

Discourses of Teacher Quality in the Australian Print Media 2014-2017: A Corpus-assisted Analysis

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ABSTRACT

Discourses of 'teacher quality' have been on the rise in Australia since at least the standards-focused policy reforms of the 1990s. This paper uses a corpus-assisted analysis to explore recent deployments of 'teacher quality' and 'teaching quality' in the Australian print media, drawing on 432 articles collected from the twelve Australian national and capital city daily newspapers over the four-year period from January 2014 to December 2017. The analysis highlights that 'teacher quality' and 'teaching quality' are deployed differently in respect to school teachers and teachers in higher/vocational education contexts, and examines the nature of these differences. It demonstrates that the print media plays a key role in shaping and/or reflecting the links between discourses of teacher quality and notions of standards and accountability in education; and also in reflecting the highly politicised and political nature of teacher quality discussions and debates in Australia at this time.

Print media articles focusing on 'teacher quality' have been on the rise in Australia since the late 1990s, reaching a recent peak around the passage of the Australian Education Act in 2012/2013 (Mockler, 2018). At the same time, so-called teacher quality has been a particular focus of successive governments' education policy in relation to schools. During the years of the Rudd-Gillard-Rudd (Labor) Government (2007-2013), the teacher quality agenda was linked to moves to strengthen the Australian Institute of Teaching and School Leadership; to establish national teaching standards and national standards for the accreditation of initial teacher education programs; and toward greater 'consistency' and 'transparency' realised through the national curriculum and national testing program. In the years from 2014 to 2017, teacher quality was one of the five key planks of the Abbott-Turnbull Coalition Government's *Students First* policy suite (Australian Government Department of Education and Training, 2016), designed to "lift the quality, professionalisation and status of the teaching profession" (Australian Government Department of Education and Training, 2017). A focus on *teacher quality* has thus been a central tenet of the Coalition Government's education policy reforms since their election in 2013, consistent with key education policy reforms enacted by the previous Government.

Because of the increasingly ubiquitous nature of the concept of *teacher quality* in discussions of education reform in Australia, particularly the proffering of increased teacher quality as a solution to problems of poor performance of students, schools, and school systems, research into the ways that this concept is deployed in the print media, and the consequences of this deployment, is important and timely. This paper systematically explores manifestations of discourses of teacher quality in the Australian print media over the years from 2014 to 2017, through a corpus-assisted discourse analysis approach. Where much research on media discourses of education tends to

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utilise close analysis of a small number of selected media texts (for example, Baroutsis, 2016; Cohen, 2010; Mills & Keddie, 2010; Mockler, 2013), a corpus-assisted approach allows for both 'macro' and 'micro' lenses to be applied to the analysis, exploring language patterns and their implications for the shaping of discourses as well as uses of language in context. Fenech and Wilkins (2017, p. 168) have noted in their work on representations of early childhood education in the print media, that corpus tools help to identify “strategic signposts for subsequent and more fine-grained qualitative and discursive analysis of such data”. This paper aims to demonstrate the utility of these methods in investigating media discourses of education, through an examination of the discourse of teacher quality as realised in the Australian print media over a set timeframe.

The paper is presented in three parts. After a brief review of recent work on representations of education in the print media and discussion of methodological considerations and approaches, I use a range of corpus-based tools to systematically explore the selected media articles, building an overview of the discourse of teacher quality as realised in the Australian print media from 2014 to 2017.

A Corpus-assisted Approach to Exploring Media Discourses of Education

A growing body of work has explored representations of different aspects of education in the print media over time. In the Australian context, this work has been conducted by scholars such as Blackmore and Thorpe (2003), Mills and Keddie (2010), Baroutsis (2016), and Fenech and Wilkins (2017). Internationally, similar work has been undertaken in the United States (Cohen, 2010; Ulmer, 2016), Latin America (Robert, 2012), Finland (Punakallio & Dervin, 2015), and Israel (Yemini & Gordon, 2017), while further work has taken a comparative approach (Waldow, Takayama, & Sung, 2014).

Print media texts hold the capacity to both shape and reflect dominant perceptions of education in the public space, and are key to what might be known as ‘issue visibility’ (Winburn, Winburn, & Niemeyer, 2014). As Baker, Gabrielatos and McEnery have noted in their introduction to their book on representations of Islam in the UK print media (2013), “newspapers function as more than mere ‘mirrors’ of reality”:

Instead, they have the role of constructing ideologically motivated versions of reality, which are aimed at persuading people that certain phenomena are good or bad, leading John Richardson (2004, p. 227) to describe journalism as an ‘argumentative discourse genre’. (p.3)

In relation to education, Mills and Keddie (2010) have argued that the media is a primary source of public knowledge about education, and as such media representations of education are important because of the way they contribute to broad public understandings of what goes on in schools. Furthermore, while the influence of the media on the shaping of both public perceptions and public policy is well recognised (see, for example, McCombs, 2014; Rivers, 2016) it should be noted that this relationship is not by any means understood as linear or predictable. Rather, it is a complex and messy relationship, rendered more so by the relatively recent advent of social media, the proliferation of ‘citizen journalists’ and the associated decline in authority of the mainstream media.

