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The importance of trust and authenticity among stakeholders involved in higher education data infrastructure redevelopments: An Australian critical discourse study

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Abstract

Governments require higher education providers (HEPs) to be transparent in their use of public funds and have developed specialised higher education (HE) data infrastructure to enable the data transfer from HEPs to government departments. In 2018, Australia's Department of Education, Skills and Employment launched *Transforming the Collection of Student Information (TCSI)* to enhance HE data infrastructure for student data transfer. This critical discourse study explores the discourses, discursive strategies and perspectives surrounding TCSI. Findings included HEP issues and concerns that the interviewees believed were inadequately addressed or ignored despite the Department's claims of extensive engagement with HEPs to achieve mutually beneficial objectives. This study highlights the importance of trust and authenticity among stakeholders involved in major HE data infrastructure redevelopment projects and is the first known study of its kind in this context. Recommendations for TCSI and similar projects are provided, and broader implications for data infrastructure are discussed.

Keywords: higher education data infrastructures, government collaboration, critical discourse study.

Introduction

Since the 1960s, global higher education (HE) has become increasingly competitive and metricised, with terms such as marketisation, performativity and accountability now defining a responsive sector (Ball, 2008; Marginson, 1997; Middlehurst, 1999; Olssen & Peters, 2005; Tight, 2019; Williamson, 2019). Data is a valuable commodity and university decision-makers are expected to understand, use and be seen to use data effectively to position their institutions for funding success and viability. Yet, as Middlehurst (1997, p. 21) notes, "to fulfil the requirements and functions of accountability … regulatory and reporting arrangements need to be defined and agreed". In line with international trends (Funck & Karlsson, 2019; Jongbloed & Vossensteyn, 2010; OECD, 2017; Williamson, 2019), Australia's HE policy recently shifted from demand-driven to performance-contingent funding (Wellings et al., 2019), meaning that higher education providers (HEPs) must use data to comprehensively evidence their impact and secure funding (Borden et al., 2013; Matchett, 2019).

In January 2018, the Australian Government launched a data infrastructure redevelopment project for HE titled, *Transforming the Collection of Student Information (TCSI)*. The project

aimed to improve the quality and immediacy of student data transferred from HEPs to the Department of Education, Skills and Employment (Department) with all HEPs using TCSI by March 2021. Departmental documents portray TCSI as a transparent, inclusive, collaborative, beneficial and solutions-focused reform, but such claims prompt scrutiny. As Bleiklie and Kogan (2007) note:

> *Reforms are often presented as radical changes introduced as the outcome of thorough and well-planned structural redesign, and based on the assumption that human behaviour easily lends itself to steering by changes in formal structures. Actual reform processes, however, tend to depart from this ideal. (p. 483)*

This paper presents a critical discourse study (CDS) that examined the discourses, discursive strategies and perspectives surrounding TCSI to explore collaboration among these stakeholders. The research intends to: (1) raise awareness of TCSI among HE stakeholders; (2) uncover concerns expressed by participating HEP representatives; (3) explore how the HEP representatives' perspectives differed from those found in the analysed departmental documents; and (4) contribute to the development of CDS methodology. With these intentions, this CDS assumes that language creates and supports social processes and structures (Saarinen, 2008b), where discursive strategies are "forms of (discursive) manipulation of 'reality' by social actors in order to achieve a common goal" (Carvalho, 2005, p. 3).

Although this research is exploratory in intent, it is important because, to date, there has been no known research on HEP sentiments and/or stakeholder collaboration regarding TCSI, nor any other HE data infrastructure redevelopment project internationally. This research also makes a significant contribution to the sector by documenting a major event in the history of the Australian HE data infrastructure.

Study context

In Australia, HEPs are required to submit data on students, staff, research and finances to the Government and the Department manages the HE data collection (called the Collection in the analysed documents and in this paper) (DEET, 1993). The Collection refers to the process of collection (i.e., data transfer) and the collected data repository. This paper is focused on the *student* data component of the Collection as reflected by 'student information' in the name of TCSI. The Collection informs Australian HE policy development and provides student liability information to the Australian Taxation Office. The Department and Australia's 169 registered HEPs (TEQSA, 2018) use the Collection to shape sector policy and practices, and to benchmark, evaluate and report performance outcomes.

According to Borden et al. (2013, p. 44), "the roots of the current Collection can largely be attributed to the educational reforms introduced by the Hawke Federal Government of 1987–1989", which improved resource management, business and system processes, and HEP reporting capabilities. Low (2002) argues that these reforms increased the need for

roles often described in the literature as institutional researchers – staff involved in strategy and planning, statistical analyses, statutory reporting, compliance and/or benchmarking activities. The participants in this study are institutional researchers according to this definition.

The last major change of the Collection, in 2004, focused on aligning it with the Commonwealth Higher Education Support Act (HESA) 2003. The HESA remains in force and details HEP reporting requirements including the consequences of non-compliance (see Subdivision 19-E Section 19-70(1)). TCSI applies technological advances to the Collection to enable automated, instantaneous data transfer.

Student data infrastructure in higher education

Research on student data collection in HE has primarily focused on learning analytics, artificial intelligence, technological change and emerging commercial markets of data service provision (see Andrews, 2019; Daniel, 2019; Fallshaw, 2000; Kitto & Knight, 2019; Klašnja-Milićević et al., 2017; Productivity Commission, 2017; Williamson, 2018, 2019; Zawacki-Richter et al., 2019). However, Williamson's (2019) critical appraisal of publicly available documentary sources about the United Kingdom's (UK) student data infrastructure is highly relevant to this study. Williamson observed what he described as 'encoded' political interests and values within the UK HE data infrastructure. He described "synergies between governmental and commercial actors, as well as unresolved tensions with researchers and practitioners in university settings" (p. 2795). He argued that this originated from differing priorities, namely, that HEPs used data to empower students, while politicians prioritised a "metrics-powered" sector (p. 2796). Importantly, Williamson identified stakeholder collaboration as vital to "promoting and producing a joined-up, interoperable data infrastructure" (p. 2795), describing stakeholder engagement as the driving force behind the establishment of the UK Office for Students (OfS).

