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Impact in education: A discourse analysis of interpretations and negotiations across the field

The recasting of accountability in teaching and teacher education as a problem of impact across many countries has seen a proliferation of policies and strategies that datify the work of students and teachers. The enactment of such policies must be interrogated from the perspectives of multiple policy actors to understand the impact of the 'impact agenda'. We use the conceptual framing of policy enactment along with discourse theory to investigate the interpretations and negotiations of the impact agenda by twenty teachers, principals, teacher educators, regulators and policy makers from across Australia. Ten discourses were evident across interpretive, material and discursive aspects of policy enactment. Key findings include a real tension between holistic views of impact and reductive views that rely on data analytics, as well as standardisation versus the importance of accounting for the contextual emergences that influence learning and teaching. We argue that educators must be positioned as key policy actors in driving the way impact is understood and measured.

Keywords: impact in education; educational policy; critical discourse analysis; teacher accountability; educational data; policy enactment

Introduction

Teacher quality and accountability in teacher education have been dominant discourses across the world for at least two decades (Cochran-Smith et al., 2018) despite little evidence of a problem with teacher quality (Bourke, Ryan, & Lloyd, 2016). In more recent years, a key solution to the discursive 'problem' of teacher quality has been to promulgate policies to improve classroom readiness of teacher graduates (see Fitzgerald & Knipe, 2016; Teacher Education Ministerial Advisory Group (TEMAG), 2014). Classroom readiness is a discursive concept that has been used interchangeably with 'impact on student achievement'. Thus, impact has been defined as *evidence of student learning* but also as *evidence that teachers know how to demonstrate this evidence of student learning*, and has become the solution to the 'problem' of teacher quality. This nascent 'impact agenda' which has seen the term 'impact' appearing in

multiple policy documents and beginning to proliferate talk in schools and universities, is ambiguous in its explanation of what constitutes learning, what constitutes evidence, or what are the capabilities of teachers that will lead to this impact (Ell et al., 2019). The concept of impact is complex: it includes different perspectives and requires greater interrogation across different education and policy contexts (Kertesz & Brett, 2019) to understand the impact of the 'impact agenda'.

This paper utilises discourse theory to interrogate how impact is understood, talked about and acted upon in the educational landscape. We argue that impact itself is not problematic, but that reductive and standardised approaches to impact do not lead to improved educational experiences and outcomes. Accounts from teachers, principals, teacher educators, policy makers and regulatory authorities in Australia are used to provide diverse perspectives on the enactment of policy related to impact in education. Pivotal to this study is the assertion by Ball (2015) that policy should be looked upon as a process rather than the taken-for-granted solution to a problem (see also Ozga, 2019). This goes beyond policy implementation and shifts thinking to what Ball, Maguire and Braun (2012) name 'policy enactment'. Whereas policy implementation often elides context and the groups of people 'outside the formal machinery of official policy-making' (Ozga, 2000, p. 113), 'policy enactment' foregrounds both context and the diverse cast (Ball, 2015) of stakeholders (policy actors) involved in the policy process.

Conceptual framing: Policy enactment through discourse

Discourse theory is the mediation of the social and the semiotic. It theorises the social structuring of semiotic hybridity or interdiscursivity (Fairclough, 2003). As Fairclough (2003) suggests, we represent our material world, our social practices and reflexive selves through discourse. Discourses exercise power in society as they normalise or institutionalise particular ways of talking, thinking and doing. Discourses are based on particular kinds of knowledge and

prioritise knowledge in ways that empower some and disempower others in society. Discourses determine the ways in which society interprets reality and promulgates further discursive and non-discursive practices. Discursive practices include speaking and thinking on the basis of knowledge and non-discursive practices involve acting on the basis of knowledge. That is, the discourses around impact shape how it is spoken about and therefore how it is acted upon.

Policy enactment as a conceptual framework offers a dynamic, non-linear process for investigating 'teacher quality' and *impact* through the complexities that make up the policy process. In terms of policy significance, breaking the problematic circular logic cycle allows **new** ideas or space for alternative unknowns to emerge, leading to a rethinking of 'teacher quality' and *impact*. Policymakers and practitioners can then engage in productive discussions in this area. To study policy enactments properly, three facets – namely the 'interpretive', the 'material' and the 'discursive' (Ball, 2015) – must be investigated. The *interpretive* facet describes how policies are read and understood by those involved in the policy process. By investigating the complex web of interpretations, translations, active readership and writerly work around policy, spaces for new ways of thinking around 'teacher quality' and *impact* emerge. The second *material* facet describes how contextual factors influence policy. While central policy making has good intentions, it often does not take into consideration constraints and enablers such as people/staffing, school intake, history, ethos/culture, buildings, resources, budget and so on. The third *discursive* facet describes how policy discourses are spoken about and acted upon by policy actors.

Impact as a discursive knot

Impact in education is an entanglement of different discourses indicative of a discursive knot (after Jäger & Maier, 2003). In policy and media, the discourse strand of teacher quality is entangled with the discourse strands of classroom readiness, test outcomes and collective

efficacy (see for example Hattie, 2012). In schools, these discourses may be more or less important, but they are also entangled with discourses of student wellbeing and the preparation of well-rounded citizens (Mills & Ballantyne, 2016).