As noted above, the vast majority of scholarship in the area of education and the media has centred on the close analysis of small selections of texts, often print media articles,

and usually focused on the identification of discourses, themes or recurrent frames in use across the dataset, without the analysis of a broader corpus of texts. In studies of media and news discourse beyond the context of education, however, corpus-assisted approaches to discourse analysis utilising both quantitative and qualitative analysis have long been employed, putting both ‘macro’ and ‘micro’ analytical lenses to work (see, for example, Baker et al., 2008; Hunston, 2002). A corpus-assisted approach allows for comprehensive and systematic analysis to be performed on larger collections of texts; for patterns, similarities and differences to be identified within and across different groups of texts; and for prototypical or exemplar texts to be identified for closer analysis.

Approach and Methods

This study analysed media articles sourced from the twelve Australian capital city and national daily newspapers via the Factiva database using the search terms "teacher quality" and "teaching quality" over a three year period from January 1, 2014 to December 31, 2017. The search initially identified 432 unique articles, comprising a corpus of over 260,000 words, and including news stories, feature articles, opinion pieces, commentaries and letters. This collection of texts is referred to henceforth as the Teacher Quality Corpus (TQC).

As Figure 1 below highlights, the articles were not evenly distributed between the newspapers, with 131 (30.3%) published in *The Australian*, and 54 (12.5%) in the *Australian Financial Review*. This perhaps reflects the continuing constitution of schooling generally and teacher quality specifically as a national issue during this period, despite Australia’s federated system of schooling. A further 53 (12.2%) were published in the *Sydney Morning Herald*, perhaps reflecting a disproportionate focus on ‘teacher quality’ in the state of NSW in the years following the release of the *Great Teaching Inspired Learning* blueprint (NSW Government, 2013).

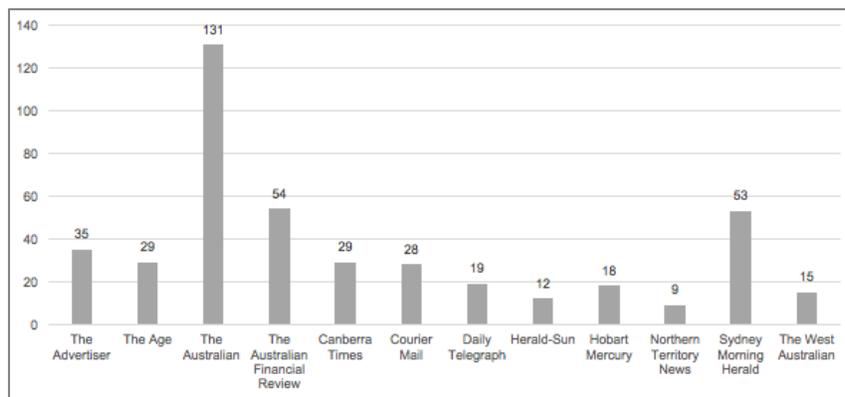


Figure 1: Distribution of articles according to source

The print media landscape in Australia is bifurcated, with eleven of the twelve national and capital city newspapers owned during these years by either News Corp Australia (seven) or Fairfax Media (four). The remaining newspaper, *The West Australian*, is independently owned. 252 of the 432 articles (58.3%) in the Teacher Quality Corpus were published in News Corp publications, while 165 (38.2%) were published in Fairfax newspapers, and the remaining 15 (3.5%) in *The West Australian*.

As Baker et. al. (2013) have noted, it is becoming increasingly difficult to categorise print media outlets along traditional tabloid/broadsheet lines and in terms of political affiliation. They point to both shifting formats that make the tabloid/broadsheet distinction difficult (in Australia, for example, all broadsheet newspapers except *The Australian* are now published in 'Berliner' size, similar to that of the tabloids), and also to the "move in the elite press toward populism" in recent years, caused by the popularity of tabloid newspapers (p.7). Reflecting this complexity in the Australian context, Shine (2015) suggests that *The West Australian* might be more appropriately considered a "broadsheet/tabloid hybrid" (p.26). In relation to political affiliation, Baker et. al. (2013) note the complexity of this issue also, given the multiple voices that a newspaper might showcase. Recognising this complexity, I have employed their categorisation of newspapers as right or left *leaning* rather than right or left *wing*.

Publication	Owner	Type	Orientation	Readership ¹
The Advertiser	News Corp	Tabloid	Right-leaning	281,000
The Age	Fairfax	Broadsheet	Left-leaning	472,000
The Australian	News Corp	Broadsheet	Right-leaning	311,000
The Australian Financial Review	Fairfax	Broadsheet	Right-leaning	181,000
Canberra Times	Fairfax	Broadsheet	Left-leaning	50,000
Courier Mail	News Corp	Tabloid	Right-leaning	355,000
Daily Telegraph	News Corp	Tabloid	Right-leaning	558,000
Herald-Sun	News Corp	Tabloid	Right-leaning	847,000
Hobart Mercury	News Corp	Tabloid	Right-leaning	48,000
Northern Territory News	News Corp	Tabloid	Right-leaning	27,000
Sydney Morning Herald	Fairfax	Broadsheet	Left-leaning	446,000
The West Australian	Seven West	Tabloid	Right-leaning	350,000

Table 1: Newspaper profiles

Using these distinctions, 68.5% of the articles in the Teacher Quality Corpus were published in what might be regarded as broadsheet newspapers, with the remaining 31.5% published in tabloids, suggesting that the broadsheet newspapers demonstrated a proportionately higher interest in matters related to teacher/teaching quality in this period. Significantly more of the articles in the TQC were published in right-leaning newspapers (74.3%) than left-leaning ones (25.7%), which, while an approximately proportionate representation, suggests that more of the articles within the corpus might present a more conservative view on the issue.