This CDS extends Williamson's ideas by exploring stakeholder perspectives and collaboration within the described Australian context, using Critical Discourse Analysis (CDA). TCSI is analogous to the UK Higher Education Statistical Agency's (HESA) project, Data Futures. HESA manages the UK Collection (c.f., the Department in the Australian context), while the UK Qualifications Assurance Agency (QAA) assures quality provision, and the Office for Students (OfS) uses the data to regulate. Like TCSI, Data Futures is focused on developing a software data platform and standard student model, data quality standards and cloud storage (HESA, 2016). Unlike TCSI, Data Futures includes analytical tools, data dashboards and other visualisation capacities to compare across institutions. Currently, TCSI analytics only enable HEPs to view their own data. As a secondary consideration (not part of TCSI), the Department is developing visualisations to provide national data insights. While Australia has an equivalent to the QAA, namely the Tertiary Education Quality and Standards Agency (TEQSA), there is no Australian equivalent to the OfS.

Methodology

This CDS is focused more on the process than product (Ozga, 2000) for HEPs in the context of TCSI. Wodak (2001a) describes "process" as involving communication and negotiation (discourses) among stakeholders in time and space, with discourse being context specific, "structured by dominance [and] historically produced and interpreted" (p. 3). According to Wodak (2001b), discursive strategies, such as nomination, predication, argumentation, perspectivation and intensification, can facilitate legitimation of ideologies and/or objectives by powerful groups. In this study, language (discourse and discourse practices) and context (historical and present) are viewed as crucial to the development, implementation, reception and outcomes of TCSI.

This CDS was approached from a relativist ontological and critical-social constructionist epistemological position in recognition of the different interpretations and perspectives that exist within the study context. Wodak (2001a) explains "critical" as meaning "having distance to the data, embedding the data in the social, taking a political stance explicitly, and [focusing] on self-reflection as scholars doing research" (p. 9). In this study, the researcher attended to this definition by exploring and exposing the social structures and relations associated with TCSI. Via transparent reporting, the researcher has attempted to empower readers to form their own judgements as to the plausibility and authenticity of this research (Pozzebon, 2004).

Persuasion inherent in the socio-political context of TCSI, may be an intention behind discursive strategies (Muntigl, 2002). According to Saarinen (2008a) "some policy actors have the power to regulate, whereas the policy construction powers of others are dependent on their persuasive powers" (p. 344). In this study, the Department has the power to regulate, whereas the HEP representatives are limited by the Department's persuasive discursive strategies and structural power. Wodak (2001a) explains how "power does not derive from language … [but exists] in social hierarchical structures" (p. 11). The CDS methodology enables the critical exploration of power differences among stakeholders.

It is important to acknowledge the main limitation of this study in that it is exploratory; merely scratching the surface of the socio-political context of TCSI to reveal some tensions and previously unheard voices. Yet, what this study *does* offer is a hermeneutic adaptation of the work of Fairclough (1989; 1995; 2004), which originally aimed to expose the underlying meanings behind talk and text by examining discursive strategies and interjections among three interrelated dimensions of ideological discourse (Figure 1).
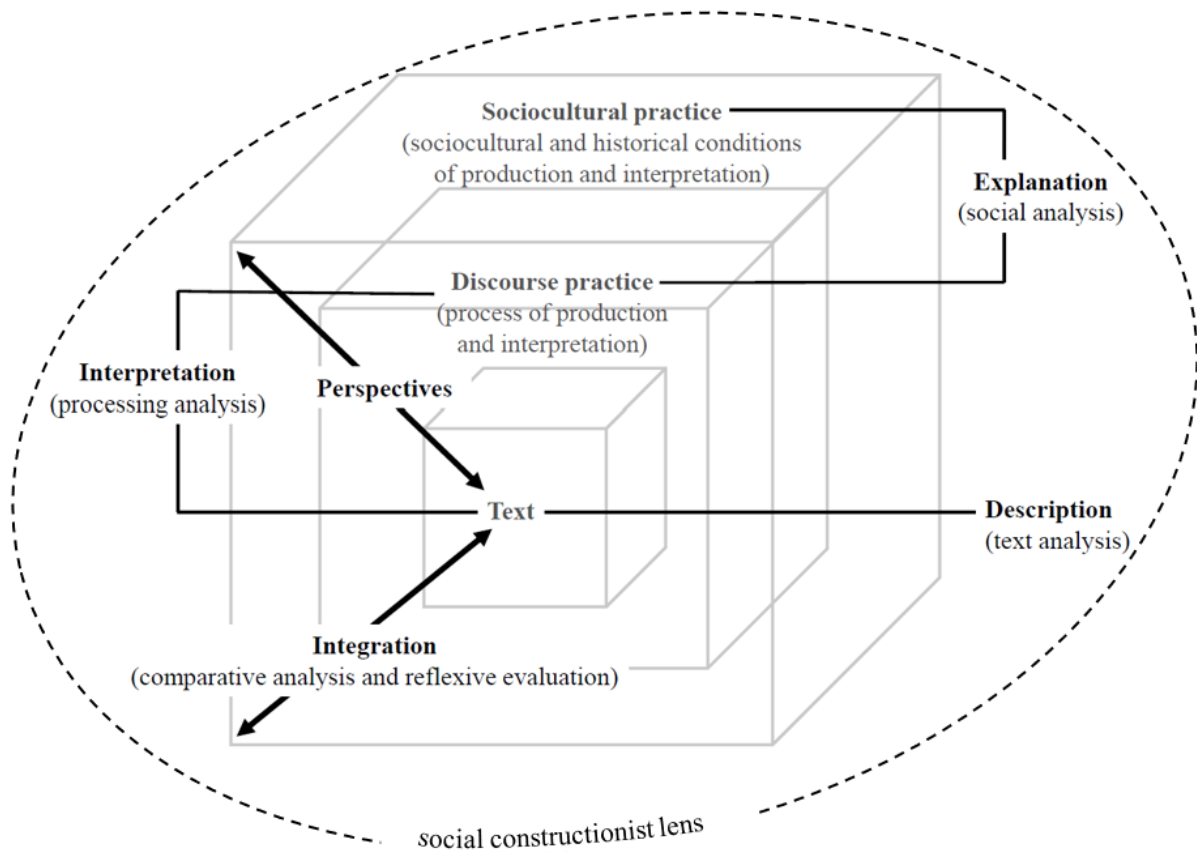
Figure 1: Research design incorporating hermeneutic interpretation of interview texts (labelled 'Perspectives') into Fairclough's (1995, p. 98) model for CDA.