Loughran (2016) argues that impact that can be measured tends to show a superficial linear cause and effect relationship. For example, in didactic teaching situations it may be straightforward to measure what is retained. In complex, inquiry-based and narrative learning situations, however, measuring the teaching effectiveness and/or the learning that takes place is much more difficult. In the USA, student test scores are being used to measure the impact and quality of teacher preparation programs. An issue with this linear, statistical solution, despite the apparent logic that a well-prepared teacher will have a positive impact on student outcomes, is that correlation does not necessarily equate to causation, and that other factors may be at play (Ginsberg & Kingston, 2014). Konstantopoulos (2014), for example, found that teacher education and experience explained less than one percent of the variation in teacher effectiveness across all grades and test scores.

When using standardised test scores as a measure of desirable learning and teacher effectiveness, issues arise about reliability and validity (Marx, 2014). Konstantopoulos (2014) critiques growth or value-add models which purport to measure teacher effects on the amount of learning that students achieve (usually across a year). A practical enactment of this approach is a rising phenomenon of data walls whereby students' photos, details and achievement scores or groupings (poor, acceptable, high progress) are on public or semi-public display in the school so that any change in their results can be seen by the school community (thereby holding teachers to account) . There is very little evidence of the utility of data walls to improve teaching and learning (Koyama, 2013). These types of linear cause and effect relationships and strategies do not account for multiple variables, can obscure what is actually happening in classrooms and can draw attention away from solutions at a local level (Koyama, 2013). Despite the focus on large

scale comparative student test data, no research at scale has shown that such data has been used to design instructional practices to improve achievement (Amrein-Beardsley, Collins, Polasky, & Sloat, 2013).

Evidence of impact requires research that goes beyond superficial measures to account for the complexity of factors that contribute to quality teaching and to different kinds of learning (Loughran, 2016). The contextual, often qualitative, research that points out intersectional complexities (e.g., class size, classroom composition, teacher–student interactions, student backgrounds, geographical location, interactions among teachers, leadership and school climate) (Konstantopoulos, 2014; Lunn et al., 2019) is not as influential on policy-makers who need quick-fix solutions that can be implemented at scale. One consistent finding in the literature is that the effectiveness of teachers varies dramatically within and across schools (Hanushek & Rivkin, 2012). Hattie (2012) argues that the greatest effects on student learning occur when teachers become learners of their own teaching, and when students become their own teachers. He suggests that the introduction of learning intentions (LI) and success criteria (SC) in the classroom is essential for clarity of purpose and learner autonomy. Crichton and McDaid (2016) found that while LI and SC had the potential to effect student learning, they were not necessarily well understood by teachers and were often introduced in a tokenistic way. This scaling up of strategies as a standardised solution is problematic if it is not contextualised for and by teachers. Intersecting contextual influences mean that teachers cannot be evaluated for effectiveness using only statistical measures (Marx, 2014; Plecki, Elfers, & Nakamura, 2012). Ydesen & Bomholt (2019) also point out that the claim from the OECD that improving students' test scores will lead to economic growth (economistic accountability) has never been established.

When linear or economistic tools are used to measure teacher quality and impact, and particularly when these evaluations are high stakes, there is greater potential for unintended consequences such as teaching to the test, attrition, low morale, stress, burnout and

unattractiveness of teaching as a career (Lavigne, 2014). Like in any profession, teachers develop their skills and practices as they gain greater experience in the profession. Twiselton (2012), for example, highlighted that expert teachers develop their practice through three phases: from task manager (keeping students on task, orderly and completing assigned tasks), to curriculum deliverer (prescribed learning, dictated by someone else, and curriculum as the goal itself) and, finally, to concept/skill builder (focused on concepts and skill development, tasks as a vehicle for learning, and transferable and transformational learning). Ginsberg and Kingston (2014) suggest that when test scores are used to evaluate impact, teachers will never move to the more expert phase three. In countries such as the USA, England and Australia, where effect size (Hattie, 2012) has become as important as statistical significance in reporting results, policy makers and school leaders need to better understand exactly what the scores they count on truly mean. Cut-off score setting, according to Ginsberg and Kingston (2014), involves 'a lot of magic … and typically little in the way of predictive validity for any score' (p. 37). Indeed Bergeron (2017) provides a strong critique of the statistical validity and reliability of Hattie's effect size methodology. Impact measures must be nuanced and triangulated, with a clear understanding of the desired outcome and potential undesired consequences.

It is clear that impact is a complex concept as there is no consistent agreement on how evidence of learning can be demonstrated or accounted for in different contexts or for different purposes. These entangled strands constitute the discursive knot of impact represented in the literature. We now turn to the current study which sought to investigate discursive and non-discursive practices that people in different educational roles in Australia account for as they enact the impact agenda.

Recruitment of policy actors

Participants were policy actors recruited through the professional networks of the research team. Purposeful sampling recruited those 'best' (Stake, 1995) placed within their organisations to have knowledge about current policies and practices around *impact*. For example, teacher educators selected were those either involved in accreditation processes or those involved in professional experience. Teachers and principals were recruited through emails to school networks that were involved in professional experience. Other policy actors were approached as they held positions directly related to accreditation of initial teacher education programs.