Prior to analysis, the data were 'cleaned', involving the deletion of photograph captions, formatting and spellchecking to eliminate errors that would interfere with the corpus linguistic analysis software. The output from the Factiva database was split into 432 separate text files, named according to date, publication, and type, which included news, comment (including op-eds) and letters. Where articles were identified as letters to the editor (including all of the letters for the day of publication), all non-education related letters were deleted prior to the analysis. Corpus analysis software Wordsmith Tools 7 (Scott, 2018) was used to conduct the computer-assisted analysis.

¹ Source: Roy Morgan research, Australian Newspaper Readership, 12 months to December 2017. Available at <http://www.roymorgan.com/industries/media/readership/newspaper-readership>

Three key corpus-assisted analytical techniques were used in the research to build a holistic account of deployments of *teacher quality* and *teaching quality* in the Australian print media from 2014 to 2017. At each step along the way, systematic concordance analysis was also undertaken, whereby the words and word clusters emerging as important according to these three techniques were examined manually, at close range and in context.

Word Frequency: A Starting Point

Initially, word and word cluster frequencies were examined across the TQC to provide a general picture of the corpus and highlight particular areas for further analysis. Frequency analysis is the least sophisticated corpus linguistic tool, used a ‘way in’ to the data rather than as an end in itself. In this case, frequencies of both individual words and words clusters of between two and five words were generated as a starting point for the analysis.

Collocation Analysis: The Company Words Keep

Collocation analysis, exploring significant and frequently co-occurring words in relation to “the associations and connotations they have, and therefore the assumptions they embody” (Stubbs, 1996, p. 172), was undertaken for both *quality* and the word-form *teach* (including *teach*, *teacher/s*, *teaching*, etc.). Collocation analysis provides particular insight into the discourse or semantic *prosody* of a concept such as *teacher* or *teaching quality*. Louw (1993) defines semantic prosody as “an aura of meaning by which a form is imbued by its collocates” (p.157), those words that frequently co-occur with the word in question. Of collocates, Firth (1957, p. 20) famously wrote “you shall know a lot about a word from the company it keeps”, and of studies of collocation in large corpora, Baker has written:

All words co-occur with each other to some degree. However, when a word regularly appears near another word, and the relationship is statistically significant in some way, then such co-occurrences are referred to as collocates and the phenomena of certain words frequently occurring next to or near each other is collocation. (Baker, 2006, pp. 95-96)

Computational and corpus linguistic techniques have thus enabled greater insight to be developed into discourse prosody, with Louw (1993), in his groundbreaking work, arguing that this provides the most compelling argument for developing larger and larger corpora: the characteristics of semantic prosodies “will only be revealed and be seen to stabilise once the content of a prosody can be collected extensively” (p.164). Such an extensive collection has been attempted in this research, which includes all print media articles employing the terms *teacher quality* and *teaching quality* over the set timeframe in all major newspapers. While generalisations cannot be made about the discourse prosody of these terms beyond the print media, the census nature of the data involved (within the stated parameters) does make it possible to make claims about the way they were employed in the Australian print media in the years in question.

The discourse prosody of *teacher quality* and *teaching quality* was thus explored via a computer-assisted collocation analysis, which used two statistical measures. The Mutual Information (MI) score is an effect size measure which measures the collocational strength of the relationship between words, with higher MI scores indicating stronger relationships. Hunston (2002) indicates that MI scores of over three suggest the presence of collocation, however she also notes that as the MI score does not take into account the

size of the corpus under analysis, they alone do not provide adequate evidence of collocation. Similarly, McEnery, Xiao and Tono (2006) argue that “collocational strength is not always reliable in identifying meaningful collocations. We also need to know the amount of evidence available for a collocation” (p.56). They thus suggest drawing on the recommendation of Church et. al. (1994), that both the MI score, which measures collocational strength, and the t-score, which reflects the confidence with which we can conclude that there is indeed an association (and which takes into account the size of the corpus under examination) be used in identifying collocates. In this analysis, an intersection of these two measures has been used, where words with both an MI score greater than three and a t-score greater than two (McEnery et al., 2006, p. 56) have been identified as collocates of the search term. The collocation analysis was conducted using a 4:4 window (i.e. four words on either side of the search term or ‘node word’), which is a standard procedure in exploring linguistic collocations (Scott & Tribble, 2006; Sinclair, Jones, & Daley, 1969).

