Understanding factors affecting the teaching of teamwork in Australian higher education business schools

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Thesis Structure Statement

This thesis has been designed to present the data collected during the degree of Doctor of Philosophy as a coherent piece of work incorporating a series of manuscripts. Each manuscript was written according to authorship guidelines of the journals in which the manuscripts have been published. A statement of author attribution precedes each manuscript. All chapters are presented in a similar format with a single reference list at the end of the thesis.

Thesis Attribution Statement

The content in this thesis was developed by the Candidate with advice from their supervisory panel. The following individuals contributed to the thesis.

Contributor	Contribution (%)	Concept Development	Data Collection	Data Analyses	Drafting of Chapters
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Candidate   **Principal Supervisor**

Abstract

Integrating teamwork into higher education (HE) curricula has been part of the employability skills agenda for decades. Whilst HE academics have published widely on a variety of strategies utilised to implement teamwork in their teaching, there is little evidence of the interrelated factors associated with teaching teamwork and the paradoxes of critical tension points arising from challenges encountered by educators in their efforts to integrate teamwork in their courses. This thesis explores the salient influences affecting the teaching and learning of teamwork in the Australian HE business school context. The outcomes are presented in a thesis by compilation, which includes the traditional structure of introduction, literature review, methodology, findings/discussion, and conclusion chapters, along with three published articles demonstrating original, primary research.

A published global systematic literature review (SLR) identified that temporal, fiscal, psychological, and human resource transaction cost interactions for HE educators, students and institutions affected the uptake of HE teamwork. Interactions are predicated on the way in which educators derive benefits or costs from developing, coordinating, monitoring, participating in, interacting with, and evaluating HE teamwork. Transaction costs, for example, whether to engage with the employability agenda, or provide instruction in team skills, collaborative learning, curriculum design, and assessment of teamwork, represent the return on investment to educators when undertaking the teaching of teamwork. These findings are an original contribution to the HE teamwork literature as there is scant evidence of costs associated with affording or constraining HE teamwork. A second published SLR article was confined to a more rigorous review of the Australian HE teamwork literature. Numerous factors were identified as constraints to HE teamwork, with findings thematically indicating that Australian business discipline educators were mainly concerned with team

formation and management, teaching and learning approaches to HE teamwork and challenges influencing teaching and learning practices, thus providing an original contribution to knowledge of the salient issues affecting the teaching and learning of teamwork in the Australian business school context.

These findings were used to inform semi-structured interview questions for a case study of business educators from a range of disciplines across four public universities in Australia. Grounded in a social constructivist paradigm, and using the case study approach, findings from 30 qualitative interviews with Australian business educators identified that performative demands on HE educators resulted in a range of critical paradox tension points, highlighting the salient influences contributing to understanding educator factors affecting the teaching of HE teamwork. Specifically focusing on the performativity paradoxes of performing/organising, performing/learning, and performing/belonging, illuminated the lived experience of business educators navigating performativity with HE teamwork and their reactions to critical tension points in their required or perceived performativity. In this thesis the third published article presented in Chapter Five, conceptualises how business school educators negotiated the inherent stresses, conflicts, and tensions in their teaching to understand, react and influence their approaches to HE teamwork.

Theoretically, the utility of transaction cost and paradox theories as heuristic conceptual lenses to understand the dynamic interactions for educators' facilitating the teaching of teamwork is demonstrated. Conceptual understandings are expanded through the application of paradox theory in the educational context, contributing to the advancement of knowledge and/or professional practice acknowledged by the Tertiary Education Quality and Standards Agency (2018) as a core aspect of HE scholarship. This is a unique feature of this study, generating original contributions to the understanding of the scholarship of teaching and learning in the field of teamwork in the Australian business school context.

Implications for theory and practice have wider application within HE and provide a sound basis for the development of teamwork as a requisite skill to satisfy not only the broader aspects of the employability agenda, but also advancement of knowledge in the field which has implications for future research, providing opportunities to broaden the scholarship of teaching and learning as it relates to the functionality of teamwork pedagogy.

Contents

List of Figures

List of Tables

List of Abbreviations

AACSB	Association to Advance Collegiate Schools of Business
AAGE	Australian Association of Graduate Employers
ABDC	Australian Business Deans Council
ACCI	Australian Chamber of Commerce and Industry
ADTL	Associate Dean Teaching and Learning
AEC	Australian Education Council
AIG	Australian Industry Group
AQF	Australian Qualifications Framework
ANTA	Australian National Training Authority
BCA	Business Council of Australia
BIHECC	Business, Industry and Higher Education Collaboration Council
CBI	Confederation of British Industry
CPA	Certified Practising Accountant
CSP	Commonwealth Supported Places
DeSeCo	Definition and Selections of Competencies
DEST	Department of Education, Science and Training
ESF	Employability Skills Framework
HE	Higher Education
HEI	Higher Education Institution
HESF	Higher Education Standards Framework
HREC	Human Research Ethics Committee
NACE	National Association of Colleges and Employers
OECD	Organisation for Economic Cooperation and Development

PBF	Performance Based Funding
PD	Professional Development
QILT	Quality Indicators for Learning and Teaching
RTO	Registered Training Organisation
SLR	Systematic Literature Review
SoTL	Scholarship of Teaching and Learning
SPARK	Self and Peer Assessment Resource Kit
TAFE	Tertiary and Further Education
TCE	Transaction Cost Economics
TCI	Transaction Cost Interactions
TEQSA	Tertiary Education Quality and Standards Agency
VET	Vocational Education and Training
ZPD	Zone of Proximal Development

Chapter 1: Introduction and Background

1.1 Overview: Teamwork in Australian Business Schools

Teaching teamwork in business disciplines is hugely challenging due to a confluence of factors that are contextual, individual, collective, and paradoxical.

Notwithstanding the effects of the pandemic, the number of students commencing higher education (HE) degrees in Australia has steadily increased in the last decade, with statistics indicating 25.1% of all commencing students enrolled in the broad field of Management and Commerce in 2019 (Department of Education, Skills and Employment [DESE], 2020). Whilst students undertake a specific study area to develop technical skill knowledge within their business degree, the development of non-technical skills is also considered important as evidenced in the data collected in the Student Experience Survey (SES), which is conducted each year with HE students (Quality Indicators for Learning and Teaching [QILT], 2020). Yet, the QILT 2020 results reveal a decline in student experience with undergraduate skills development.

Integrating teamwork into the higher education (HE) curricula has been part of the employability skills agenda for decades, with employers noting teamwork as an essential skill for graduates to develop (Australian Association of Graduate Employers [AAGE], 2019). The employability agenda is an underpinning rationale for the inclusion of teamwork and a suite of other soft skills in HE curricula. Whilst HE academics have published widely on a variety of strategies utilised to implement teamwork in their teaching (Fittipaldi, 2020; Wade et al., 2016), there is little evidence of the interrelated factors associated with teamwork pedagogy and the critical tension points arising from challenges encountered by educators in their efforts to integrate teamwork in their courses. Therefore, it is important to understand the

salient factors that affect the teaching of teamwork in the Australian HE business school context.

This chapter outlines my positionality as a researcher, the primary research concern, the research question and aims and the context of the study. In order to research teamwork pedagogy in HE, it is essential to understand the background to the rise in prominence of employability skills and how these skills have developed as connected to government policy through funding arrangements and regulation through the Tertiary Education Quality and Standards Agency [TEQSA] with the Higher Education Standards Framework (HESF). Thus, a comprehensive background section is provided, detailing the historical development of employability skills in tertiary education and the definitions, in the context of Australia and similarly developed Western economies, that have evolved over time. Finally, the structure of the thesis and outline of the chapters is presented.

1.2 Researcher Position

In identifying my positionality as an interpretivist, constructivist, practitioner researcher, I unveil those motivations that determine the direction of the story I present. As a practitioner researcher, I acknowledge that I have approached this exploratory research from the perspective of both an insider and an outsider (Milligan, 2016) at different levels, although it has been suggested "that researchers should select between approaches" (Morris et al., 1999, p. 783) with an emic approach best suited to exploratory research. Emic accounts, as noted by Morris, et al., (1999, p. 782), "describe thoughts and actions primarily in terms of actors' self-understanding" in a single culture. From an emic perspective, an insider account from within the culture of the HE business school context is provided. With an etic approach, consideration must be given to positioning and power relations between researcher and participants and how this may "influence the way in which knowledge is constructed and what becomes known" (Milligan, 2016, p. 241). Strategies were

implemented to alleviate the researcher power position, for example, conducting interviews in the participants' offices, side-by-side seating where appropriate, and providing time for introductions and initial general discussion to promote a comfortable environment. I believe such strategies helped to even out power relations through the interactive process of interpretation created between the participants in the study and myself (Charmaz, 2000). Therefore, I am motivated to better understand the scholarship of teamwork pedagogy by recognising, relating to, and interpreting participant voices with my own views to be cognisant of what becomes known.

Having worked in teams in both the investment banking and primary education sectors throughout my career, I was struck by the depth of impact that teamwork could have on individuals pursuing goals aligned with those of an organisation. Such impacts could manifest as joyful when the team was cohesive, and a strong sense of trust had developed, or emotionally draining if the team was dysfunctional. I had previously, and unquestioningly, accepted both as possible outcomes of teamwork, having never been trained in how to work in a team.

Transitioning into a new role in HE as a lecturer in a business school, with the specific brief of teaching employability skills to university students, I was initially struck by the lack of formal guidelines or processes that could be implemented to assist me in teaching students about teamwork. Collegial discussions indicated a similar sentiment, although many colleagues had ad hoc approaches with which to deal with teamwork pedagogy within their discipline teaching. As my career advanced, I gained experience in more senior administrative roles. Coordinating the Bachelor of Commerce course, one of my responsibilities was to review the outcomes of student evaluations of individual units within the course. From this perspective outside of the class environment, I was able to take a step back and reflect on student evaluations of the positive and negative aspects of teamwork,

consistently arising over time, with more distance and objectivity. Reflecting on how teamwork was taught, practised, and assessed at the tertiary level raised questions about the factors that afford or constrain teamwork pedagogy in HE. What became apparent as I researched the topic was the complex web of relationships affecting educator, student, and institutional approaches to the teaching and learning of teamwork. My need to learn more about employability skill teaching and learning, and in particular teamwork pedagogy, became the driver for the present study.

1.3 Employability Skills in the Business School Context

Traditionally, business schools have offered degrees that provide students with the opportunity to develop specific technical knowledge and qualifications in pursuit of employment. There are a range of factors that lead to employability in a chosen career. Employability skill development, government policy and graduate attributes conglomerate as three salient factors and are outlined next.

Degree credentials, in the form of HE qualifications, provide evidence of achievement of technical or discipline-based skills and are taken as given by employers, yet in rapidly changing labour market conditions and training trends (Cascio, 2019), such qualifications can quickly become obsolete (Kalfa & Taksa, 2015). More recently, in Australia and other Western countries with culturally similar economies, there has been a move towards the inclusion of employability skills development (Deloitte, 2017) through various models (Cranmer, 2006). This move is widely attributed to the alignment between governments and higher education institutions (HEI) graduate productivity agenda (Bennett, 2018), with changes to curriculum actioned to incorporate the development of employability skills within degree courses (Cotronei-Baird, 2020) and further aligning skill development to employer needs (Jackson et al., 2020) such that business students can distinguish themselves beyond the technical skills of their degree qualification.

Government policy initiatives pertaining to employability have, in the main, been informed by human capital theory (Tomlinson & Jackson, 2019): in essence, the knowledge, skills, abilities and experiences of individuals that contribute to a nation's economic production. Investment in human capital through education and/or further training is noted by Becker (1962) to "improve the physical and mental abilities of people and thereby raise real income prospects" (p. 9) or, as expressed by Gillies (2011, p. 225), "the more and better education that individuals possess, the better their returns in financial rewards and the better the national economy flourishes." While there would appear to be merit in the human capital conceptualisation of employability, it alludes to the premise that employment is based on merit (Brown et al., 2003), which does not consider intense competition for graduate positions in overheated job markets. Tomlinson (2012) has argued "for a broader understanding of employability than that offered by policy-makers" (p. 407) whereby HE students should understand the link to future labour market participation so they can manage their own employability. This human capital concept of employability has implications for the university sector with recent changes to criteria for HEI funding being linked to graduate employment outcomes (Bolton, 2019). Hence, for HE students to connect their employability skills learning and development with labour market participation, HEIs need to further develop ways to structure and manage the teaching and learning of the skills required by industry to improve graduate employment outcomes.

One way in which Australian HEIs have responded to the call for the development of employability skills is through graduate attribute statements. Most Australian HEIs have developed a set of graduate attributes (Barrie, 2006) which, conceptually, are those attributes, skills and associated behaviours that HEIs advocate that their students will attain over the life of their degree. These have also been referred to in the literature as non-technical skills, generic, professional or key skills (Jackson et al., 2013), human skills (Deloitte, 2017), soft

skills (Hampson & Junor, 2009), and hereafter referred to as employability skills. Further complicating this is the milieu of change in the university context exerting influence on the complex and changing roles of academics (Macfarlane, 2020) whereby performativity is constantly measured by, as some argue, reductionist metrics (Papadopoulos, 2017) through workload models that do not necessarily account for the additional cost of incorporating delivery of employability skills in discipline-based courses. Therefore, how employability skills are to be delivered in the HE context remains contentious due to the tensions arising from defining, delivering and measuring development of such skills. Hence, TEQSA has provided a guidance note on scholarship (TEQSA, 2018) for HEIs in the context of HESF threshold standards with the intention that the standards broadly encompass how content is taught, practiced, and assessed appropriate to discipline. The TEQSA guidance note draws on Boyer's (1990) model of scholarship which offers a framework for consideration by HE providers which includes the scholarship of teaching and learning (SoTL) elements of discovery, integration, application, teaching and learning.

The university sector has adopted different models of employability learning (Cranmer, 2006; Speight et al., 2013) to operationalise employability skill development in the curriculum. Cranmer's (2006) seminal investigation on delivery methods for employability skills in HE outlined a continuum of models including: 1) total embedding in the degree, where skills development is not assessed and possibly lost in discipline content so that students may not be aware they are developing skills; 2) explicit embedding and visible integration in discipline subjects where skills development is explicitly managed and assessed but has a high impact on curriculum; bolted-on generic skills programs that offer specific focus on skills but limited contextualisation for within degree development and; 3) parallel development in which skills learning and development is delivered outside of the curriculum by university careers staff. Cranmer (2006) acknowledges that "despite the best intentions of

academics to enhance graduates' employability, the tensions inherent in the agenda will consistently produce mixed outcomes" (p. 172). This suggests the need for further research that explores pedagogical tensions, especially as this relates to HE teamwork, as this is one graduate attribute consistently demanded by employers. In the past decade, more attention has been directed at identifying skills gaps in business graduates (Jackson & Chapman, 2012) and implementing skill development in the university context (Jackson & Tomlinson, 2020).

One of the employability skills that almost all HEIs acknowledge is teamwork (Riebe et al., 2017). Yet how teamwork is to be developed and made demonstrable has been unclear (Gottschall & Garcia-Bayonas, 2008). What has not been widely explored are factors that influence the teaching of teamwork in a context of changing demands for graduate employability outcomes, and sector complexity.

If the skill of teamwork continues to remain of such importance to employers and institutions, there needs to be more engagement by educators and curriculum leaders in understanding the extent to which contextual and individual factors afford or constrain the teaching of teamwork and consequently graduate outcomes.

1.4 Background

The background section details the historical import of the deployment of employability skills in the tertiary education sector. First, a brief history of employability skills in Australia is presented to highlight the emerging recognition of the importance of employability skills persisting over time. Next, the evolution of employability skills is discussed with a focus on definitional challenges, operationalisation and translation into curriculum and teaching practice. Teamwork is then defined, noting the complexity that arises for educators given there is no universally accepted definition.

1.4.1 Australian Employability Skills History

Employability skills initiatives have increased over the last three decades. Calls from employer groups in Australia and other culturally similar developed countries have identified the need to develop a suite of employability skills in university graduates (see, Australian Chamber of Commerce and Industry [ACCI], 2002; Business Industry and Higher Education Collaboration Council [BIHECC], 2007; Confederation of British Industry [CBI], 2009; US Department of Labor, 1991).

Historically, successive Australian governments have sought to improve the nation's economic production through education and training, particularly through conceptualising broad statements of employability and introducing employability skills packages. Over the past three decades, various reviews of education have noted the importance of identifying ways that education can contribute to Australia's labour market competitiveness. However, there is a continuing debate in the literature about the notion of employability being presented as reductive (Bennett, 2018) and typical of policy approaches by governments and institutions (Wilton, 2014). Tomlinson (2012) has earlier argued for a broader understanding of employability. Yet, there remains definitional contention across sectors between the development of employability skills (general personal competencies) within degrees at university (Cranmer, 2006; Jackson, 2016b) and employment outcomes as monitored by governments through for example, the Graduate Outcomes Survey. Nevertheless, it is useful to understand the nature of the historical elaboration of the focus by government on employability skills in HE to meet economic imperatives. The following information, sourced from the report, *Adolescent Overload?* (Australian Parliament, 2009, p. 48), sets out a brief history of the development of generic skills in Australia that contribute to an individual's employability.

The Quality of Education Review Committee (1985) chaired by Peter Karmel examined the quality of education in Australia. The review highlighted the importance of an internationally competitive labour force and stressed that outcomes of education should contribute to Australia's competitiveness. Recommendations included that education prepare students for employment through skills learning, including being able to access information and work in groups. A review of young people's post-compulsory education and training in Australia by Finn (Australian Education Council Review Committee [AEC], 1991) recognised the importance of young people developing key competencies. Finn's review emphasised the acquisition of both technical and non-technical skills for jobs in a changing technological and economic landscape. Based on Finn's findings, the AEC Mayer Committee (1992) developed a set of key competencies, resulting from broad consultation across the education and industry sectors, that were considered essential to preparing young people for employment.

Following on from these various reviews for the Australian Government, there were several industry-led initiatives undertaken. In 1999, the Australian Industry Group (AIG) commissioned a report that refocused the importance of emphasis on the development of both technical skills (discipline-related) and non-technical skills (such as teamwork, problem-solving and adaptability) in order for young people to be prepared prior to the recruitment process. The ACCI and the Business Council of Australia (BCA) jointly surveyed employers' views on generic skills resulting in the production of an expanded list of employability skills, which would meet employer requirements. The ACCI/BCA (Department of Education, Science & Training [DEST], 2002) report acknowledged that combinations of employability skills would lead to higher job-related performance.

The Australian National Training Authority (ANTA) was tasked with making employability skill development explicit in Vocational Education and Training (VET)

training packages. ANTA coordinated a collaborative, cross-sectorial approach defined by Australian industry requirements.

The historical development of employability skills initiatives led to evolving definitions of employability skills, with a raft of organisations and governments seeking to provide descriptions that would clarify skills needed for the workplace beyond degree technical skills. Driven by changes in labour market policies and to meet industry requirements, explicitly developing employability skills within the parameters of students' HE degree is to "make them appealing to multiple employers across multiple work contexts and disciplines" (Bridgestock, 2009, p. 32) in an era of job mobility and where organisational agility is valued (Bennett, 2018). The implication for HE has meant that the sector has had to respond through changes to curriculum, particularly in business and other professional schools, in delineating how employability skills are understood and operationalised in education and the workplace.

In the following section, definitions of employability skills are explored.

1.4.2 Evolving Definitions of Employability Skills

Governments and independent organisations in Australia and other culturally similar developed countries have offered various definitions for employability skills. As previously noted, there are a variety of references to non-technical skills, generic skills, professional skills, key skills, human skills, core skills, work-related competencies, capabilities, and lifelong learning skills that have been used interchangeably in the literature. However, there has been convergence of thought along the lines of education providing students with skills they should acquire as job-ready graduates and for full participation in society.

Employability skills have been defined in Australia as "skills required not only to gain employment but also to progress within an enterprise so as to achieve one's potential and contribute successfully to enterprise strategic directions" (DEST, 2002, p. 3). Employability

skills have also been referred to as "broad generic work-related competencies and personal attributes which are valued by employers" (Australian Parliament, 2009, p. 46).

It has been two decades since the Employability Skills Framework (ESF) was introduced in Australia through the Australian Federal Government's release of the report '*Employability Skills for the Future*' (DEST, 2002). Eight skills were identified and enacted in the ESF: communication; teamwork; problem-solving, initiative and enterprise; planning and organising; self-management; learning; and technology. The Curtis and McKenzie (2001) review of the employability skills literature found that employer groups accorded communication, teamwork and problem-solving the highest priority to develop. Further, the authors assert that "focussed efforts to develop, assess, and report achievement against these should be a priority in a phased implementation of the framework" (Curtis & McKenzie, 2001, p. 56).

The Organisation for Economic Co-operation and Development (OECD) sponsored DeSeCo (Definition and Selections of Competencies) project identified three key categories of competencies, 1) using tools interactively, 2) interacting in heterogenous groups, and 3) acting autonomously (OECD, 2005). Each category defined what specific competencies were required. The competencies were determined as multi-functional, relevant across many fields, referring to a high order of mental complexity, and multi-dimensional (Allen Consulting Group, 2006).

In the Confederation of British Industry (CBI) (2009) report, *Future fit: Preparing graduates for the world of work*, employability skills are defined as: "A set of attributes, skills and knowledge that labour market participants should possess to ensure they have the capability of being effective in the workplace–to the benefit of themselves, their employer and the wider economy" (CBI, 2009, p. 8). The CBI report goes further to attempt to define the facets of employability skills that will be required of graduates when they enter the job

market. Skills identified by the CBI include, for example, team working, self-management, problem-solving, consumer awareness and communication skills.

1.4.3 Operationalising Employability Skills in HE

Focusing on Australia, definitions of employability skills were laid out in the Employability Skills Framework (DEST, 2002), with early adopters of the teaching of these skills being Registered Training Organisations (RTO) and Tertiary and Further Education (TAFE) providers that incorporated skills training in packages for certificates and diplomas. Australian universities did not immediately follow suit. According to Star and Hammer (2008), there is a distinct dichotomy that permeates universities that have previously been conceived as having an elite higher academic purpose, as opposed to reviewing that position in a new era of vocational mass HE for employability. This may be the broad reason for late involvement in the explicit teaching of employability skills, such as teamwork, by universities. Over time, the assurance of learning of employability skills has been regulated through policy. The Australian Qualifications Framework (AQF) is a national policy regulating the standards and requirements for qualifications in the Australian education and training sectors (Australian Qualifications Framework Council, 2013). Since one of the objectives of the AQF is to "underpin national regulatory and quality assurance arrangements for education and training" (AQF, 2013, p. 8), there is an expectation that educators will teach relevant knowledge and skills. The qualification types are structured into levels from level 1 (being a Certificate I, sometimes available in secondary education settings), to level 10 (being a doctoral degree). The application of skills requirements in levels 1–6 of the AQF broadly requires students to be able to participate in teams or work effectively with others. At bachelor's degree, level 7, the focus shifts towards independent lifelong learning. The AQF notes that graduates at level 7 will have 'intellectual independence' although some collaborative skill requirement is noted in the statement, "responsibility accountability for

own learning and professional practice and in collaboration with others within broad parameters" (AQF, 2013, p. 48). It is here where policy simulacra and the employability agenda diverge, as there would appear to be a dilution of the intent to develop teamwork as a skill at bachelor's degree level, noted in the slight shift in focus of the wording from lower levels—where the word 'team' is prominent—to the more self-focused wording mentioned previously. This suggests that teamwork, at the policy level, is not considered as important at Bachelor level in the AQF, which does not accord with the high level of importance of this employability skill as rated by employers (Australian Association of Graduate Employers [AAGE], 2014; 2019). For example, teamwork was assessed by 79% of employers in the 2014 AAGE survey and of those employers, 86% ranked teamwork as very important in the graduate recruitment and selection process. In the 2019 AAGE survey, teamwork was assessed by 100% of surveyed employers and of those employers, 75% ranked teamwork as very important in the recruitment and selection process. The difference across time suggests that HEIs are maintaining a focus on improving HE teamwork teaching and learning to meet industry requirements.

For HE business schools undertaking accreditation with professional bodies, for example, with the Association to Advance Collegiate Schools of Business (AACSB), business schools must demonstrate the meeting of specific standards, including integrating generic competencies such as teamwork within degrees.

The previous sections have provided background and context as to how employability skills initiatives have developed over time. How employability skill development has translated to operationalisation in the HE curriculum has been explained as driven by government policy, introduced through standards frameworks, and the requirements of employers and accrediting bodies. This information will provide background for the rationale and the significance and scope of the research undertaken in this thesis.

To further understand how teamwork is perceived, the following section provides a range of definitions provided in the literature.

1.4.4 Definitions of Teamwork

Definitions of teamwork vary with no one universally accepted meaning. This definitional opaqueness has implications for educators in the HE context when operationalising teamwork pedagogy. For example, teamwork pedagogy comprises approaches to teaching that aim to address the dynamic interactions inherent within teamwork processes. As such teamwork requires instruction on the transition, action and interpersonal processes of teamwork, beyond product output, of which educators may not be aware. Therefore, the aim of this section is to provide some background to definitions of teamwork and teams that have been proposed in the literature, by seminal authors and/or enacted in policy that have implications for approaches to SoTL and teamwork pedagogy as outlined in this thesis.

Teamwork is a social construct with definitions promulgated as "the set of interrelated behaviours and actions that occur among team members while performing on a task" (Salas et al., 2000, p. 344) and "the interdependent components of performance required to effectively coordinate the performance of multiple individuals" (Salas et al., 2008, p. 541). Katzenbach and Smith (2013) point out that teamwork "represents a set of values that encourage listening and responding constructively to views expressed by others, giving the benefit of the doubt, providing support and recognizing the interests and achievements of others" (p. 36). Reference to interdependence in teamwork is elaborated as "the extent to which team members rely on each other when they are working together" (Ren & Wang, 2007). The Australian 'Employability Skills Framework' (DEST, 2002, p. 40) identified elements of teamwork as: working with people of different ages, gender, race, religion, or political persuasion; working as an individual and as a member of a team; knowing how to

define a role as part of a team; applying teamwork to a range of situations – e.g., futures planning, crisis management; identifying the strengths of team members; and, coaching, mentoring, and giving feedback

Teams have also been defined in various, yet interrelated, ways in the literature. For example, Katzenbach and Smith (2013) refer to teams as "a small number of people with complementary skills who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable" (p. 39). Salas et al. (2000) define teams as "a set of two or more individuals interacting adaptively, interdependently and dynamically towards a common and valued goal" (p. 341). Similarly, Hughes and Jones (2011) suggest that,

> teams are composed of individuals who share several defining characteristics:
> they (1) have a shared collective identity, (2) have common goals, (3) are
> interdependent in terms of their assigned task or outcomes, (4) have distinctive
> roles within the team, and (5) are part of a larger organizational context that
> influences their work and that they in turn can influence. (p. 54)

Some of the common threads among the definitions offered for teams and teamwork are the elements of interpersonal relationships, interrelated behaviours between team members and task performance. Therefore, contextually, this research explores these threads as they relate to implications for teamwork pedagogy.

1.4.5 Rationales for the Provision of Teamwork Pedagogy

There are two major rationales underlying the importance of the teaching and learning of teamwork at university. These are developing teamwork as an employability skill and the importance placed on collaborative learning. First, as previously noted, in employability terms teamwork is a continually sought-after skill by employers, with teamwork skills noted as "essential" (AAGE, 2019, p. 12). Organisations invest billions of dollars annually in skills

training (Grossman & Salas, 2011); therefore, it stands to reason that there would be a vested interest in employing graduates who are able to demonstrate adequate soft skills training, representing a saving on skills training to the employer. Although the skill of teamwork constitutes only a part of a bank of skills required by employers, it continues to rate in the top three skill requirements in annual employer surveys.

