideology: Alternative discourses. *Australian Journal of Teacher Education*, 36(12). <https://doi.org/10.14221/ajte.2011v36n12.8>
- Wyatt-Smith, C., Klenowski, V., & Colbert, P. (2014). Assessment understood as enabling: a time to rebalance improvement and accountability goals. In C. Wyatt-Smith, V. Klenowski & P. Colbert (eds.), *Designing Assessment for Quality Learning* (pp. 1-20). Netherlands: Springer. <https://doi.org/10.1007/978-94-007-5902-2>