These dimensions of ideological discourse provide the framework of Fairclough's (1995) adapted model in this paper. Janks (1997) summarises Fairclough's three dimensions of discourse as:

1) the object of analysis (including verbal, visual or verbal and visual texts);
2) the processes by which the object is produced and received (writing or speaking or designing and reading or listening or viewing) by humans; and
3) the socio-historical conditions that govern these processes.

Fairclough posits that these different dimensions of discourse each require a different approach to analysis, as follows:

1) text analysis (description)
2) processing analysis (interpretation)
3) social analysis (explanation)

Given this study is exploratory and bound (as opposed to capturing the broader socio-historical conditions and processes of TCSI), it seemed misleading to call this study a CDA.

According to van Dijk (2009), a study that incorporates a range of perspectives and methods by design (to make it more than just a critique of text and talk) can be called a CDS, which this study does, hence the name. Figure 1 shows how Fairclough's model (described above) is adapted in this study to incorporate hermeneutics (interpretation), allowing participant feelings and perceptions to be included in the analysis (RQ2, below). Doing so opened up the tightly bound conditions of the study and deepened the researcher's exploration of experience as told through dialogue. Figure 1 shows how the combination of methods – hermeneutic interpretation and critical discourse analysis (CDA) – were used to respond to these research questions:

RQ1: What discursive strategies (and underlying intentions) are used in the selected departmental documents about the TCSI project? *Text and discourse practice focus*.

RQ2: How do the interviewed HEP representatives feel about TCSI and its implementation? *Hermeneutic approach to text*.

RQ3: What are the implications of the study's findings for the HE sector and governments? *Broader sociocultural practice focus*.

Hermeneutic approaches are not uncommon in CDSs because "one part can only be understood in the context of the whole [which] in turn is only accessible from its component parts" (Meyer, 2001, p. 16). Incorporating hermeneutic interpretation into Fairclough's (1995, p. 98) model for CDA not only facilitated analysis of the participants perspectives (RQ2), but also the discursive strategies in the documents (RQ1). This enabled reflexive evaluation of the interactions among the stakeholders within the bounded sociocultural context (RQ3). During analysis, the researcher moved outwards and inwards through layers of the research design (Figure 1), exploring and synthesising the gathered information about the discourses, discursive strategies, perspectives and context (Fairclough, 1995; Mullet, 2008; Wodak & Meyer, 2001).

Some scholars have expressed concerns about the qualitative rigour of CDSs (Locke, 2004; Mullet, 2008; Wodak & Meyer, 2001). This is addressed in this study by being transparent with: (1) the method and analysis; (2) the researcher's position (within HE but outside the direct context of TCSI); and (3) whose interpretation is being represented at any one time. Participants were interviewed to hear their perspectives rather than the researcher making judgements and assumptions based on documents alone and each participant was involved in member checking throughout the study. A clear analytical framework is presented in the Method section to empower readers to form their own judgements and to apply the findings to their familiar contexts, thus ensuring the study has consequential validity (Mullet, 2008).

Methods

This section describes the methods applied in the CDS using the analytical framework shown in Table 1 (next section). This section addresses stages one to three of the analytical framework (the Results section covers stages four to seven).

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Document selection and analysis

Selected documentary sources included the TCSI Discussion Paper (*Redevelopment and Audit of the Higher Education Data Collection*), Outcomes Paper (*Outcomes from the Redevelopment and Audit of the Higher Education Data Collection Discussion Paper*) and *Working Group Terms of Reference* (ToR). Each of these were publicly accessible (at the time of writing this paper) and used in this study as representative of the Department's overall stance and discursive strategies.

A word frequency query was undertaken in NVivo to gain initial insights into some of the recurrent concepts within these documents. This initial exploratory technique draws from the field of corpus linguistics and was similarly used by Guerrero and Torres-Olave (2022) and Ellison and Szablewska (2022) in their CDA research.

Discourses and discursive strategies were analysed according to Wodak's (2001b, pp. 72-73) question framework, which enabled the identification of discursive strategies in the documents:

1) How are people, objects and actions named and referred to linguistically? (nomination strategies)
2) What traits, characteristics and qualities are attributed to them/these things? (predication strategies)
3) What arguments are used to justify and legitimise specific actions or discourses? (argumentation strategies)
4) From what perspective are the above labels, attributions and arguments expressed? (perspectivisation strategies)
5) Are the respective utterances articulated overtly, intensified or moderated? (intensification/mitigation strategies)

Additional documents were briefly reviewed to confirm the findings, including the TCSI Provider Transition Checklist and TCSI Newsletters (both accessed from the TCSI website), and submissions supplied by each participant (prepared on behalf of their institutions in response to the Discussion Paper). The HEP submissions were not made publicly available by the Department. This was queried by the researcher via email with the Department (personal communication,14 January 2020) and the response was that the Outcomes Paper "summarises the feedback to the discussion paper". Since the study was exploratory, as opposed to descriptive or explanatory, all other HEP submissions were not pursued through independent enquiry. Future research could include these documents.

Participant selection, interviews and their analysis

Ethics approval was obtained from Lancaster University's Faculty of Arts and Social Sciences Human Research Ethics Committee prior to commencement of participant recruitment. Participants were identified from the ToR, which lists 21 HEP representatives. Informal discussions were held with senior colleagues (who have insider knowledge), and the

researcher used existing knowledge of the field to identify a representative sample of expert HEP representatives. The sample was deliberately spread across the Australian states and territories, and across two HEP types, Technical and Further Education (TAFE) institutes and universities. Five HEP representatives were suggested and contacted via email with attached participant information sheets and consent forms. Three HEP representatives responded with consent; the remaining two did not respond.