Surveys of graduate employers in Australia report that recruiters consistently assess for teamwork skills and rank demonstrable learning in this skill as very important, consistently rating teamwork in the top three skills that employers seek in graduates during the application and selection process (AAGE, 2014; 2019). In a survey of employers' views by Hart Research Associates (2010), 71% of employers in the USA indicate that more emphasis should be placed on developing teamwork and the ability to collaborate with others in diverse settings as an outcome of a college education. Outcomes of surveys conducted by the National Association of Colleges and Employers (NACE) (2018) also bear witness to the importance of teamwork, ranked as one of the top four career-readiness competencies by employers (NACE, 2019). Moreover, human capital development and neo-liberalisation of HE has seen the rise in pressure exerted by governments on HEIs to produce employable graduates. For example, the *Quality Indicators for Learning and Teaching* (n.d.) website describes outcome indicators for graduate employment. Graduate employment is deemed an indicator of university quality and hence, the ability to attract and retain students. There have been recent changes to Commonwealth Supported Places (CSP) funding with CSP contributions for business related courses being reduced (Australian Business Deans' Council [ABDC], 2021). Further, proposed changes to Australian Federal Government HE funding policies would see a move from the current uncapped CSP arrangement (based on the number of undergraduates enrolling in courses) to Performance-Based Funding (PBF) from 2020 for 'new' undergraduate students (Australian Government, 2019). One of the four criteria for

PBF is improving graduate employment outcomes and it has been suggested that not meeting this criterion could result in loss of some funding for the university sector (Bolton, 2019) additional to business related CSP contributions already being reduced. These arrangements can have implications for educators in the broad context for inclusion of teamwork pedagogy that meets the skill requirements of employers leading to employable graduates. As previously elaborated, teamwork is a very important skill for graduates to be able to demonstrate (AAGE, 2019).

The second rationale for teamwork pedagogy and HE students' development of teamworking skills at university is the importance placed on promoting collaborative learning to enhance "student achievement, effort, persistence and motivation" (Scager et al., 2016, p. 1). Collaboration is a defining feature of teamwork as is the capacity for collaborative learning. In the HE context, there is increased recognition of the theoretical underpinnings of collaborative learning (Roselli, 2016) as well as the social and educational benefits (Prichard et al., 2006; Scager et al., 2016). Collaborative learning is a process that entails interaction with others, providing opportunities to actively learn new knowledge and practice skills when working in groups with a shared goal (Gokhale, 1995; Driskell et al., 2018). Collaborative learning has also been noted in the literature as important in forming interpersonal and instrumental bonds to achieve goals (Driskell et al., 2018) and increasing social skills for future professional work (Scager et al., 2016) that can evolve from the collaborative efforts emerging from teamwork. Yet collaborative learning has proved to be a challenging barrier for some educators and students and integrating this form of pedagogy into the learning environment has perceived time and effort costs (Yamane, 1996). Such costs to educators can be in the form of temporal resourcing (Kirschner et al., 2018), for example, introducing collaborative learning in HE alongside crowded, discipline-specific content curricula (Bennett, 2018), and learning new skills to be able to effectively facilitate and coordinate

collaborative learning activities, influencing how collaboration in teamwork pedagogy is approached, developed and delivered in curriculum.

The rationales for teamwork pedagogy at university are apparent through the demands exerted by employers and aspects of government policy at the macro level described.

As Australian business schools struggle to regain ground from the loss of international student revenue (Ross, 2020) and changing labour market conditions arising from COVID19, teamwork and the ability to work effectively with others in various modes, highlights the importance of understanding the challenges of HE teamwork (Wildman et al., 2021). The tensions arising from transaction costs and collaborative learning have the potential to positively or negatively influence how teamwork pedagogy is understood, developed and resourced. What is required is research that considers how these influencing factors affect educators and how these can be understood in the Australian business school context. This leads to the research question and aims of this study presented next.

1.5 Research Question and Aims of the Study

The present research aimed at generating a solid understanding of the salient influencing factors of teamwork pedagogy faced by business educators in Australian HE business schools.

The research addressed an overarching question: *What are the salient influences on educator factors that affect the teaching of teamwork in the Australian HE business school context?*

Given the complexity of the underlying primary research question, three aims for addressing the question arise. These aims are discerned as:

1. identifying factors perceived to afford or constrain teamwork pedagogy in HE

2. exploring the salient issues associated with teaching teamwork skills in the Australian business school context, and;

3. understanding the challenges of implementing teamwork as part of the curriculum through educators' experience in the Australian HE business school context.

To address the research question and aims, a precursor foundation to identifying salient issues affecting HE teamwork pedagogy was to systematically review existing literature at global and national levels. Drawing on the extant knowledge arising from the literature, transaction costs (Williamson, 1979) were assumed to contribute to some of the salient factors affecting teamwork pedagogy. A further focus was on deriving perspectives on teamwork pedagogy sought from interviewing business educators to explore the organisational paradox tensions (Smith & Lewis, 2011) encountered through HE educators lived experiences of teaching teamwork.

1.6 Significance and Scope of the Research

The importance of this research is explained in conceptual, empirical and educational terms. Teamwork is shaped by human interaction drawing together the complex interaction of individuals and the individual's transaction within their own environmental system, and the social forces of the collective through experiential and collaborative learning.

Conceptually, the research unveils sensitising concepts explained as multilayered theoretical perspectives underpinning teamwork pedagogy. The implications and impact of which aids in the understanding of the interplay of factors that challenge HE business school educators. For example, with many educators being subject-matter experts (Cotronei-Baird, 2020), there are implications in understanding how theoretical perspectives impact on teamwork pedagogy. Conceptualising how these perspectives coalesce to support groundwork for teamwork pedagogy supports the interpretivist position adopted in this thesis of reality viewed as shaped by interactions through language, experiences, and relationships.

Empirically, the study was designed to explore the factors affecting the teaching of HE teamwork. In reviewing the literature, specifically in the two peer reviewed published

SLR articles in Chapter Two, salient factors affecting the teaching of teamwork emerged and gaps in knowledge were perceived. Implications arising from the literature review revealed that few studies had focused on the tangible and intangible costs or tensions associated with implementing teamwork pedagogy in HE business schools. This is significant as transaction costs (temporal, physical, fiscal and/or psychological/human resource costs) impact return on investment in teamwork pedagogy. Despite the significance of understanding transaction costs of teamwork pedagogy and impact on educators, HEIs and students, there remains a paucity of literature conceptualising transaction costs as factors that afford, constrain and/or create tensions around teaching teamwork. Similarly, there were no studies specifically analysing how HE educators deal with the tensions of teamwork pedagogy utilising organisational paradox theory. Research by Miron-Spektor and Paletz (2017) extended theory on paradoxical frames on team learning and innovation, discussing recognition of and acceptance of tensions between opposing elements, although this does not address the gap in the literature regarding the performance paradox tensions that educators experience when facilitating the teaching of teamwork in the HE business school context. Therefore, exploration of the impact of how paradoxes and 'critical tension points' (Jarzabkowski et al., 2013) affect HE business school educators is considered in this thesis to address a gap in the HE teamwork literature. Chapter Five presents the third peer reviewed published article which explores the tensions associated with teamwork pedagogy faced by educators in this study. Tensions can be positive and "fuel virtuous cycles that unleash creativity and enable resilience and long-term sustainability" (Miron-Spektor et al., 2018, p. 28) or negative, resulting in vicious downward spirals that "provoke defensive responses that paralyze action or foster intractable conflicts" (Miron-Spektor et al., 2018, p. 28). These tensions can be viewed through the paradox lens articulated by Smith and Lewis (2011), who define paradox as "contradictory yet interrelated elements that exist simultaneously and persist over time" (p.

382). For example, educators grapple with simultaneous competing tensions that seem contradictory to their teaching purpose: that is, discipline content versus generic skill development. Yet if educators can recognise the mixed messages and contradictory demands in their experiences, they can potentially adjust their mindset to address the tensions arising as these tensions intersect and cause disequilibrium. One way of negotiating paradox tensions identified in the literature is to adopt a paradox mindset. Sleesman (2019) argues that a paradox mindset is the way people accept and respond with energy and optimism to tensions to successfully work through them where there are salient alternatives. Having a paradox mindset can assist the educator in being more tolerant of "ambiguity, integrative complexity, contradictions, and openness to experiences" (Miron-Spektor et al., 2018, p. 33) when paradox tensions are experienced simultaneously, and alternative courses of action surmised. On the other hand, where there is no alternative, a paradox mindset can be just as powerful in escalating commitment to a failing course of action (Sleesman, 2019). Understanding the dynamics that influence educators and how these are realised through approaches to teamwork pedagogy in business schools is an important outcome of this research in unpacking the challenges presented as paradoxes and tensions.

From an *educational* perspective in a changing academic environment, the cost of the cumulative emotional labour to educators given the increasing commodification of HE and introduction of service-oriented practices (Hatzinikolakis & Crossman, 2010), is highlighted. The research question is addressed, in part, by discerning the scarcity of temporal, fiscal, physical, and human resources from which educators can draw, and tensions arising from competing demands on HE business educators.

Prior research has explored such competing demands from the perspectives of academic workload (Papadopoulos, 2017), academic identity (Billot, 2010; Macfarlane, 2017), and academic performativity in relation to teaching and research (Macfarlane, 2020;

Vos & Page, 2020). Yet, there is little evidence of how educators deal with these tensions viewed through the organisational paradox lens as applied to the lived experience of HE business educators with teamwork pedagogy. The empirical article in Chapter Five significantly contributes to further understanding of these competing demands and tensions by exploring and unpacking the paradoxes and tensions encountered by business faculty teaching teamwork in a changing academic environment.

The significance of this research is in understanding salient influencing factors that affect the teaching of teamwork in the Australian HE business school context in order that strategies and recommendations, that have hitherto been overlooked, can be developed.

This research is the first of its kind to explore the dynamics and interactive effects of internal and external influencing factors utilising a constructivist perspective. Understanding how these influencing factors manifest, within the context of the HE business school and through individual educator responses and are actioned in light of contextual forces has the potential to address the research question and reveal salient factors in the operationalisation of teamwork pedagogy.

1.7 Structure of Thesis and Outline of Chapters

This thesis by compilation is laid out as chapters including Introduction and Background; Literature Review (containing two systematic literature review articles that have been peer reviewed and published); Research Methodology; Findings and Discussion; Faculty Paradoxes and Tensions (including a peer reviewed and published article); and, Conclusion chapters.

Figure 1.1 provides an outline of the thesis structure. Figure 1.2 conceptualises the bricolage of methods and theories in this thesis by publication. There are three articles included that answer a series of related aims addressing the research question. Each article has been submitted to, and published in, a peer reviewed scholarly journal.

Figure 1.1

Thesis Structure

Chapter 1	•**Introduction and Background**
Chapter 2	•**Literature Review and Systematic Literature Reviews**
Chapter 3	•**Methodology**
Chapter 4	•**Findings and Discussion**
Chapter 5	•**Faculty Paradoxes and Tensions**
Chapter 6	•**Conclusion**
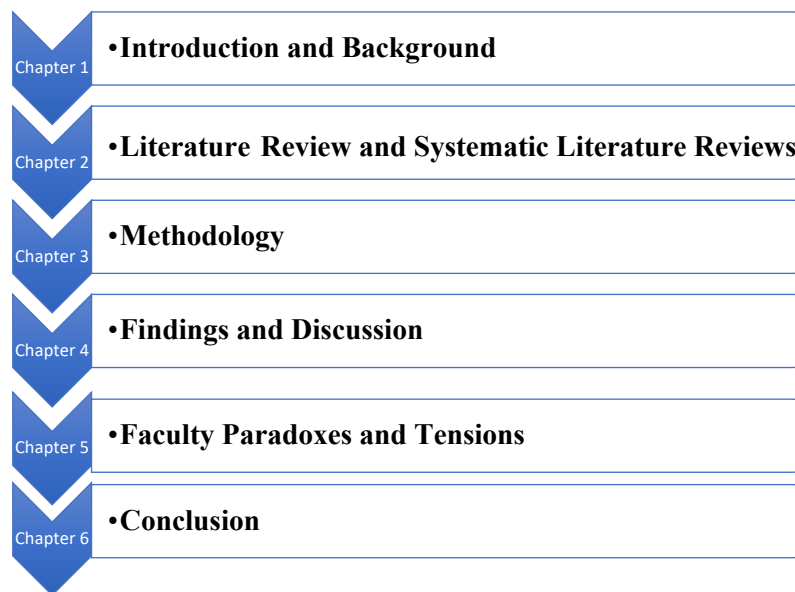
Figure 1.2

Bricolage of Methods and Theories
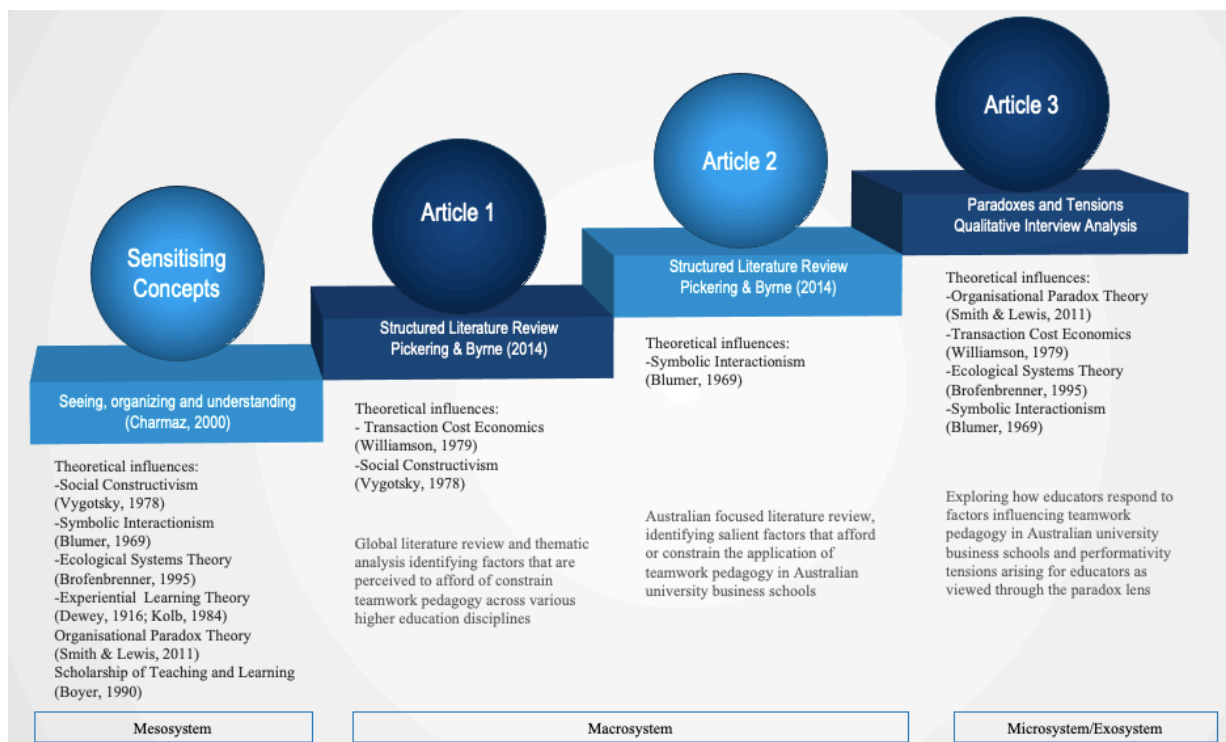
Following this introductory chapter, Chapter Two presents the findings of two published systematic literature reviews (SLR). The first SLR focused on the salient issues associated with teaching teamwork skills in a global, multi-disciplinary context, identifying the transactional nature of affordances and constraints of teamwork pedagogy. The second SLR addresses the salient issues associated with teaching teamwork skills in the Australian business school context and thematically outlines the challenges faced by Australian educators. Further extant literature is reviewed to provide updates to, and connect with, SLR literature, as well as insights into the various themes arising through the data analysis. Chapter Three presents the methodological approach, including the research design and methods used to conduct this qualitative exploratory study. An overview of the origins of the chosen method is explained, followed by an explanation of procedures of obtaining ethics, data collection, analysis processes and other methodological issues. Chapter Four details the findings and discussion in a presentation of themes resulting from the qualitative analysis of interview responses. Chapter Five reviews paradox theory and presents findings of the case study in the third published article in this thesis. Chapter Six reviews the study overall. Contributions to SoTL are presented, along with implications and recommendations for theory, practice and policy, followed by limitations of the study and thoughts for further investigation.

1.8 Chapter Summary

This chapter has introduced the researcher position adopted and contextualised the study of employability skills, in particular teamwork, in the Australian HE business school environment. The development of employability skills across Australia and other culturally similar developed economies has been provided as background to assist with understanding of the growing importance of within degree training of these skills. Definitions of employability skills and teamwork derived from the literature were provided to further

enhance understanding. The rationales for the importance of including teamwork in HE was expounded through the rationales of employer demand for graduates trained in collaborative processes and teamwork skills and government policy initiatives underpinning HE commodification through the employability agenda. Finally, knowledge gaps were identified, and research question and aims highlighted. The next chapter presents the Literature Review, including the two published SLR articles.

Chapter 2: Literature Review

2.1 Overview

This chapter reviews the relevant literature related to the salient influences associated with HE teamwork teaching and learning. Literature on HE teamwork was searched with a focus on HE educator approaches to teamwork pedagogy, strategies, rationales and challenges of HE teamwork to determine trends that would address the research question and aims. Outcomes of the literature search are presented in two systematic literature reviews (SLR) published in scholarly peer reviewed journals. The chapter concludes with a review of more recent literature published since the initial SLRs were undertaken or literature which may have been excluded due to SLR search parameters.

2.2 Systematic Literature Reviews

To focus the review of the literature and identify factors affecting the teaching and learning of teamwork in HE, a specific style of literature review (SLR) was conducted.

The SLR methodology includes a scoping protocol to find literature by volume and set search strategy parameters developed from the research question to be searched in electronic databases, with resulting literature screened against specific criteria (Perry & Hammond, 2002). More time consuming than a traditional literature review, the SLR is considered comprehensive in developing a review procedure that is reproducible when explicit parameters are specified, and it affords assessment of a combination of variables examined, findings arising (Pickering & Byrne, 2014; Xiao & Watson, 2019) and avoids potential bias in the selection of literature by involving at least two reviewers in the decision-making process (Perry & Hammond, 2002).

SLRs are considered comprehensive because they assess "which different combinations of locations, subjects, variables and responses have been examined by researchers and what they have found" (Pickering & Byrne, 2014, p. 538), allowing for further analysis in this thesis of convergent or divergent findings.

In this thesis, two SLRs were completed and subsequently published. The first SLR analyses the literature from a global, multi-discipline perspective, grounded in the social constructivist paradigm. The second SLR funnelled down to reveal the factors affecting the teaching of teamwork in the Australian business school context, with intent to inform business academics of issues and challenges arising in the literature that are similar to those with which they are faced and highlight gaps in the literature that could stimulate future research. In the following sections, each published article is introduced including publication details. This is followed by the article as published. Finally, the implications of each SLR are critically discussed.

2.2.1 Article One: A Systematic Literature Review of Teamwork Pedagogy in Higher Education

The first article presented is a global SLR, published in a special edition of the journal *Small Group Research.*

The purpose of the global SLR was to critically analyse research reported in scholarly academic journals, identifying how educators' approach and investigate teamwork pedagogy globally, and how what they report in their research is understood to either afford or constrain their practice, providing critical insight to factors influencing HE teamwork pedagogy. The aim was to 'identify factors that are perceived to afford or constrain teamwork pedagogy in HE contexts'.

The broad-brush approach developed through the global literature review provided a general overview of the evidence of what works to afford and/or constrain the teaching of

teamwork in the HE context. Integral to the research design was the requirement that the literature review included studies that, in addition to being published in scholarly peer-reviewed journals over 1995–2015, had to propose a range of evidence-based processes or recommend pedagogical approaches to teaching teamwork skills to HE students. Hence, the SLR did not aim to specify best practice in teamwork pedagogy, but rather to contextualise those factors that were associated with recent trends in HE teamwork teaching and learning. Two broad themes emerged which related to teamwork pedagogy and transaction costs associated with investment in teamwork pedagogy.

The first broad theme of teamwork pedagogy identified factors emerging from common course content descriptions across all journal articles. Factors were then coded to categories of:

Instruction: training in team skills; collaborative/cooperative/experiential learning; tools introduced; process of teamwork; mentoring/coaching/modelling; Tuckman's stages; team-based learning. *Curriculum design:* learning outcomes; constructive alignment. *Team composition:* team size, team diversity, team formation. *Assessment:* self/peer assessment; social loafing; giving/receiving feedback; grading. Of the 57 articles reviewed in the global SLR, the majority focused on teamwork pedagogy as related to the introduction of strategies intended to facilitate enhanced learning outcomes for students and/or to better understand student/educator motivations relevant to HE teamwork participation.

Emerging as the second substantive theme from the analysis of the journal articles, a series of intersecting factors that influenced the teaching of teamwork in HE were identified as transaction costs. As such, transaction cost economic (TCE) theory (Williamson, 1979) was appropriated as a heuristic lens through which to view teamwork pedagogy. The TCE lens assumes that engagement with teamwork pedagogy will depend on the benefits or costs derived from participation. Temporal, physical, psychological, fiscal and human resource

costs were identified as affordances and/or constraints to the application of teamwork

pedagogy in terms of return on investment. The published article is presented next.

ATTRIBUTION STATEMENT FOR ARTICLE

The following article has been drafted in accordance with the journal *Small Group Research*.

The current article is published.

Riebe, L., Girardi, A., & Whitsed, C. (2016). A systematic literature review of teamwork
pedagogy in higher education. *Small Group Research, 47*(6), 619-664.
https://doi.org/10.1177/1046496416665221

The following authors contributed to this manuscript as outlined below.

Authorship order	Contribution (%)	Concept Development	Data Collection	Data Analyses	Drafting of manuscript
LINDA RIEBE	80	X	X	X	X
ANTONIA GIRARDI	10	X			X
CRAIG WHITSED	10	X			X

Contribution indicates the total involvement the author has had in this project. Placing an 'X' in the
remaining boxes indicates what aspect(s) of the project each author engaged in.
By signing this document, the Candidate and Principal Supervisor acknowledge that the above
information is accurate and has been agreed to by all other authors.

Candidate   **Principal Supervisor**

Note that the Tables, Figures and Appendices that appear in the article that follows are

presented as originally provided to the journal.

2.2.2 A Systematic Literature Review of Teamwork Pedagogy in Higher Education

Abstract

Teamwork pedagogy has received considerable attention across a wide range of academic literature. Yet employers continue to argue that universities need to do more to better prepare graduates to work in team-based environments. Grounded in the social constructivist paradigm, this article uses a two-phase systematic literature review methodology to explore the conditions and influences affording or constraining teamwork pedagogy. A complementary thematic analysis of the articles revealed two broad themes: pedagogy and transaction costs. In almost all 57 articles, a range of factors influencing teamwork pedagogy were elaborated. Temporal, fiscal, and human resource transaction costs were identified as constraints in the application of teamwork pedagogy. An overlap of educator, student, and institutional factors are discussed as contributing to the transaction costs of implementing process-oriented teamwork pedagogy. However, the interdependent interactions among educators and students, within and across institutions, remained largely underexplored and are presented as part of the future research agenda.

Keywords

In the 21st century employment market, being able to work effectively and productively with others in teams is no longer considered *desirable*, but rather – *essential*. The importance of teamwork capability is repeatedly highlighted in reports from Western and other economies. Teamwork capability can be developed, supported, and improved through effective teamwork pedagogy. Teamwork pedagogy comprises approaches to teaching that aim to address the dynamic interactions inherent within the teamwork process (organization oriented), and approaches that are not product/artifact oriented, but rather those pedagogies that focus on developing students' capabilities, "accountability, open discourse, team dynamics, and collaborative problem solving" (psychological and communication oriented) (Ding & Ding, 2008, p. 5).

Reports from the USA (Hart Research Associates, 2015); Canada (Harder et al., 2014); the UK (Confederation of British Industry, 2009); Australia (Australian Industry

Group and Deloitte, 2009); Eastern Europe (Sondergaard & Murthi, 2012); and China (Zhang & Zou, 2013) express the view that teamwork and related interpersonal skills are equally, or more important than graduates' technical skills. These views have been further emphasized in surveys of graduate employers (e.g., AAGE, 2014; National Association of College Employers, 2014). Teamwork is a social construct that describes the working relationship between people (Volkov & Volkov, 2007); influenced by the nature, intensity, and depth of interactions among psychological, communicative and organizational factors. Given that teamwork is a dynamic, multidimensional construct with a multitude of definitions, depending on the aspects studied (c.f., Salas, Burke, & Canon-Bowers, 2000; Tannenbaum, Mathieu, Salas, & Cohen, 2012b), in this paper teamwork is defined as a process involving two or more students working toward common goals, through interdependent behavior with individual accountability.

University graduates today now work in environments wherein teamwork is considered the norm (Stone & Bailey, 2007). This assumes that graduates will be able to work collaboratively and productively in teams as soon as they enter the professional workforce. Therefore, there is now a more explicit expectation among employer groups and governments that higher education (HE) institutions *will* provide students quality training in teamwork skills and capabilities to ensure graduates are better prepared to work in teams when commencing employment (Archer & Davison, 2008; Lowden, Hall, Elliot, & Lewin, 2011). Training in the HE context refers to the application of instructional strategies to enhance the development of teamwork theory, tools and guided practice (Stout, Salas, & Fowlkes, 1997) to assist students to develop application of the various behaviors associated with working in teams.

Yet, while many universities have been addressing teamwork skills for decades across a wide range of academic programs, teamwork pedagogy, as we explicate in the following, is

afforded or constrained by a range of interrelated and dynamic interactions. These include how teamwork pedagogy is conceptualized in the institutional context; the degree of experience and proficiency educators bring to teamwork pedagogy; and the perceptions of students concerning teamwork in the learning context. For example, how educators conceptualize teamwork pedagogy and implement learning activities intended to support the development of teamwork capability in students vary widely. What this means is, educators may place more emphasis on product or artifact production (outputs), rather than on the processes, skills and dispositional attributes required to work collaboratively and productively within a team (inputs). The experience and skills of the educator in the content development of teamwork projects is expected; however, the implementation of teamwork processes is considered a challenge. Burbach, Matkin, Gambrell and Harding (2010), recognizing the importance of professional development for teamwork pedagogy argued, "instructors must be trained in the pedagogies of teamwork and actively employ these pedagogies in the classroom" (p. 754). The provision and uptake of educator training and professional development, however, varies widely, and is influenced by institutional and educator commitment to teamwork pedagogy.

In addition to the definitional challenge and the educators' competency in teamwork pedagogy, negative perceptions and feedback from students assert a strong influence on teamwork pedagogy, and its planning and implementation in learning contexts. For example, a significant body of work documents students' concerns about: the distributive justice of grading team projects (Clarke & Blissenden, 2013; Kidder & Bowes-Sperry, 2012); working in multicultural teams (De Vita, 2002); social loafing of one or more team members (Jassawalla, Sashittal, & Malshe, 2009; Kouliavstev, 2012; Maiden & Perry, 2011; Pieterse & Thompson, 2010); inability to deal with intra-group conflict (Curşeu, 2011); and HE student workload (Pfaff & Huddleston, 2003), balanced with students' external part time work

(D'Alessandro & Volet, 2012). In this context, and recognizing that a significant body of literature and empirical studies have explored teamwork in organisations (e.g., Mathieu, Maynard, Rapp & Gilson, 2008; Rasmussen & Jeppesen, 2006; Rousseau, Aube & Savoie, 2006; Tannenbaum, Mathieu, Salas, & Cohen, 2012a) we determined to undertake a review to explore the following research question:

> **Research Question 1:** *What factors are identified in academic publications that are perceived to afford or constrain teamwork pedagogy in higher education contexts?*

The purpose of the review is to critically analyze research reported in scholarly academic journals, identifying how educators' approach and investigate teamwork pedagogy; and how what they report in their research is understood to either afford or constrain their practice. The outcome of the review is to provide educators with an overview and critical insight into the factors influencing effective teamwork pedagogy.

The following first, sets out the epistemological underpinnings and conceptual framework employed in this paper. Then, the review methodology, strategy and analysis processes are elaborated, followed by the presentation of results and discussion.

Conceptual Framework

This article is grounded in the social constructivist paradigm and employs an interpretive framework in order to better understand what factors are perceived to afford or constrain teamwork pedagogy in higher education. We understand learning to be a social and collaborative activity and, consistent with Vygotsky (1978), shaped by one's experiences and background (socio-cultural context). This extends to educators engaging in teamwork pedagogy through their interactions and experiences with students and others within the HE context.

Systematic Literature Reviews

D. Rousseau, Manning and Denyer (2008) advocate for the use of systematic syntheses of research findings in the management and organization sciences. Advocates of the use of systematic literature reviews believe the method can go some way in alleviating concerns around the "misuse of existing literature, the overuse of limited or inconclusive findings, and the underuse of research evidence…" (D. Rousseau et al., 2008, p. 477). The systematic review differs from a traditional literature review in several significant ways. For example, this systematic review is focused on a single question, details the process for selecting articles through the use of search protocols and outlines specific inclusion and exclusion criteria which guided the literature search. This approach means that the design of the literature review takes on characteristics of a robustly designed primary research project, which is replicable and which can facilitate interpretation of studies based on the research question.