The twenty participants that were interviewed for this study included principals (n=5), teachers (n=5), teacher educators (n=5) and regulatory authority/policy makers (n=5) from Queensland and New South Wales, Australia. Written informed consent was obtained prior to each 30–45 minute interview and ethics approval was granted through the university Human Research Ethics Committee. Analysis of discourses

The analytical method used is critical discourse analysis (CDA), which is concerned with the workings of power through discourse on three intertwined levels: the macro level of socio-historical ideologies and influences on teachers and teaching; the meso level of the contextual specificities and how these influence the discourse; and the micro level of the language choices that are used to represent particular groups and ideas. CDA enables a close examination of the interpretive, material and discursive elements of policy enactment (Ball, 2015) as we sought to make visible the policy actors' understandings and perceptions of impact and its influences. We use Fairclough's (2003) linguistic point of reference, systemic functional linguistics, which is concerned with the social character of text and the relationship between discourse and discursive practice. Our analysis here specifically focuses upon genre, discourse and style, including

semantic relations between clauses and sentences, along with assumptions evident in these transcribed interviews. We analyse linguistic transitivity processes and their participant realisations within the clause (who or what is involved, how impact is described and accounts of its discursivity), as well as the use of modal adverbs to determine which practices are afforded value or are excluded in these accounts, and how this fits with broader social discourses of teaching, teacher quality and student achievement. This ideational function of language is also interested in the meaning relationship between text and context (lexis), that is, we analyse the choices and co-locations of words made in these interviews to indicate how impact is discursively framed by different policy actors across education.

To conduct the CDA, transcript data was first inductively coded into discourse themes individually by each of the five researchers. This was then checked by a second researcher and consensus on themes was reached through dialogue between all research team members (see Table 1). These broad discourses constitute the interpretive enactment of policy. Contextual influences on these (the material enactment) mean that these discourses play out (the discursive enactment) in different ways between and across these policy actors.

Table 1. Impact discourses across participant groups.

Impact Discourses	T	P	TE	RP
Impact as holistic and in context: student voice, wellbeing, engagement and relationships	✓	✓		✓
Visibility, accountability, expectations of teachers/systems	✓	✓	✓	✓
Corporatisation and alignment	✓	✓	✓	✓
Growth and value-add models; datafication	✓	✓	✓	✓
Teacher and/or teacher educator confidence, skills and knowledge		✓	✓	✓
Creativity and knowledge translation beyond school	✓			
Social justice and employability		✓		
Professional learning, adaptability and ideology	✓	✓	✓	✓
Top-down power			✓	✓
Stakeholder engagement			✓	✓

In the second level of analysis, the team deductively analysed the interpretive, material and discursive aspects across these themes. Finally, a more detailed CDA (as indicated above) was undertaken by the lead author on sections of text that illustrated the different aspects of the three facets of policy enactment.

Voices of policy actors

The findings are presented to highlight the voices of the different policy actors – teachers (T), principals (P), teacher educators (TE) and regulators/policy makers (RP) – in relation to interpretive, material and discursive facets of policy enactment related to impact.

Interpretive enactment

The participants in this study have some similar and some divergent interpretations of impact, including datafication and growth models, a holistic view of impact, ambiguity around the term impact, employment and governance. The genre chains (Fairclough, 2003) in educational discourse were evident in that they referred to data, progression and growth (highly repetitive terms that proliferate policy, media texts and system communications to schools). Models of value-addedness or learning growth have been critiqued for their reliability and validity (Konstantopoulos, 2014; Marx, 2014), yet they have become normalised as existential assumptions (what exists) (Fairclough, 2003) in policy speak and teacher talk with little evidence of understanding or critique.

TE3 uses an industrial metaphor to criticise the linearity of 'inputs and outputs' that she suggests are 'overly reductive' and cannot account for 'complex social behaviours'. She questions the existential assumption (Fairclough, 2003) that effect size equals impact by stating, 'you're assuming …'. This is a similar critique offered by Ginsberg and Kingston (2014) and Bergeron (2017).

One of the really interesting things around education at the moment has been the sort of shift towards the evidence based or evidence informed practice. Which assumes a few things, largely that education can be understood in terms of sort of inputs and outputs … An overly reductive approach to education where things are simply measurable and from that, we can make some broad sweeping generalisations around complex social behaviours … one of the things you're assuming in any effect size calculation is that you have a normative spread of data, and that the numbers are big enough that you'll be able to get some reliable statistical result from the calculation. (TE3)

RP3 explicitly qualifies her interpretation of impact 'from a governance point of view' and creates lexical links between 'evidence', 'learning growth', 'testing regimes' and 'comparisons'. Governance and accountability is a strong discourse across policy genre chains in Australia. Growth models, despite their critique (Konstantopoulos, 2014), have been legitimised in educational discourse as one policy uses another as a referent of evidence, creating a 'trap of visibility' (Bourke, Lidstone, & Ryan, 2015).

Impact in education, from a governance point of view, would be something you can show ... have evidence to show that you have made a learning growth. That the student has learned between one test, or one time and the next … if you have good testing regimes, where you have equating questions and things like that, from one paper to the next and so on, and you have reliable and valid test instruments ... The other one is, comparison with similar schools. That'd be the second one. (RP3)

Competing discourses around the purpose of schooling as preparing students for job pathways and also the moral imperative around social good and equity has long been pointed out in the literature (Doherty, 2017). P3 suggests a holistic view of impact is important in terms of being 'productive and valuable members of society' with a 'sense of social justice'. The 'backpack' metaphor is used to suggest that schools fill the pack with 'tools' to prepare students for this social goal.