Keyword Analysis: Exploring the ‘Aboutness’ of the Texts

In corpus linguistic analysis, keywords are those identified as occurring more often in one group of texts than another, in a statistically significant sense. Baker (2006) notes that keywords go beyond mere frequency indicate the salience of particular words across a group of texts. To engage in keyword analysis, corpus linguistic software is used to establish a measure of ‘keyness’ in the form of either a test of significance (such as the log-likelihood statistic and associated p-value, which indicates how confident we can be that a keyword’s appearance in a corpus cannot be accounted for by chance alone) and/or an effect size statistic, such as Hardie’s Log Ratio statistic (Hardie, 2014). As Scott notes, keywords “give robust indications of the text’s *aboutness*, together with indicators of style” (2010, p. 43). Keywords thus provide a sense of the important distinctions between texts and groups of texts, and convey a sense of the ‘aboutness’ of a large group of texts.

Keyword analysis works with a study corpus, in this case the TQC, and a reference corpus against which the study corpus is compared. For this analysis, the Wordsmith Tools 7 keyword function was used to compare the TQC to a subsection of the Australian portion of the *News on the Web* (NOW) corpus (Davies, 2013). The NOW corpus includes over three billion words gathered using Google News from 20 countries on a daily basis, and dates from 2010 to the present day, updated daily. The subsection of NOW used as the reference corpus was of Australian news texts only, from 2014 to 2017 inclusive, the same timespan as for the texts included in the TQC. This subsection of the NOW Corpus includes over 324,000,000 words in total, and over 611,000 distinct word types. A combination of measures of significance and effect size was used to identify keywords. The log-likelihood statistic was used to identify words that appear more frequently in the TQC than in the reference corpus in a statistically significant sense, as is usual in keyword analysis (McEnery et al., 2006; Oakes, 1998). A high threshold was set for this analysis: to be identified as a keyword, a word must appear in at least 10% of the texts in the TQC – this to ensure that the heavy use of a word in a small proportion of the texts within the corpus does not suggest keyness – and significance testing was conducted at the level of $p < 0.000001$, meaning that we can be 99.9999% confident that an identified keyword does not appear on the list by chance. The log ratio statistic (Hardie, 2014) was used to judge the relative importance of the differences in frequency once their significance had been established using log-likelihood.

Discourses of Teacher Quality

As noted above, as a starting point, a word frequency list was developed from the TQC, highlighting the words used most frequently in the corpus. Table 2 below shows the 30 most frequent lexical words² in use in the corpus.

Word List
education, students, schools, school, said, teachers, teaching, teacher, quality, government, Australian, university, funding, Australia, student, universities, years, new, research, high, need, results, state, federal, time, standards, minister, learning, other, public

Table 2: 30 most frequent lexical words

Given the search terms used for selection of articles, the appearance of education-related words (such as *education*, *school/s*, *student/s*, *teacher/s*) on this list is not noteworthy. Similarly, neither is the appearance of *quality*. It should be noted, however that while *quality* appears in the corpus 548 times as part of one of the search terms, it also appears within the corpus on 424 additional occasions (that is, not as part of *teacher* or *teaching quality*), and this alone would have placed it in the top 30 most frequent lexical words in the corpus. We will return to the various uses of *quality* within the corpus in subsequent discussion. The proliferation of government-related words, such as *government*, *federal*, *state*, *Australia/n*, *public* and *minister* on this list suggests a political edge to the teacher quality discourse. *Said* is the only verb on this list, and raises a question about these articles and their tendency to draw on commentary: in subsequent discussion we will briefly explore the nature of these commentaries and who is doing the ‘saying’ in the corpus. Finally, the appearance of *standards* suggests a possible relationship between the concept of teacher quality and professional teaching standards in the media articles, another area for further exploration.

Word clusters of between two and five words were also explored in terms of frequency. Table 3 below presents the ten most frequent word clusters in the corpus, in order from most frequent (‘teacher quality’, with 369 appearances in 298 of the media texts) to least frequent (‘quality of’, with 151 appearances in 104 texts).

Word List
Teacher quality, education minister, the university, the government, literacy and numeracy, teaching quality, higher education, federal government, teacher education, quality of

Table 3: Ten most frequent word clusters

While the prevalence of ‘teacher quality’ and ‘quality teaching’ on this list is unsurprising, given their use as search terms, other word clusters echo and extend the observations made above in relation to frequencies. The frequent use of the clusters ‘education minister’ (256 times in 179 articles), ‘the government’ (231 in 120 articles), and ‘federal government’ (158 in 101 articles) resonates with the observations made above regarding the political edge of teacher quality discourse. In particular, the relative prevalence of ‘federal government’ points to the way in which the print media positions teacher quality as a national issue, part of what Lingard (1991) and Savage (2016; Savage

² Baker (2006) notes that while grammatical words are useful in discerning the register of a text or group of texts, lexical words provide insight into the discourses within a corpus. For this reason, this discussion excludes grammatical words and focuses exclusively on lexical words.

& Lewis, 2017), among others, have conceptualised as the emergence of a federal field of education in Australia.

The appearance of ‘literacy and numeracy’ (185 times in 92 articles) and ‘teacher education’ (153 in 72 articles) on this list suggests a link between issues of teacher or teaching quality and literacy and numeracy standards of either students and/or teachers; or teacher education, respectively. The frequency of ‘the university’ (243 times in 106 articles) and ‘higher education’ (175 in 67 articles) reflects the number of articles in the corpus focusing either entirely or partially on university or further education (some of which focus specifically on initial teacher education, but the majority of which do not), and we will explore this issue more in further analysis of the use of the search terms within the text, below.