Methodology

Guided by a set of principles discussed by Briner and Denyer (2012), the literature review process used in this paper seeks to identify and map the dominant themes emphasized in publications exploring teamwork pedagogy in the HE context. The review is undertaken in two phases, and is described next.

Pickering and Byrne's (2014) systematic quantitative literature review (SQLR) method framed and informed the systematic review. According to Pickering and Byrne (2014),

> this type of review is systematic because the methods used to survey the literature, and then select papers to include, are explicit and reproducible… The review is quantitative because it quantifies where there is research, but also where there are gaps. And the review is comprehensive because it assesses which different combinations of locations, subjects, variables, and responses have been

examined by researchers, and what they have found. (p. 538)

The first five steps in the SQLR method involve: (a) Defining a topic, (b) formulating a research question (addressed in the preceding), (c) identifying key words to be used in the search string, (d) identifying and searching databases, and, (e) reading and assessing publications. Step 6 through 9 involves (f) structuring a database, (g) entering critical information about the journal articles, (h) testing and (i) revising categories. Step 10 requires producing and reviewing summary tables.

The sheer body of work related to teamwork in organizations and the plethora of studies across health, engineering, psychology, sport science, arts, and other disciplines in HE, required that the context for the review be refined. A number of considerations were explored: first, the increasing concerns of employers and their requirements for work-ready graduates who can demonstrate teamwork skills; second, that the authors are academics actively engaged with business student research; and third, that business students are not fully engaging with HE teamwork projects. As such, it was determined that the review would be conducted in two phases. The first phase would focus on research in business disciplines. As teamwork is considered an interdisciplinary skill; however, the decision to include additional HE subject areas was addressed as part of the broader research design and second phase of the study.

Prior to the search, the authors clarified and agreed inclusion and exclusion criteria employed for the systematic review. The review focused on articles published in peer-reviewed journals in English between January 1995 and September 2015 that explored teamwork pedagogy. In addition, the studies had to apply to undergraduate or post-graduate students in higher education. Studies from the secondary education, vocational education and training and workplace sectors were excluded. Studies also had to propose a range of

evidence-based processes, or recommend pedagogical approaches to teaching teamwork skills to HE students.

The library database search. To enable the systematic review of titles, abstracts and keywords, a search string of keywords was developed. The keywords were inductively derived by two of the authors who completed an initial traditional literature search examining teaching teamwork in higher education. The search string concentrated on the broad concept *team* and included synonyms. Within the set returned for the concept *team* the next search string focused on the context *higher education* (and synonyms). Refining the search and concentrating on the construct *teaching*, then *individual*, *skill*, and *discipline area*. In the second phase of the review the same search strings were used; however, to allow for the inclusion of non-business related disciplines the narrowing down process did not include *discipline area* (see Figure. 1).
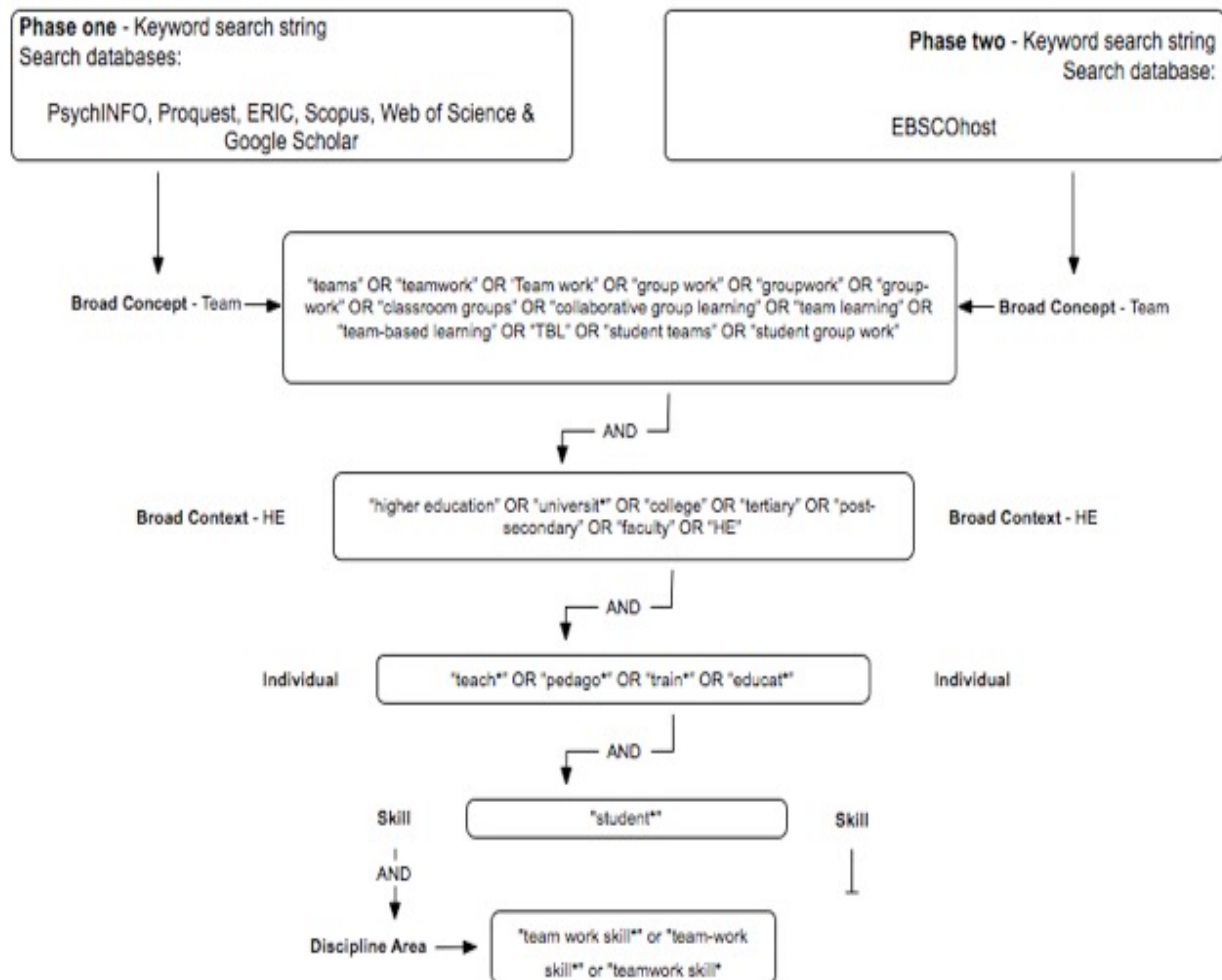
Figure 1. Library database search.

The library database search was conducted in two search phases and employed a combination of database and manual coding methods. The first phase of the systematic review concentrated on searching the databases: PsychINFO, ProQuest (see Appendix A for full list), ERIC, Scopus, Web of Science and Google Scholar to ensure a wide range of journal articles were identified. A second search using the EBSCO*host* database provider was then used as it captured a different range of databases (including CINAHL plus, Business Source, Communication Source, Education Source and Medline) and broadened the scope to also include non-business related HE subjects.

All articles were screened using the following protocol noting: number of records identified through initial database searching and number of records identified through further

database searches, screening for duplicates and exclusions; eligibility based on abstract and then full article review, ending with total number of journal articles included for the review. This process is captured in Figure 2. From the first phase, 30 articles were retained, with a further 27 articles from the second phase, resulting in 57 articles.
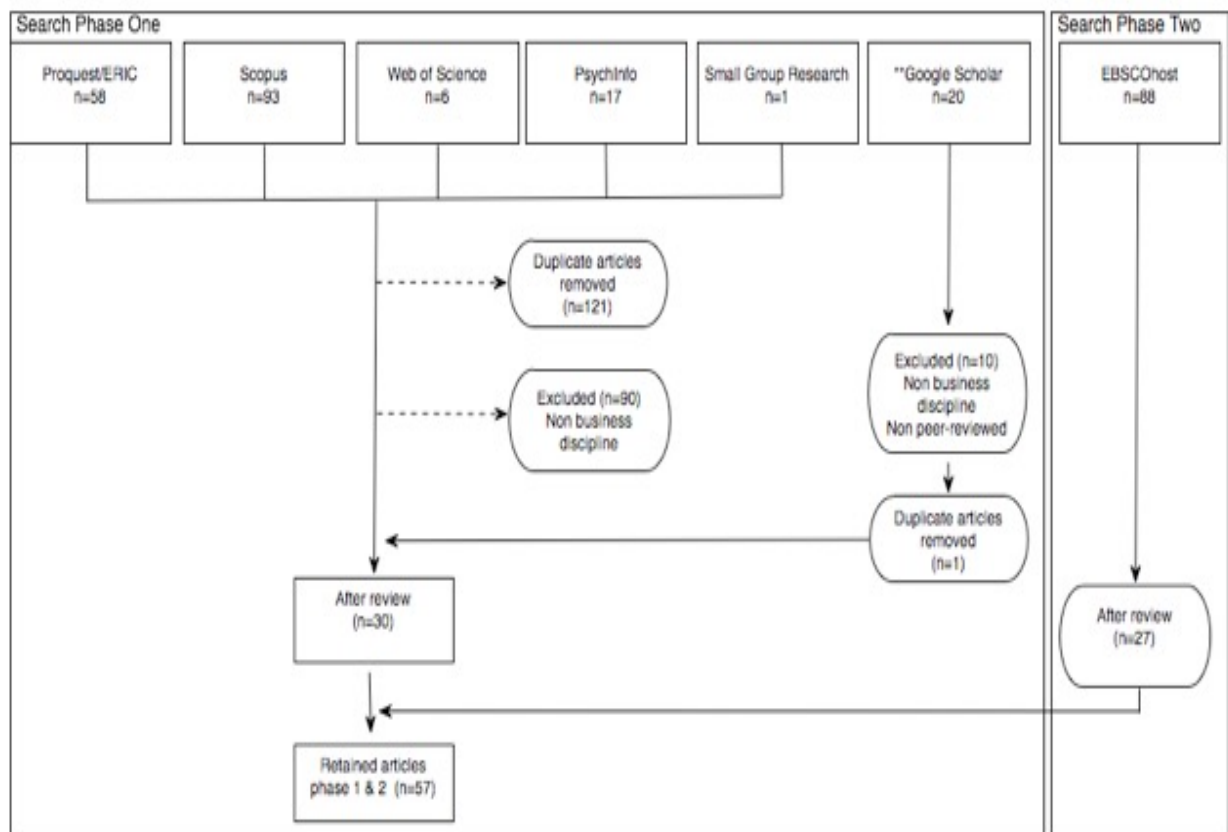
Figure 2. Database search protocol.

Data analysis. A database was established, following the SQLR method, to enable detailed mapping for each article retained that included: author(s); year of publication; title of the article; journal; discipline/subject area; geography; method; participants (number, undergraduate, postgraduate); results; gaps and salient factors affecting teamwork pedagogy. In total, 57 journal articles were retained, screened and placed in the database (see Appendix B for an extract of this database). Each article was allocated a unique number (first phase search) or letter (second phase search) identifier, which is used in the Appendix B and subsequent analysis and discussion. Descriptive and univariate statistical processes were

applied to detect patterns and themes in the literature surveyed (see Tabachnik & Fidell, 2013). As well as being able to report on the descriptive characteristics of the studies, the journal articles were analyzed using interpretive synthesis. This involved "translating and comparing data across the studies to develop categories and higher-level themes" (Briner & Denyer, 2012, p. 123).

Two broad themes emerged which related to teamwork pedagogy and transaction costs associated with investment in teamwork pedagogy. These themes were evaluated by all authors to ensure consistency of judgement and theme relevance to the research question. Categories in the first theme were coded by the first author, and reviewed and confirmed by the second and third authors to come to an agreement about category terms (instruction, curriculum design, team composition, assessment) representing factors emerging from common course content descriptions across all journal articles. Factors were then coded to these categories:

- *Instruction*: training in team skills; collaborative/cooperative/experiential learning; tools introduced; process of teamwork; mentoring/coaching/modelling; Tuckman's stages; team-based learning.
- *Curriculum design:* learning outcomes; constructive alignment.
- *Team composition:* team size, team diversity, team formation.
- *Assessment:* self/peer assessment; social loafing; giving/receiving feedback; grading.

The same process was followed to determine categories for the second theme of transaction costs, informed by educator, student and institution factors. The synthesis focused on collating the information gleaned from the studies in a way which was not necessarily apparent from the individual studies alone. An iterative approach was used by the research team to facilitate the review.

Furthermore, the journal articles were appraised for quality using quality appraisal scoring criteria (Hawker, Payne, Kerr, & Hardey, 2002). Each article was reviewed against a

list of nine specific questions (see Hawker et al., 2002, Appendix D) and scored along a four-point scale that ranged from: 3 *(good);* 2 *(fair)*; 1 *(poor)* and, 0 (*very poor*) for a maximum possible score of 27 points. The nine questions related to abstract and title, introduction and aims, method and data, sampling, data analysis, ethics and bias, transferability and, implications. Of the 57 articles reviewed, 46% were judged as good, 25% judged as fair, 26% judged as poor and 3% as very poor. Debate on scoring for methodological rigor is ongoing in the social sciences. However, interpretive synthesis allowed the authors to make judgements about inclusions. For instance, conceptual articles not based on primary research scored lower on the scale but were deemed by the authors as appropriate sources of information being fit for purpose in relation to the research question and were thus retained.

Results and Discussion

The quantitative characteristics of the retained articles are presented first in the quantitative findings section. This section is then followed by results and discussion arising from the two broad themes emerging from the thematic coding, under the headings Theme 1 Pedagogy and, Theme 2 Transaction costs.

Quantitative Findings

Over the search period and across the articles retained, interest in teaching teamwork in HE courses was more prolific in the most recent decade ($n = 45$; 2005 through 2015), than in the previous 10-year period ($n = 12$; 1995 through 2004). Seventy-five per cent of articles originated from authors based in the United States. This outcome may be a function of the keyword strings and criteria applied to the search, but may be because of the greater representation in general of publication outlets as well as educator numbers in the USA. Further, of the retained articles across the two phases, 75% related to research across a

variety of business subject areas, suggesting that developing teamwork of business students is highly prioritised when compared to other disciplines.

Table 1 aggregates the research methods employed across the journal articles. Notably, 19 articles (33%) used quantitative methodologies while seven (12%) used qualitative research approaches. Fifteen articles (26%) were categorized as conceptual describing pedagogical interventions or tools for teaching teamwork skills, but not empirically examining such strategies.

Table 1. Methods used in the studies

Method	Article identifiers	*n*
Quantitative	8,10,15,18,19,21,22,24,26,28,29,J,P,Q,R,T,U,V,W	19
Conceptual	9,16,20,27,B,D,F,G,H,I,K,M,X,Z,A1	15
Qualitative	2,4,30,A,E,O,S	7
Mixed method	11,12,17,25,L	5
Case	3,13,14,23,N	5
Experimental	1,5,Y	3
Action research	6, C	2
Meta-analysis	7	1

These results show that quantitative methods remain a popular approach when investigating the efficacy of teamwork pedagogies; and the affordances and constraints influencing design and implementation processes. There is a marked absence of mixed method approaches in the review, despite most researchers recognizing the value of using both quantitative and qualitative frameworks in the one study to expand understanding (Onwuegbuzie & Leech, 2005). Johnson and Onwuegbuzie (2004) noted mixed methods research presents a unique opportunity for researchers to understand educational activities. However, a review by Truscott et al. (2010) suggested that although mixed methods research is better suited to educational research, its use has not been as prevalent as expected. In the future, research designs which take advantage of mixed method approaches would be useful in addressing issues around methodological rigor, and generalizability of work examining teamwork pedagogy. Application of this methodology would additionally provide an

opportunity for better understanding how dynamic interactions between educators, students and institutional norms, influence teamwork pedagogy.

Of the empirical research reported, just over half (58%) are cross-sectional in design, with students or educators comprising the sample. Samples reported in the journal articles are considered small scale, with 26% reporting sample sizes smaller than 100 individuals; a further 28% report on studies with sample sizes between 100 and 1000 individuals. Sample size was not reported in 24 (42%) articles. Across the 33 journal articles referencing sample size, 58% used quantitative methods with sample sizes greater than 100. Qualitative or mixed method designs were used in 15% of journal articles stating sample size. Further, analysis of the sample sizes in this review indicate that large scale studies on HE teamwork pedagogy are infrequent, with two studies containing sample sizes over 1000 (e.g., Oakley, Hanna, Kuzmyn, & Felder, 2007; Takeda & Homberg, 2014). Whilst access to large samples plagues much primary research, the variance in sample sizes reported in these studies does question the generalizability of the findings, and is therefore to be considered in any future interpretations. Future research using larger sample longitudinal designs would contribute to rigorous, evidence-based knowledge of the implications of HE teamwork pedagogy.

The quantitative analysis of the journal articles did not easily lend itself to addressing the research question: *What factors are identified in academic publications that are perceived to afford or constrain teamwork pedagogy in higher education contexts?* Therefore, additional thematic analysis (as described above) was undertaken.

Theme 1: Teamwork Pedagogy

The first substantive theme to emerge out of the thematic coding and analysis of the literature reviewed related to teamwork pedagogy. Table 2 represents a count of the categories associated with teamwork pedagogy. The identifiers in the table relate to the articles in Appendix B.

Table 2. Theme 1 Pedagogy – Categories and Codes

Category and Codes	Article identifiers	*n*
Instruction		
Training in team skills	1,3,4,5,8,10,12,13,14,16,18,19,21,22, 23,24,25,27, 29,30,A,B,G,H,L,N,P,Z,A1	29
Collaborative/cooperative/ experiential learning	1,3,4,8,9,12,13,14,18,21,23,27,29,30, A, B,N,Q,V,A1	20
Tools introduced/used	2,3,5,8,10,12,15,16,19,26,B,K,F,O,S	15
Process of teamwork	11,13,19,22,24,26,30,S,Z,A1	10
Mentoring/coaching/Modelling	4,8,14,17,26,27,28,30,H,P	10
Tuckman stages	7,20,21,22,23,26,27,30,Z	9
Team-based learning	M,R,T,W	4
Curriculum Design		
Learning outcomes	1,3,4,11,12,16,A,F,M,S	10
Constructive alignment	3,11,F	3
Team composition		
Team size	1,5,6,8,10,12,13,19,24,26,A,B,E,K,M,P	16
Team diversity	11,13,15,18,21,23,26,29,A,H,M,R,S,V,A1	15
Team formation	7,8,10,13,15,16,19,26,A,B,E,Q,R,V	14
Assessment		
Self/peer assessment	1,3,4,5,7,12,16,19,23,26,29,B,C,E,F,N,Y, A1	18
Social loafing	1,2,3,4,7,10,13,14,17,18,23,29,B,F,G,P,Q	17
Give/receive feedback	6,7,12,13,18,20,21,22,23,25,B,G,K,M,N	15
Grading	3,5,9,12,23,27,B,G,A1	9

A wide range of approaches to, and implementation of, teamwork pedagogy was revealed across the retained journal articles. Instructional strategies received the most attention, with just over half the articles (51%) iterating the need to train students in team skills; and the need for direct instruction in teaching teamwork knowledge, skills, abilities, and other factors (KSAOs) (Bacon, 2005; Delaney, Fletcher, Cameron, & Bodle, 2013, Pineda & Lerner, 2006, Rapp & Mathieu, 2007; Snyder, 2010). Researchers contend that training HE students in teamwork can lead to higher academic achievement (Rapp & Mathieu, 2007), further enhanced by collaborative activities undertaken during teamwork (Prichard, Stratford, & Bizo, 2006; Sabal, 2009).

Although a range of instructional strategies were recommended across the articles, only 35% emphasized teaching collaborative and cooperative learning. Prichard et al. (2006)

observed that there is an assumption that educators and students have had some prior experience with collaborative or cooperative learning. But, Ahern (2007) and Burke (2011) noted that this is not always the case, and may explain the low percentage of articles reporting on these strategies. Some educators are challenged by the transition from teacher-centred to collaborative/cooperative teaching methods, or as in Holt, Michael and Godfrey's (1997) case, view cooperative learning as an inefficient allocation of time. Such views may constitute a significant psychological constraint when it comes to adopting collaborative instructional strategies.

Other instructional strategies included the introduction of team-training tools for students (Hogarth, 2008; Hubbard, 2005; Rapp & Mathieu, 2007), such as simulations (Gilson, Maynard, & Bergeil, 2013), role-play (Crumbley, Smith, & Smith, 1998), and self and peer assessment (Delaney, et al., 2013). Ten articles (e.g., Hansen, 2006; Page & Donelan, 2003; Rafferty, 2012; Snyder, 2010) referred to the use of Tuckman's (1965) model to introduce students to the stages of teamwork.

The process of teamwork was discussed in 10 (17.5%) journal articles. Three articles (Kirby, 2011; Pineda & Lerner, 2006; Rapp & Mathieu, 2007) specifically explained and grouped team processes into three main processes – transition, action and interpersonal. Kirby (2011) related team formation to the transition process; Pineda and Lerner (2006) discussed team goals as a team transition process related to planning, whilst Rapp and Mathieu (2007) focused on the establishment of team member roles and responsibilities and team charters.

Action process factors focused on implementing good communication skills (Considine, 2013; Gilson et al., 2013; Hershey & Wood, 2011), both in face-to-face and asynchronous communications. Making decisions as a team (Rapp & Mathieu, 2007; Shaw,

2004) and giving and receiving feedback (Goldfinch, Laybourn, MacLeod, & Stewart, 1999;

Hansen; 2006) were also linked to the teamwork action process.

There was considerable discussion across the articles on the interpersonal relationship

dimensions of team processes. Aspects elaborated included: intra-team conflict resolution

(e.g., Paulus, Horvitz & Shi, 2006; Rafferty, 2012; Staggers, Garcia and Nagelhout, 2008).

Jackson, Sibson and Riebe, (2014) observed in their findings that students, academics and

industry rated conflict resolution behaviors poorly. Some articles in this review (e.g.,

Schullery & Gibson, 2001; Shaw, 2004) specifically included suggestions for dealing with

teamwork conflict, while others researched how team conflict impacts on self-efficacy (Stone

& Bailey, 2007).

If the development of teamwork skills is a learning outcome in a course or program of

study, then relevant training and instruction in teamwork must be incorporated into its design

at the planning phase. For this to be realized, understandings of curriculum design and

development and teaching strategies that have the best potential for delivering the desired

learning experiences and outcomes are necessary. Over one third of the journal articles

referred to collaborative, cooperative, or experiential learning strategies as essential to

teamwork pedagogy. Across the articles reviewed, curriculum design considerations were

only superficially addressed with limited attention to issues related to curriculum design and

the application of constructive alignment or other pedagogical frameworks (e.g., Frazer &

Bosqanquet, 2006; Trigwell & Prosser, 2014). For example, *constructive alignment*,

popularized by Biggs (1999) is widely regarded as a seminal model for curriculum design

and development. The model asserts approaching curriculum design by starting with a focus

on learning outcomes and then aligning these with assessment, content and learning

activities. This process is demanding and whether working individually, or with

learning/instructional designers, designing a curriculum requires a considerable investment in

time and cognition. As well as the temporal cost associated with this approach, the limited attention focusing on constructive alignment may be a product of the geographic spread of literature reviewed, given that Australian literature accounted for less than 10 per cent of the reviewed journal articles (e.g., Delaney et al., 2014; Jackson et al., 2014).

Most notably in the literature reviewed was the focus on team composition factors, which is discussed in over 50% of articles. Team size is outlined in 16 articles, team diversity outlined in 15 articles and, team formation outlined in 14 articles. The reviewed journal articles indicate that educators often place students in teams with little or no instruction on how to work in teams (e.g., Hansen, 2006; Page & Donelan, 2003; Rafferty, 2012; Sashittal, Jassawalla, & Markulis, 2011; Shaw, 2004) prior to assigning complex team projects. Lancellotti and Boyd's (2008) research indicated that students perceived development of teamwork skills as being affected by compatibility and personality type, but they debate the wisdom of manipulating student team composition, as it is not considered reflective of real-world situations. Another aspect of team composition noted in the journal articles was that of team diversity. Shaw (2004) found that consideration of diversity (gender, age, nationality, position) within a group structure could place some students at a disadvantage to others in the group. The multicultural nature and diversity of individuals required to work together on team projects at university has variously contributed to negative student perceptions of teamwork productivity. This has been aligned with misunderstandings arising from individualistic and collectivist cultural norms affecting team collaboration (McCorkle et al., 1999). Shaw (2004) makes a number of suggestions for ameliorating adverse aspects of the multicultural and diverse nature of HE student teamwork. However, cultural dimensions were not studied in great detail in the reviewed journal articles. This may be because the majority originated from culturally similar contexts; however increased attention to this phenomenon in the context of effective teamwork pedagogy should be considered in future research.

Student perceptions about team composition is less dependent on procedural justice and more dependent on their perceptions of distributive justice and what will afford the best return for their participation in teamwork. This is perhaps why social loafing – (which occurs when one or more team members fail to contribute their fair share to a team project, benefitting from the work of others, and causing resentment [McCorkle et al., 1999]) – was identified as a salient concern of students. What was recommended in the reviewed journal articles to mitigate against this phenomenon is for educators to focus on action processes. For example: Offer a clear proviso for individual accountability in assessment procedures (Bacon, 2005); and, use team contracts or a divided mark team contract, which offers teams the ability to divide up the number of marks for each team member as a percentage of the final grade (see Maiden & Perry, 2011) and act as a deterrent to social loafing. In these articles, there is less of a focus on the teaching of interpersonal competence building for students to be able to address issues of social loafing of team members. Again, this may be a function of a focus on team artifacts or outputs, rather than building competence around team process.

It is not surprising to find that 63% of journal articles refer to some element of assessment as part of teamwork pedagogy discussions, as this is an integral element of any curriculum. Grading issues were identified in 16% of articles, with some articles particularly focused on strategies to address individual grading of team members (Burke, 2011; Gueldenzoph & May, 2002).

Seventeen (30%) journal articles acknowledged social loafing as an assessment concern for students when the whole of team grading is applied and individual team members are perceived as not contributing equitably to the final product being assessed. Maiden and Perry (2011) outlined, for example, several approaches adopted to deter free-riding/social loafing and presented results of student responses on these interventions. Student responses to

educator efforts to intervene with the ability to grade individual team members has been

viewed positively by students as reflecting distributive justice. Behavioral contracts

(Hubbard, 2005; Frederick, 2008) between students to mitigate the impact of social loafing

and to establish team norms were discussed; however, relatively little information on

establishing contracts was noted across the journal articles reviewed, indicating an area for

future research.

The use of self and/or peer assessment (Delaney et al., 2013; Freeman & McKenzie,

2002; Loughry, Ohland, & Woehr, 2014; Ohland et al., 2012) to assist with grading

teamwork was presented in 26% of articles. The articles demonstrated that giving and

receiving feedback can be used constructively as a collaborative peer assessment method,

allowing students to participate in the grading process (Gueldenzoph & May, 2002). How and

what aspect of teamwork is assessed (i.e., artifacts, completed tasks, teamwork process,

individual vs. group contribution) are presented as constraints across many of the journal

articles reviewed.

Table 2 shows that much of the research on teamwork pedagogy is focused on very

similar concerns. Although there is a proliferation of information available to educators on

teamwork pedagogy, the same types of practices are presented, with no real discernible

innovation or advancement in the teamwork pedagogy domain. This may be because the

issues faced by educators using teamwork pedagogy are common, and there are a variety of

strategies providing evidence of good practice (as is supported in this review). It may also be

because educator motivation to introduce teamwork process and teamwork projects relies on

discretionary effort and is a function of educator confidence and willingness, which is not

uniform (Sashittal, et al., 2011). Student perceptions and the valence they afford teamwork

also influence these outcomes. It may be however, that educators are implementing additional

instructional strategies and tools in the HE classroom, but simply not publishing on

teamwork. As teamwork is an interdisciplinary skill, HE educators may be more focused on publishing findings that are discipline content related, as this is generally an institutional requirement, and therefore may be considered an undue cost for academics. The outcomes do support, however, that there is interplay amongst educator, student and institutional expectations which may be influencing research on teamwork pedagogy.