We think a lot about what sort of citizens the kids are at the other end of it, what are we sending them out with in a way, what they've got in their backpack in terms of tools that

make them productive and valuable members of society in the 21st century … So have we had an impact on them in a sense or in the sense of social justice? (P3)

T2 indicates their scepticism around 'data' as 'the be all and end all' for impact. Data is a term that proliferates educational discourse but is ambiguous in its use across the genre chains of policy, media, teacher education and school discourse (Brett et al., 2018). It often refers to big data or test data rather than classroom assessment and observation data. 'Lifelong learners' is introduced by T2 as the key overarching goal of impact, rather than point-in-time measures.

> It's not necessarily data but I guess how you impact that student so that they can be lifelong learners … I just don't think that measuring them on their data is not necessarily how you impact, or reading their data is seeing how much of an impact you have on them because they might have had a bad day or they might have been sick or something like that. So for me, yes data is important, but it's not the be all end all of the impact that you're going to make on that student within the school. (T2)

P3 also indicates the importance of wellbeing while at school but sets up a logic of equivalence between the goal of wellbeing and the goal of academic success in having an impact. They refer to a growth model of 'a year's worth of progress for giving a year's worth of their life to our school'. There is an interesting contrastive relation in this quote – 'not just seeing them as exam numbers' – but then invoking the growth model discourse which reduces impact to a narrow definition of growth.

> We definitely are more strongly focused on wellbeing these days. Unfortunately, at our school we have had critical incidents which have made us think more deeply about the impact on kids as a whole and not just seeing them as exam numbers in the whole, not that we ever did. But it's brought it home to us without a doubt. But definitely academic success. Have we made a positive difference? We talk a lot in education about, does every child have a year's worth of progress for giving a year's worth of their life to our school? (P3)

P5, on the other hand, prioritises 'meaningful employment'. Their propositional assumption is that employment is the 'core job' of schools in a contrastive semantic relation (through the conjunction 'but') to teaching values or health.

> Ensure that all kids get the meaningful employment education to either matriculate into university, further training, or meaningful employment. And yeah, people say, 'School should teach values and teach health and things like that', but our core job is, when they leave that school they're going to be ready for meaningful employment, which is not working at Maccas part-time. (P5)

TE4 invokes a value assumption (Fairclough, 2003) about the 'relational aspect' of impact, using the word 'hope' twice in this comment. She uses low modality to indicate uncertainty about impact with 'I don't know' and 'I haven't got the answer' and uses the causal conjunction 'because' to lexically link 'travesty' with the idea that impact is only about 'learning achievement levels'. She contrasts her uncertainty about impact overall with her certainty of what it does need to include: 'It's going to be … it's gonna be …'

> I think, I hope, that impact won't be measured just by student learning achievement levels. Because that would be a bit of travesty, because it's not always going to be a student achievement level change. It's going to be that a child comes to class five days instead of two days. It's gonna be that a child makes a friend, a social connection for the first time and then in a year. So measuring impact, I don't know, I haven't got the answer on it, but I hope that there's a relational aspect to it. (TE4)

In summary, in relation to the interpretive facet of policy enactment, the participants in this study interpreted impact in both broad and narrow ways. A focus on goals beyond schooling and holistic indicators of wellbeing and engagement are evident in their accounts, but they also interpolate the measurable concept of educational growth in this macro climate of accountability and public visibility of test outcomes.

Material enactment

The participants indicated a number of material influences on their enactment of impact, including top-down accountability strategies and power plays, stakeholder engagement, confidence and skills in using data, and the contextual conditions of the school. There is a 'top-down' discourse that is in contrast with the expectation of collaboration with all stakeholders about impact and a strong discourse of a power play between stakeholders (Zuckerman et al., 2018). Strategies that are imposed from above, with little buy-in from stakeholders, have been argued to effect little change in practice (Leonard & Roberts, 2014; Loughran, 2016). TE3, for example, points out the contrastive relationship between 'reductive' messages 'from the top' and making 'a difference to the very real issues'. This logic of difference suggests that those who make the policies are too far removed from the realities of the work.

> What I'm saying is that the message which is coming from the top, which is coming down to the programs, is only reductive in how it understands impact and as a result is not really going to allow us to make a difference to the very real issues that ITE programs should be engaging with. (TE3)

TE4 introduces one of these realities that is constrained by a top-down approach to impact: 'we haven't had a wider dialogue'. Their uncertainty is attributed to all teacher educators – 'we don't have a clear picture' – but there is a clear lexical link between 'standards' and 'mechanism' presented as a logic of difference (Fairclough, 2003) with 'really good' teaching or 'the essence of teaching'.