Having established which lexical words were used most frequently within the corpus, manual concordance analysis was employed to explore how selected words and phrases were used in context within the corpus.

Teacher Quality and Teaching Quality in Context

In the first place, the search terms ‘teacher quality’ and ‘teaching quality’ were examined in order to ascertain which teachers were the subject of discussion. 76% of the occurrences of both search terms were found to relate to school teachers, the focus of this paper, while 24% were found to refer to other teachers (namely those in the higher and vocational education sectors)³. Table 4 below presents their breakdown according to the two search terms.

Search Term	School Teachers	Other Teachers	Total
Teacher Quality	360	9	369
Teaching Quality	57	122	179

Table 4: Deployments of Teacher and Teaching Quality in the Texts

Of the 369 instances of the use of ‘teacher quality’ in the corpus, 360 (98%) referenced school teachers, while nine (2%) referenced teachers in higher/vocational education contexts. Conversely, of the 179 instances of ‘teaching quality’ in the corpus, only 57 (32%) related to school teachers, while the majority of references (122, equalling 68%) related to teachers in higher/vocational education. Clearly, the notion of ‘teacher quality’ is predominantly used in reference to school teachers, while ‘teaching quality’ is employed by the print media in more expansive ways. Gore, Ladwig and King (2004) draw attention to the difference between understanding good teaching as practised (as implied in ‘teaching quality’) and embodied (as implied in ‘teacher quality’), arguing that “where good teaching is understood as being about practices rather than bodies, there is likely to be a stronger receptivity to the idea of change in pedagogy as advocated in [Quality Teaching⁴]” (p. 7). The predominance of use of the term ‘teacher quality’ in relation to school teachers brings a connotation that there is something implicitly wrong with the teachers themselves, rather than with their practices, a notion further reinforced within the discourse of teacher quality, as we shall see. Conversely, in university and vocational education contexts, the high prevalence of ‘teaching quality’ in the corpus

³ Despite 19 mentions of early childhood education in the corpus, no use of either ‘teaching quality’ or ‘teacher quality’ in the corpus referred to early childhood teachers.

⁴ Quality Teaching is the model of pedagogy developed by Gore and Ladwig for the NSW Department of Education. See NSW Department of Education and Training (2003).

suggests that the problem is regarded as a problem of practice, and of the structures and systems that allow for particular practices to flourish and others to wane. The upshot of this is an implicit understanding that the ‘quality’ problem in schools has to do with *who* is doing the teaching, while in universities and further education contexts it has more to do with the *how* of teaching, which, one might argue, is an infinitely easier issue to address. This difference will be further explored below.

Second, concordance analysis of the search terms was conducted to explore their immediate context, specifically focused on the verbs and adjectives used to the left of the search term, exploring what was being suggested about teacher quality in the texts. As an example, Table 5 below reproduces an extract of 15 lines of the concordance, utilising the most frequently-used word in the space immediately to the left of the search term, *improve*.

Concordance Extract: Teacher Quality	
that measures that can improve	teacher quality are the best means of lifting students'
Everyone agrees we must improve	teacher quality , but there is substantial disagreement on how
literacy and numeracy skills, improve	teacher quality , raising autonomy and accountability in the
standard for new teachers, improve	teacher quality in every classroom and establish minimum
review's recommendations to improve	teacher quality . It also calls for practical training to be
announced other measures to improve	teacher quality , including basing salary increases for
any initiative that helps to improve	teacher quality ". "The community expects very high
it dismissed the opportunity to improve	teacher quality by elevating the calibre of teacher education
at the forefront of efforts to improve	teacher quality is Emily Rhodes at Belmore South Public
are blocking tough reforms to improve	teacher quality and empower principals to halt the slide
was leading reforms to improve	teacher quality , to ensure that performance was rewarded in
In a bid to improve	teacher quality , the Federal Government is requiring all
pledging \$107 million to improve	teacher quality , \$97 million for her Advance Queensland
38 recommendations to improve	teacher quality - everything from better national
committing \$16.9 million to improve	teacher quality . The funds will be provided to the Australian

Table 5: Concordance Extract: Teacher Quality

The concordance analysis highlighted that of the 548 occurrences of the two search terms, *teacher quality* and *teaching quality* in the texts, 143 (26%) referred to *improving* (including *lifting*, *boosting*, *enhancing* and *raising*) quality. 52 occurrences referred to *focusing on* (also including *targeting*, *emphasising*, *clampdown*, *investing*), while 18 referred to *declining* (including *reducing*, *poor*, *crisis in*, *neglect* and *falling*) teacher or teaching quality.

Third, given the frequent occurrence of *quality* in the texts, beyond instances where it appeared in the search terms themselves, concordance analysis was undertaken to explore exactly how and in relation to what, the concept of *quality* was used in the corpus outside of the search terms. Of the 972 instances of *quality* in the corpus, 548 occurred as part of the search terms *teacher quality* (369) and *teaching quality* (179). The remaining 424 occurrences of *quality* in the corpus related to ten different concepts (in a small number of cases, *quality* referred to more than one concept). Table 6 below lists these concepts, from most to least frequently referenced in the corpus.