A small sample of participants is not uncommon in CDSs, which often involve people in similar circumstances and specific contexts (e.g., Rogers, 2003; Ryan, 2008). The goal is to obtain rich and nuanced observations, which can be interpreted using theory, as opposed to broad and generalised observations (Wodak, 2001a). Since the participants are named in the ToR, their anonymity is protected by providing minimal demographic details. All three HEP representatives have extensive strategic planning experience across more than one institution and are, at a minimum, Bachelor degree qualified. At the time of this research, each participant held a senior position and was managing several staff involved in their institution's transition to TCSI. One of the interviewees was employed at a TAFE and the other two at universities.

The interview questions were shared with participants two weeks prior to their interview, enabling them to provide feedback on the questions and to prepare their responses in advance. The question about the cost of TCSI for HEPs was added as a result of member checking. Participant A was interviewed face-to-face and the others via Zoom. Each one-hour-long interview was audio-recorded and manually transcribed. Interview texts were analysed in NVivo and Microsoft Excel. Techniques included word frequency query and structural coding, followed by thematic analysis (Saldaña, 2013).

Analytical framework

Table 1 details the analytical framework that guided the researcher's critical-interpretative analysis of the interview and documentary data. Wodak's (2001b, pp. 72-73) question framework was applied during stages 5 and 6 to analyse the external and internal relations in the texts. The second column of the analytical framework relates to the adapted version of Fairclough's CDA model, which was used in this study (see Figure 1). The specific discourses that were identified through this analytical process are elaborated in the sections that follow (as noted in the third column of Table 1).

Stage of analysis	Relationship to research design (Figure 1)	Description and location in this paper
1. Select the discourse	Using discourse to explore social relations including contestations and different interests relating to TCSI as told by participants and in the analysed documents.	Discourses and discursive strategies construct, and are constructed by, socio-historical processes and conditions, which, in turn, produce perspectives. See *Introduction*, *Research design and questions*, *Key methodological theory*, *Methods*.
2. Locate and prepare data sources	Objects and subjects of analysis.	Departmental and other documents and interview texts. See *Methods*.
3. Explore background of texts	Socio-historical conditions and processes that govern texts achieved through processing and social analysis (outer and middle layers).	Interpretation and explanation of the historical context, production process, text styles/genres, intended audiences and purposes of texts informed by the research literature and enhanced through member checking. See *Study context* and *Review of literature*.
4. Code texts and identify themes	Text analysis to identify major themes (inner layer).	See *Findings*, particularly Figures 2 and 3 and Table 2.
5. Analyse external relations in the texts (interdiscursivity)	Explanations of discourses, discursive strategies and perceptions achieved through social analysis (middle and outer layers) and hermeneutics.	Relations between texts, and between texts and context. See *Findings* (Table 2) and *Discussion*.
6. Analyse internal relations in the texts	Interpretation of the texts achieved through processing analysis (inner and middle layers) and hermeneutics.	Interpretations supported by examples (Table 2 and quotes). See *Findings* and *Discussion*.
7. Interpret the data	Critical and interpretive integration of analysed data achieved by moving inwards and outwards through the layers.	Integration of stages 4 – 6. Comparative interpretation and critical analysis supported by reflexive evaluation. This stage occurred throughout the study to assure alignment to the research questions.

Table 1 : Analytical framework. Adapted from Mullet (2018).

Findings

This section is structured according to stages four to seven of the analytical framework shown in Table 1. The findings are outlined as they were observed by the researcher during the exploration of the data. Interpretation is excluded from this section to aid transparency. The Discussion section is focused on the interpretation of the data.

Stage 4. Code texts and identify themes

Figure 2 presents the word frequency queries as Wordles to give a visual depiction of the language used most by the Department (in the selected documents) and the HEP representatives (in the interviews) to support transparency and familiarity with the data. Each wordle gives prominence to words that appear more frequently in the group of texts.

Figure 2: Word frequency analyses of departmental documents [left] and HEP representatives' texts [right].

Figure 3 shows the themes that emerged from structural coding and thematic analysis. These themes are substantiated with quotations from the interviews in the Discussion section. While some themes were shared by both stakeholder groups (e.g., action, collaboration, support and quality), the Department's language focused on driving the project and demonstrating their worth, whereas the HEP representatives' language focused on needs, issues, opportunities and their perceived lack of power.
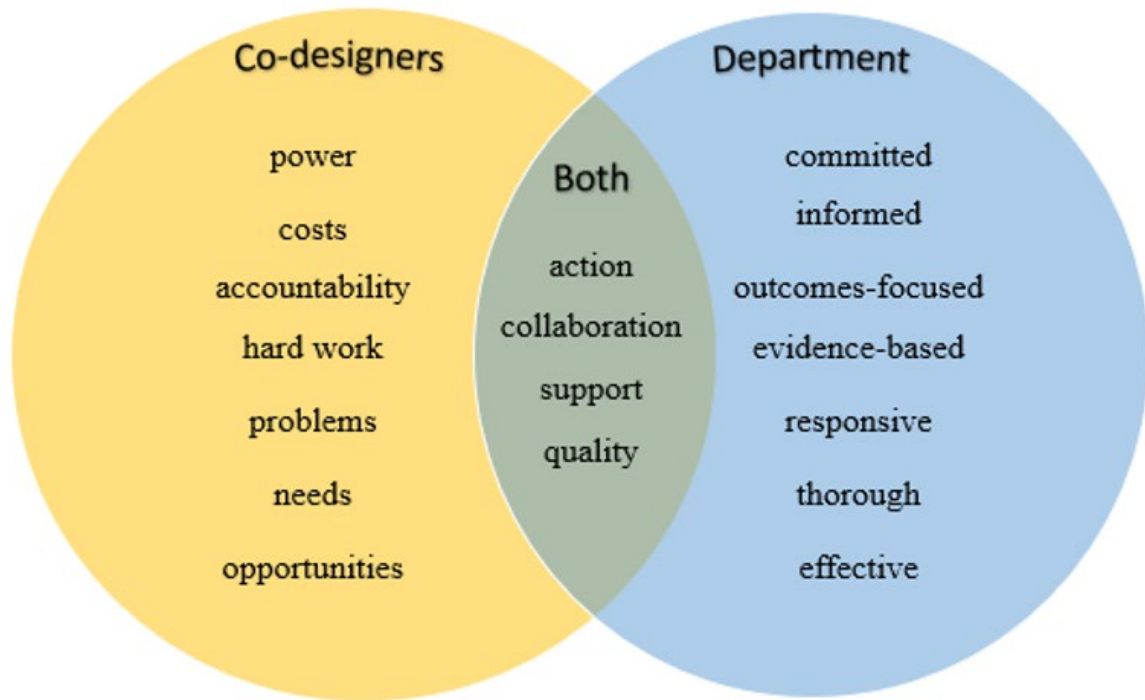

Figure 3: Venn diagram of major themes generated via structural coding and thematic analysis.