> I think something that constrains it, is we haven't had a wider dialogue with our stakeholders around it. And if we have had any dialogue, it's been more about the standards as a mechanism for doing this, not necessarily all the things that make up a really good ... The essence of teaching … we don't have a clear picture of what it is that we're looking for in terms of impact, nor do we have a good picture of how to evaluate impact. And what I mean by that is, what's working and for whom? (TE4)

RP2 is critical of the contradictory discourses and uneven implementation of policy. 'Typical' is used to suggest that 'politicians and national bodies' follow a similar approach each time a new policy is introduced 'without really thinking through the implications'. 'Timely' and 'sensible' are contrasted with what 'actually' happens during implementation. There is clearly no ownership of policy from this regulator's perspective as policy is referred to as 'this thing'. Evaluative terms such as 'struggling' and 'totally disconnected' are used to describe how this regulator is responding to policy enactment, particularly when 'I've been out of schools for six years now'. It is noteworthy that accreditation of ITE programs requires evidence of recency of practice, yet those who regulate these programs are 'totally disconnected' from schools.

> It's something that we're all struggling with at the moment and it's typical of the politicians and national bodies that they put this thing out without really thinking through the implications and the impact of that policy change as well … it's all rushed through. There's no sense of actually implementing it in a timely sensible fashion and we're all just trying to keep up with it and make sense of it … I've been out of schools for six years now and I feel totally disconnected, I just don't know what's going on out there now. (RP2)

The proliferation of the 'data' discourse is indicated here by T2 as a logic of equivalence (Fairclough, 2003) with a corporate agenda: 'schools are kind of being run as businesses' and 'they want to have the best data'. In contrast, a logic of difference is established lexically between data/corporatisation and schools as 'a place for students to learn' and for diversity rather than standardisation to be celebrated as 'everyone learns differently'.

> I'm finding that within schools now … data, a lot of things are data driven, so proving that this school is high in this or getting these types of grades that I think, I don't know, sometimes it feels to me like schools are kind of being run as businesses rather than a place for students to learn because everyone learns differently so impact around data is massive at the moment because schools want to be the best and they want to have the best data. (T2)

The literature indicates a lack of knowledge and skill across the sector in the interpretation and use of data (Amrein-Beardsley et al., 2013). P2 raises issues of teacher

knowledge and confidence. He uses an interrogative mood to introduce the semantic relation of problem/solution with questions and goes on to list the solutions with the comparative descriptor 'better' used three times. The value assumption (Fairclough, 2003) of teacher improvement is evident here, as it is in broader media genre chains and policy discourses around improving quality in teachers and teaching (Cochran-Smith et al., 2018).

> So do staff understand impact? I don't think so, not well. How do we do that? Better professional learning, better support structures, listening to the kids, and understanding what they're actually teaching, and have a better understanding of what they're trying to deliver in the classroom. (P2)

A similar critique from RP2 relates to a lack of knowledge across the whole system – 'teachers', 'teacher educators' and 'the regulatory authority' – around the datafication discourse of impact that has been legitimised across the educational sector (Lavigne, 2014).

> I'm conscious that teachers are not very good at working with data. They've not had much training on that and I would suggest perhaps teacher educators are along the same lines from what I've seen from programs. And I'm the first to admit that at the regulatory authority we're in the same position. So we need some intensive PD on that. Actually analysing what students have achieved so far, where they're at, where they should be going, what their potential is. (RP2)

The importance of intersectional influences such as context, diversity and relationships are clearly indicated in the literature (Marx, 2014) and are also referred to by these participants. These materialities cannot be understated in a policy environment where schools are compared on public websites such as My School in Australia. While these public comparisons account for socio-economic status, size and location, there is no nuanced accounting of the multiple intersecting contextual influences that constitute every school community (Plecki et al., 2012). T4 highlights the changing contextual conditions in schools and communities and speaks to the macro conditions in which we ask students to learn and to take tests.

Behaviour management is a huge thing that teachers are grappling with I think … it's across all domains, parents, students, teachers, and normally, traditionally it's been more so the teachers, but when the parents and the children are noticing it I think that's problematic, I think that speaks to a bigger problem … probably two years ago, the clientele really started to change, really changed drastically and we have a lot of students that come with a lot of trauma, a lot of domestic violence … Yeah, I think there's very few teachers that don't want the best for their kids. (T4)

Twiselton's (2012) *Task Manager* phase of expertise appears to be a discursive response to these changing conditions of life experience that intersect with a focus on evaluating impact through test scores (Ginsberg & Kingston, 2014). Many of these teachers are 'grappling' with conflicting material discourses of policy enactment. Australian teachers are considered by the OECD (2019) to have one of the highest workloads in the world. P1 refers to lack of time and resources as almost a throw-away line as it has become so legitimated in practice that it is considered a normal state of being. P1 suggests that different ideologies or opinions have the potential to constrain impact. However, they point out that differences of opinion or approach can sit comfortably alongside each other as long as 'we' have 'our framework' and there is a 'shared vision'. This alignment speaks to the sense of collective efficacy as a legitimate educational discourse, also raised by teachers in the study.

Time and resources, the old adage for all teachers, always. But also sometimes, like that thing we were talking about before, ideology, can sometimes as well. Differences of opinion of firstly, what impact is, I suppose. I might have a different view to someone else and sometimes people have a different pedagogical approach, which is why we're keen to say this is our framework, it doesn't mean everyone has to teach the same way but this is a shared vision. (P1)

In summary, the material elements of policy enactment accounted by these participants are the conflicting influences of top-down corporatised and data-driven discourses alongside the real conditions of teaching, diversity and learning environments in schools.