Concept	Freq	Concept	Freq
Teaching	125	School/s or Education System	40
Teacher/s	56	General 'quality'	39
Teacher Education Students/Graduates/Courses	54	Incidental 'quality'	20
Higher Education Institutions/Courses/Graduates	44	Learning	9
Education	42	Early Childhood Education	6

Table 6: Uses of Quality

Even beyond the search terms themselves, mentions of *quality* most frequently related to teaching (125) and teachers (56). Together these two concepts account for almost 43% of the usages of *quality* in the corpus outside of the search terms. 54 instances related to the quality of either initial teacher education students, graduates or courses: together these account for approximately 13% of the uses of *quality* in the corpus. Mentions of research quality, the Tertiary Education Quality and Standards Agency, graduates of non- initial teacher education courses in higher education, higher education courses and institutions and campus quality accounted for 44 (10%) of the 424 appearances of *quality* in the corpus, and all exclusively relate to higher education as opposed to schooling.

The quality of schools and the school education system together accounted for 40 of the instances of *quality* in the corpus, while 39 of the occurrences referred to *quality* generally: that is, without linking the notion of quality to any other concept. A further 20 instances were incidental in that they bore no relationship to education at all. The quality of learning and of early childhood education accounted for nine and six instances respectively.

While the quality of a number of other concepts were mentioned a small number of times in the corpus, Table 6 highlights that *quality* is deployed in this corpus primarily in relation to teachers and teaching, to education and education systems generally, and to teacher education programs, student and graduates. Furthermore, the concordance analysis suggests that *quality* itself is often deployed in the context of a nominated deficit or other need for improvement in relation to these things. In essence, rather than celebrating quality that already exists, the usage holds that (low) quality is a problematic to be solved.

Voices of Authority in Media Texts on Teacher/Teaching Quality

Given the frequency of *said* in the TQC, concordance analysis was conducted for its variants (including *says*, *say* and *saying*), in order to explore whose voices were utilised in the media articles. There were 1433 occurrences of *said*, 497 of *says*, 93 of *say* and 58 of *saying* in the TQC. All 2081 of these were manually examined, and of these, 1963 instances where *said* or its variants was used by way of drawing on sources were identified. These instances were further examined to identify the people and

organisations attributed to the ‘saying’. Given the different usages of the search terms as identified in the concordance analysis presented above, for this analysis the TQC was divided into two subcorpora: articles focused on school education (342) and articles focused on higher/vocational education (90).

Members of 19 different groups provided source material for the 432 media articles, as represented in Table 7 below. Where individuals could conceivably be placed in more than one group (such as an academic who was also quoted as the chair of a policymaking body), they were assigned to one group based on the primary affiliation used in the article.

Actor	Total % n=1963	School % n=1550	HE/VE % n=413
Politician/Government	29.4	35.0	8.5
Other Policy Actor	17.6	15.1	27.1
Academic Expert (Education-related)	9.9	8.6	14.8
School Principal	5.8	7.3	0.0
Union Official/Union	5.7	6.9	1.0
Vice Chancellor	5.2	2.3	16.0
Policymaker	4.4	5.5	0.0
School System/Network Representative	4.2	5.4	0.0
Teacher	3.7	4.7	0.0
Business/Industry Figure	3.7	2.4	8.7
University Spokesperson	2.8	0.0	13.3
Other Teacher/Principal Organisation	2.3	3.0	0.0
University Student	1.5	0.5	5.6
Educators/Other Education Experts	0.9	1.0	0.7
Higher Education Organisation	0.9	0.1	3.9
Parent	0.7	0.8	0.0
Board Member	0.5	0.5	0.5
School Student	0.4	0.5	0.0
Parent Organisation	0.3	0.3	0.0

Table 7: Sources

Politicians and Government spokespeople were by far the most frequent ‘sayers’ in the TQC, representing over 29% of the uses of *said*. This differed radically between the two sub-corpora, however, with politicians doing the saying in 35% of the cases in the school-related articles but only 8.5% in the higher/vocational education-related articles. A consequence of this is that in articles referencing teaching or teacher quality in schools, voices of authority come almost as frequently from politicians as from the combined group of principals, teachers, unions, school system representatives, teachers and principals’ organisations, parents and parent organisations, and academic and other experts on education (38.5%). By contrast, in articles related to higher/vocational education, vice chancellors and other university spokespeople, academic and other education experts, and higher education organisations and their representatives did 55.3% of the ‘saying’, as opposed to politicians with 8.5%.

‘Other Policy Actors’ including think tanks and other pseudo-educational organisations such as Teach for Australia and their employees, were the second most frequently cited sources, in 17.6% of instances across the whole corpus, highlighting their considerable

influence (Lingard, 2016), but cited proportionally more frequently in the higher and vocational education texts (27.1%) than in the school-focused texts (15.1%). Academics with expertise in education were also cited proportionally more frequently in the higher and vocational education texts (14.8%) than in the school-related texts (8.6%).