Theme 2: Transaction cost

The second substantive theme to emerge from the analysis of the journal articles clustered around factors identified as transaction costs which afford or constrain teamwork pedagogical activities and decisions. Table 3 represents the types of transaction costs which resulted from the thematic coding process. Although not explicitly identified, in many of the articles it was evident that costs applied to undertaking the design, development and maintenance of effective teamwork pedagogy, were impacted and influenced by institutional, educator, and student factors.

Table 3. Theme 2 Transaction Costs

Codes	Article identifiers	*n*
Expectations of employers	2,3,6,7,8,11,12,14,15,16,17,22,23,29,30, B,G,L,N,R,Y	21
Inadequate preparation	6,7,8,12,14,16,23,25,30,A,B	11
Lack of resources	16,18,23,25,A,F,M,O,Y	9
Expectations of students	5,12,18,30,A,L,Q,A1	8
Marking load	17,18,25,A,G	5
Educator rewards/research	25,A	2
Cooperative learning	9,X	2

To better understand the affordances or constraints influencing teamwork pedagogy, transaction cost theory (Williamson, 1979) was appropriated and applied as a heuristic lens. The prediction made about engaging in teamwork pedagogy using transaction cost theory assumes that engagement will depend on the benefits or costs derived from developing, coordinating, monitoring, participating in, interacting with, and evaluating teamwork pedagogy. This is represented in Figure 3.

49
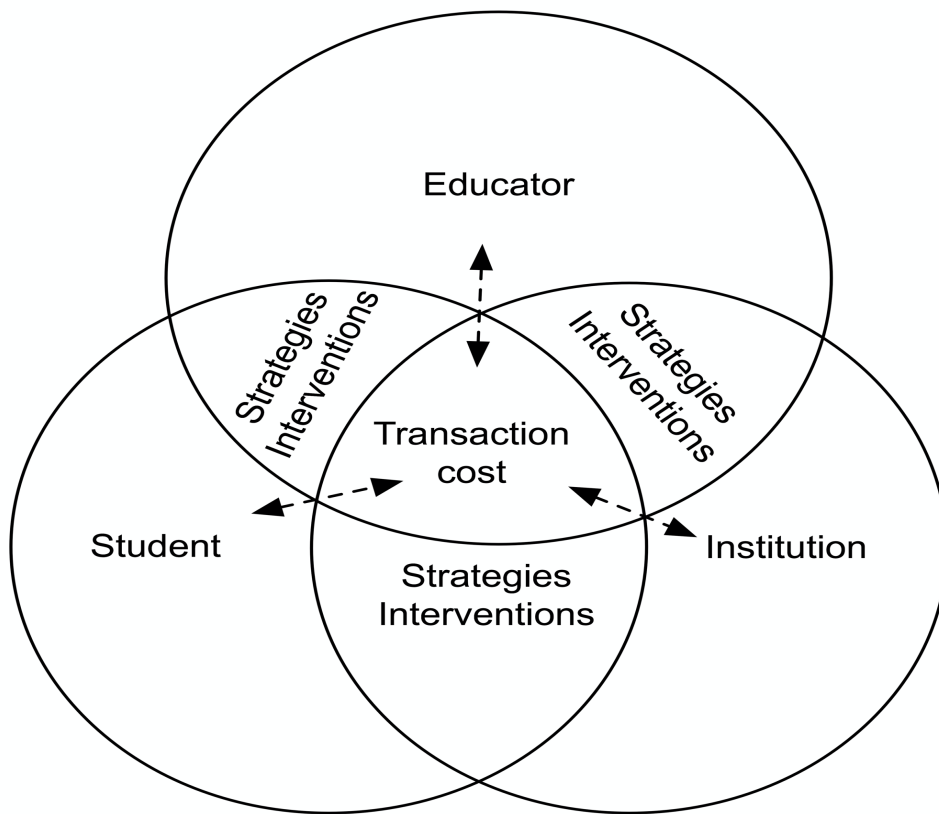
Figure 3. Transaction cost interactions

When applied to teaching teamwork skills, transaction costs represent the return on investment or costs incurred when undertaking the design, development, and maintenance of effective teamwork pedagogy. Some of these interactions can be imposed, for instance, by attempting to meet employer expectations (Burbach et al., 2010); can be considered a function of educator preparedness to develop resources (Albon & Jewels, 2014), devise strategies and interventions (Kedrowicz & Nelson, 2007), and teach teamwork skills (Jackson et al., 2014); the readiness of students to willingly participate in teamwork learning activities (Bacon, 2005); and, the resources available to institutions which precipitate a focus on the teaching and learning of teamwork (Ahern, 2007).

The most frequent transaction reported across the journal articles related to employer expectation. This constituted a major affordance when it came to the importance placed on

addressing graduate teamwork skills in programs and instructional design. Employer

expectations regarding the importance of work-ready graduates have asserted a strong

influence on teamwork training and assessment (Hobson, Strupeck, Griffin, Szostek &

Rominger, 2013; Kemery & Stickney, 2014) across the higher education sector. This is

evident in over 50% of the journal articles reviewed. For example, Hobson et al., (2013) and

Kliegl and Weaver, (2013) observed that employer expectations and those of professional

bodies reflected through their accreditation standards (Kemery & Stickney, 2014; Rakestraw,

2014; Reinig, Horowitz, & Whittenburg, 2011) have influenced HE institutions to emphasize

the development of collaborative skills, teams and teamwork in programs of study. This has

implications for established curriculum where the focus has not been facilitated through

institutional strategies.

Many of the articles (e.g., Gilson, et al., 2013; Kirby, 2011; McCorkle et al., 1999;

Snyder, 2010) reported that for some educators it is not always clear how they should teach

teamwork skills and therefore, educators may be inadequately prepared (Tombaugh &

Mayfield, 2014) to take on the task. This has an impact on both educators and students.

According to Kirby (2011, p. 36), "there has been little consensus amongst academics about

how best to teach teamwork". Many educators are discipline-based scholars and because of

this may not have had any formal training in teaching methods or be familiar with resources

or collaborative approaches to develop students' teamwork skills (e.g., Hansen, 2006;

Hobson et al., 2013; Kliegl & Weaver, 2013; Sashittal et al., 2011). This is compounded in

cases where educators have not themselves experienced adequate teamwork training while

completing their own degrees. The provision of training to HE educators is a significant,

specific, albeit infrequent, fixed cost that is, on the one hand, determined at the individual

level, while on the other determined by the degree to which the educator feels the need for

training. If there is a lack of institutional support for educators to take time away from

teaching and research to attend professional development to enhance the depth of knowledge associated with developing sound teamwork pedagogy, this may be considered a constraint. Alternatively, where institutional support is provided, a human resource transaction cost is incurred if there is a requirement for replacement staff.

Associated with implementing collaborative/cooperative learning is the time cost of providing students with opportunities to practice these strategies, thereby reducing time available for teaching discipline specific content and skills in a course (e.g., Bacon, 2005; Kliegl & Weaver, 2013; McCorkle et al., 1999). The literature reviewed strongly advocated emphasizing the importance of teamwork and providing training and practice of teamwork skills through educator modelling, support and reinforcement (e.g., Frederick, 2008; Page & Donelan, 2003; Shaw, 2004; Snyder, 2010), all of which impose temporal, human and fiscal cost. For example, although group work may provide a foundation learning opportunity, and some teamwork behaviors may develop through group work, Myers and Goodboy (2005) argued that simply participating in group work was not the same as learning about the process of teamwork. This was supported by Palit and Stein's (2009) results, which indicated that just grouping students into teams will not in itself make them better at teamwork, leading them to recommend explicit instruction in teamwork KSAOs be included in the curriculum. Participation in teamwork activities imply a further transaction cost for educators; not only in relation to the distribution and allocation of time taken from teaching discipline content, but also consideration of assessment of the process (inputs) elements of teamwork and not just the product (outputs) element.

Assessment is a critical facet of curriculum design (Jackson et al., 2014), yet educators may have little experience in assessing the process of teamwork as opposed to just the product outcomes (Goldfinch et al., 1999). The crowded curriculum of discipline specific subjects may induce educators to introduce team assignments to reduce grading (or marking)

load (Jassawalla et al., 2011), without considering effective design (Kidder & Bowes-Sperry, 2012) or, how the assessment aligns with teamwork learning outcomes. Although the use of teamwork assessments may act as a mechanism to reduce marking load (Maiden & Perry, 2011; McCorkle et al., 1999; Sashittal et al., 2011) educators may incur greater hidden costs especially in terms of managing high student dissatisfaction with this form of assessment (Jassawalla, Sashittal, & Malshe, 2010); and mitigating concerns around social loafing, and distributive and procedural justice perceptions (Maiden & Perry, 2011). The giving of formative feedback, for instance, is an intervention noted in over one quarter of the reviewed journal articles. However, the high level of commitment involved in giving feedback to students and incorporating a formative feedback process in course redesign (Kirby, 2011) is an additional transaction cost to the educator, potentially for little return. In the review several alternatives were presented which could reduce these temporal and efficiency related costs. For example, the use of self and/or peer assessment (Hansen, 2006; Page & Donelan, 2003) procedures in class, or implementing the use of online team tools (Delaney et al., 2013; Ohland et al., 2012), to provide feedback on team member effectiveness are less time consuming for the educator. Less well developed were interventions around the use of student contracts related to allocation of individual team member grades, although behavioral contracts between students and the establishment of team norms were advocated in several articles. If, as reported, assigned grades do not reflect students' notions of distributive justice, and/or are incongruent with the transaction costs students associated with their contribution to and participation in a team, there is the potential of negative feedback by students in educator evaluations. This in turn may influence educators' decisions concerning the use of teamwork as a learning experience in future iterations of the program of study.

The redesign of a program of study to incorporate teamwork pedagogy represents a significant investment in time and fiscal resources for institutions and educators responsible

for the design and ongoing development of curricula. This cost is compounded by a focus on research outputs as a key performance indicator (Pickering, Grignon, Steven, Guitart & Byrne, 2014), which may detract from focusing on teamwork pedagogy as a priority (David, David & David, 2011; Fleming, 2008). Other potential costs, at the institutional level, reside in the development and utilization of learning spaces that are intentionally designed to afford constructivist approaches to teamwork pedagogy. As Mourshed, Farrell, and Barton (2015) and others (e.g., Sondergaard & Murthi, 2012) have observed, fiscal and/or human resource constraints have the potential to limit how well institutions adapt and respond to changing employer expectations concerning the capability (work readiness) of new graduates. Several articles drew attention to the need to consider workload and time required for educators to learn collaborative/cooperative teaching strategies prior to implementation (Bacon, 2005). However, in stark contrast, Holt, et al. (1997) specifically build a case against introducing cooperative learning in accounting classes on the basis that student time is a scarce resource and an imposed transaction cost.

Across the journal articles reviewed, a significant range of student related determinants and factors that afford and/or constrain what educators can do to facilitate teamwork learning were discussed. These include: student perceptions of teamwork learning, team composition, managing social loafing, and considering student workload.

Student perceptions of teamwork learning are reported across a range of articles, influenced by the degree to which teamwork skills development is incidental or intentional within the framework of the program of study or course. Where educators have utilized constructive alignment to incorporate a focus on teamwork processes for example, it was reported that this promoted more positive student perceptions concerning how team working skills are developed (Jackson et al., 2014). Such an outcome has implications for educator preparedness, as inadequate preparation can evoke or intensify negative perceptions of

teamwork among students (Tombaugh & Mayfield, 2014). The costs incurred due to poor instructional planning and delivery, as Sashittal et al. (2011) observed, can encourage students to retreat or disengage from teamwork.

Student expectations, when it came to participation in team-based learning activities, likewise asserted an influence on how and to what degree team-based learning was structured into a program of study. These expectations were considered as moderating the emphasis placed on teaching teamwork skills and successful outcomes; and were featured in 18 of the articles. In 11 journal articles, the costs associated with ensuring educator readiness to teach teamwork skills were discussed. Specific educator costs associated with teamwork pedagogy were discussed, for example, in relation to the temporal cost of the application of collaborative/cooperative learning approaches (Holt et al., 1997; McCorkle et al., 1999) and opportunity costs for students (Bacon, 2005).

What is largely absent in the literature reviewed is recognition that students have a significant role to play when it comes to the achievement of teamwork learning outcomes. As individuals and as a cohort, students can and do exercise their agency to engage in the learning enterprise. The level of discretionary effort exerted by students to engage in teamwork learning is moderated by the value they afford teamwork as part of their learning experience; and, the relevance of teamwork skills for their future employability. Delaney et al. (2013) maintain that when it comes to developing teamwork skills, curriculum design that incorporates both process and product outcomes may better engage students to see a benefit to their teamwork learning and, therefore, contribute to future employability.

Whereas much of the discussion examining how to better engage students in learning teamwork skills has focused on minimizing negative perceptions, the tangible temporal cost of working in teams was given less attention in the reviewed journal articles. Consideration of reasonable workload was mainly addressed in those journal articles making

recommendations (Hansen, 2006; Snyder, 2010). Assigning class time for meetings, for example, was an intervention suggested by Page and Donelan (2003), as a way to counteract the transaction cost of additional workload required by organizing team meetings outside of class and impacting on student work-life balance (Rafferty, 2012). Student workload, both within and outside of the educational context, is a significant determinant of negative student perceptions for participating in teamwork. However, to balance such demands is often outside of the educators' control and relies on students' ability to manage workload. Such an observation reinforces the need to give due consideration to the interaction of student perceptions and the role of the educator in balancing out the costs versus gains of participating in and teaching teamwork respectively.

In the journal articles reviewed, the dynamic interaction of educator, student, and institutional costs, although not explicitly addressed, are often implied. Most of the articles focused on the educator dimension of Figure 3 and the strategies and interventions introduced. Similarly, journal articles looked at educator motivations and student perceptions about the introduced strategies and interventions. Likewise, several journal articles noted the institutional dimension. However, what is missing from a constructivist perspective is the dynamic, multi-level interactions between student, educator and institutional factors as moderated by perceived and real transaction costs and how this influences teamwork pedagogy.

Conclusions and Future Research

The purpose of this review was to identify factors in academic publications perceived as affording or constraining teamwork pedagogy in higher education. Grounded in the social constructivist interpretive paradigm, this review employed a two-phase approach in the literature search of social science databases. The analysis incorporated both qualitative and quantitative methodologies, and the findings and discussion sections were organised to reflect

56

both perspectives. The results identified that educators prioritised instruction, curriculum design, team composition and assessment factors when researching teamwork pedagogy. The interactive effects of educator, student and institutional factors, and their influence on transaction costs were presented as affordances and constraints shaping the uptake of teamwork pedagogy, thereby providing a critical insight for educators engaged with teamwork as part of their course design.

A review of this nature does not provide best practice advice; instead it offered an overview of the current state of play in regard to the research question, and avenues for further investigation. One potential limitation of this methodology relates to the key words selected and how the search strings are applied. This does influence the number of journal articles retained and is a consideration when interpreting and generalizing the results of this review. In order to address such a concern, we adopted a methodology that used broad as well as a specific set of search criteria and we completed the search as part of a sequential two-phase design. Additionally, interpretive synthesis provided the opportunity to make judgements about the inclusion of conceptual journal articles fit for purpose in addressing the research question.

Of the 57 journal articles included in this review, the majority focused on teamwork pedagogy as it relates to the introduction of strategies intended to facilitate enhanced learning outcomes for students, or to better understand student/educator motivations relevant to teamwork participation. The majority of the journal articles were aligned to the business discipline context, and confirmed the importance of teamwork as part of business curriculum.

The empirical journal articles were dominated by quantitative, cross-sectional studies; focused on single dimensions such as examining perceptions relating to a newly introduced teaching strategy. As noted, only two studies included a sample size larger than 1000 individuals and longitudinal research designs were infrequent. The emphasis on quantitative

research, while offering some significant insights into teamwork pedagogy is constrained as it does not have the capacity to illuminate a fuller understanding of situational or contextual dynamics, interactions, and factors that may assert an influence on the study phenomena. This suggests future research should look to employ methods that are capable of capturing more nuanced interactions, such as mixed methods designs, which are focused on addressing macro and micro level dimensions of social phenomena such as, teamwork pedagogy.

Teamwork pedagogy is a situated and transactionally oriented activity wherein perceptions concerning value and return on investment are significant affordances and constraints influencing design and implementation, and the willingness to engage in this form of pedagogy. Transaction costs, including temporal, fiscal, psychological, and human resources were implied as constraints in the application of teamwork pedagogy. Few studies however, explicitly recognized or tested the significance of the interactions between students, educators, and institutions in the situated context; nor did they further explore the moderating effects of transaction costs associated with developing, coordinating, monitoring, participating in, interacting with, and evaluating teamwork pedagogy (as depicted in Figure 3). An empirical investigation which begins to unpack these multi-level interactions is required.

As such, this review calls for more focused research that explores these dynamic interactions which places transaction cost at the nexus of educator, student, and institutional interactions with teamwork pedagogy. Better understanding how transactionalism and perceptions pertaining to transaction cost influence teamwork pedagogy has implications for educators and their curriculum design, students engaging with teamwork as part of their learning journey, and institutions meeting employer expectations about graduate capability when it comes to working in team-based environments.

Appendix A

Proquest Databases (First Phase Search)

ASFA: Aquatic Sciences and Fisheries Abstracts

Australian & New Zealand Newsstream

Ebrary e-books

EconLit

ERIC

FIAF

Film Index International

Periodicals Archive Online

PILOTS

ProQuest Central

- ABI/Inform Collection

- Accounting, Tax & Banking Collection

- Arts & Humanities Database

- Asian & European Business Collection

- Australia & New Zealand Database

- Biology Database

- Business Market Research Collection

- Canadian Business & Current Affairs Database

- Canadian Newsstream

- Career & Technical Education Database

- Computing Database

- Continental Europe Database

- Criminal Justice Database

- East & South East Asia Database

- East Europe, Central Europe Database

- Education Database

- Family Health Database

- Health & Medical Collection

- Health Management Database

- Health & Medical Collection

- Health Management Database

- India Database

- International Newsstream

- Latin America and Iberian Database

- Library Science Database

- Linguistics Database

- Middle Ease & Africa Database

- Military Database

- Nursing & Allied Health Database

- Political Science Database

- Psychology Database

- Public Health Database

- Religion Database

- Research Library

- Science Database

- Social Science Database

- Sociology Database

- Telecommunications Database

- Turkey Database

- UK & Ireland Database

- US Newsstream

ProQuest Dissertations & Theses Global

PsycARTICLES

PsycInfo

Social Services Abstracts

Sociological Abstracts

Appendix B

Journal Articles Included in Review (Alphabetical Order by Lead Author)

ID	Authors/ year	Article title	Location of study	Research design/number of participants	Subject area	Findings
A	Ahern (2007)	What are the perceptions of lecturers towards using cooperative learning in civil engineering?	Ireland	Qualitative $N = 20$ students	Engineering	Research found that group work is widely used in civil engineering but that lecturers do not focus on structuring group work to ensure skills are developed and do not check if they have been learned. Group work was often used to mitigate transaction costs such as assigning resources more effectively and reducing marking load.
1	Bacon (2005)	The effect of group projects on content-related learning	USA	Experimental $N = 233$ students	Business (Marketing)	Students learn more course content through individual projects than group projects. Course designers should make explicit decisions about whether a group project is intended to enhance content learning or learning about teams. If the latter, then more team exercises should be included. Business schools may be able to facilitate more learning while improving student satisfaction through careful group project design.
B	Burke (2011)	Group work: How to use groups effectively	USA	Conceptual	Multi-disciplinary	Offers suggestions on how to use small groups to facilitate and enhance group learning. Advantages and disadvantages of group work are outlined. The author finds that group work can yield positive results, and if the instructor is properly prepared, can ameliorate group hate.
C	Clews (2003)	Imaging in education: imaging in preliminary-level studio design technology projects	UK		Architecture	The author compares problem-based learning (PBL) with experiential learning in a technology project. Feedback on teamwork from students indicated they thought that they needed help from tutors to learn how to work as a team;

ID	Authors/ year	Article title	Location of study	Research design/number of participants	Subject area	Findings
						teamwork capabilities should be assessed, peer evaluation would encourage more responsibility, and staff members should learn how to teach team-based projects.
D	Considine (2013)	What students really do in learning groups	USA	Conceptual $N = 24$ student teams	Communication	The author discusses an approach to analysis of group projects in communication classes through the use of audio recordings of team meetings and reflections. Interaction process analysis is suggested as an analysis framework for how group members contribute. Results suggest audio recording of meetings can assist students and instructors to assess more accurately.
E	Cox and Friedman (2009)	The team boat exercise: Enhancing team communication midsemester	USA	Qualitative	Business (Organizational Behavior)	The authors report on an intervention used mid-semester to enhance team communication, reflection and goal setting. The activity encourages students to engage in positive behaviors that should increase team performance and satisfaction going forward. The exercise and goal setting lecture notes are outlined in the appendices.
2	Crumbley Smith and Murphy (1998)	Educational novels and student role-play: A teaching note	USA	Qualitative $n = 190$ students $n = 24$ accounting educators	Business (Accounting)	The authors describe the use of novels in accounting courses as an instructional tool, leading to an assessment involving videotaping role-playing of a scenario. The stated primary goal of using role-playing is to enable students to practice teamwork skills. The use of these teaching devices was found to be highly rated by students and educators.
3	Delaney, Fletcher, Cameron, and Bodle (2013)	Online self and peer assessment of teamwork in accounting	Australia	Case study $N = 93$ students	Business (Accounting)	Study prompted by calls by professional accreditation bodies for universities to recognise the importance of generic skills in accounting education. The introduction of an online model

ID	Authors/ year	Article title	Location of study	Research design/number of participants	Subject area	Findings
						– using the SPARK+ tool – was a means to formally grade students on their teamwork skills. The study provides a foundation for improving the design and assessment of group work activities to achieve generic skills outcomes.
4	Frederick (2008)	Facilitating better teamwork: Analyzing challenges and strategies of classroom-based collaboration	USA	Qualitative	Engineering & Professional communication	The author concludes that providing more collaborative experiences for working in teams is important for students. Teachers need to recognise challenges students face with asserting authority and managing conflict and should actively facilitate team projects. Strategies for effectively facilitating student teamwork are suggested.
F	Freeman and McKenzie (2002)	SPARK, a confidential web-based template for self and peer assessment of student teamwork: Benefits of evaluating across different subjects	Australia	Conceptual	Multi-disciplinary	The authors describe the establishment of a self and peer assessment resource kit (SPARK) for calculating and assessing student teamwork. SPARK was developed as a generic web-based template tool. The authors implemented the tool and evaluated its use through a number of case studies and believe that it has the potential to improve team-based learning.
5	Gilson, Maynard, and Bergiel (2013)	Virtual team effectiveness: An experiential activity	USA	Experimental Pre-post design	Business	The article describes a simulation activity and challenges faced by virtual teams in the use of technology to communicate. Refinements were made to increase the range of ICTs students could use to communicate outside of Blackboard.
6	Goldfinch, Laybourn, MacLeod, and Stewart (1999)	Improving group working skills in undergraduates	UK	Action research $N = 35$ students	Business (Accounting)	The study involves a method of involving employer observers in student teamwork projects. Findings indicate that good preparation and training of observers played a key part in

ID	Authors/ year	Article title	Location of study	Research design/number of participants	Subject area	Findings
		through employer involvement				the success of the project. Anecdotal evidence supports the conclusion that students learned from the experience and raised their confidence in their ability to work in groups.
G	Gueldenzoph and May (2002)	Collaborative peer evaluation: Best practices for group member assessments	USA	Conceptual	Business Communication	The authors outline strategies for implementing collaborative group learning, including the introduction of peer evaluations as formative feedback prior to the summative evaluation. The appendices provide a sample peer evaluation form that can be used and a checklist for educators on effective peer evaluation.
H	Gueldenzoph (2007)	Using teaching teams to encourage active learning	USA	Conceptual	Business Communication	The article provides a description of how the author organizes team development through a variety of active learning activities.
I	Gueldenzoph (2009)	Teaching teams about teamwork: Preparation, practice and performance review	USA	Conceptual	Business Communication	The article suggests that students who do not receive instruction in teamwork skills may perform poorly in collaborative projects. In order to improve, students need to be prepared through team coaching, adequate skills practice, along with reviewing and revising performance based on feedback and self-reflection.
7	Hansen (2006)	Benefits and problems with student teams: Suggestions for improving team projects	USA	Meta-analysis	Business	Provides ten suggestions for faculty who seek to improve the performance of student teams as well as the satisfaction of the students in those teams.
J	Hershey and Wood (2011)	Using Blackboard CMS to develop teamwork skills in undergraduate Marketing Principles class	USA	Conceptual	Business (Marketing)	The authors outline the features of the Blackboard learning management system (LMS) suggesting that utilising asynchronous communication for collaboration can alleviate time constraints associated with coordinating individual meeting schedules in group work.

ID	Authors/ year	Article title	Location of study	Research design/number of participants	Subject area	Findings
						The LMS also allows the educator to track individual participation rather than relying on self-reporting.
8	Hobson, Strupeck, Griffin, Szostek, and Rominger (2013)	Assessing teaching team leadership capabilities: Field testing a behavioral roles approach with business undergraduate students	USA	Quantitative $N = 247$ students	Business	The use of the two-factor theory of team leadership and evaluation to assess student behaviors worked well. Major findings revealed a statistically significant increase in mean overall team leadership skills; improvements in 8/10 specific task leadership roles and 3/6 social leadership roles; and, no significant differences in student improvement as a function of sex, age, race/ethnicity or major.
K	Hobson, Strupeck, Griffin, Szostek, Selladurai, and Rominger (2013)	Facilitating and documenting behavioral improvements in business student teamwork skills	USA	Quantitative $N = 247$ students	Business	Using Anderson's ACT theory, the research reports on the introduction of the Leaderless Group Discussion (LGD) tool to teach teamwork behavioral skills to undergraduates. LGD's were videotaped and analysed and coaching/feedback sessions implemented. The authors conclude that findings from the study demonstrate that a teamwork course can be designed to improve student teamwork behavioral skills and is easily transferable to other instructors.
L	Hogarth (2008)	Introducing a collaborative strategy for higher education students: Recommendations and the way forward	UK	Mixed method $N = 27$ students	Business	The research indicates that university tutors should make students aware of why group work is necessary and why any group-based technology is being introduced. Justifying the rationale for these would remove any ambiguity around teaching, learning and assessment issues. Further, the author recommends introducing a training and guidance model for group work and group-based technology.

ID	Authors/ year	Article title	Location of study	Research design/number of participants	Subject area	Findings
9	Holt, Michael, and Godfrey, (1997)	The case against cooperative learning	USA	Conceptual	Business (Accounting)	The authors believe that co-operative learning as a means to teach teamwork skills may lead to inefficient allocation of student time hence reducing student content knowledge. They indicate that by participating in teamwork, mean grades may increase, reducing students ability to signal their quality to potential employers.
10	Hubbard (2005)	Project management tools that facilitate team projects	USA	Quantitative $N = 70$ students	Business	The findings suggest that improvements to team project design and teaching can be improved by incorporating explicit teaching of teamwork skills into existing curricula. Four areas of focus are noted for incorporating the teaching of teamwork skills in business courses.
M	Hyrnchak, P. & Batty, P. (2012)	The educational theory bases of team-based learning	Canada	Conceptual	Health	The authors link constructivist theory to small group learning and team-based learning (TBL) in health care training programs in Canada and the USA. The authors see TBL as an important educational adjunct to existing methods, they acknowledge that implementation of TBL requires buy-in from students and faculty, with both incurring transaction costs in terms of time and resourcing.
11	Jackson, Sibson and Riebe (2013)	Undergraduate perceptions of developing team-working skills	Australia	Mixed method $N = 799$ students	Business	The study aligns teamwork with a specific employability skills framework defining overall skills and associated behaviors. Findings indicate that within the skill set of 'working effectively with others' some behaviors are perceived as less developed than others including: influencing others; conflict resolution; and, social intelligence. The authors suggest scaffolding development of skills across units and making explicit the constructive

ID	Authors/ year	Article title	Location of study	Research design/number of participants	Subject area	Findings
						alignment of learning outcomes with activities and assessments to students.
N	Joseph and Payne (2012)	Efficacy of monitoring and supporting college students teamwork: A case study	USA	Case study	Computer Science	The study supported the use of monitoring and supporting teams throughout the teamwork process, with results from trials indicating improved student performance outcomes when this was enacted.
12	Kemery and Stickney (2014)	A multifaceted approach to teamwork assessment in an undergraduate business program	USA	Mixed Method $N = 91$ students	Business (Organizational Behavior)	The study describes the use of the Learning Partner Rating Scale to measure students' teamwork behaviors. The authors conclude that peer evaluation is a learned skill that must be taught and reinforced. It can reinforce the importance of teamwork, giving students more practice learning a soft skill that employers are demanding.
O	King, Greidanus, Carbonaro, Drummond, Boechler, and Kahlke (2010)	Synchronous problem-based e-learning (ePBL) in interprofessional health science education	Canada	Qualitative	Health Science	Conclusions from this study indicate that online team-based collaboration that requires real time synchronous interaction needs to be understood in an instructional context. Transaction cost of time taken to learn the technology creates challenges. Students should be given tip sheets on how to use features of online applications to express responses typically addressed in non-verbal communication in the face-to-face environment.
13	Kirby (2011)	"No one can whistle a symphony. It takes an orchestra to play it"	Australia	Case study $N = 35$ students	Business	Innovative teamwork training module was developed for business students as part of a grant project supporting the acquisition of generic skills. The study reports on the methodology for teaching teamwork skills and processes related to the principles of team effectiveness. Students reported satisfaction with the team training pedagogy.