Discursive enactment

The discursive practices outlined by these participants include professional learning communities, accountable data tracking, the visibility of teachers' work and power plays between stakeholders. Collective efficacy (alignment in staff values and practices) is another buzz word that has acquired legitimacy as a social relation (Fairclough, 2003) in educational discourse as it was found by Hattie (2012) to have a high effect size. Despite critique of cut off scores (Ginsberg & Kingston, 2014) and effect size methodologies (Bergeron, 2017), schools have been scrambling to implement strategies with high effect sizes (Hattie, 2012).

T1 comments on the staff being 'aligned' in relation to 'data priorities' and 'school priorities'. The literature supports collegial professional learning communities (Cosner, Leslie, & Shyjka, 2019); however, the focus of the shared sense of purpose isn't necessarily interrogated. If it is based on particular kinds of data, does it account for intersectional influences?

> All of those data priorities, and other school priorities, but those particular impact discussions would actually happen as the one group, where we were actually all then aligned as to what we wanted to do about that. A lot of time and energy and money went into professional development, to actually getting teachers engaged with educational research and those sorts of ... So, through professional development, through professional learning, collegial learning, professional learning communities, all of that. (T1)

TE1 suggests that acting upon impact means that you can 'see an increase in students' belief in their own need for ongoing learning'. She lexically links good teaching with good learning and uses emotive adverbials and adjectivals such as 'enthusiastically' and 'a huge part' to suggest that teachers should 'role model' good learning to their students.

> I'm also looking to see an increase in students' belief in their own need for ongoing learning. So as a teacher, I would hope that they would start their teaching career understanding and enthusiastically grasping the fact that they're going down a path of being

a learner. And a huge part of that path of being a learner is that they need to role model being a good learner to their students. So I'm trying when I'm teaching to present as a learner who's talking about new things, and to role model that I'm a good learner, not just a good teacher. (TE1)

TE2 suggests that ongoing 'flexibility' and 'adaptability' are important for 'situations that emerge'. Situations are described as 'probably fairly unexpected' indicating the unpredictable nature of teachers' work (Lunn et al., 2019) and inferring the difficulty of standardised approaches to impact.

> There needs to be scope for flexibility and adaptability to kind of address questions and situations that emerge, that are probably fairly unexpected, that you haven't got a formal plan for … (TE2)

Transparency around expectations and success criteria for students is a useful strategy to encourage self-regulation (Hattie, 2012); however, teachers are not always provided with deep learning about the purpose of such strategies and they are sometimes introduced in reductive or tokenistic ways (Crichton & McDaid, 2016). P4 posits the 'data wall' as an indicator of progress as an existential assumption that has legitimacy in educational discourse despite little evidence of their utility to improve teaching and learning (Koyama, 2013). The high modality of 'They will move along the wall' indicates certainty around the growth strategy. The language of data walls suggests a belittling of students – 'little card … little photo … might be Indigenous' – or at least a sense that they can be categorised so easily and almost shamed if they don't meet the 'benchmark level' which is 'highlighted'. LI and SC are also framed with a high level of certainty using modal adverbs – 'Every child knows exactly …' – despite research to suggest that management teams in schools take for granted that teachers' knowledge of the use of such strategies is sound (Crichton & McDaid, 2016).

> The data wall is based, you can base it on what you like. I think most schools are certainly from prep to year two … there's a little card for every child with their face on it, so we

know immediately who we're thinking of. A little photo on it and any details about them … might be Indigenous. They will move along the wall. The wall is divided into levels. The average level, the benchmark level is there highlighted … and we have learning intentions and success criteria. Every child knows exactly what they're supposed to be learning today and can articulate it. (P4)

This comment from T2 indicates passivity and evaluative language (Martin, 2004) of scepticism from teachers around data use with 'we have Track bundles put together for us' and 'it's not the best measurement'. The language of 'ranking' is lexically linked to pre-determined strategies for 'helping those students move above the line'.

Our schools using this thing called Track Ed at the moment … we have Track bundles put together for us. We also use, and it's not the best measurement but I think it's been someone's project that they've taken on and it's, we call them class analysis profile sheets. And they're ranked … you've got your Naplan score down at the bottom … and then on the sides of the class analysis profiles there are strategies from ASOT implemented that you can use. So we focus on three students in that profile that we can move up and then we're supposed to link strategies to helping those students move above line. (T2)

RP5 indicates the 'contested and complex ground' of policy enactment is placed in a causal semantic relation with the solution of schools 'magic bulleting'. This suggests a lack of ownership and a value assumption (Fairclough, 2003) of enactment as compliance.

It's very contested and complex ground. There's no simple solutions to any of it. So schools are really magic bulleting just to try and make it go away. (RP5)

RP3 similarly outlines the reality of schools saving face in a climate of accountability. You can't be 'the bunnies' or 'early adopters' in a 'high stakes' data environment so you're 'better off sitting back and watching'. Unintended consequences of an environment of high stakes accountability need to be considered in policy enactment (Lavigne, 2014).