Thematic analysis of the HEP representatives' texts (Figure 4) revealed many more negative (total of 59 per cent) than positive (12 per cent) and neutral or mixed themes (29 per cent). Quotations exemplifying some of these themes are included in the Discussion section.
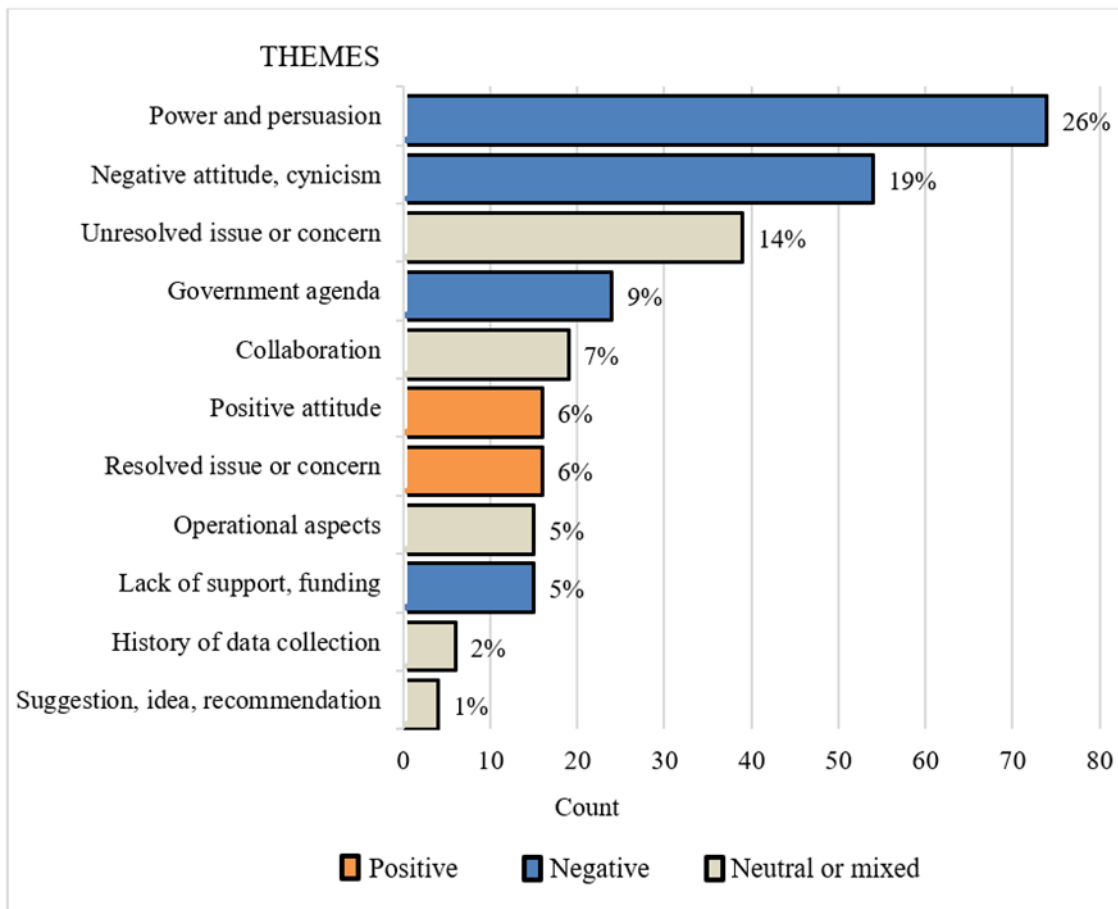

Figure 4: Themes derived from analysis of the interview texts.

Stage 5. Analyse external relations in the texts (interdiscursivity)

Table 2 shows the word specialisations most frequently used by the Department and HEP representatives grouped by frequency level to aid comparison. Although not emphasised in Table 2, there was overlap in their discourses used to describe the purposes and processes of TCSI. Many shared word specialisations (e.g., *change*, *communication(s)*, *issues*) received different levels of attention by HEP representatives versus the Department. However, there were some commonalities, for example, *messages/-ing* received similar attention by both. *Communications*, and words with similar foci, featured most strongly in the Department's documents, whereas words focused on *change* and *activity* were most frequent in the HEP representatives' texts.

Level	HEP representatives	Department
1	change, activity	communications
2	messages, making, information, think, communication	activate, change, messaging
3	quality, action, reason, evaluation	information, knowledge
4	issues, structure, power, conditions, support	reporting, action, worked, think, quality
5	saying, control, impact, concerned, funding, suspect, accept, security, validation, force, proof	committed, prepared, support, evidence, ideas, consideration, details, improve, channels, learn, extensive, evaluate, management, connection, transforming, shows, distributed
6	requirements, costs, performance, complicated, accommodate, question, argument, probably, trying, handle, assurance, errors, needs, standards	reason, address, security, impact, steps, clearly, access, verified, available, training, advances, arrangements, outcomes, understand, ready, discussion, investigating, announced, offers, openness, allowing, tools
7	interactions, difficult, effort, solution, appreciate, problem, opportunity, serious, challenge, seems, consequences, ambiguous, amusing, mistakes, missed, ignored, ridiculous	helping, navigating, relating, questions, contact, comprehensive, assured, obligations, issues, consultation, functionality, complications, effort, burden, challenge

Table 2 : Most (level 1) to least (level 7) frequent words used by stakeholders.