The Discourse Prosody of Teacher and Teaching Quality

Concordance analysis sheds contextual light on patterns of usage and highlights avenues for further analysis, but, as noted above, collocation analysis is required to truly understand the discourse or semantic *prosody* of a concept such as teacher or teaching quality. For this collocation analysis, the TQC was once again divided into the two subcorpora: one including articles focused on school education and one including articles focused on higher/vocational education. Collocations were run for *teaching quality* and *teacher quality* together, by school and higher/vocational education subcorpora.

Teacher and Teaching Quality at School and University

Table 8 below highlights the 52 lexical collocates of *teacher quality* and *teaching quality* in the school-related subcorpus, presented in order according to their MI score (effect size).

Collocates: School Subcorpus

curriculum, autonomy, accountability, improving, student, improve, parental, teacher, lifting student, lift, ensuring, Pyne, outcomes, learning, improvements, boost, reforms, investing, factors, standards, focus, school, raising, institute, academic, schools, education, measures, focused, professional, evidence, issue, important, push, increased, single, funding, training, quality, students, key, areas, class, development, better, including, national, million, government, more, said, one

Table 8: Collocates of ‘teacher quality’ and ‘teaching quality’ (School subcorpus)

Many of the collocates in Table 8 (such as *autonomy*, *accountability*, *improving*, *improve*, *lifting*, *outcomes*, etc.) suggest that when used in relation to schools, the terms *teacher quality* and *teaching quality* are strongly situated within discourses of improvement, accountability and standards. The appearance of *government* and *Pyne* (the federal Minister for Education and Training from 2013 to September 2015) provides further evidence for the claims made earlier regarding teacher/ing quality as a political issue, while words such as *funding* and *million* point to the ongoing discussion of the links between school improvement, quality and funding in the Australian media from 2012 to the present day (Mockler, 2014).

Most illuminating is the contrast between these collocates and the 15 lexical collocates of *teacher quality* and *teaching quality* in the higher/vocational education texts, as represented in Table 9.

Collocates: Higher/Vocational Education Subcorpus

satisfaction, student, output, engagement, Flinders, rating, stars, universities, skills, staff, research students, star, experience, support, five, one

Table 9: Collocates of ‘teacher quality’ and ‘teaching quality’ (Higher/vocational ed. subcorpus)

The higher/vocational education collocates reflect the context in which teaching/teacher quality is most often raised in these articles, namely around the release of student survey results, relating to student satisfaction, engagement and experience; and institutional

rankings relating to four and five stars, research outputs and so on. *Flinders* refers to Flinders University, whose performance in international rankings was the subject of almost 10% of the articles in this subcorpus. The discourse prosody of teacher/ing quality when used in relation to university lecturers or teachers in the vocational education sector stands in stark contrast to that of its use in relation to school teachers. Teaching/teacher quality in the context of higher/vocational education is associated with institutions and measures of their quality, often linked to the positioning of students as customers or consumers of education (Pitman, 2016). Concordance analysis revealed that the absence of either positive or negative qualifiers amongst the collocates in this subcorpus reflects the fact that within these texts, teaching/teacher quality is observed to be of an adequate or good standard as often as lamented as in need of improvement, a direct contrast to the discourse prosody of the term when used in relation to schools and school teachers.

Keyword Analysis: Teacher Quality as a Political/Policy Tool

As introduced above, a keyword analysis, highlighting words used more frequently in the TQC relative to the News on the Web (NOW) corpus (Davies, 2013), a reference corpus of general media articles, was undertaken. Using the criteria elaborated previously, 170 keywords were identified as used more frequently (as measured in terms of statistical significance) in the TQC than in the reference corpus. Table 10 below highlights the 50 top lexical keywords (ordered according to log ratio).

Keywords
Government's, Australia's, Piccoli, numeracy, Gonski, NAPLAN, teaching, teachers, principals, teacher, literacy, curriculum, classroom, maths, graduates, classrooms, universities, educators, schooling, Pyne, courses, schools, Birmingham, educational, education, tertiary, teach, student, students, disadvantaged, graduate, rankings, profession, qualifications, outcomes, achievement, quality, Chancellor, subjects, standards, degrees, school, Adrian, learning, Catholic, funding, Christopher, reforms, classes, taught

Table 10: 50 Top Lexical Keywords

With regard to *aboutness*, this list of keywords is revealing. First, as might be expected given the search terms around which the TQC was constructed, a high proportion of the keywords might be regarded as broadly educational – for example, *education, teachers, schools, students* and so on. The words included in the search terms themselves also appear on the list. More interesting, however, are the 26 keywords that appear in bold, some of which are education-related but not so broad as to be generally related to education or specifically to teachers. These keywords reveal that print media articles discussing teacher quality are also focused on aspects of education such as *numeracy, literacy, curriculum, maths, and NAPLAN*, as well as links into funding debates through the keywords *Gonski, disadvantaged, Catholic* and *funding*. A separate set of bolded keywords once again highlights the political edge to teacher quality discourses, including *Government's, Piccoli* (after then NSW Minister for Education, Adrian Piccoli), *Pyne* (after previous Federal Minister for Education and Training, Christopher Pyne), and *Birmingham* (after current Federal Minister for Education and Training, Simon Birmingham). *Australia's* also speaks to this political edge, with teacher quality positioned as an issue of national concern. A final set reflect the accountability underpinnings of teacher quality discourses, comprising the keywords *rankings, outcomes, achievement, standards, and reforms*.