Sometimes you're better off sitting back and watching. By being earlier adopters, you become the bunnies. When you've got data being released publicly and it's high stakes, you

never be a bunny. You want to make sure that your school is always going to be represented well. (RP3)

RP1 repeatedly throughout these data, raised the issue of 'working in the grey' as a national body, positioning this uncertainty as both a challenge and an opportunity where it is 'exciting' but 'takes a lot of work'. The teacher educators and regulators in this study account for this power differently as a powerful driver of their work. There is an interesting contradictory discourse across the data of the benign and helpful national body as a logic of difference (Fairclough, 2003) in policy enactment alongside the discourse of the powerful and political puppet master controlling policy and enactment.

> If you're in a system you can mandate every teacher uses resources. If you're a regulator you can make some hard-line decisions. You've got a bit of power. The national body, working in the grey is challenging but it's also exciting because it means we're only as good as the stuff we do and produce because we require people to agree essentially. At the highest level that's the Ministers for education but to get Ministers for education to agree takes an awful lot of work with all the stake holders. (RP1)

In summary, the discursive practices of policy enactment outlined by these participants point to increased visibility and accountability, some passivity in relation to data use, but also positive opportunities for collegiality and professional learning.

Discussion and conclusion

In this paper we have used Ball's (2015) policy enactment to understand the interpretive, material and discursive ways that the nascent impact agenda has been enacted in Australia. Critical discourse analysis enabled us to make visible the ways in which teachers, principals, teacher educators and regulators/policy makers account for impact in their contexts. A number of studies have pointed out the ambiguities and issues of validity and reliability in how impact is interpreted and implemented in education. However, this study has contributed important understandings about the different interpretations, materiality and discursivity of the impact

agenda for these specific policy actors as they live through this policy enactment. The contextual or material facet of enactment is particularly pertinent given the focus on these different groups. For example, a shared vision or pedagogic framework was an important material influence for schools to enact policy. In contrast, stakeholder engagement was priorotised in the talk of teacher educators and regulators/policymakers. Both of these materialities, however, are in line with intelligent accountability (O'Neill, 2013) that creates transparency and best practice (Ydesen & Humbolt, 2019). Interestingly, school based policy actors did not interpolate top-down power or economistic accountability, yet this was a tension between teacher educators and regulators.

Common across these data was the tension between a holistic view of impact related to student wellbeing, voice, engagement and relationships, and a reductionist view of impact that relies on data analytics to show learning growth across a year. The ambiguity of the term 'impact' is problematic in that it proliferates all of the genre chains of educational discourse and has high stakes implications for all educational stakeholders (Ginsberg & Kingston, 2014). Further research is needed to investigate how different policy actors can implement a more intelligent form of accountability (O'Neill, 2013) that focuses on the holistic aims of schooling rather than on narrow test scores.

It is ironic that the current impact agenda focuses on evidence and yet its enactment has little evidentiary basis. Overwhelmingly, what previous research does confirm, which is supported by the findings of this study, is that impact is not a singular or simple construct that is easily measurable. It is highly dependent on interpretations, material conditions and different ways of talking and acting within contexts. We argue that for the impact agenda to lead to a positive transformation and better outcomes for all learners, it cannot be enacted as a standardised, top-down policy. Unless educators are involved in decision-making about their priorities for impact in their context and are given support and professional autonomy to use

various forms of evidence appropriate for their context, then the impact agenda will become another tick-box exercise whereby 'saving face' will be the ultimate goal.

Disclosure statement

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References

Amrein-Beardsley, A., Collins, C., Polasky, S. A., & Sloat, E. F. (2013). Value-added model (VAM) research for educational policy: Framing the issue. *Education Policy Analysis Archives*, *21*(4).

Ball, S. J. (2015). What is policy? 21 years later: Reflections on the possibilities of policy research. *Discourse: Studies in the Cultural Politics of Education, 36*(3), 306–313.

Ball, S., Maguire, M., & Braun, A. (2012). *How schools do policy? Policy enactments in secondary schools*. London: Routledge.

Bergeron, P. J. (2017). How to engage in pseudoscience with real data: A criticism of John Hattie's arguments in Visible Learning from the perspective of a statistician (L. Rivard, Trans.). *McGill Journal of Education*, *52*(1), 237–246.

Bourke, T., Lidstone, J., & Ryan, M. (2015). Schooling teachers: Professionalism or disciplinary power? *Educational Philosophy and Theory*, *41*(7), 84–100.

Bourke, T., Ryan, M., & Lloyd, M. (2016). The discursive positioning of graduating teachers in accreditation of teacher education programs. *Teaching and Teacher Education*, *53*(1), 1–9.

Brett, P. D., Fitzallen, N., Kilpatrick, S., Morrison, C., Reynolds, B., Kertesz, J., … Mainsbridge, C. (2018). Learning the words: Supervising teachers and the language of impact in an initial teacher education programme. *Australian Journal of Teacher Education*, *43*(8), 105–122.

Cochran-Smith, M., Carney, M. C., Keefe, E., S., Burton, S., Chang, W., Fernandez, M. B., … Baker, M. (2018). *Reclaiming accountability in teacher education*. New York, NY: Teachers College Press.

Cosner, S., Leslie, D., & Shyjka, A. (2019). Supporting instructional transformation tied to standards-based reforms: Examining a learning-focused approach to supporting school-wide implementation. *Leadership and Policy in Schools.* doi: 10.1080/15700763.2018.1551550

Crichton, H., & McDaid, A. (2016). Learning intentions and success criteria: Learners' and teachers' views. *The Curriculum Journal*, *27*(2), 190–203.