Table 3 summarises the discursive strategies inherent in the Department's documents, which are elaborated in the Discussion section. However, as an example, predication is identified as a tactic in the Department's documents through the use of language that shows appreciation for the work of HEPs and positive labelling of their representatives as "experts".

Strategy	Objectives	Device examples
Nomination	Construction of in-groups.	Membership categories defined in the ToR are enhanced through argumentation.
Predication	Appreciative and positive labelling of HEP representatives.	Explicit attribution of HEP representatives' expertise and value/worth.
Argumentation	Justification of positive or negative attributions.	Advantages of TCSI, sector and HEP representatives' responsibilities, departmental contributions and numbers.
Perspectivation	Expressing involvement and positionality.	Department's collaboration efforts.
Intensification /mitigation	Modifying the epistemic status of a proposition.	Emphasised collaboration efforts, encompassing the policy network.

Table 3 : Discursive strategies used by the Department (based on Wodak, 2001b, p. 73).

Stage 6. Analyse internal relations in the texts

The Discussion Paper is 18 pages long with contents as shown in Figure 5. Like other documents available via the TCSI website, the Discussion Paper is graphically designed with attractive colours and icons. Adequate spacing separates succinct blocks of text.

Contents

Figure 5: Contents page of the Discussion Paper.

As shown in Figure 5 detailing the contents, the paper begins by describing its purpose as opening consultation and seeking sector views. Sections labelled *Background* and *Anticipating change* (also on page 1) outline the benefits of the redevelopment of the Collection and the impetus for the project (argumentation). Page 2 includes *The Challenges* (a three-quarter page high-level summary of the proposed changes to the Collection), *Supporting resources* (weblinks) and a proclamation that "we invite your submissions" (p. 2; perspectivation). The section titled *Consultation* (p. 3) is an annotated diagram of the timeline for TCSI implementation and emphasises multiple collaboration points (intensification). Section 2 is announced with a full-page heading *The Details* (p. 4), which are provided as high-level information (pp. 5-17) on the proposed changes based on themes identified by the Department (participants confirmed details were lacking in respect to operational matters). Each theme includes "discussion points [as a] starting point to guide feedback and comment" (p. 2). The last page of the document contains instructions on how to make a submission in response to the paper and includes the contact details of the Department.

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In summary, the Discussion Paper positions the Department as collaborative, proactive, organised and responsive to change and serves a purpose to nominate the group of HEP representatives as "a small number of data and technical experts" (p. 3; predication). However, the document lacks detail on the proposed changes and implications, particularly when compared to other recent documents of the same genre (e.g., Discussion Paper: Review of the Australian Qualifications Framework).

The Outcomes Paper is six pages long. Succinct text covers high-level content visually enhanced by five images. Figure 6 shows that more than half the document is focused on promoting the Department's efforts to collaborate with stakeholders, in particular the HE sector (perspectivation and intensification). Few outcomes in response to the Discussion Paper are provided despite this being the document's title.

Figure 6: Outcomes Paper highlighting the Department's focus on collaboration (yellow), HEP feedback (boxed and green) and information provision (uncoloured).

The Department states that it has responded to feedback from "over 60 stakeholders" via submissions (p. 2). However, there is no detail about this feedback in the document, with

the exception of three "issues" (p. 2) that are briefly listed and concern implementation efficiency and effectiveness. These highlighted issues are not operational or representative of those experienced by HEPs on the ground as expressed in the three HEP submissions provided by the research participants for this study.

The two-page TCSI Working Group ToR lists contributors and pilot partners, collectively referred to as HEP representatives with corresponding institution names. The opening paragraph prescribes their responsibilities using formal language germane to documents of this type. This is a nomination, predication and argumentation device since it functions to increase the visibility and accountability of the HEP representatives.

Discussion

This section provides the necessary interpretation and elaboration of the findings and is organised according to the research questions.

What discursive strategies (and underlying intentions) are used in the selected departmental documents about the TCSI project?

Each of Wodak's (2001b) discursive strategies were identified in the analysed departmental documents with the perceived intention of persuading HEP stakeholders to ratify the project and support implementation. The following commentary elaborates on the linguistic devices used and what this may imply about the Department's stance.

The Discussion Paper presents TCSI as a shared and collaborative enhancement process, which is an intensification strategy as defined by Wodak, 2001b (see Table 3). For example, the Department uses aspirational language, for example, *high quality*, *best practice*, *more focused* and *efficient*, to describe the process and goals of TCSI. Statements such as, "will focus on user-centred design to improve usability, reduce the cost of reporting and support robust, timely data availability" (p. 1), are used to market, entice and promote positive stakeholder reception, whilst, at the same time, imply (via "will") that outcomes are assured.

The Discussion Paper highlights the value of the Collection to the sector and nation both explicitly (using the word 'value') and implicitly. This is an argumentation strategy (Wodak, 2001b; see Table 3). For example, "the Collection directly supports around $16 billion of funding to the sector and the transfer of around $7 billion of student debt to the Australian Taxation Office each year" (p. 1). Statements such as, "better information sharing … to improve the experience for students" (p. 1), presents TCSI as benefiting students, which the Department knows will appeal to HEPs.

The section, *Anticipating change* (p. 1), affirms the Department as proactive, responsive, responsible and, therefore, organised in their approach (a perspectivation strategy; Table 3). For example, the Department emphasises the need to keep up with "the continuing evolution of the higher education landscape and the emergence of new technologies", by

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seizing this "ideal opportunity" to make the Collection more efficient, simpler and flexible (p. 1).

To augment perspectivation and argumentation, *The Challenges* section (p. 2) positions the Department as doing great things for the sector; for example, "The department's planned redevelopment … is focused on more efficient, fully automated technologies that will reduce data preparation and submission processes and better facilitate timely reporting" (p. 2). Combined with timesaving hyperlinks to useful resources and a warm invitation for submissions, the Department is presenting itself as understanding HEP needs, and supporting, encouraging and enabling collaboration and discussion. However, with submissions due on 9 February – three weeks after the 18 January 2018 date on the cover page – HEPs would have had to act swiftly to respond in time.