ID	Authors/ year	Article title	Location of study	Research design/number of participants	Subject area	Findings
14	Kleigl and Weaver (2013)	Teaching teamwork through coteaching in the business classroom	USA	Case study	Business	Faculty co-teaching is used as an approach to model team behaviors to students in a positive context. Recommendations for implementing co-teaching as an alternate approach to teaching teamwork are outlined for educators including: establishing shared values and trust; complementary expertise; and, a willingness to experiment.
15	Lancellotti and Boyd (2008)	The effects of team personality awareness exercises	USA	Quantitative $N = 65$ students	Business (Marketing)	Authors propose that using a humorous approach to team exercises can increase student satisfaction and performance in teams. Results suggest that such exercises positively impact both the team and individual learning experiences.
16	Loughry, Ohland, and Woehr (2013)	Assessing teamwork skills for assurance of learning using CATME team tools	USA	Conceptual	Business	Describes the development of a web-based team tool to assist with the analysis of data related to the assurance of the development of team skills in undergraduate students to meet HE accreditation standards and employer expectations.
17	Maiden and Perry (2011)	Dealing with free-riders in assessed group work: results from a study at a UK university	UK	Mixed method $N = 251$ students	Business	Authors signal the importance of discussing free-riding issues at the start of any team-working module. An approach that attempts to address free-riding may be considered a positive deterrent and students should be involved in choice of deterrent chosen.
18	McCorkle et al. (1999)	Undergraduate marketing students, group projects, and teamwork: The good, the bad and the ugly?	USA	Quantitative $N = 77$ students	Business (Marketing)	The authors conclude that group projects can be affected by problems of specialisation of labor and collective action and offer three potential solutions: (1) re-examine the use of group projects as a pedagogical tool for effectiveness in developing discipline related skills; (2) create a specific course component to address the

ID	Authors/ year	Article title	Location of study	Research design/number of participants	Subject area	Findings
						development of team skills; and (3) departments should consider the appropriate balance between group and individual work and short versus semester long projects.
P	Mumford (2010)	Just teams: the relationship between team roles, fairness and performance	USA	Quantitative $N = 109$ students	Business (Marketing)	The study investigates team role performance as linked to perceived distributive justice, procedural justice and interactional justice. Implications of the study suggest that educators should take greater responsibility for training students about team norms, coaching students in team roles, and providing guidance on team formation strategies. Providing requisite training on group processes and monitoring perceptions of fairness may improve student team learning and achievements.
Q	Oakley, Hanna, Kuzmyn, and Felder (2007)	Best practices involving teamwork in the classroom: Results from a survey of 6435 engineering student respondents	USA	Quantitative $N = 6435$ students	Engineering	A large-scale study over two years was implemented to identify optimal conditions for team working. Main inferences drawn from the results of the study included the widespread use of team assignments, students perceived quality of teamwork learning, dealing with uncooperative team members, and importance of receiving guidance from the instructor.
19	Ohland et al. (2012)	The comprehensive assessment of team member effectiveness: Development of a behaviorally anchored rating scale for self and peer evaluation	USA	Quantitative T1: $n = 86$ (Fall 2005) T3: $n = 570$ (Fall 2007-Summer 2010) students	Business	The authors trial the use of a team rating scale (CATME) for self and peer evaluation. Several studies are conducted and data collected across time on reliability of the scale. The conclude that educators should do more than use teamwork in the classroom, they should teach about teams and teamwork and offer a tool that educators may be able to use to achieve such a goal.

ID	Authors/ year	Article title	Location of study	Research design/number of participants	Subject area	Findings
R	Opatrny, McCord, and Michaelsen (2014)	Can transferable team skills be taught? A longitudinal study	USA	Quantitative $N = 108$ students	Business	The article indicates that prior learning in TBL creates team skills, which can transfer and improve team skills in subsequent courses.
20	Page and Donelan (2003)	Team-building tools for students	USA	Conceptual	Business	The article provides a guide to developing teamwork skills, which also includes a student team project guidelines handout (Appendix 1) and an outline for educators of a role assignment exercise (Appendix 2). The authors conclude that team-building package provides aids designed to transition business groups to business teams.
21	Palit and Stein (2009)	How to collaborate in a virtual world: Teaching teamwork and technology	USA	Quantitative $N = 22$ students	Business (Marketing and Multi-media)	After implementing an interdisciplinary team project, the authors found that their assumption that students would get better at teamwork just by working in teams was not sufficient to build their knowledge of how to collaborate. They recommend incorporating explicit curricula changes to accommodate teaching, practice, and assessment of teamwork to help teams function more efficiently. First, provide foundational knowledge on important collaboration skills; second, set norms and guidelines on behaviors; and third, incorporate a weekly formative self-assessment process.
S	Paulus, T., Horvitz, B. & Shi, M. (2006)	Isn't it just like our situation? Engagement and learning in an online story-based environment	USA	Qualitative $N = 21$ students	Education – Instructional design	An online web-based tool was specifically designed to facilitate teamwork skills. Student engagement and learning with the online story-based environment was mapped onto four learning theories. The tool supported the process of students to probe conflict and engage in reflection with facilitator assistance.

ID	Authors/ year	Article title	Location of study	Research design/number of participants	Subject area	Findings
22	Pineda, R. & Lerner, L. (2006)	Goal attainment, satisfaction and learning from teamwork	USA	Quantitative $N = 159$ students	Business Strategy	Results showed that students derived different outcomes when practicing specific team process activities. Transition, action and interpersonal processes are explained, and a model tested to investigate the relationship between team member outcomes and the team activities engaged in to achieve different team outcomes. Findings support a significant relationship between team processes and team outcomes.
T	Pogge, E. (2013)	A team-based learning course on nutrition and lifestyle modification	USA	Quantitative $N = 62$ students	Pharmacy	The article presents an overview of the implementation of team-based learning (TBL) in pharmacy education to address professional competencies required to meet accreditation standards. TBL was found to be an effective teaching method for content delivery and development of communication and teamwork skills.
U	Pollard, K., Miers, M. & Gilchrist, M. (2004)	Collaborative learning for collaborative working? Initial findings from a longitudinal study of health and social care students	UK	Quantitative $N = 852$ students	Health and Social Care	Study based on interprofessional cohorts including nursing, social work, occupational therapy, physiotherapy, radiotherapy and diagnostic imaging students. Results indicate that students rate their own communication and teamwork skills highly; however, held negative perceptions of interprofessional interaction. Reasons for negative perceptions are postulated.
23	Rafferty, P. (2012)	Group work in the MBA classroom: Improving pedagogical practice and maximizing positive outcomes with part-time MBA students	USA	Case study	Business (MBA)	Tuckman & Jensen (1977) five-stage model was used as an analytical lens through which to understand graduate business student experiences of group work and implications for pedagogical practice. Results from the case study propose a situational group work model for educators who want to maximize positive outcomes for part-time graduate students.

ID	Authors/ year	Article title	Location of study	Research design/number of participants	Subject area	Findings
						Practical implications of situational group work are discussed.
V	Rakestraw, T. (2014)	The role of performance feedback in the transfer of teamwork skills	USA	Quantitative $N = 119$ students	Business (Management)	Students were supplied with readings and instruction during lectures on teamwork, as well as a set of guidelines (provided as an appendix in the article). The study investigated consensus seeking using specific imaginary scenarios as team-building exercises. Findings suggest that students benefit from classroom instruction on the effective functioning of teams.
24	Rapp, T. & Mathieu, J. (2007)	Evaluating an individually self-administered generic teamwork skills training program across time and levels	USA	Quantitative $N = 54$ students	Business (MBA)	The purpose of the study was to examine the efficacy of an individually delivered, technology-based (CD) teamwork-training program. A commercially available program was trialled as an intervention to improve team-training skills. Findings indicate that alternative delivery formats can be used to effectively train individuals in generic teamwork skills that translate into better team processes and performance; however, for training effects to compile on a team level, time is a consideration.
W	Reinig, B., Horowitz, I., & Whittenburg, G. (2011)	The effect of team-based learning on student attitudes and satisfaction	USA	Quantitative $N = 137$ students	Business (Accounting)	The study examined student perceptions of the use of a team-based learning (TBL) component known as the Readiness Assurance Process (RAP). Results inferred that student satisfaction relied less on feedback and more on their perception of how the method had enhanced their professional skills.
X	Sabal, R. (2009)	The individual in collaborative media production	USA	Conceptual	Media Production	Collaborative group workplaces heavy demands on faculty and students. Technical knowledge is important, but ultimately it is the responsibility of the educator to highlight group process, collaboration, conflict management and self-

ID	Authors/ year	Article title	Location of study	Research design/number of participants	Subject area	Findings
						management to train students in those lifelong skills that enable them to develop the ability to work effectively with others.
25	Sasshital, H., Jassawalla, A. & Markulis, P. (2011)	Teaching students to work in classroom teams: A preliminary investigation of instructors' motivations, attitudes and actions	USA	Mixed method	Business (Organizational Behavior)	Findings arising from the study conclude that more instructors assign team projects than those that provide teamwork-related instruction. Before changes in practice can be implemented, instructor motivations to increase convenience and attitudes toward student empowerment require further investigation.
Y	Schullery, N. & Gibson, M. (2001)	Working in groups: Identification and treatment of students' perceived weaknesses	USA	Experimental design $N = 95$ students	Business Communication	The research identified 10 categories of deficiencies through content analysis of student self-descriptions. Findings indicate that pedagogical interventions to target specific weaknesses through a variety of activities were beneficial and, a systematic approach to classroom groups helped students recognize both the importance and state of their group skills.
26	Shaw, J.B. (2004)	A fair go for all? The impact of intragroup diversity and diversity-management skills on student experiences and outcomes in team-based class projects	Australia	Quantitative $N = 390$ students	Business (Organizational Behavior)	Results from the study indicate that the structure of groups in terms of gender, age, and nationality differences, as well as the position of students in groups, may place particular students at a significant disadvantage in their ability to perform as well as others. Significant efforts need to be made in tailoring the teaching of group process skills to students. The author makes five recommendations based on the results of the study that used a team-based pedagogy.
27	Snyder, L.G. (2010)	The use of pre-group instruction to	USA	Conceptual	Business	Students can become effective team members if given appropriate tools. Provides suggestions to

ID	Authors/ year	Article title	Location of study	Research design/number of participants	Subject area	Findings
		improve student collaboration				educators for preparing and teaching students teamwork skills.
Z	Staggers, J., Garcia, S. & Nagelhout, E. (2008)	Teamwork through team building: Face to face to online	USA	Conceptual	Business Communication	The authors recount their efforts to translate face-to-face learning of teamwork to an online environment. Team-building exercises are recognised as important to establish collaborative, dialogic participation in the online environment. Tuckman's stages and Cog's Ladder are integrated into teaching to enable students to understand and reflect on the team process. Experience demonstrates that stages of team building are recursive and not necessarily linear in occurrence.
28	Stone, R. & Bailey, J. (2007)	Team conflict self-efficacy and outcome expectations of business students	USA	Quantitative $N = 140$ students	Business	A model was developed linking the antecedents of team conflict self-efficacy to behavioral intentions to use team skills. Results showed that vicarious team experiences and team member support affect behavioral intentions of students to use team skills. Further, instructors may be able to manipulate and influence the antecedents and ultimately student behavioral intentions.
A1	Strom, P. & Strom, R. (2002)	Overcoming limitations of cooperative learning among community college students	USA	Conceptual	Education	This research elaborates on an Interpersonal Intelligence Inventory (III), Collaboration Integration Theory (CIT) and an instructional method – Cooperative Learning Exercises and Roles (CLEAR) to assist students to move into active learning. Findings suggest that students are more likely to gain from cooperative learning groups given the opportunity to practice team roles and engage with peer evaluation.

ID	Authors/ year	Article title	Location of study	Research design/number of participants	Subject area	Findings
29	Takeda, S. & Homberg, F. (2014)	The effects of gender on group work process and achievement: An analysis through self and peer assessment	UK	Quantitative $N = 1001$ students	Business (Management)	Data were collected over a five-year period. Results indicated that all male exception groups should be avoided when considering the learning experience, learning process and achievement. The study supports that instructors assign students into heterogeneous groups or some measure be taken to ensure students form gender diverse groups.
30	Tombaugh, J. & Mayfield, C. (2014)	Teams on teams: Using advice from peers to create a more effective team experience	USA	Qualitative $N = 132$ student teams	Business (MBA)	The authors conclude that it is incumbent upon an instructor to create a classroom experience that actively promotes the development of teamwork skills. The study provides advice, derived from the analysis of insights from experienced student teams, as a source of learning and support for novice teams.

Note. SPARK = Self and Peer Assessment Resource Kit; TBL = team-based learning; ICTs = information communication technologies; CMS = course management system; LGD = leaderless group discussion; CATME = Comprehensive Assessment of Team Member Effectiveness; HE = higher education.

Note: Full text references for this article appear in the final end text reference list.

2.2.3 Article Summary

The article provides relevance to the research by addressing the aim of identifying factors perceived to afford or constrain teamwork pedagogy in a HE context. Teamwork in HE was found to be a situated and transactionally oriented activity, wherein perceptions concerning value and return on investment are significant affordances and/or constraints. Globally, transaction costs were found to exist across disciplines and in the complex nexus of interrelationships between educators, students and institutional factors. The article highlights transaction cost implications for: educators influencing curriculum design and implementation of instructional methods and assessment of teamwork; students engaging with the development of teamwork skills; and, for institutions in meeting employer expectations of graduate teamwork capability. Therefore, in identifying transaction costs in this article, critical insights were developed on the dynamic and interactive effects influencing affordances and constraints shaping the uptake of HE teamwork in a global context not previously undertaken. Thus, this research has contributed to the scholarship of discovery (Boyer, 1990), expanding knowledge in a field by challenging current understandings of what is known and inspiring curiosity for further discovery of new knowledge (Hofmeyer et al., 2007).

Following the global SLR, a second SLR focused on exploring the factors affecting the teaching of teamwork in Australian HE business schools was undertaken to establish context for the study. The Australian SLR is presented in the next section.

2.2.4 Article Two: Teaching Teamwork in Australian University Business Disciplines: Evidence from a Systematic Literature Review

An early version of this article was presented at the 25th Annual Teaching and Learning Forum in Perth, Western Australia in 2016. The presentation allowed for testing of emerging understanding with an informed practitioner and researcher audience.

This article situates the literature in the Australian business discipline context. The research question being addressed in the article is, '*what are the salient issues associated with teaching teamwork skills in Australian university business disciplines evident in the literature?*' which aligns with one of the research aims for this thesis.

Interpretive synthesis of content elicited three major themes emerging across the articles reviewed. The findings indicated varied approaches associated with effective implementation of teamwork pedagogy which may be considered transactions costs for educators. Such costs, for example associated with provision of resources for curricula redesign, teaching teamwork process skills, can impact on workload and may influence the individual educator's approach to teamwork.

Linking to Blumer's (1969) three basic assumptions of symbolic interactionism, individuals act on things that have meaning for them, the meanings arising from social interaction with others and modified through an interpretive process, thus incurring temporal and human resource costs. Within the individual educator's environment but noted across the wider university context in Australian business disciplines, there is subjectivity of social actors engaging in practical actions to ameliorate challenges encountered with teamwork.

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The following authors contributed to this manuscript as outlined below.

Authorship order	Contribution (%)	Concept Development	Data Collection	Data Analyses	Drafting of manuscript
LINDA RIEBE	80	X	X	X	X
ANTONIA GIRARDI	10	X			X
CRAIG WHITSED	10	X			X

Contribution indicates the total involvement the author has had in this project. Placing an 'X' in the remaining boxes indicates what aspect(s) of the project each author engaged in.
By signing this document, the Candidate and Principal Supervisor acknowledge that the above information is accurate and has been agreed to by all other authors.

Candidate   **Principal Supervisor**

Note that the Tables and Figures that appear in the article that follows are presented as originally provided to the journal

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2.2.5 Teaching Teamwork in Australian University Business Disciplines:

Evidence from a Systematic Literature Review

Abstract

Australian employers continue to indicate that the development of teamwork skills in graduates is as important as mastering technical skills required for a particular career. In Australia, the reporting on the teaching of teamwork skills has emanated across a range of disciplines including health and engineering, with less of a focus on business related disciplines. Although Australian university business schools appear to value the importance and relevance of developing teamwork skills, implementation of the teaching, learning, and assessment of teamwork skills remains somewhat of a pedagogical conundrum. This paper presents evidence from a systematic literature review as to the salient issues associated with teaching teamwork skills in Australian university business disciplines.

Introduction

Teamwork continues to rate in the top three skills required by Australian employers, ranking second behind cultural fit, with oral communication skills ranked third (Australian Association of Graduate Employers [AAGE], 2014). Teamwork is further noted as being very important in the recruitment and selection process (AAGE, 2012, 2014). Studies of most frequently mentioned skill requirements, such as teamwork and communication, in graduate job advertisements (Bennett, 2002) bear witness to the rationale that developing graduate teamwork skills is an important process in higher education. A desktop analysis of 39 Australian university websites in 2014 indicated that teamwork (or the ability to work effectively with others) was explicitly mentioned in 70% of graduate attributes or graduate qualities statements, affirming the importance of teamwork skills. Despite this, reports have continued to emerge expressing employer dissatisfaction with the deficiency in teamwork skill preparedness of new graduates (Australian Industry Group & Deloitte, 2009; Harder, Jackson & Lane, 2014), without consideration of how individual student, educator, and institutional factors influence this preparation.

Much of the research focusing on the teaching of teamwork skills in higher education has emanated from the United States (see Riebe, Girardi & Whitsed, 2016 for a recent review). Within the Australian context, the reporting on the teaching of teamwork skills, while less prevalent, is presented across a range of disciplines including health and engineering, with less of a focus on business related fields. This limited focus across business disciplines is surprising given the attention of educators/researchers on ensuring compliance with teaching standards requiring general skills development in curriculum content. For those university business schools maintaining or aspiring to AACSB (Association to Advance Collegiate Schools of Business, n.d.) accreditation, in particular, there is an expectation that teamwork skills will be developed and include learning experiences that address this expectation, along with technical knowledge in business degree programs.

Given the increased focus on accreditation compliance expectations, and calls from employers to improve the skills, knowledge, and behaviours associated with teamwork, the development of teamwork skills (broadly defined) in Australian university business disciplines merits further investigation. This research forms part of a larger study investigating how teamwork is taught, practiced and assessed in university business courses in culturally similar countries.

In this paper, we pose the question: *What are the salient issues associated with teaching teamwork skills in Australian university business disciplines evident in the literature?* We define teamwork as two or more students formally working together toward a common goal through interdependent behaviour and personal accountability. Although we use the terms 'team' and 'teamwork', we acknowledge that others use the terms 'group' and 'group work' when discussing student teams. These terms are often used interchangeably; however, not all

groups are teams. Groups can be any subset of people with similar traits, characteristics, culture or interests, whereas teams are usually formed to work interdependently to complete a short-term project, driven by a common goal (Kirby, 2011). To maintain the integrity of the original research when cited, we have used both terms. We conducted a systematic literature review to present an overview of recent literature emanating from Australia on teamwork teaching and learning issues in university business disciplines.

The approach

The systematic review process relies less on the potentially biased expertise and authority of the researcher(s) that may be evident in traditional narrative style reviews, and more on an explicable and replicable method. This study followed Pickering and Byrne's (2014) method for conducting systematic reviews. The process included focusing on a single question, explicating search and selection protocols, specifying those criteria for inclusion and exclusion, thus facilitating replicable design elements characteristic of a primary research project. The resultant database can be used to develop and document breadth, depth and type of published literature in the field. It therefore reflects on salient theoretical, geographic and methodological gaps of the extant literature, important for the identification of future research agendas. Further, by exploring multiple perspectives on the primary research, patterns can be discerned, making prominent "the robust features of reality" (Rousseau, Manning & Denyer, 2008, p. 506).

Inclusion and exclusion criteria

Following an initial search of the literature using the key words: *student; teamwork; group work;* and, *business*, several thousand articles were found. Advanced search parameters were then used in selected databases, to narrow the selection to 203 peer-reviewed journal articles.

In conducting the search, a number of inclusion and exclusion criteria were developed to address the research question. Initially, the literature search focused on undergraduate business students. However, although this focus narrowed the results of the search, it was found to be too limiting in terms of research produced in Australia, therefore, research including postgraduate business students was also included.

In selecting the literature, the following inclusion criteria were observed. The articles must:

- Apply to undergraduate and/or postgraduate students in university business disciplines in Australia;
- Be published in English, in peer-reviewed journals, between September 2009 and September 2014;
- Be of an empirical and applied nature, using teamwork skills as the primary facet of interest; and;
- Clearly refer to the application in university courses conducted in face to face mode, demonstrating a range of processes to engage students in teamwork in a university classroom setting.

Journal articles were excluded if they:

- Related to secondary education, vocational education, and training, or the workplace;
- Did not relate to teamwork in university business courses specifically (for example, health, engineering, the arts);
- Were studies related to teamwork research in the online environment; and
- Reported on teamwork only as a by-product of teaching and learning.

Due to the sheer volume of research across the many variables related to teamwork development in Australian university business disciplines, only articles meeting the strict

criteria were included. It is recognised, however, that there may have been some articles meeting the review criteria that were published about teamwork in the specified time period by Australian authors, but not located. These may not have been locatable using online database searching, or accessible in the databases selected for searching. This is a limitation of the systematic review approach that needs to be considered when interpreting the outcomes of the review.

Literature search and selection procedure

The material included in this review is derived from a keyword-based search in the databases PsycINFO, ProQuest Business Source, Google Scholar, ERIC, and Scopus. Using the terms *team, student teams, teamwork, group work, generic skills, employability skills, generic attributes, Australia,* and, *Australian;* journal articles in English and pertaining to student teamwork data were gathered and screened. Figure 1 presents a flowchart of the selection process.
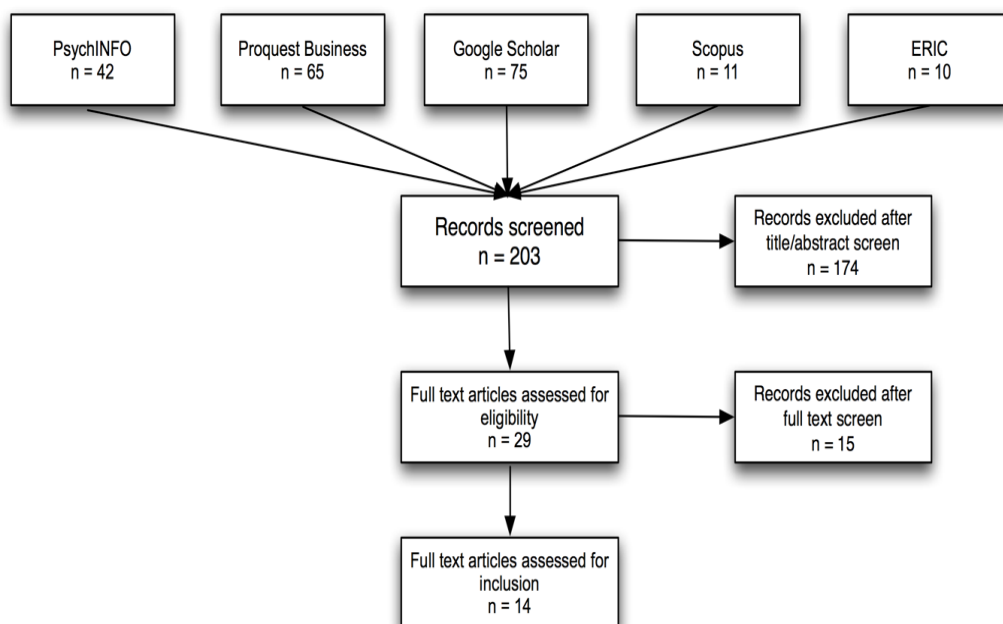
Figure 1: Flowchart of the literature selection process

As recommended by Pickering and Byrne (2014), articles found in the initial search were screened and then placed in an *Excel* database with the following headings: authors' name(s); year of publication; title of the article; journal title; research design (including sample information); geography (according to authors university affiliation); theme; and, findings. The database allowed for the filtering of article information into the various headings. The first filter removed all non-Australian university affiliated authors. Full-text articles ($n = 29$) were then filtered by the relevant inclusion criteria noted for the study, leaving 14 journal articles by Australian university affiliated authors. Table 1 identifies the articles selected for the systematic review. Coding of the 14 articles was conducted in preparation for the analysis. Each article was allocated a number used to identify the article in the following sections.

Results and discussion

Over the five-year period covered by this review, 14 articles were located that met the search criteria. Research on the application of teamwork teaching and learning is therefore considered minimal, despite approximately 70% of Australian universities that explicitly state teamwork, or working effectively with others, as a graduate attribute or quality. However, the role of collaborative partnerships in academia is clearly evident in the articles reported on in this review. Twelve of the 14 articles are co-authored and evidence of teamwork in practice. Of the retained articles most focused on a variety of university business course majors including accounting, marketing, management, management information systems, human resources, and business courses where a major was not specified. Interestingly, definitions of teamwork were not prevalent in the literature reviewed, with only three of the 14 articles specifically outlining working descriptors for teamwork (Delaney, Fletcher, Cameron & Bodle, 2013; Jackson, Sibson & Riebe, 2014; Riebe, Roepen, Santarelli & Marchioro, 2010).

This lack of attention to teamwork definitions makes direct comparisons difficult and are signalled as a consideration when interpreting the results of the review.

Table 1: Studies identified from the review (lead author alphabetical order)

Paper No.	Author(s)	Year	Article title	Research Design/ Size/Discipline	Theme	Findings
1	Burdett, J. & Hastie, B.	2009	Predicting satisfaction with group work assignments	Mixed method/ 344 undergraduate final year business students	Pedagogy/ Student perceptions	Student workload issues are the major contributor to dissatisfaction with group work assessment. Authors note it is critical for faculty to support and explain how distributive justice will be addressed through workload and assessment procedures.
2	Chad, P.	2012	The use of team-based learning as an approach to increased engagement and learning for marketing students	Case study/ 50 postgraduate final year marketing students	Pedagogy	TBL is an effective teaching process enabling educators to offer students enhanced and stimulating learning experiences. Belief by students that they learned more via TBL relative to traditional teaching delivery previously experienced.
3	D'Alessandro, S. & Volet, S.	2012	Balancing work with study: Impact on marketing students experience of group work	Quantitative/ 222 undergraduate marketing students	Pedagogy/ Student perceptions	Student learning in groups is adversely affected by hours of part time employment.
4	Delaney, D. Fletcher, M. Cameron, C. & Bodle, K.	2013	Online self and peer assessment of teamwork in accounting education	Mixed method/ 93 second year undergraduate accounting students	Assessment/ Student perceptions	Understanding of the implementation and impact of an online self and peer assessment (SPA) model to assess teamwork.
5	Freeman, M.	2012	To adopt or not to adopt an innovation: A case study of team-based learning	Qualitative	Pedagogy/ Educator perceptions	Up-front time commitment for academics using TBL. Crucial factor affecting adoption is the pedagogical compatibility of the adopter.
6	Hunter, J., Vickery, J. & Smyth, R.	2010	Enhancing learning outcomes through group work in an internationalized undergraduate business education context	Action research/ Focus groups, business undergraduate students: Time 1 n = 108 Time 2 n = 28	Pedagogy/ Student perceptions & Educator diary reflections	As undergraduate students with minimal life experience, many lack the necessary skills to confront issues faced with group process. Problem-based learning (PBL) and active learning activities appear to offer students a sound framework from which deep learning can be pursued.
7	Jackling, B., Natoli, R. Siddique, S. & Sciulli, N.	2014	Student attitudes to blogs: a case study of reflective and collaborative learning	Quantitative/ 111 2nd year undergraduate accounting students	Assessment/ Student perceptions	Composition of a group has a significant effect on perception of the group work activity.
8	Jackson, D., Sibson, S. & Riebe, L.	2013	Undergraduate perceptions of the development of team-working skills	Mixed method/ 799 undergraduate business students	Pedagogy/ Student perceptions	Importance of constructive alignment and scaffolded development of the skill. Skills of teamwork can be fostered in the university classroom through reflection.