Doherty, C. (2017). Edufare for the future precariat: The moral agenda in Australia's 'earning or learning' policy. *Journal of Education Policy*, *32*(1), 34–47.

Ell, F., Simpson, A., Mayer, D., McLean, Davis, L., Clinton, J., & Dawson, G. (2019). Conceptualising the impact of Initial Teacher Education. *Australian Educational Researcher*, 46(1), 177-200.

Fairclough, N. (2003). *Analysing discourse: Textual analysis for social research*. London: Routledge.

Fitzgerald, T., & Knipe, S. (2016). Policy reform: Testing times for teacher education in Australia. *Journal of Educational Administration and History*, *48*(4), 358–369.

Ginsberg, R., & Kingston, N. (2014). Caught in a vise: The challenges facing teacher preparation in an era of accountability. *Teachers College Record*, *116*(1), 1–48.

Hanushek, E. A., & Rivkin, S. G. (2012). The distribution of teacher quality and implications for policy. *Annual Review of Economics*, *4*, 131–157.

Hattie, J. (2012). *Visible learning: Maximizing impact on learning*. New York, NY: Routledge.

Jäger, S., & Maier, F. (2003). Theoretical and methodological aspects of Foucauldian critical

    discourse analysis and dispositive analysis. In R. Wodak & M. Meyer (Eds.), *Methods of*

    critical discourse analysis (pp. 34–61). Los Angeles, CA: Sage.

Kertesz, J., & Brett, P. (2019). Defining and designing impact consciousness in teacher

    education. *Teaching Education*. doi: 10.1080/10476210.2019.1583728.

Konstantopoulos, S. (2014). Teacher effects, value added models and accountability. *Teachers*

    College Record, *116*(1), 1–21.

Koyama, J. (2013). Global scare tactics and the call for US schools to be held accountable.

    American Journal of Education, *120*(1), 77–99.

Lavigne, A. (2014). Exploring the intended and unintended consequences of high-stakes teacher

    evaluation on schools, teachers, and students. *Teachers College Record*, *116*, 1–29.

Leonard, S., & Roberts, P. (2014). Performers and postulates: The role of evolving socio-

    historical contexts in shaping new teacher professional identities. *Critical Studies in*

    Education, *55*(3), 303–318.

Loughran, J. (2016). Teaching and teacher education: The need to go beyond rhetoric. In R.

    Brandenburg, S. McDonough, J. Burke, & S. White (Eds.), *Teacher education:*

    Innovation, intervention and impact (pp. 253–264). Singapore: Springer.

Lunn, J., Rowan, L., Ryan, M., Walker, S., Bourke, T., & Churchward, P. (2019). Researching

    teacher educators' preparedness to teach to and about diversity: Investigating epistemic

    reflexivity as a new conceptual framework. *Asia Pacific Journal of Teacher Education*,

    47(3), 230–250.

Martin, J. R. (2004). Sense and sensibility: Texturing evaluation. In J. Foley (Ed.), *Language,*

    education and discourse: Functional approaches (pp. 270–304). London: Continuum.

Marx, R. (2014). Reforming again: Now teachers. *Teachers College Record*, *116*, 1–15.

Mills, C., & Ballantyne, J. (2016). Social justice and teacher education: A systematic review of empirical work in the field. *Journal of Teacher Education*, *67*(4), 263–276.

OECD. (2019). *Education at a glance 2019: OECD indicators*. Paris: OECD Publishing.

O'Neill, O. (2013). Intelligent accountability in education. *Oxford Review of Education*, 39(1), 4-16.

Ozga, J. (2000). *Policy research in educational settings: Contested terrain*. Buckingham: Open University Press.

Ozga, J. (2019). The politics of accountability. *Journal of Educational Change*, doi: 10.1007/s10833-019-09354-2.

Plecki, M. L., Elfers, A. M., & Nakamura, Y. (2012). Using evidence for teacher education program improvement and accountability: An illustrative case of the role of value-added measures. *Journal of Teacher Education, 63*(5), 318–334.

Ryan, M., Bourke, T., Lunn, J., Rowan, L., Walker, S., & Churchward, P. (2018). Seeking a reflexive space for teaching to and about diversity: Emergent properties of enablement and constraint for teacher educators. *Teachers and Teaching: Theory and Practice*, *25*(2), 259–273.

Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.

Teacher Education Ministerial Advisory Group (TEMAG). (2014). *Action now: Classroom ready teachers*. Retrieved from http://www.studentsfirst.gov.au/teacher-education-ministerial- advisory-group

Twiselton, S. (2012, November). *Seeing the wood for the trees: Developing teacher expertise—Conditions, contexts and implications.* Paper presented at the Universities' Council for the Education of Teachers Annual Conference, Hinckley, UK.

Ydesen, C. & Hombolt, A. (2019). Accontability implications of the OECD's economistic approach to education: A historical case analysis. *Journal of Educational Change*, doi: 10.1007/s10833-019-09355-1.

Zuckerman, S., Wilcox, K. C., Durand, F., Lawson, H., & Schiller, K. (2018). Drivers for change: A study of distributed leadership and performance adaptation during policy innovation implementation. *Leadership and Policy in Schools*, *17*(4), 618–646.