Conclusion: Deployments of Teacher Quality

This analysis highlights two key phenomena at work in relation to discourses of teacher quality. The first is that the notion of teacher quality itself is deployed differently in different contexts. As we have seen, the discourse prosody of *teacher quality* varies between the realms of school and higher/vocational education within the Teacher Quality Corpus. In relation to school teachers, frequency, collocation, concordance and keyword analysis has highlighted that *teacher quality* is largely associated with technologies of standards and accountability, and itself positioned as a technology of reform, a phenomenon requiring constant vigilance and continuous improvement. In relation to higher and vocational education, the discussion is far more likely to be about *teaching* rather than *teacher* quality, which is positioned as one element among many in institutional excellence and/or popularity. While teacher quality in schools is positioned as a problem in need of improvement, such a positioning does not prevail when it comes to higher or vocational education contexts.

Furthermore, the highly political nature of discourses of (school) teacher quality is demonstrated by this analysis. This can be seen not only in the prevalence of reference to governments, ministers, and the national interest reflected in the frequency, collocation and keyword analyses, but also in the concordance analysis for the verb *to say*, which highlighted the frequency with which the voices of politicians and other policy-makers were employed within the texts. Once again, in this we can observe a contrast between discourses of school teacher quality and discourses of teacher/ing quality in higher/vocational education, where politicians are seldom called upon to provide comment, and expert comment from within the sector is far more common.

This analysis serves to highlight that the discourse of teacher quality as represented in the print media is worthy of problematising: the notion itself is neither innocent nor apolitical, and its deployment is an example of what has been categorised in previous research as application of the ‘problem frame’ (Altheide, 1997, 2015) in news discourses about education (Baroutsis, 2016, 2017; Mockler, 2016). What is different about this analysis is that it has utilised not a selection of articles related to the phenomenon under investigation over the given timeframe, but rather *all* articles within the set search term and timeframe parameters. This has allowed a comprehensive exploration of the patterns at work across a substantial number of texts, and for broad conclusions to be drawn about the emergent discourses. A limitation of this approach is, of course, the lack of close contextual analysis of these patterns, although a substantial amount of concordance analysis was undertaken alongside the statistical analysis to ensure that the conclusions drawn about the patterns were consistent with the language in use. Future research might focus on a ‘downsampled’ (Baker & Levon, 2015) selection of texts, chosen for their prototypicality (Anthony & Baker, 2015), at closer range, to explore the specific ‘moves’ that constitute the deployment of teacher quality in the print media; and also engage in corpus-assisted analysis of key policy texts, to test how far the origins of media discourses of education might find their roots in education policy.

Despite taking a very different methodological and analytical approach, it is interesting to note that these findings resonate with, and in some ways confirm on a broader scale, those of recent studies employing critical discourse analysis, framing analysis, and other methods to explore more general representations of education in the media, many of

which have necessarily included a focus on teachers. In these studies, crisis often emerges as a significant theme. As Ball (2008) observed a decade ago, much media coverage of education focuses on ‘blaming’ teachers, a phenomenon highlighted in Keogh and Garrick’s (2011) close sociolinguistic analysis of a single news article, in which they conclude that “this article, along with other negative articles about teacher quality that appear regularly in the media, must inevitably contribute to continuing and pervasive public deficit views of teachers and teaching” (p.433). Evidence of this perceived crisis of teacher quality and its manifestation in the print media is similarly provided through analysis of a selection of articles at closer range in the work of Alhamdan et al. (2014) and Shine (2015), who found that “the message that teachers and schools were failing Australian students was the dominant theme” in her analysis of print media articles on NAPLAN. Furthermore, the deployment of teacher/ing quality identified in this analysis sits comfortably with tales told in the print media of a crisis of falling educational standards at a system level, as identified in recent work by Baroutsis (2016) and Mockler (2016). As a recurring theme, crisis is understood within the research to play a pivotal role in the shaping of media representations across time and geographical space, and consequently, in shaping public discourses of education, resonant once again with Altheide’s conceptualisation of ‘the problem frame’.

Finally, the key messages from this analysis are consistent with recent work on teacher quality which focuses on the shifting nature of discourses of teacher quality, and the work these discourses do in modern-day democracies. Connell, for example, has identified the contemporary resonance of *teacher quality* with neoliberal discourses of standards and accountability in education, arguing that this has given rise to “an extremely questionable way of operationalising teacher quality” (2009, p. 226). Berliner has written of the “silly and costly compliance-oriented actions” (2005, p. 206) that have emerged from political mandates around teacher quality in the United States, while Bourke, Ryan and Lloyd (2016) have linked ongoing teacher quality debates to regimes of standards, accountability and standardisation of practice. The findings from this study suggest that the media plays a key role in shaping and/or reflecting the links between discourses of (school) teacher quality and notions of standards and accountability in education; and also in reflecting the highly politicised and political nature of teacher quality discussions and debates in Australia at this time.

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