Paper No.	Author(s)	Year	Article title	Research Design/ Size/Discipline	Theme	Findings
9	Lambert, S., Carter, A. & Lightbody, M.	2014	Taking the guesswork out of assessing individual contributions to group work assignments	Qualitative 232 postgraduate & 325 undergraduate accounting students	Assessment/Educator perspective	Wiki-based assessment provided benefits to both students and instructors, with students able to receive a more just outcome in terms of final grades awarded and instructors using less guesswork, and thus experiencing less stress, in the grade review process.
10	Riebe, L., Roepen, D., Santarelli, B. & Marchioro, G.	2010	Teamwork: Effectively teaching an employability skill	Qualitative 160 second year undergraduate business students	Pedagogy/ Case study	The most important factor for engaging students in teamwork is having a clear conceptual framework. A three-phase approach to teaching teamwork skills provided the vehicle for student teams to both experience and understand the generic skills and behaviours required for effective teamwork.
11	Sargent, L. Allen, B. Frahm, J. & Morris, G.	2009	Enhancing the experience of student teams in large classes	Mixed method Control n = 101 Experimental n = 564	Pedagogy	A teacher assistant (TA) training intervention was used to build team-coaching skills in TAs working in a large business course. Application of the process was assessed as a positive experience for both teaching assistants and student teams. TAs learned new and transferable skills and student teams were exposed to coaching relationships.
12	Seethamraju, R. & Borman, M.	2009	Influence of group formation choices on academic performance	Mixed method 141 postgraduate business information systems students	Pedagogy	Students who take account of the skills and knowledge of individual students, their ability to contribute to the management of the task at hand and the potential social cohesion of the members in the group are likely to perform better as a group.
13	Teo, S. Segal, N. Morgan, A. Kandlbinder, P. Wang, K. & Hingorani, A.	2012	Generic skills development and satisfaction with group work among business students	Quantitative 389 postgraduate and undergraduate students	Pedagogy/ Student perceptions	The study reported on key variables that influenced the development of group work skills. It found that lack of prior training in group work tended to produce a more negative group work experience, with Australian residents reporting more reluctance to conduct peer evaluation and a more negative response to group work than international students.
14	Troth, A., Jordan, P. & Lawrence, S.	2012	Emotional intelligence, communication competence, and student perceptions of team social cohesion	Quantitative Final sample n = 273 university business students	Pedagogy	Communication skills training early in a university degree could result in students better able to engage in teamwork and have a more positive experience. Development of EI and communication skills should become an important part of team building to ensure maximum opportunity for optimising performance.

Geographical spread

Thirteen universities from across Australia are represented in the 14 retained articles. Two of

the articles (3 and 13) included authors from more than one state and/or also had

organisational affiliations and as such, were not aggregated in the state/territory totals, but

nominated as 'other' as can be seen in Table 2.

Table 2: Comparison of author(s) location and number of universities represented in review

	WA	SA	VIC	NSW	QLD	TAS	ACT	NT	Other	Totals
No of articles	2	2	2	4	2	0	0	0	2	14
No of universities*	5	3	9	11	8	1	1	1	0	39

Notes: WA = Western Australia; SA = South Australia; VIC = Victoria; NSW = New South
Wales; QLD = Queensland; TAS = Tasmania; ACT = Australian Capital Territory; NT =
Northern Territory. *Number of universities based on 2014 figures.

Content and methods

Each article was reviewed for dominant content and type of method applied in the research.

The primary foci of the research in the articles were pedagogy and assessment. Of the 14

retained articles, 11 primarily addressed teamwork pedagogy with three articles (4, 7 and 9)

predominantly focused on assessment issues. Table 3 presents the research methods used to

explore teamwork pedagogy and assessment of teamwork across the articles.

Table 3: Content and methods

Content	Methods				Totals
	Quantitative	Qualitative	Mixed method	Other	
Pedagogy	3	2	4	2	11
Assessment	1	1	1	0	3
Totals	4	3	5	2	14

Quantitative approaches were used in four articles (3, 7, 13, 14); and three articles used a

qualitative approach (5, 9, 10). The mixed method approach was favoured slightly more than

others, with five articles (1, 4, 8, 11, 12) using this method. Mixed method studies were defined as those studies which included "both types of data sources and both forms of analysis, whether performed simultaneously or sequentially as part of an a priori design or an adaptive, evolutionary process" (Truscott et al., 2010, p. 318). Two of the articles are noted as other – one (article 2) adopted a case study approach and one (article 6) used an action research approach.

Themes around the teaching and learning of teamwork

Themes across the articles were derived through a detailed reading of each article, incorporating interpretive synthesis (Briner & Denyer, 2012) to compare information across the individual studies. Although each article had a particular research focus, similarities were discerned. Table 4 outlines three inter-related emergent themes - team formation and management, teaching and learning approaches, challenges influencing teaching and learning practices - and variables and articles where each theme is located. The following elaborates each theme in turn.

Table 4: Themes and variables in university teamwork research articles

Theme	Variables	Mentioned in article(s)
Team formation and management	Team formation	6, 7, 8, 9, 10, 12, 14
	Team cohesion	6, 12, 14
Teaching and learning approach	Teaching and learning strategies/processes	6, 9, 10, 11,14
	Constructive alignment	4, 6, 8, 10
	Assessment/marks/grading	1, 4, 7, 9, 13, 14
	Active/collaborative/student-centred learning	5, 8
	Team-based learning	2, 5
Challenges affecting teaching and learning practices	Cultural diversity/mix	5, 6, 13
	Workload	1, 2, 3, 4, 6, 13
	Assessment/marks/grading	1, 4, 7, 9, 13, 14

Team formation and management

Half of the articles focused on team formation and team management issues. Team formation and composition of teams are somewhat contentious issues for both students and educators in terms of size and the way in which teams are structured and supported. This is not a new issue in higher education, nor in fact in the workplace, as team composition inherently includes complications arising from individualistic and/or collectivist cultural understandings, communication and decision-making styles (Gibson & Saxton, 2005). This aspect can be considered closely related to issues of homogeneity/ heterogeneity, where people tend to prefer to work with others more like themselves as observed by Volet and Ang (1998). Where the size of teams was mentioned in the articles, a team size of between three and five members was recommended across a range of articles.

Reflecting on the challenges of team formation and management, three contesting orientations to this were observed. Some researchers (e.g., Hunter, Vickery & Smyth, 2010; Jackson et al., 2014; Troth et al., 2012) advocated for educator allocation of students to teams to promote diversity of culture, gender, age, team role profiles and, the level of emotional intelligence. While Seethamjura and Borman's (2009) research with postgraduate students suggested that heterogeneity of team members contributes to team success, they concluded that students should self-select team membership. The findings of Jackling, Natoli, Siddique and Sciulli (2014) suggested that team composition has a significant impact on student perceptions of group work. For example, the research by Jackling et al., (2014) was based on student self-selected dyads, with the rationale for the smaller team size being to mitigate anxiety associated with lecturer formed teams. However, they acknowledged that self-selecting into teams is not generally reflective of real-world situations and that findings may not be transferable to larger groups. Alternatively, Sykes, Moerman, Gibbons and Dean

(2014) argued that the notion of real-world teamwork in the university classroom is clichéd and "chimera-like in the student experience" (p. 11). What this suggests is that research on the formation and composition of teams and teamwork in the university context continues to be debated, with arguments both for and against self-selection evident in the literature.

There is also evidence in the literature reviewed that Australian researchers are concerned with team cohesion. Hunter et al. (2010) posited that meetings between educators and individual teams to discuss issues assist with the development of team cohesion. Such an argument finds support in the workplace, where external third parties are known to be contracted by organisations to provide input on team goal clarification and to improve team effectiveness by keeping teams on track with strategic priorities (Gibson & Saxton, 2005). Troth et al. (2012) discussed the implications of emotional intelligence training as a way of improving team social cohesion. They further suggest that emotional intelligence could be a factor in determining the allocation of students to teams. While Seethamjura and Borman (2009) found that how a team is formed ultimately influences the team's performance, they also implicated social cohesion as a latent variable and an important factor in the construct of teams. In general, the research suggests that there is potential for a team to perform better where there is social cohesion. This implies that the inclusion of innovative teaching and learning approaches to establish team cohesion and social dynamics, such as emotional intelligence training, would benefit both university students and educators in the management of student teams.

Teaching and learning approaches
Specific innovative pedagogical approaches were noted in three articles in this review. For example, team-based learning was presented in two articles (Chad, 2012; Freeman, 2012). Team-based learning includes four elements: strategically formed teams; a readiness

assurance process – questions initially undertaken by individuals and then followed up with the team through a consensus decision-making process, peer evaluation, and small group activities. Freeman's (2012) article provided a description of the team-based learning phases of readiness, application, and assessment, and investigated team-based learning adoption in a research-intensive Australian university. It is apparent in both articles that although the introduction of team-based learning offered students an enhanced team learning experience, it also added to the workload commitment of the academic adopter. Reinig, Horowitz and Whittenburg's (2011) research indicated student satisfaction with the team-based learning readiness assurance process "in the attainment of multiple goals" (p. 44); however, they noted that relationships between social dynamics and student satisfaction were not examined. Another innovative approach to teamwork teaching and learning was outlined by Sargent, Allen, Frahm and Morris (2009) in their strategy to develop team coaching skills in teaching assistants by providing the assistants with training in coaching and feedback skills to student teams in a large management course. The findings of their study indicated that the outcome of this applied process approach was a positive experience for student teams and teaching assistants. This outcome implied that the trade-offs between positive student experience and educator workload is an issue influencing the adoption of innovative pedagogical approaches, and must be acknowledged and supported at the institutional level.

The design of team assessments is a factor that is of concern to university educators, particularly in how to address individual grading of team members (Lambert, Carter & Lightbody, 2014), and in the use of self-and/or peer assessment. In the articles, peer assessment is presented most often as a strategy to ensure accountability of individual team members (D'Alessandro & Volet, 2012; Delaney et al., 2013), discourage social loafing and non-cooperation (Burdett & Hastie, 2009), and increase distributive justice. For example,

Burdett and Hastie (2009) suggested interventions to overcome student perceptions of inequity of workload distribution by providing a mechanism to adjust individual team member grades. They elaborated the importance of distributive and procedural justice as predictors of students' commitment, persistence, and satisfaction with group work. Other strategies for applying grading mechanisms, including a self and peer assessment model through the implementation of the online tool, $SPARK^{PLUS}$ (Self and Peer Assessment Resource Kit), were outlined by Delaney et al. (2013). By contrast, Lambert et al. (2014) placed less reliance on peer evaluation as a strategy to deal with individual accountability and instead, argued for team member accountability through contributions to a team wiki. Wikis, often available through the university learning management system, allow educators to textually track individual contributions of individual team members. However, there are drawbacks to wiki use for this purpose as some wikis only record the name and date of the last contributor. Therefore, contributions to the wiki must be notated in some way or, for example, colour coded to indicate an individual student's contribution. Riebe et al. (2010) also advocated for the use of a team wiki to promote individual team member accountability, but also implemented peer evaluation processes as formative checkpoints in team projects.

Constructive alignment (Biggs, 1999) of assessments and activities with intended learning outcomes was mentioned as the basis from which to ensure team-working skill development (Delaney et al., 2013; Jackson et al., 2014; Riebe et al., 2010). Riebe et al. (2010) proposed that constructive alignment supports students' understanding of the development of behaviours associated with the process of teamwork. Jackson et al. (2014) argued that educators must "explicitly articulate the connections between the constructive alignment of the unit's activities and assessments with the learning outcomes" (p. 15), so that students are able to self-report on the outcome of the development of teamwork skills. Such an approach

is not common in the extant literature; however, it is an area of teaching and learning that is worthy of further research, especially given the evidence requirements of professional accreditation bodies (Delaney et al., 2013) of the development of teamwork skills during an undergraduate degree. In Australia, the Tertiary Education Quality and Standards Agency (TEQSA) has specified *standards* which require achievement of not only core discipline skills, but also for "…generic, employment-related and lifelong learning" (TEQSA, 2016, p. 2), such as teamwork skills. The AACSB also set standards that require "learning methods that actively involve students in the learning process [and] encourage collaboration…" (Reinig et al., 2011, p. 28) developed through teamwork. It is, therefore, important for universities to articulate alignment of content and assessments to ensure that both discipline knowledge and generic, employment-related skills (such as teamwork) are incorporated into course design.

Challenges affecting teaching and learning practices

The influence of organisational culture on teaching practices in universities, as well as the cultural background of university business students, was mentioned in the literature reviewed as influencing teamwork pedagogy. For example, Freeman (2012) referred to a change in teaching culture requiring educators to move from a lecture-based pedagogy to one of active learning. Such external forces are seen to contribute to resistance to change or resentment among academics. Freeman explained, "some academics may resent the extra investment of time and effort required of them in implementing change or they may prefer to transmit information through traditional lectures and tutorials" (2012, p. 157). Implementation of active and collaborative learning methods are supported in the literature as high-impact pedagogical practices that benefit student success, particularly for underserved students who are less likely to have access to these practices (Kemery & Stickney, 2014; Kuh, 2008). As an

example, Hunter et al., (2010) outlined the need for time to develop cultural sensitivity so that undergraduate students learn to cope with group diversity through proactive teaching and learning strategies. Teo, Segal, Morgan, Kandlbinder, Wang and Hingorani (2012) concurred, stating that "developing intercultural competence in students and academics is a clear priority" (p. 482) in the development of teamwork skills.

Workload and assessment practices were also discussed as impacting student satisfaction with teamwork. Social loafing is where one or more team members do not contribute their fair share, causing additional workload for others. Workload sharing is noted as a burden for students, with a variety of viewpoints raised by researchers (Chad, 2012; Hunter et al., 2010; Troth et al., 2012). Social loafing (also known as free-riding) has been well-documented as a discouraging aspect of university student teamwork in the extant literature (see for example Jassawalla, Sashittal & Malshe, 2009; Kouliavstev, 2012; Maiden & Perry, 2011; Pieterse & Thompson, 2010). D'Alessandro and Volet (2012) discussed the impact that external part-time work hours have on student attitudes to group work at university, finding that "student learning in groups is adversely affected by substantial hours of part-time employment" (p. 103). While workload issues have focused mainly on student perspectives, one must also consider educator workload. A study by Sashittal, Jassawalla and Markulis (2011) found that undergraduate business students still do not receive adequate training and instruction in teamwork skills prior to being assigned large, multi-outcome team projects. Planning and implementing team training for students, on top of normal content planning, is an additional workload for educators. Further, by necessity, the educators must train themselves, or seek access to professional development (Albon & Jewels, 2014), in collaborative learning techniques in order to both plan and model the collaborative skills underlying team working.

The role of the institution in facilitating this focus on professional development for educators and how this impacts the uptake of teaching teamwork skills merits further attention.

There are many challenges faced by educators and students that affect the teaching and learning of teamwork skills in university business disciplines evident in the extant literature. One particularly prevalent challenge is dealing with social loafers in teams. Less prevalent in the literature reviewed is research around the processes of teamwork pedagogy and, the investigation of cultural factors that may affect student teams. The latter may be because educators are not as focused on cultural aspects, which would be surprising given that Australian universities host many international students in business courses. It may also be because educators are already dealing with a crowded discipline-specific curriculum and, although aware of the importance of addressing team processes and cultural differences in business classes, do not have the time to teach these aspects formally. Research that explores these rationales is necessary. The role of institutional practices in affording educators the opportunity to engage in activities which further promote opportunities to teach teamwork skills is also a significant consideration warranting further research.

Implications and conclusions

The aim of this systematic literature review was to understand the salient issues associated with teaching teamwork skills in business disciplines in the Australian university context. The review did not set out to promulgate best practice, but to outline the state of play and inform business academics of issues arising in the literature that are similar to those with which they are faced, as well as to highlight gaps that may stimulate future research.

In order to understand how teamwork is situated as a learned employability skill in business related disciplines in the Australian university context, consideration was given to common themes arising across the literature reviewed. The 14 articles have suggested or operationalised certain approaches to deal with specific concerns linked to teamwork pedagogy and assessment practices. For example, the use of team-based learning has been implemented to enhance and improve student engagement with teamwork (Chad, 2012). Student perceptions of (dis)satisfaction with teamwork assessment have been attributed to considerations of social loafing, workload of individual team members (both within the university environment and in relation to external employment hours undertaken by students), and the distributive justice related to grading team assignments. Concerns about teamwork assessment practices were also highlighted across articles reviewed (see for example Burdett & Hastie, 2009; Delaney et al., 2013; Lambert et al., 2014).

Three themes were identified across the literature reviewed: team formation and management; teaching and learning approaches; and, challenges influencing teaching and learning practices. Remarkably, little attention has been paid to training students in the processes of teamwork. There are numerous factors that potentially contribute to this. For example, university educators, dealing with the competing interests of teaching an already crowded curriculum, or a change in teaching culture to focus on development and assessment of process skills, may be deterred from adopting a process over product approach to teaching teamwork. Further research that explores factors that influence educators' rationales relating to the inclusion or exclusion of explicit teamwork training and how this is integrated into programs of study at the course and unit level is warranted.

Moreover, and related to curriculum design, is the need for research that explores how and in what ways educators understand and construe their curriculum and learning design approaches. Biggs' (1999) constructive alignment approach, for example, could assist in the design of program activities to better ensure teamwork skill development outcomes are articulated (see also Trigwell & Prosser, 2014). The review also challenged the assumption that academics in business related disciplines require less professional development support as this relates to teamwork pedagogy and learning design. Research that explores the perspective that business academics, being discipline-based scholars, may not have adequate training in pedagogical practices or curriculum design principles (Albon & Jewels, 2014) is necessitated, given the limited focused attention on this dimension in the articles reviewed.

Contributing to the need for further research is the contested terminology and the multi-vocalness of teamwork and related synonyms and rationales underpinning the incorporation of teamwork into a course as a learning or assessment task. For example, when group projects are introduced as a synonym for the use of teamwork, or to reduce educator marking load, training students to develop the process skills of teamwork may be overlooked, which has the potential to negatively influence the student learning experience and educational outcomes. Providing training resources to educators was identified as a way to improve academics' understanding of pedagogical strategies associated with professional learning (Freeman, 2012). A lack of resources may inhibit the ability of universities to respond to the changing needs of employers, and hence, the redesign of curricula to incorporate skill development in courses in budgetary constrained environments. The type of institutional support needed for academics to teach teamwork skills is an area in need of further exploration.

This review has also identified phenomena that have a significant influence on university students' satisfaction and motivation to engage in teamwork, team learning tasks, and assessments. The broader literature identifies many factors for consideration, which has the potential to inform new and innovative ways to engage students in teamwork related learning. Extrinsic motivation has been widely linked to student motivation. For example, students are motivated primarily by assessment (Ramsden, 1992) and therefore, when it comes to developing teamwork skills, curriculum design that incorporates both process and product outcomes in the assessment may engage students with deep learning (Delaney et al., 2013). Yet, this approach amplifies the transactional dimension of this form of learning approach and elevates it to a high stakes form of assessment and learning experience, where marks are often linked to performance of group members, rather than the individual, thereby intensifying students' negative perceptions associated with assessment marks and grading (Burdett & Hastie, 2009).

In particular, individual grades being affected by the multicultural nature of teamwork at university (Teo et al., 2012; Volet & Ang, 1998), and fears associated with social loafing of peers in team assessments were noted. While these are well-defined problems as they relate to assessment, further research exploring how best to structure teamwork learning tasks that are perceived as equitable, while ensuring assessments and learning are aligned within the university context, is needed. Further, to the issue of perceptions of the equitable distribution of work, students' external employment commitments were identified as a negative influence on student perceptions of fairness in teamwork assessment. For example, D'Alessandro and Volet (2012) reported on the effect of external part-time employment negatively impacting student appraisals of teamwork experiences more than teams where team members did not have high levels of external commitments. Finally, it was observed that explicitly teaching

teamwork skills at university also has implications for educator workload. Introducing innovative teamwork strategies and collaborative pedagogy incurs additional time and effort on the part of educators to implement change, with implications for universities to recognise this as part of their workload management strategy.

Research employing a systematic literature review methodology has the potential to highlight as yet unexplored gaps and present a platform from which future research agendas can be developed. This review has provided a way of interrogating the literature that is less subjective than traditional reviews. In the time since the initial literature search and review was conducted, several articles related to teamwork teaching and learning in the Australian university business context have been published (see for example, Augar, Woodley, Whitefield & Winchester, 2016; Betta, 2016; Volkov & Volkov, 2015), further supporting the need for further research on the teaching of teamwork skills and unpacking the factors that influence this across Australian universities. Though limited in scope, the systematic literature review presented here has highlighted emergent themes and future research foci which must take into consideration how individual student, educator, and institutional factors interact to influence the teaching of teamwork skills in Australian universities.

Note: Full text references for this article appear in the final end text reference list.

2.2.6 Article Summary

Teaching HE teamwork is fraught, with a multitude of issues arising from analysis of the scholarly journal articles reviewed in the SLR of teamwork in Australian business disciplines. Researchers diverge on practices associated with team formation and management, teaching and learning approaches, and assessment and grading practices. A variety of educator issues emerged that highlighted convergence of specific challenges faced by educators, including tensions around workload allocations for the inclusion of teamwork, dealing with team conflict and social loafing and lack of resources. As with the global SLR, teamwork pedagogy was found to be a situated and transactionally oriented activity wherein perceptions concerning value and return on investment act as significant affordances and constraints influencing curriculum design and implementation of instructional methods and assessment of teamwork.

2.2.7 SLR Commonalities

Across both studies, the SLRs have raised salient transaction cost factors associated with HE teamwork that impact across the nested system of institution, educator and student interconnectedness. The SLRs have highlighted factors that afford or constrain teamwork in the HE context and the tensions arising from challenges encountered by educators adopting strategies to integrate teamwork into their courses. These factors appear in a wide range of scholarly literature across culturally similar developed countries, including Australia, and are analysed in the SLRs. Major themes arising in the SLRs included transaction costs and teamwork pedagogy (incorporating teaching and learning approaches and challenges affecting HE teamwork). What is clear from the literature is that educators use a variety of strategies to facilitate HE teamwork to communicate effective practice appropriate to the needs of the educator, to improve outcomes for students and address institutional aspirations and requirements. What is not clear, is how educators navigate the tensions and transaction

cost factors of teamwork pedagogy. These factors are explored in more depth in Chapters Four and Five.

2.2.8 Literature Updates Since SLRs

Some literature may not have been captured in the SLRs having been published since the SLRs were conducted. Likewise, due to the inclusion or exclusion criteria of the SLRs there may be literature that was not included in the SLRs. A limitation of this research is that books, chapters, and grey literature were not canvassed in the literature search that focused on journal articles. Seminal authors writing on teamwork in organisations is also an example of work excluded because of its focus on organisational teamwork rather than HE teamwork. For example, US authors Katzenbach and Smith (1993) have impacted team research— though mainly in the organisational domain—with seminal publications on teams still widely referred to in management education today. Similarly, Eduardo Salas (PhD, USA) is noted among the seminal authors contributing to the research of teams, team training and team cognition in organisations; however, also publishes in the HE context of student teams.

The following section reviews recent literature on themes established in the global SLR of (i) transactions costs, informed by educator, student and institution factors and (ii) teamwork pedagogy, which included categories of: instruction; curriculum design; team composition; and, assessment. The Australian SLR themes of (i) team formation and management, (ii) teaching and learning approaches and, (iii) challenges affecting teaching and learning practices, closely align with those the global SLR themes and the following supplementary literature review is therefore considered at the aggregate level reflecting educator, student, and institution factors.

Educator Factors

Educator factors, such as a lack of appropriate educator training (LaBeouf et al., 2016), lack of professional development (Augar et al., 2016), or simply being unaware of

teamwork best practices (Fittipaldi, 2020) for facilitating teamwork are identified as possible

constraints to teaching teamwork, which can be challenging and complicated (Wesner et al.,

2018, p. 119) for business educators. Further, in Management and Business Communication

courses, educators have traditionally been viewed as the discipline expert (Cotronei-Baird,

2020) and therefore, may implement a slew of traditional pedagogies based on discipline-

based problem and solution strategies and possibly, teach the way they were taught (Hora et

al., 2020). These factors may contribute to product-focused team projects rather than teaching

the process skills associated with developing teamwork (see Dunne & Rawlins, 2000;

Jassawalla et al., 2010; Lawson et al., 2011).

In the articles reviewed in the global and Australian SLRs, curriculum design

considerations were deemed as being only superficially addressed by HE educators, with

little attention paid to constructive alignment of teamwork learning outcomes. However, in

later literature, curriculum design for HE teamwork was noted as important (Fittipaldi, 2020;

Newell & Bain, 2020) as was authentic assessment of teamwork (McConologue, 2020) in

meeting intended learning outcomes through constructive alignment to "ensure the

curriculum meets the quality standards of institutions" (Lasrado & Kaul, 2020, p. 60).

Research has acknowledged that HE educators have diverse and ad hoc approaches to

assessment of teamwork (Augar et al., 2016), including grading teamwork products

holistically (all team members get the same mark), team members are marked individually on

contributions to teamwork processes or some combination of both. Implementing individual

assessment of teamwork incorporating participative peer assessment elements has been noted

as an "accountability mechanism" (O'Neill et al., 2019, p. 849) to deter social loafing,

although educators need to train students how to do this effectively (Fittipaldi, 2020).

However, educators are not the arbiters of all knowledge (Seibold & Kang, 2008). Hence,

there would appear to be a case for educators and students to co-construct knowledge about

teamwork and assessment through critical praxis and reflection on experience in preparing students for collaborative work (Snyder, 2010; Grzimek et al., 2020).

An often-repeated rationale for using team projects in the literature is the use of teamwork to reduce lecturer marking loads (see Jassawalla et al., 2011; Opdecam & Everaert, 2018; Riebe et al., 2016; Shimazoe & Aldrich, 2010). This may be considered an example tactic employed by the educator to account for the temporal, fiscal and human resource transaction costs associated with teaching teamwork and address scarce resources and the paradox of having to do more with less (Vos & Page, 2020).

Doing more with less may raise critical tension points (Jarzabkowski et al., 2013) for educators when they are confronted with a paradox entailing persistent, conflicting, or contradictory demands between interdependent elements (Schad et al., 2016). These conflicting demands give rise to tensions which may cause cognitive disequilibrium inducing "high levels of stress around resource allocation, communication and control of the labour process" (Sutton, 2017, p. 629), and ultimately contributing to faculty disengagement, despondency, and/or performative paralysis. As one example, a *performance paradox* can be seen in the ever-increasing pressure placed on business academics by HE institutions to prioritise research productivity (Mitten & Ross, 2018) over teaching or reviewing pedagogical practices. However, the same contradictory tensions may enable learning, creativity, and contribute to sustainable resilience (Miron-Spektor et al., 2018). Organisations host a wide variety of these tensions that have been categorised (see Lewis, 2000; Smith & Lewis, 2011) as performing tensions; learning tensions; belonging tensions; and organisational tensions. For example, undertaking teaching accreditation (Spowart et al, 2016) can create tensions in the mixed messages emerging between the objectives of the individual and that of the line manager or institution. Further exploring the nature of these

tension points and how they manifest and are navigated is worth considering when exploring the salient factors affecting the teaching of teamwork. This is the focus of Chapter Five.

Student Factors

Student factors have also been implicated in the literature in relation to the ability to develop graduate team working skills (Boud et al., 2013; Ellis et al. 2005; Schullery & Gibson, 2001). For example, at the mesosystem level, factors such as students having a positive attitude toward teamwork (Mendo-Lazaro et al., 2017; Troth et al., 2012), training in team (Jackson et al., 2014) and interpersonal skills (Bedwell et al., 2014; Schullery & Gibson, 2001), the ability to work interdependently (Rydenfält et al., 2017) and develop trust between team members (Bravo et al., 2019; Jones & George, 1998; Marks & O'Connor, 2013; Tseng & Yeh, 2013), aid in developing team accountability (O'Neill et al., 2019; Zhang & Ohland, 2009) and may reduce anxiety (Strauss et al., 2011) surrounding team projects if there is less ambiguity and more structure for teamwork (Wesner et al., 2018).