Similarly, the *Consultation* section emphasises the Department "are committed" and plan to collaborate with stakeholder to "ensure we get the best ideas" (p. 3). It shows the Department as advocating that the best results will be achieved through a coordinated and collaborative approach, and this suggests that they are aiming to be seen this way. The Department may or may not be consciously aware that this attitude would be well-received by a sector used to whole-of-institution approaches, which are inherently collaborative. However, considering the short timeframe given to HEPs to respond to the Discussion Paper, it may be that the Department did not genuinely want sector feedback; for instance, few responses may support timelier completion and limit the need for additional work.

Throughout Section 2 (pp. 5-17), questions posed to HEPs show the Department as needing, valuing and engaging with stakeholders to solve the technical aspects of implementation (a predication strategy). Moreover, "How might we implement single touch reporting?" (p. 5) and "what is the most efficient way to identify higher education students throughout their study?" (p. 6) indicate the Department's lack of knowledge and their reliance on stakeholders.

Section 2 does not identify problems that require solving, which may be an avoidance tactic or highlight the Department's lack of understanding of the complexity of the project, particularly from the perspectives of HEPs. Instead, the Department uses this section to identify changes, opportunities and required modifications, and to reaffirm the benefits of the project for HEPs (an argumentation strategy), by which the Department potentially attempts to move past the problems.

Rather than present outcomes as one would expect, the Outcomes Paper uses multiple visually appealing graphics and minimal textual information to further persuade stakeholders about the quality and benefits of the project, conveying that hard work developing TCSI has future benefit. A few issues are briefly mentioned as being identified by stakeholders, but we are led to believe these are easily resolved. The Department solidifies the validity and trustworthiness of its statements by presenting the HEP representatives as valued and respected "experts" (p. 3), "broadly representative" (p. 2) of those stakeholders involved, implying that experts are across the project and have the sector's best interests at heart (again, a predication strategy). Overall, the Outcomes Paper presents TCSI, and the

Department's handling of the project, as well-considered, thorough and consultative, yet does not provide explicit supporting evidence of this.

The ToR reaffirms the quality of the project, and the Department's work as involving, valuing and recognising the contributions of a broad and expert stakeholder group based across all Australian states and territories. This is a nomination strategy (Wodak, 2001b; see Table 3). It implies a thorough consultation process and an agenda based on consultative evidence, thus setting the scene for expectations of a quality project. The statement, "communicating the outcomes of the co-design with the broader sector and with technology partners" (p. 1), which describes the role of the "Co-designer" group, almost positions the HEP representatives alongside the Department as allies sharing the load of ensuring the sector remains informed. This is an example of the Department using the HEP representatives to market the project, which is strategic as the Department has used the HEP representatives as insider messengers to communicate changes more effectively and convincingly to HEPs. This may imply that the Department had anticipated receiving adverse reactions from HEPs in response.

For people outside the context of TCSI, these documents portray the Department as committed, responsive, informed, evidence-based, outcomes-focused, collaborative and a supportive driver of a well-considered and expertly designed project. "Policy-networking activities" (Williamson, 2019), involving representative stakeholders at multiple stages, are highlighted to leverage the trustworthiness, validity and rigour of the project. TCSI is presented by the Department as having minimal issues, and they argue these are, or have been, easily resolved through effective collaboration. However, resolution is not evidenced in any analysed documents and the HEP submissions are not publicly available to check the Department's claims. This suggests that the Department aims to maintain control.

How do the interviewed HEP representatives feel about TCSI and its implementation?

The HEP representatives voiced aligned perceptions and attitudes towards the Department's handling and portrayal of TCSI, and the project itself. Each interviewee, at least once, expressed cynicism about the project, for example:

They were saying, *we noticed the sector likes this or that*. I'm thinking, *hang on, I didn't write that! Are you ignoring what I said?* … I was keen to look on their website to find everyone's responses and they weren't there. There is a certain level of trust you have to keep, that they're relating everyone's responses accurately, or they're lying and driven by their agenda … you can't really trust what they say. I'm suspicious of their notions of the sector liking this, that and the next thing when they don't show the evidence (Participant C). Similarly, Participant B simply stated, "[they're] not so good at telling us what they've ignored, but that's the Government for you!"

Each interviewee purported a need to see the HEP submissions and have opportunities to test whether the project works as it should, for example:

They haven't released those responses. But they're saying they're addressing all the concerns … it's to control the power in terms of proceeding … We don't know if everything will work. There's no opportunity to learn along the way because the Government won't tell us [if it's working] in advance. (Participant A)

The quotes above demonstrate the HEP representatives' perceived lack of power, which is elaborated in the following:

We'll take that on board was often used. [However] feedback was ignored when at odds with their plans [or] well regarded when it coincided with their agenda … the attitude of the Government has been, we've got this agenda, we're running with it, fit in … Consultations [were] very one-sided. (Participant C)

It doesn't matter how many times we talk about [data privacy and security concerns], it doesn't get acknowledged as an issue … a legal expert who was very concerned has disappeared … The original intent to tackle this issue [was] sidelined … an interesting insight into Government behaviour. (Participant B)

They would know that it's going on, but they don't want to tackle it because we have this concept of 'minimum viable product'. Just do the bare amount with TCSI. (Participant A)

The effectiveness of the Department's efforts of persuasion is indicated by the HEP representatives' mixed levels of awareness. Some were convinced:

I'm happy with the way they've described it on the website – to transform the collection of student information. There's some underlying technological backlog they're trying to address … [they say] they've got very archaic practice, an aging database. They've had to recruit 'heritage programmers' because the system is from the 80s. It's on its last legs. (Participant B)

Others were not:

Much emphasis has been made by the Government in promoting TCSI on the grounds that data duplication is a bad thing and that TCSI will reduce duplication … [they] pushed the convenience of it all but I'm not convinced. (Participant C)

Similarly, when asked about the Department's efforts to collaborate, responses were mixed. For example:

The scope was set early and the co-design meetings have been very good: small, focused, face-to-face, technical problems, design issues, responding

to the things that we've raised with them, itemised, this is what you said, this is how we think we're going to deal with it … [But] it's very disturbing to see the lack of transparency and the communication … the pretence that it was co-designed is amusing. (Participant B)

Overall, the interviewees were sceptical about the sincerity of the Department's collaboration efforts; for example, Participant C, said, "they had these workshop sessions, that's the consultation process, but they don't seem to be listening."