Studies of student perceptions of teamwork in the literature often report the negative aspects of working in student teams (Schultz et al., 2010). At the student mesosystem level, lack of guidance in team skills (Opdecam & Everaert, 2018) and structure (Olson & Olson, 1999) have been noted as factors affecting student satisfaction with teamwork assignments, with research confirming that undergraduate business students do not receive adequate training and instruction in teamwork skills prior to being assigned large, multi-outcome team projects (O'Connor & Yballe, 2007; Sashittal et al., 2011). One of the most often reported negative factors inducing student dislike of teamwork is social loafing of one or more team members (see for example, Jassawalla et al., 2009; Kouliavstev, 2012; Maiden & Perry, 2011; Pieterse & Thompson, 2010) and, grading, including distributive justice (Healy et al., 2018; Lambert & Carter, 2014) in assessing team projects (Augar et al., 2016; Clarke & Blissenden, 2013; James & Casidy, 2018; Kidder & Bowes-Sperry, 2012). Recent research

(Planas-Llado et al., 2021, p. 191) suggests "that those team members who assess themselves positively do the same for their peers" and agree to equal distribution of teamwork marks. Hence, if students are provided with the opportunity to co-construct teamwork assessment outcomes through a participative self/peer assessment component (Grzimek et al., 2020), accountability can be incorporated through distributive justice and social loafing may be reduced (O'Neill et al., 2019).

Other factors negatively affecting student satisfaction with teamwork assignments include concerns about working in multicultural teams (Colvin et al, 2014; Curşeu & Pluut, 2013; De Vita, 2002; Takeuchi et al., 2013; Volet & Ang, 1999). More recently, the diversity of team members, whether by cultural or other bio-demographical differences (e.g., age, gender) was found to correlate with fostering higher teamwork innovation levels (Grzimek et al., 2020) across face-to-face and online HE student cohorts (Usher & Barak, 2020). The ability to deal with intra-group conflict (Chapman et al., 2010; Curşeu, 2011; Lang, 2009; Stone & Bailey, 2007) and personality clashes (Hunter & Westwick, 2019) may also be related to age and gender diversity through miscommunication issues (Usher & Barak, 2020). Yet these factors may be ameliorated through the development of team trust (Lusher et al., 2014) and cohesion (Bravo et al., 2019), when developed through purposeful cooperation and collaboration of team members, improving learning and positively influencing team effectiveness.

Transaction costs associated with student workload and other pressures (Hall & Buzwell, 2012; Bravo et al., 2019), for example, the adverse effect that students' part- or full-time working hours has on student application to team working (D'Alessandro & Volet, 2012) can be attributed to interactions between different parts of a student's mesosystem surfacing contradictory demands on time. While not the subject of this study, the student experience also seems to be fraught with transaction cost and future studies must consider

this aspect when exploring student perceptions, especially when it comes to undertaking

teamwork for the benefit of meeting employability outcomes.

Institutional Factors

At the macrosystem level, institutional awareness of where and how soft skills such as

teamwork are developed in the business curriculum to satisfy external professional body

accreditation for skill development (see for example, Certified Practising Accountants [CPA]

Australia, n.d.) and meet quality indicators (QILT, n.d.) and assurance of learning

requirements (see for example, AACSB, n.d.; Hunt, 2015), constitutes political and economic

awareness related to the productivity agenda. This agenda is highlighted in frequent

references to the importance of teamwork in industry and government documents (see

AAGE, 2014; AQF, 2013; Australian Industry Group and Deloitte, 2009; BIHECC, 2007;

DEST, 2002), and in the literature (Bravo et al., 2019; Fittipaldi, 2020; Planas-Llado et al.,

2020) emphasising the relevance of developing employability skills such as teamwork with

HE students. Yet, there is little guidance for educators in industry and government literature

on how to introduce and facilitate collaborative teamwork learning in the HE context. Newell

and Bain (2020) suggest that although there appears to be willingness on the part of

academics to engage with team-based collaboration, there needs to be organisational support

for the development of "specific interpersonal skills and protocols required for effective

collaborative practice" (p. 760), identified as a gap in the literature between theory,

aspiration, and practice.

At the exosystem level, institutional strategy decisions can have a bearing on

educators as inhibiting factors in relation to teaching teamwork skills. It has been reported

that there is a marked lack of resources in HEIs allocated to develop and assess employability

skills generally (BIHECC, 2007). Resources include, for example: policy decisions about

time in workload to develop teamwork and design curriculum (Newell & Bain, 2020;

Shimazoe & Aldrich, 2010; Siha & Campbell, 2015) that includes teaching teamwork theory and skills (Jackson et al., 2014) when there are no explicit rules (Oakley et al., 2004); supply of appropriate tools (Fittipaldi, 2020; Hubbard, 2005) including accessing industry speakers to promote the importance of teamwork development (Riebe et al., 2013) and how learning is transferred to the workplace (Ettington & Camp, 2002; Jackson et al., 2018). Another inhibiting factor is the pressure on academics in business faculties to publish discipline-focused research in high-quality journals that, in Australia, contribute to university research rankings to maximise the prestige of the institution (Melguizo & Strober, 2007; Miller et al., 2011). Teamwork related research can fall outside of the remit of business discipline journals and therefore may not encourage educators to publish in the field of teaching and learning scholarship.

These institutional factors may impact educators' approaches to teamwork through the ticking of curricula boxes (Biesta et al., 2015) to satisfy institutional goals beyond the educator's control, creating tensions, for example, between individual (educator) and collective (institutional) goals (Macfarlane, 2017).

The factors discussed signal the paradox tensions and transactions costs encountered by educators as part of their conflicting and sometimes contradictory demands of their academic roles, which have been explored and further discussed in Chapters Four and Five.

2.3 Chapter Summary

This chapter has presented relevant literature on a range of salient influences on educator factors that affect the teaching of teamwork in the HE context. The published global SLR provided analysis of the literature from a multi-disciplinary perspective, implicating transaction cost factors identified as existing across a nexus of HE stakeholders which act to afford or constrain teamwork pedagogy. The Australian SLR explored salient factors affecting teamwork pedagogy in the Australian business school context finding varied and ad

hoc approaches to teamwork pedagogy in the Australian literature. Both reviews, together with a more traditional narrative review, reinforce the need to undertake further primary research which uncovers the factors influencing the teaching of teamwork and the meaning making of the academic staff who teach in Australian business schools. The qualitative case study research design utilising interviews with 30 academics across four universities is elaborated in the following chapter, with findings presented and discussed in Chapters Four and Five.

Chapter 3: Research Methodology

3.1 Overview

Discussed in this chapter are perspectives on philosophical approaches and paradigms that drive major research approaches and the rationale for selection of a particular approach, given the paradigm net of the researcher. Methodological decisions are discussed, along with inherent issues and assumptions associated with each and the justification for the ultimate choice of case study research design. The chapter also details the process of qualitative data collection and analysis, ethical considerations, and limitations of the research methodology.

3.2 Research Questions and Aims

According to Carter and Little (2007, p. 1323) "objectives, research questions, and design shape the choice of methodology, and methodology shapes the objectives, research questions, and design". Central to informing the research question and conducting research for this thesis is my positionality as a constructivist interpretivist researcher. Framing the research question from my epistemological position, the research question is:

What are the salient influences on educator factors that affect the teaching of teamwork in the Australian HE business school context?

Three aims support the objective of answering the research question. These aims are discerned as:

1. identifying factors perceived to afford or constrain teamwork pedagogy in HE

2. exploring the salient issues associated with teaching teamwork skills in the Australian business school context, and;

3. understanding the challenges of implementing teamwork as part of the curriculum through educators' experience in the Australian HE business school context.

The first aim is partially addressed in the global SLR in Chapter Two and further discussed in the findings and discussion in Chapter Four. The second aim is partially addressed in Chapter Two with the Australian SLR article and further discussed in the findings and discussion in Chapter Four. The third aim is addressed in Chapter Five, exploring transaction costs and the paradoxes and tensions encountered by business faculty in a changing academic environment. Importantly, Chapter Four provides in-depth discussion of findings and analysis of the research question and aims

3.3 Methodology Decisions

The following section outlines the 'paradigm net' (Denzin & Lincoln, 2000) of ontological, epistemological, and interpretive frameworks that inform the research decisions and actions in this thesis. All researchers bring their set of beliefs to their research that inform their world view (Creswell, 2007). Researchers position themselves and their research according to a particular paradigm or in some cases, multiple paradigms.

> Paradigms rest upon the most fundamental sets of beliefs that can be enunciated by their proponents. They cannot be justified on any more external, objective, or foundational grounds; if they could, then those grounds would assume the status of the most fundamental beliefs. Ultimately the proponent of any paradigm is forced to the admission that he or she believes what is believed because he or she believes it, however self-referential that may be. (Lincoln & Guba, 2016, p. 59)

It is the responsibility of the researcher to situate themselves in a particular research paradigm that will "locate the researcher in history both guiding and constraining work that will be done in any given study" (Denzin & Lincoln, 1998, p. 24). In order to do so, the researcher should demonstrate awareness of the different research paradigms and be able to deconstruct their beliefs to understand their own world view (Evans, 2013). Having a background in education and educational theories and working and studying in business

schools with management theories, I find myself somewhat of a bricoleur. According to

Denzin and Lincoln (2000, p. 4) an "interpretive bricoleur produces a bricolage-that is a

pieced together set of representations that are fitted to the specifics of a complex situation.

The solution (bricolage), which is the result of the bricoleur's method, is an emergent

construction". The following outlines my position on the selection and justification of social

constructivism, followed by a comparison of alternate world views to demonstrate awareness

of different research paradigms.

3.3.1 Selection of Social Constructivist Paradigm

Decisions about epistemology matter: they should be identified because they

influence one's world view and the practice of research (Creswell, 2014, p. 6). There are

some inherent differences in epistemological, ontological, and axiological assumptions

between paradigms that orient the researcher according to fundamental beliefs about the

nature of knowledge (epistemology) and reality (ontology). Epistemology of the researcher is

reflected in assumptions about how knowledge is "created, acquired and communicated"

(Scotland, 2012, p. 9) to legitimise research. Ontology is a particular way of knowing what is.

It concerns assumptions about the nature of reality. Crotty (1998) conflates ontology with

epistemology, stating "to talk of the construction of meaning is to talk of the construction of

meaningful reality" (p. 10) in an argument suggesting the two are mutually dependent and

often hard to discern. Conceptually, I agree with Crotty (1998) in-so-far as ontologically, I

position myself as a constructivist within this paradigm embracing interpretivist

epistemology to construct an understanding of reality as perceived through interactions with

participants. As such, consideration must be given to the researcher's skills and abilities, the

phenomenon that the researcher is seeking to address, and the research question to be

answered. Thus, this research is situated in a constructivist/interpretivist pedagogical

paradigm, with the dominant discourse being that of Australian HE as the provider of

employability skill learning. The discourse is enacted in Australian Government initiatives, such as the *Employability Skills for the Future Report* and *Skills Framework* (DEST, 2002) and the more recent AQF *Standards* (AQF, 2013) and TEQSA HESF. The challenging discourse is that of factors affecting the teaching and learning of teamwork as an employability skill in HE in Australia.

3.3.2 Justification for Social Constructivist Paradigm Selection

Interpretivist epistemology underpins this research, with the ontological contention that reality is subjective, multiple and socially constructed by its participants (Tuli, 2010), including the researcher. Ontologically, in this research, I acknowledge reality as subjective, and concur with Patton (2015) that this constructionist view of "making sense of the world is valid and worthy of respect" (p. 122). My beliefs are grounded in my experiences and perspectives as a trained teacher and Australian university lecturer. Further, being a white, Western, educated female and feminist, situates me within a particular interpretive community that will affect the research act. I view the world through a particular set of lenses and values, of which I am keenly aware. Entrenched and unconscious mindsets are difficult to eradicate (Kinash, 2006); however, I believe that as I am conscious of the way I perceive and view data, I will be aware of the politics of the lived experience of others who I am researching. Employing a qualitative research approach and design in this study acknowledges a social constructivist worldview of how I understand the world (Creswell, 2014) and pedagogical experiences in HE, allowing for the participants to give voice to the reality of their lived and shared experiences in a natural setting. Qualitative research strategies and research design are discussed next.

3.3.3 Comparison of Paradigms and Research Design Approaches

The debate about the right choice of research approach has lasted many decades (Patton, 2015), fuelled by beliefs that affect the choices of strategies and methods employed

to conduct research. Yin (2018) suggests that "the design is the logical sequence that connects the empirical data to a study's initial research question and ultimately, to its conclusions" (p. 26). How design informs this research is discussed in the following.

A research design entails a philosophical framework (Farquhar, 2012) within which researchers choose to work. The researcher's set of beliefs inform their worldview or the paradigm net that guides their research design and "the specific methods or procedures of research that translate the approach into practice" (Creswell, 2014, p. 5).

Qualitative research strategies have evolved over time, punctuated by what Denzin and Lincoln (2000) refer to as the seven moments of qualitative research which offer "an embarrassment of choices" (p. 18) of research strategies, methods of analysis and paradigms from which understanding can be drawn. Research strategies can include, but are not limited to, case studies, grounded theory, ethnography, phenomenology, narrative and action research (Creswell, 1998; Denzin & Lincoln, 2000; Farquhar, 2012).

The paradigm of qualitative research design arose post industrialisation to investigate social phenomena, as an alternative to positivism. Philosophically, Kant (1724–1804) and Dilthey (1833–1911) construed the positivist position as having limitations based on its stance on reality (Collis & Hussey, 2014) and moved towards the development of principles of idealism. The alternative paradigm has been labelled as interpretivism, underpinned by the belief that the social world consists of multiple realities by which humans understand or interpret phenomena. However, qualitative research can encompass a bricolage of methods and interpretive practices (Denzin & Lincoln, 1998). The ontological position of constructivism is that of relativism: encompassing assumptions about constructed and multiple realities, and often involves the development of theory over the course of the study. The epistemology of the interpretivist paradigm focuses on subjective interaction with real-world phenomena (Scotland, 2012). Axiologically, constructivist interpretivist researchers

acknowledge that research is value-laden: on the part of the researcher, the researched and the reader. Hence, the interpretivist research paradigm, unlike that of the quantitative paradigm, does speak to values, with the researcher acknowledging "values and biases, as well as the value nature of the information gathered" (Creswell, 1994, p. 6). The language of the constructivist interpretivist paradigm is often reported in the first-person writing style. This reflects reality as shaped by interactions, as they are interpreted and constructed through language, to offer insights into the understanding of social phenomena.

The strengths of qualitative research are embedded in understanding the processes of a phenomenon (Maxwell, 2008), where the researcher can study dynamic processes in the data based on an understanding of patterns arising from participant descriptions (Johnson & Onwuegbuzie, 2004; Patton, 2015). These strengths are particularly relevant to my exploratory research of educator perspectives of factors affording or constraining teamwork pedagogy in HE business disciplines, as the lived experience of participants is interpreted through their words in an inductive process (Creswell, 1998), reflecting thick, rich description to endow the research with trustworthiness. Creswell (1998) argued therefore, that there is no need to compare paradigm assumptions in the axiomatic format, perceiving qualitative research to be legitimate and making of comparisons unnecessary to the respectability of a research process. However, differences in the researcher's paradigmatic stance are reflected in the methodology and methods used (Scotland, 2012); hence, a comparison is considered necessary in a doctoral thesis to demonstrate cognition of the different paradigms that exist. Table 3.1 compares issues broadly associated with the positivist/post-positivist and interpretivist/constructivist paradigms based on paradigm issues outlined by Lincoln & Guba (2000), to demonstrate the differences between the major paradigms and informing how I frame the methodological discussion from the constructivist/interpretivist paradigmatic position going forward.

Table 3.1

Comparison of Positivist/Post-positivist and Interpretivist/Constructivist Paradigms

Issue	Positivism/Post-positivism	Interpretivism/Constructivist
Ontology What is the nature of reality?	Positivism: I realism—'real' reality but apprehendable. Post-positivism: Critical realism–'real' reality but only imperfectly and probabilistically apprehendable.	Relativism: Local and specific constructed realities.
Epistemology What is the relationship between the enquirer and the known?	Positivism: Dualist/objectivist, findings true. Post-positivism: Modified dualist/objectivist, critical tradition/community; findings probably true.	Subjectivist—created findings.
Axiology What is the role of values?	Values excluded—objective. Research should be value free.	Values included—subjective. Research is value bound.
Methodology What are the methods used in the process?	Positivism: Experimental/manipulative, verification of hypotheses, chiefly quantitative methods. Post-positivism: Modified experimental/manipulative, critical multiplism, falsification of hypotheses, may include qualitative methods.	Hermeneutical/dialectical.
Nature of knowledge	Positivism: Verified hypotheses established as facts or laws. Post-positivism: Non-falsified hypotheses that are probably facts or laws.	Individual reconstructions coalescing around consensus.
Quality criteria	Conventional benchmarks of rigour: internal/external validity, reliability and objectivity.	Trustworthiness, authenticity.
Form of theory	Logical—deductive, grounded.	Substantive—formal.
Type of narrative	Scientific report.	Interpretive.

3.4 Qualitative Research Design and Methods

A qualitative research design was implemented focusing on data collection for a case study with Australian university business educators. First, the case selection and interview protocols were established and ethics approval for data collection sought and obtained from the Murdoch University Human Research Ethics Committee (HREC) and approved in September 2016 (#2016/146). Data collection by interviews occurred between October and November 2016, with qualitative data analysis commenced after each interview. Interpretation of data began after all interviews were completed. Figure 3.1 outlines the phases incorporated in the qualitative research design.