TCSI was also described as costly for institutions, for example:

In the previous major review of the HE student data collection [we received] direct funding to cover the cost of implementation. This time, there's no funding. [As] a Co-designer, having to go to Canberra nine times, there's no funding. A team … working full-time on TCSI changes must fit within existing time and resources. We haven't got a single cent reimbursed, yet, the Department of Human Services are going to reap immediate benefits. (Participant A)

The interviewees told how the Department had not promoted TCSI to senior executives in their institutions, focusing on the technical rather than socio-political aspects and managing the project at the coalface. This meant that the HEP representatives had to work hard within their institutions to raise awareness with senior executives who may otherwise have pushed back against the Department's demands or demanded Government funding be made available. Another disconnect, evidenced in the quote above, is that TCSI is funded by the Department of Human Services, not the Department of Education, Skills and Employment.

Despite these difficulties, participants expressed that their institutions were doing all they could to ensure that TCSI benefited HEPs. They spoke about using TCSI as an opportunity to enhance institutional practices including internal reporting and data management. These interviewees show HEPs are doing their best to make TCSI internally viable and worthwhile, not just responding to maintain compliance.

What are the implications of the study's findings for the HE sector and governments?

As a genre of discourse, ToR have specific intentions supported by well-established norms and rules, which have governed the responsibilities of HEP representatives and enabled the Department to engage the stakeholders *they* want involved (rather than senior executives and other decision-makers). "Language is not powerful on its own – it gains power by the use powerful people make of it" (Wodak, 2001, p. 10). This has resulted in limited resistance and increased the Department's control (Reisigl & Wodak, 2015) in what is a 'self-controlled' project (Marginson, 1997).

Interviewed HEP representatives expressed gains for HEPs as a result of TCSI but, overall, demonstrated frustration, cynicism, some anger and disempowerment. Numerous concerns and issues were raised, which they purported as being inadequately addressed by the Department. Participant A described the perceived lack of support and attention to HEP needs as a major concern:

> *The discussion paper created expectations but [TCSI] hasn't delivered any more than improving efficiencies from the Government's point of view, without any advancement on policy … to give the Department of Human Services what they want … They don't want to address [the issues] because [they raise] a whole myriad of policy flaws. (Participant A)*

Overall, the interviewees seemed disappointed with the Department's handling of TCSI and the outcomes being achieved:

> *[The Department is] concentrating on one outcome, which is not necessarily doing anything for the sector … They're basically making no major change other than to streamline and improve efficiency, not expanding it to improve its scope and breath to support analysis and policy … We put through a very conservative range of suggestions to improve the Collection, none of which have been addressed. (Participant A)*

These quotes, when compared with the Department's discourse, highlight the disconnect between the perceptions and interpretations of the interviewed HEP representatives, versus the expectations and perspectives conveyed by the Department in the analysed documents. The implications of this disconnect and difference are wide and varied (too much to detail in this paper), and likely to negatively impact the collective work of both parties, perhaps not only with respect to improving the data infrastructure as examined here.

Conclusion

This CDS explored the discourses, discursive strategies and perspectives of stakeholders involved in TCSI, which were identified as frustration, cynicism and disempowerment among the disenfranchised HEP representatives, as opposed to the indifference and ignorance of the Department (as perceived by the HEP representatives), while claiming extensive engagement and collaboration with HEPs.

The research goals included to: 1) raise awareness of TCSI among stakeholders in HE; 2) uncover concerns expressed by participating HEP representatives; 3) explore how HEP representatives' perspectives differed from those found in the analysed departmental documents; and 4), through transparent research design, method and analysis, contribute to the development of the CDS methodology.

The substantiative contribution of this research is the uncovering of HEP issues and concerns about TCSI, which the interviewees said were inadequately addressed and/or ignored by the Department despite the Department conveying (in the analysed documents)

extensive engagement with HEPs to achieve mutually beneficial objectives that are defined and agreed (Middlehurst, 1997). The Department was portrayed by these participants as hearing but not listening to HEPs during planning and implementation of TCSI. The analysis also revealed that discursive strategies were used by the Department, some (e.g., nomination and argumentation) being noticed by the interviewees. While the participants valued opportunities to engage with the Department, they expressed disappointment in what they, and the project, got from these experiences.

Although governments expect HEPs to be transparent they are not, at least in the context of TCSI, seen as being transparent and authentic with HEPs in return. As a goodwill gesture, the Department should make all HEP submissions publicly available and disclose the total cost of TCSI.

This study has extended upon Williamson's (2019) research, which also focused on HE data infrastructures, in two ways. Firstly, it uncovered the perspectives of people managing teams implementing a HE data infrastructure redevelopment project. Secondly, it emphasised the importance of stakeholders establishing trust, transparency and authentic engagement to achieve mutually beneficial and cohesive data infrastructure project outcomes. In agreeance with Williamson's call for collaboration, this study emphasises three implications for the sector and governments: 1) authentic collaboration, transparent communication and common goals are important in facilitating connectivity between government departments and stakeholders in HE settings; 2) projects to redevelop HE data infrastructures (processes and outcomes) may benefit from efforts by stakeholders to establish trust, authenticity and two-way genuine engagement (e.g., through secondments and/or reflection moments during projects); and 3) connected and engaged approaches are valued by people who work in HE. Stakeholders could foster connection and trust by considering how they deliver, review and accept feedback.

This paper documents a significant shift in the history of the Australian HE data infrastructure, highlighting the importance of trust and authenticity among stakeholders involved in such projects. In addition to raising awareness about TCSI, this paper contributes to the development of CDS research through its detailed and transparent analytical approach.

To clarify this study's exploratory findings and attend to its limitations, which centre around the small sample size and scope, future Australian research should review all HEP submissions relating to TCSI and involve a larger sample of HEP representatives, including staff from Student Administration. Future research might also explore the perspectives of students, who are implicated in the transfer of data to the Department of Human Services, staff in government, commercial service providers and TEQSA (who are aligning their reporting requirements with TCSI). Internationally, evaluation of HE data infrastructure development projects is lacking and will assist in improving project outcomes.

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