Figure 3.1

Phases of Qualitative Design

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┌──────────────┐     ┌──────────────┐     ┌──────────────┐     ┌──────────────┐
│ Case selection│     │  Qualitative │     │  Qualitative │     │Interpretation│
│ & interview   │ ──▶ │     data     │ ──▶ │ data analysis│ ──▶ │ of qualitative│
│   protocol    │     │  collection  │     │              │     │    results   │
└──────────────┘     └──────────────┘     └──────────────┘     └──────────────┘
```
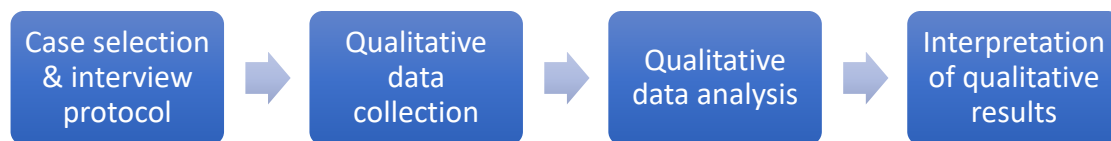
3.4.1 Choosing a Strategy of Inquiry

Deciding on a qualitative research approach requires further selection of an appropriate strategy of inquiry. There have been many strategies of inquiry articulated over the past four decades. Identification of qualitative research strategies has been attempted with little apparent consensus on one appropriate classification system. Patton (2015) identifies 12 strategies of inquiry, Wolcott (2001) identifies 19 research strategies, and Tesch (1990) proposes 26. Creswell (2007) offers a choice among five qualitative research traditions: narrative, phenomenology, ethnography, grounded theory, and case study, and reports that he focused on these five traditions as representative of popular approaches frequently used in scholarly work (Creswell, 1998). Each of Creswell's five traditions is briefly outlined below

from the perspective of various qualitative research authors, beginning with selection and justification for case study as the chosen approach for this study.

3.4.2 Selection of Qualitative Case Study Approach

Case study research is only one of many approaches to qualitative research, as noted above. A qualitative case study research design was selected for this research because it is characterised as particularistic, descriptive, and heuristic, allowing for interpretation and the development of insights into "practical problems arising from everyday practice" (Merriam, 1998, p. 29). As an educator, I recognised a problem with the way in which teamwork was being taught, practised and assessed and felt puzzled by the lack of direction that educators were faced with in implementing teamwork pedagogy. I wanted to explore the problem through the eyes of others to make and interpret connections through possible patterns and themes arising in their perceptions. In order to do so, given my underpinning philosophical assumptions, I believed that interviewing other business educators with experience of teamwork in a case study could best provide a comparison of perceptions of the issue.

The case study approach is used in various fields of study, yet there is little consensus on the definition of a research case study. Three seminal authors dominate the field of case study research: Robert K. Yin, Sharan Merriam, and Robert Stake. There are similarities in their approaches; however, divergence is noted in the epistemic stance of these methodologists. Stake and Merriam align more tightly with the constructivist paradigm and Yin more closely with the positivistic paradigm (Yazan, 2015). Yin (2018) defines the scope of a case study as "an empirical method that investigates a contemporary phenomenon (the 'case') in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident" (p. 15), and points out that there may be other factors such as methodological characteristics that may become relevant, for example, "many more variables of interest than data points" (p. 15), allowing for the

integration of qualitative and quantitative traditions. Merriam (1998) differentiates case studies from other forms of qualitative research in a generalist definitional statement, describing "intensive descriptions of a single unit or bounded system such as an individual, program, event, group, intervention or community" (p. 19). However, Merriam and Stake diverge from Yin in that they both advocate for qualitative case studies. These divergent approaches reflect one of the strengths of case study research: it can involve quantitative or qualitative data or a mix of both (Farquhar, 2012). As such, data collection activity may include surveys, experiments, documents and archival materials, diaries, interviews, focus groups, and participant observations (Eisenhardt, 1989; Farquhar, 2012). Criticism of the case study approach has centred on lack of rigour and generalisability although, as in the present study, inductive interpretivist approaches to qualitative research do not seek to generalise findings to a population (Creswell, 1998; Patton, 2015; Scotland, 2012).

3.4.3 Justification for Case Study Selection

As I align myself with the representation of the case researcher as an interpreter (Merriam, 1998; Stake, 1995), the case study approach was considered appropriate for my qualitative, exploratory study, with the goal that "specific issues and problems of practice can be explained" (Merriam, 1998, p. 34). In this research, the case explores factors affecting the teaching of teamwork in HE as perceived by educators, aligning with the underpinning exploratory conceptualisation of the study. A single holistic case study (Creswell et al., 2007; Merriam, 1998; Stake, 1995) of business educators within the bounded system of HE was selected to illuminate particular issues affecting the implementation of teamwork pedagogy in business disciplines in the Australian university context. What this means in the context of my research is that consistent with my constructivist interpretivist epistemology, my choice of methodology for analysing the interview data is the qualitative case study. As noted in Figure 3.2 the case study design contextualises the focus and unit of analysis, being business

school educators in Western Australia teaching teamwork, in order to achieve a depth of understanding of the research phenomenon.

Figure 3.2

Single Case Design

CONTEXT:
Higher Education Business Schools in Western Australia

CASE ORGANISATION:
Holistic unit of analysis

Business school educators in Western Australia teaching teamwork
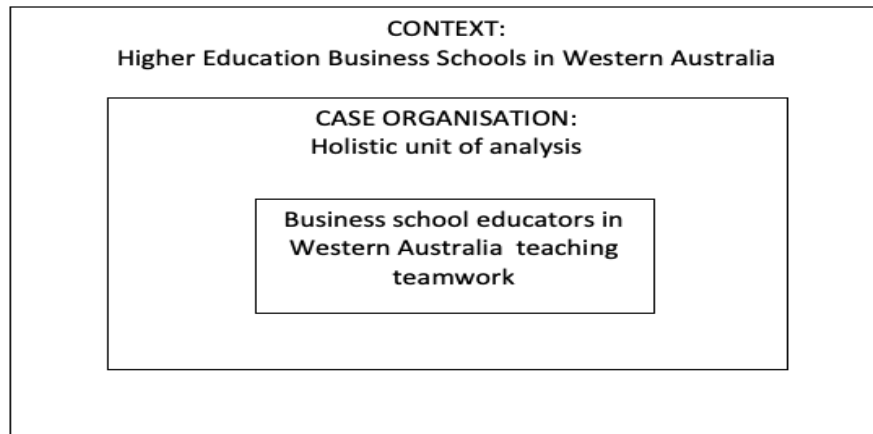
3.4.4 Alternate Qualitative Strategies of Inquiry Considered

Although case study was selected as the strategy of inquiry for my research, other strategies of inquiry commonly used in qualitative research were also initially reviewed to identify the possible potential and limits of each. The following outlines the potential of each and explains the rationale for discounting the strategy

Narrative. The narrative approach is said to be derived from the humanities (Creswell, 2014). The focus is on stories (data), examining human lives in a narrative (analysis) that has a well-constructed beginning, middle and end. Patton (2015) distinguishes between story as "what happened and narrative as how the telling of what happened is structured and scripted" (p. 128). The narrative approach makes comparisons, with the stories of one or two individuals in a series of chronologically connected accounts of events to report on the meaning of individual experiences (Creswell et al., 2007). Data collection activity generally includes, for example, documents and archival materials, open-ended interviews, subject journaling, and participant observations (Creswell, 2007). Although the narrative approach offers insight into social and cultural phenomena, it was not considered appropriate for this

study as the focus is on providing insight into an issue rather than on the comparison of stories of individuals.

Phenomenology. Deriving from philosophy and psychology, phenomenology has been described as "the study of the nature of everyday or significant experiences" (Saldaña, 2016, p. 302). However, Schwandt (2001) suggests that a simple characterisation of phenomenology resists such a description of a "complex, multifaceted philosophy" (p. 191) as the field of phenomenology is not unified. There are differences in approaches to phenomenology, although there is common ground across approaches in the rejection of scientific realism. This common ground has been the basis of criticism of phenomenology concerning a lack of rigour and being more associated with description than analysis (Denscombe, 2014). Alfred Schutz of the existential school of phenomenological thought influenced social constructionist views. Such views aim to "identify and describe the subjective experience of participants. It is a matter of studying the everyday experience from the point of view of the subject, and it shuns critical evaluation of forms of social life" (Schwandt, 2001, p. 192). Phenomenology is an umbrella philosophy that is relevant to this study in its latter contemporary form. However, language is important and positions the researcher within a particular research paradigm. The use of the term 'subject' in phenomenology implies a more positivist research approach in that the subject of the study can be studied objectively; whereas, the use of the term 'participant' can position the researcher in the constructivist paradigm, implying a shared responsibility in the research process. This positivistic leaning of language and absence of phenomenological approaches adopted in the SLR meant it was not adopted for this study.

Ethnography. The ethnographical approach derives from anthropology and sociology (Creswell, 2014). Originally used by anthropologists to study meanings, language and behaviours of cultural groups through the early 20[th] century, it was later adapted by

sociologists in the 1920s to study cultural groups within the United States (Creswell, 1998). Data collection typically relies on participant observation, interviews, artefacts and documents (Creswell, 2007). Researchers generally immerse themselves in the culture under study and conduct extensive fieldwork (Patton, 2015). More broadly, ethnography has been applied to the study of organisational cultures to effect change. Overall, the distinct purpose of an ethnographical approach is to interpret and apply findings from a cultural perspective (Patton, 2015). The ethnographic approach was not considered an appropriate approach for this study, as culture was not seen to be the most important construct in the current study. Further, there were no specific accounts of ethnography used as an approach in SLRs (Riebe et al., 2016; 2017) conducted for this study.

Grounded Theory. Like the field of phenomenology, grounded theory is not a "single unified methodology, tightly defined and clearly specified" (Dey, 2004, p. 80). Originating in sociology, traditional (Glaserian) grounded theory was considered ground-breaking in that it represented a revolt against quantitative ideologies pervasive in the social sciences at the time (Dunne, 2011). Glaserian grounded theory elucidates Glaser and Strauss' epistemological stance that "assumes reality can be discovered, explored and understood" (Bryant & Charmaz, 2007, p. 35) suggesting reality is knowable, anchoring their beliefs in positivist epistemology. The grounded theory approach was initially considered as an appropriate methodology for this study, having been utilised in other studies on HE teamwork (e.g., Sashittal et al., 2011) to analyse data about educator experiences with teamwork in business schools. However, a review of the highly specialised and structured method resulted in deliberation over employing this approach, and instead using the constant comparison technique and thematic analysis within a case study design. The next section explains data generation and collection strategies in the context of this qualitative case study research.

3.5 Data Collection

According to Patton (2015), qualitative data collection can be framed as either a single point in time study (one interview with participants) or a longitudinal study (multiple interviews with participants). In this study, interview data were collected via one interview per participant. A total of 30 interviews were conducted. Primary data collection sources for the case study were individual educators. However, the unit of analysis for the case is the collective (Yin, 2018): that is, the responses of the group of educators are considered holistically. The case approach is based on the premise that a single finding can be replicated progressively across data sources to provide "compelling support for the initial set of propositions" (Yin, 2003, p. 47). Secondary sources of data included field notes, university websites and relevant documents, for example, samples of work such as teamwork rubrics. Figure 3.3 outlines the data collection process for this study.

Figure 3.3

Data Collection Process

| Interviews arranged Oct 2016 | → | Interviews conducted Oct-Nov 2016 | → | Field notes compiled and relevant documents collected | → | Interviews transcribed Oct -Dec 2016 | → | Transcriptions emailed to participants for member checking Dec 2016 | → | Validation: Return emails received from participants confirming accuracy or changes |
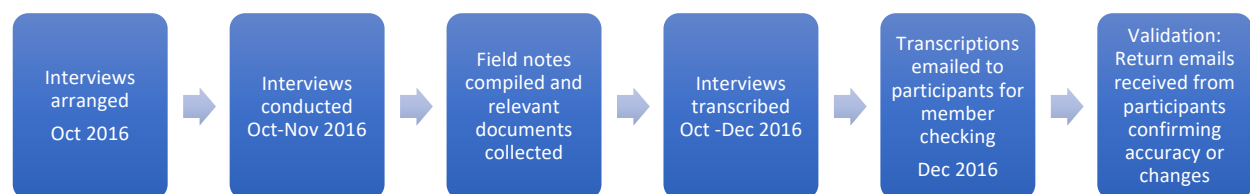
3.5.1 Qualitative Interviewing as a Data Collection Method

Interviewing is an age-old technique stemming from the ancient Greeks seeking knowledge through dialogue with others. However, the term interview is relatively new in its conception. Paraphrasing Kvale (2007), a research interview is described as a site at which knowledge is constructed between the interviewer and the interviewee, an interchange of ideas about a common phenomenon. In generating data for qualitative research, Charmaz (2014) refers to interviewing as "a gently guided, one-sided conversation that explores

research participants' perspectives on their personal experience with the research topic" (p. 56). As pointed out by Charmaz (2014), although on the surface the interchange may appear conversational, it is more of a one-sided event with the interviewer maintaining some form of control (Rapley, 2004). Data collection through interviewing is considered to be a common method in case study research (Farquhar, 2012). Corbin and Strauss (2008) refer to various forms of interviewing techniques and indicate their preference for unstructured interviews that produce data-dense responses unfettered by "any predetermined set of questions" (p. 27). However, not all research lends itself to such an open agenda. In this study, semi-structured interview questions were prepared with the position that these be used to guide the flow of the interview, allowing for changes in the question sequence (Kvale, 2007) and flexibility "to follow leads that emerge" (Charmaz, 2014, p. 250) through follow up questions.

There are strengths and weaknesses involved in using interview techniques. Qualitative interviews can produce a large amount of data. A strength of the well-conducted interview, especially where trust and rapport are established, or there is a pre-existing relationship, is that one can uncover perceptions, values and beliefs through interviewing that are not readily obtainable through other methods. Conversely, there is the contentious issue of interviewer bias: the interviewer must be cognisant of their own perceptions, values and beliefs so as not to affect the direction of the interview and the participant's responses (Bolderston, 2012). This can include those non-verbal cues displayed by the interviewer. Charmaz (2014) raises this issue as one in which the interviewer "reveals signs of being disturbed about or uninterested in the content of the interview" (p. 93), suggesting that tacit construction and negotiation of meanings may develop between the researcher and participant and influence the interview outcome. Another challenge for the interviewer is to consider what interviewees say or do not say they do (Sutton & Austin, 2015), suggesting care with

interpretation as the interviewer is not always privy to the observation of participants lived experience with particular phenomena.

Engaging interviewees is an important aspect of the interview. In this study the design of the interview questions was broad and general in scope, to allow study participants to "construct the meaning of a situation, typically formed in discussions or interactions with other persons" (Creswell, 2014, p. 8). See Appendix C for interview questions.

3.5.2 Recruitment of Participants

Purposeful sampling was undertaken with business educators across the four public West Australian universities who were either known to me or recommended by my supervisors or others with whom I worked. The rationale for purposeful sampling as described by Patton (2015) is to select cases for study because they are "information rich and illuminative, that is, they offer useful manifestations of the phenomenon of interest; sampling is aimed at insight about the phenomenon, not generalization from a sample to a population" (p. 46).

Criteria were developed for recruiting interview participants to this study focused on educators employed at an Australian university and have taught teamwork in a business discipline to procure information-rich and illuminative responses. Sensitising attributes considered relevant for the participant case comparison included gender, subject discipline, level of appointment, teaching experience, industry experience, any formal teaching qualifications and highest degree obtained. The rationale for these criteria was to elicit commentary only from business discipline educators with particular expertise and experience with teamwork pedagogy. While this rationale may be considered a limitation, it was necessary in order to maintain focus on the research question.

In this study, a sample size of 30 was decided upon with the assistance of my supervisors and in line with guidelines apparent in the literature (see Mason, 2010). As an

early career researcher, I determined that I would conduct the prescribed number of interviews. As the interviews progressed, I recognised that although each interviewee offered something slightly different in their responses, I could discern repetition. From an interpretivist constructivist viewpoint, I cannot say that saturation was reached in terms of no new data emerging; however, to a large extent, I could interpret sameness of themes arising that presented optimal data for analysis of the research question to "build an in-depth picture of the case" (Creswell, 1998, p. 123).

3.5.3 Profile of Interview Participants

Table 3.2 provides an overview of interviewee profiles by gender, discipline, institution and number of years of HE teaching. Business schools are made up of a range of disciplines. The 30 participants in this study were drawn from Management, Marketing, Accounting, Finance, Economics and Criminology disciplines, with the majority (17/30 or 57%) being from the Management discipline. Of the 30 business school staff interviewed, 67% held a PhD as their highest qualification, and 40% of participants also held a teaching qualification, being a Bachelor of Education, Diploma of Education, Graduate Certificate in Tertiary Teaching or Certificate IV in Training and Assessment. There were 19 females (63%) and 11 (37%) males interviewed for this study, with 87% of participants working full time.

Table 3.2

Profile of Interview Participants

Interview ID	Gender	Discipline	Institution	Years teaching in HE
1	F	Management	1	8.5
2	F	Management	1	16
3	F	Management	1	8
4	F	Management	1	22
5	M	Management	1	17
6	F	Management	1	23
7	M	Management	1	16
8	M	Management	2	17
9	F	Management	2	14
10	F	Management	2	10
11	F	Management	2	19
12	F	Management	1	13
13	F	Criminology	1	11
14	M	Management	1	8
15	F	Criminology	1	16
16	M	Criminology	1	12
17	M	Marketing	1	25
18	M	Finance	2	5
19	M	Management	1	4
20	F	Management	1	8
21	M	Accounting	3	35
22	F	Marketing	2	20+
23	F	Marketing	2	12
24	F	Criminology	1	2
25	F	Finance	1	13
26	F	Economics	1	28
27	F	Marketing	1	5
28	M	Management	1	16
29	M	Management	2	13
30	F	Marketing	4	8

Each potential interviewee was contacted by email to establish interest in my thesis research, and to arrange a date, time and place to meet for the face-to-face interview. As a way to manage power distance issues, interviews were arranged and conducted in a place considered by the participant to be safe and convenient, thereby helping to "reduce the researcher-participant power imbalance" (Clarke, 2006, p. 22). Ninety per cent of the participants chose to be interviewed in their offices, with the other 10% of participants choosing alternative venues. All were able to select a date and time of their choosing within the research timeframe. Having received agreement to a meeting for the interview with 30 potential participants, the interviews were conducted between 27 October 2016 and 30 November 2016.

A series of semi-structured interview questions (see Appendix C) were posed to participants, beginning with demographic information collection in order to gain an understanding of the participant's background, before moving on to questions to put the participant at ease, where they were asked to explain in their own words their understanding of teamwork. Questions were constructed as open-ended and typically included introductory phrases such as 'tell me about how you …' and 'what do you believe …'. At the end of the semi-structured questions for the interview, I additionally asked, 'would you like to provide any other comments?'. The average length of time across all interviews was 22 minutes, although the range was between 15 and 38 minutes.

Interview content was transcribed from recordings using a naturalised transcription method, where written features were given primacy over oral utterings and exhibit more formal grammatical features of language such as periods and commas (Davidson, 2009), and utterings such as 'ums' and 'ahs' are excluded. All interview recordings were listened to by the researcher immediately after the interview had taken place to begin the inductive process. Twenty-one interviews were transcribed by the researcher. However, due to time constraints,

nine interviews were transcribed using a transcription service to meet project timelines. The researcher listened again to those interviews where the transcription was completed by the transcription service to ensure these were reflective of the process used by the researcher: that is, they accurately reflected the participants' words and adhered to the naturalised transcription process.

In this study, the transcribed interviews were individually emailed to the participant in December 2016, with a request to review the transcription and confirm by return email that the written version reflected the interview discussion. Twenty-five of the 30 participants (83%) responded to the email request. Of the 25 responses, five participants requested minor adjustments, such as acronyms incorrectly transcribed from the audio or where words were unclear in the audio. The amended copy was returned to the participant to verify. The emails with the responding participants provide an audit trail (Creswell & Miller, 2000) underpinning the trustworthiness, and hence the internal validity, of the research.

3.6 Data Analysis

Data from the interviews were analysed using manual exploratory coding as soon as possible after interviews were conducted and transcribed using an inductive, bottom-up approach. Interpretivist constructivist data analysis is not a linear process; rather, it requires the researcher to go back and forth through the data. Codes are tested and compared as data are gathered and "involves starting with the data, constructing tentative ideas about the data, and then examining these ideas through further empirical inquiry" (Charmaz, 2006, p. 102).

The constant comparison method of data analysis used in this study is a common qualitative method for analysing cases, interview transcriptions, field notes and observations through inductive coding (Schwandt, 2001). Both Schwandt (2001) and Patton (2015) agree the method calls for constantly reviewing and comparing data to determine relevance and accuracy of categories: while comparing categories, the researcher looks for similarities and

differences. Coding may proceed on a line-by-line basis and/or by whole passages, as "not every datum needs extensive scrutiny" (Saldaña, 2015, p. 109). A general view of the data analysis process is represented in Figure 3.4.

Figure 3.4

Interpretivist Constructivist Data Analysis Process
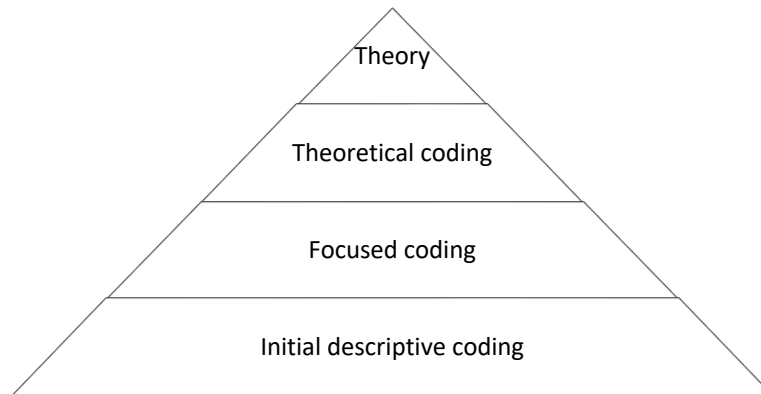
3.6.1 NVIVO Software in Data Analysis

In this study, the transcribed interview data, including demographic attributes, were imported into NVIVO software (QSR International). Individual educator responses to each question were imported as internal sources from original Word document transcriptions. Responses to questions were collated and entered as nodes and, within each node, initial coding of responses was recorded. An example of internal sources (names removed for confidentiality purposes and interview ID provided for sample response) recorded in NVivo is provided in Figure 3.5.

Figure 3.5

NVivo Internal Data Sources

		Nodes	Referen...	Created On	Created By	Modified On
_Teamwork interview		75	209	20/12/16, 8:49 am	LR	5/3/17, 12:29 pm
_Teamwork interview		81	258	31/12/16, 7:17 am	LR	31/12/16, 7:17 am
shta_Teamwork inter...		81	182	5/1/17, 6:56 am	LR	5/1/17, 6:56 am
_Teamwork Interview		82	182	20/12/16, 8:49 am	LR	20/12/16, 8:49 am
_Teamwork interview		79	193	31/12/16, 7:22 am	LR	31/12/16, 7:22 am
l_Teamwork interview...		68	125	20/12/16, 8:50 am	LR	20/12/16, 8:50 am
le_Teamwork interview		82	183	20/12/16, 8:50 am	LR	20/12/16, 8:50 am
a_Teamwork Interview		62	89	20/12/16, 8:50 am	LR	20/12/16, 8:50 am
l_Teamwork Interview		70	127	20/12/16, 8:50 am	LR	5/3/17, 12:55 pm
se_Teamwork Interview		65	107	20/12/16, 8:50 am	LR	20/12/16, 8:50 am
_Teamwork Interview		65	104	20/12/16, 8:50 am	LR	20/12/16, 8:50 am
e_Teamwork interview		68	127	20/12/16, 8:50 am	LR	20/12/16, 8:50 am
h_Teamwork Interview		66	132	20/12/16, 8:50 am	LR	20/12/16, 8:50 am
s_Teamwork Interview		76	348	20/12/16, 8:50 am	LR	3/3/17, 9:36 am
e_Teamwork Interview		67	147	20/12/16, 8:51 am	LR	20/12/16, 8:51 am
_Teamwork Interview		64	155	20/12/16, 8:51 am	LR	20/12/16, 8:51 am
aret_Teamwork inter...		50	84	5/1/17, 6:56 am	LR	3/3/17, 9:42 am

Teamwork Interview

I've had. I do think that the way it is taught will have an impact on how students perceive it.

LR: Tell me about any challenges you have experienced with teaching teamwork.

P14: The challenges to teaching teamwork are probably around battling misconceptions at the beginning of the process e.g. this is going to be bad; I know this person is a bad worker or from this particular culture so actually challenging that and getting people to look beyond that. There's also the difficulty of when students don't attend, that's one of the biggest factors. If they are not there for all of those formative feedback touch points, or to learn about teamwork, group norms, establish what the norms are, then its doomed from the beginning.

LR: How have/could you address these challenges?

P14: It's difficult. There's a number of different things I've done. If the students are not there, then I email the students and say look, this is a really important week, you've been assigned or chosen this group the week before and the norms set the boundaries and expectations for the next few weeks and you weren't there for the most important meeting so it is really important for you to touch base with your group and follow up. Apart from that and following up the next week to see whether the absent student has acted upon that, there isn't much else I can do.

The benefits of using software in data analysis are numerous. Using NViVo software enabled me to store large amounts of data that could be accessed for simultaneous display. Annotations, memos and the ability to highlight particular text of interest (Bazeley, 2010) were other useful attributes of data analysis software that I was able to employ to compare and contrast coding across participant responses in the analytic process. However, Corbin and Strauss (2008) are mindful of the use of computer software. Though not advocating against the use of data analysis software, they caution researchers not to fall into the trap of labelling data without reflective thinking through memo writing, referring to such thinking as "the heart and soul of qualitative analysis" and "the engine that drives the process to bring the

research into the analytic process" (Corbin & Strauss, 2008, p. 163). Elements of reflexivity as applied in the present study are discussed later in this chapter.

3.6.2 Qualitative Data Analysis Coding Process

An important data analysis process was to constantly compare codes across the data, whether question by question, or participant by participant in the case of interviews, to enrich the description of the analysis (Patton, 2015). An overview of the coding process enacted in the present study is discussed next.

Initial Coding. Saldaña (2013) describes a code in qualitative research as "most often a word or short phrase that symbolically assigns a summative, salient, essence capturing, and/or evocative attribute for a portion of language-based or visual data" (p. 3). In the initial coding phase of the data analysis process (as shown in Figure 3.6), words, lines and incidents were studied for their analytic importance via line-by-line analysis. In this initial descriptive coding phase, I used in vivo codes, mainly using the direct language of the participants to compare recurring topics. Hundreds of codes were generated. Using the constant comparison method, data were compared for similarities and differences and 234 codes were identified for further analysis. During the initial coding phase, further focused coding and constant comparison across codes revealed categories emerging in each question.

Focused Coding. Focused coding is the second coding phase, although it commences concomitantly with initial open coding. According to Charmaz (2000), focused coding "is more directed and typically more conceptual than line by line coding" (p. 516). Comparison of newly constructed codes across participants' data is enabled during this process (Saldaña, 2016) to refine existing codes, or rename codes (Carmichael & Cunningham, 2017) and create categories. Focused coding requires a higher level of abstraction in order to move away from the merely descriptive in vivo coding to condense and more clearly highlight that which is important for the emerging analysis (Charmaz, 2014). I found this phase particularly

challenging, questioning whether I was making the right decisions and staying true to the participants' voices. I had to learn to trust that I, as researcher, was part of the analytic process. In acknowledging my paradigm net, I was able to move forward and synthesise meanings from the data. Although not a linear process, focused coding using gerunds to activate the codes resulted in further analysis in the service of framing categories.

Overall, 44 categories were discerned from all of the coding of the responses to the interview questions. There is no hard and fast rule for the number of categories arising from focused coding, although Creswell (2007) suggests around 30 categories, reducing to five or six categories that inform major themes. From this point, I needed to conceptualise a theoretical perspective from the meaning emerging from the data. This second phase concluded, I contemplated theorising in practice and reassessing the unfolding analytic story to facilitate theoretical development.

Theoretical Coding. Theoretical coding is an integrative process, allowing for the conceptualisation of how focused codes are related to enable coherence of an emerging "analytic story" (Charmaz, 2006, p. 63). Not all codes fit with the development of understanding the phenomenon of factors affecting the teaching of teamwork in HE. It is difficult to manage the data and let go of codes that are not necessarily central to the main research. To integrate a core category or theme, I had to return to the data and link salient properties of categories to build in density and precision (Corbin & Strauss, 2008). Saldaña's (2016) streamlined codes-to-theory model for qualitative inquiry seems to represent a linear progression of the coding process moving from the particular of coding through to categorising and developing more abstract themes/concepts to reach the nuclei of general assertions or theory. This model is represented in adapted form in Figure 3.6. However, as Saldaña (2013) notes, "the act of reaching theory is much more complex and messy than illustrated" (p. 12). In practice, I found I repeatedly returned to the data to procure

further understanding of the links across codes and categories to inform the development of abstract concepts from the data.

Figure 3.6

Streamlined Codes-to-Theory Model for Qualitative Inquiry
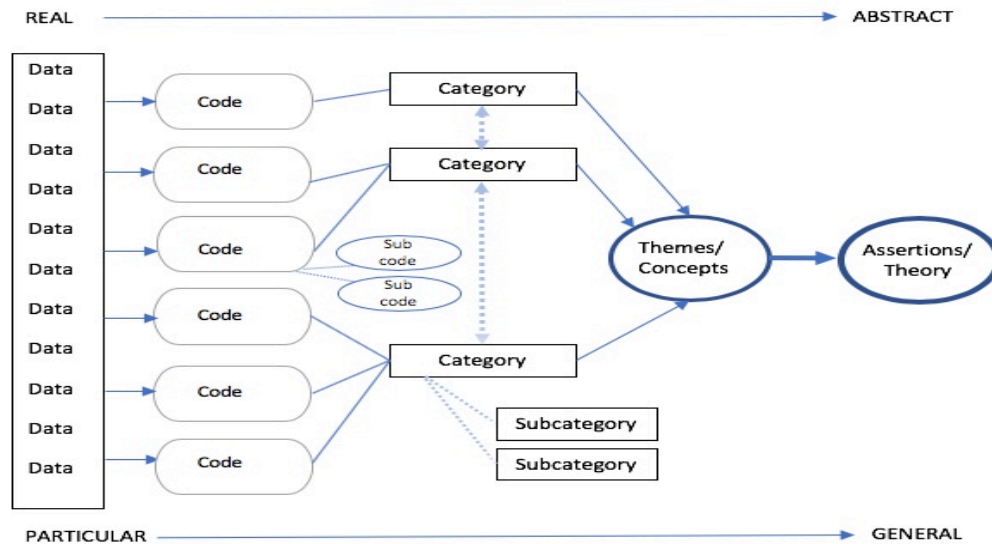
Note: Streamlined codes-to-theory model adapted from *The Coding Manual for Qualitative Researchers* (3rd Edition, p. 14) by J. Saldaña, 2016*.,* Sage Publications. Copyright 2016 by Sage Publications. Adapted with permission.

3.7 Validity in Qualitative Research

Validity procedures in qualitative constructivist research vary quite distinctly from those aligned with quantitative research paradigms. The qualitative constructivist or interpretive research position seeks internal validity through trustworthiness and credibility.

Interpretive methodologists (Merriam, 1998; Stake, 1995) have argued for alternative renderings of the positivist terminology of external validity used to clarify the generalisability of qualitative research. Rather, trustworthiness is established in qualitative research as developed through the criteria of credibility, transferability, dependability and confirmability. Each criterion is discussed in relation to this research.

Credibility. Credibility has been noted as the "equivalent of internal validity in quantitative research" (Korstjens & Moser, 2018, p. 121). In order to develop credibility, several strategies were used in this thesis. These included prolonged engagement in the field of teamwork pedagogy as an insider practitioner researcher, and as an outsider researcher observing relevant details related to teamwork pedagogy through participant interviews. Further, triangulation of data across business schools from multiple sources including educator interviews, information on teamwork compiled from university websites and field notes and investigator triangulation whereby supervisors were engaged with coding, analysis and interpretation decisions. Lincoln and Guba (2000) describe shifting the validity procedure to the participants in the study through the 'member checking' strategy. Member checking by participants in this study included repeating the message back to the interview participant to confirm the interviewer's interpretation (Kvale, 2007) and having participants view the transcribed data and comment upon accuracy, which adds credibility to the qualitative research through the lens of the participant (Creswell & Miller, 2000). In the present study, transcribed interviews were returned to the participants for comments upon accuracy with 25/30 responding, all in the affirmative. Further, throughout the thesis, categories have been proposed and defined with transparency of codes and categories provided in Appendix D. Credibility is further instituted through the process of the passage of work through the researcher's university ethics committee and, in the publication of journal articles in this thesis, establishing trustworthiness of research findings.

Transferability. The notion of transferability is offered by Lincoln and Guba (2000) as an alternative to generalisability, or external validity. Stake (1995) emphasised the difference between the scientific cause-effect relationship approach to generalisability with that of naturalistic generalisation of thick description, experiential understanding, and multiple realities. Transferability of interpretivist research is established in a thick description of

context and detail of data sources such that the study relies on actor and reader experience to endow further the research with trustworthiness (Farquhar, 2012).

The goal of this case study research is to understand factors that affect the teaching of teamwork in HE business schools from the perspective of educators. The researcher needs to have a comprehensive understanding of the activities being studied to capture and analyse patterns and theories generated in a particular environment (Collis & Hussey, 2014). In this study, patterns and theories were interpreted from both an emic and etic perspective. That is, as a HE business educator practitioner engaged with teaching teamwork, I have an insider understanding of the HE business school environment. However, I also employ an outsider perspective to interpret patterns arising throughout the research process by engaging in thick rich descriptions of context, behaviours and experiences, providing both insider and outsider perspectives. This strategy operationalises transferability, allowing for the reader to make decisions through vicarious and/or shared experiences such that information from findings could be transferred to other similar settings (Creswell, 1998).

Dependability and Confirmability. It is important for the researcher to describe the planned research design and/or any changes that occurred in design, collection and analysis of data, to defend dependability of the study (Farquhar, 2012). In this study, the research path is transparently described including research design, ethical considerations and detailed descriptions of data collection and analysis procedures. Confirmability refers to whether the research process has been fully described, and findings are aligned with the data (Collis & Hussey, 2014). Development and reporting of findings aligned with the data are further discussed in Chapters Four and Five in this thesis. Chapter Four aligns findings from the analysis of data collected from interview participants emerging from interpretive coding and theming connecting to similar or alternative views in the literature. Chapter Five connects the

research process through insights from the perspective of the paradox lens and findings emerging from the data.

3.8 Reflexivity: Memos/Field Notes

What is reflexivity?

> The researcher's scrutiny of the research experience, decisions and interpretations in ways that bring him or her into the process. Reflexivity includes examining how the researcher's interests, positions and assumptions influenced his or her inquiry. A reflexive stance informs how the researcher conducts his or her research, relates to the research participants and represents them in written reports. (Charmaz, 2014, p. 344)

Memoing. Throughout the coding and theming process, interpretation around the general context of the challenges of teaching and learning teamwork in HE began to emerge. Reflection and initial interpretations of emergent patterns during the coding process were written up as analytic memos. While initially in the informal language of personal use, I later adopted a more structured approach to memo writing. For example, at the interview stage, I recorded my observations of the interaction with the participant straight after each interview had taken place. These memos detailed my relationship with participants, my thoughts about their approach to the interview (i.e., how my a priori knowledge and epistemological stance affected my interpretations of their responses), the participant's and my own temperament and emotions on the day, along with interesting points raised and lessons learned. Later memos became more analytical. As each question was coded and categorised, I developed a memo to record my reflections on patterns emerging through repetition. Some patterns were quantifiable, with many educators referring to a specific reference point that overtly or covertly was interpreted to represent their position on the question. I was also keenly aware of my own positionality regarding how I viewed their responses, based on my own experiences with teaching teamwork in the HE context. When a participant raised a view

contrary to others (or my own), I saw it as an opportunity to reflect critically on my assumptions and to recognise the extent to which my "thoughts, actions and decisions" (Saldaña, 2013, p. 42) were influencing my research. Using reflexivity enabled me to challenge myself on a continuous basis and, though time-consuming, was a valuable tool in the methodological process.

Recording Field Notes and Memos. Field notes and memoing are common ways to capture thoughts, hunches, or brain dumps (Saldaña, 2016) and are defined by Corbin and Strauss as "written records of analysis" (2008, p. 117). Charmaz (2014) points to memo writing as "the pivotal intermediate step between data collection and writing drafts of papers" (p. 162). The purpose of writing notes or memos is to be able to capture thoughts throughout the analytic process. Thornberg and Charmaz (2014) refer to it as developing an "intellectual workplace for the researcher" (p. 3); thus, the important point is recording ideas for further scrutiny and exploration in a manageable way to stimulate further theorising. Interpretation and integration of researcher notes contribute to the final analysis in the writing up stages of the study. After the notes were developed, engagement with the literature was undertaken, resulting in the development of sensitising concepts viewed as a series of multi-theoretical insights.

3.9 Sensitising Concepts

Sensitising concepts have been defined as offering "ways of seeing, organizing, and understanding experience; they are embedded in our disciplinary emphases and perspectival proclivities. Although sensitizing concepts may deepen perception, they provide starting points for building analysis, not ending points for evading it" (Charmaz, 2000, p. 515). Sensitising concepts are acknowledged as informing how I situate and frame this study from a constructivist perspective. My experience as a trained teacher and background in educational theories shapes how I interpret the research in the context of HE teamwork.

Teamwork is broadly defined as interdisciplinary in nature (Salas et al., 2008), and described as a social construct (Volkov & Volkov, 2007), requiring interaction between people and the social environment. The teaching and learning of teamwork is a multi-layered process and as such, a bricolage of theories underpin the development of teamwork in the HE context, specifically as related to social, environmental, and symbolic interaction. These theories are explored next to explain the sensitising concepts informing the starting point of my background ideas.

Social constructivism emphasises the collaborative nature of learning and the importance of cultural and social contexts for the individual. The term social constructionism is often used interchangeably (see Berger & Luckman, 1966), holding that "knowledge and meaning are historically and culturally constructed through social processes and actions" (Young & Collin, 2004, p. 373). This thesis uses social constructivism as an educational theory which has previously been cited as supporting teamwork learning (see Schreiber & Valle, 2013). In order to more fully understand social constructivism, as applied in this research, I adopt a Vygotskian approach to meaning making as explained next.

As a trained teacher and social constructivist researcher, I have adopted certain perspectives on education which I have applied to my teaching and research at all levels. My initial belief prior to undertaking PhD study was that all educators would be operating under similar perspectives. As I have since discovered, this is not the case. Therefore, it is important to explain my understanding of social constructivism as applied to my research and relating with how participants in this study perceive and understand their meaning-making reality.

The origins of social constructivist theory are widely attributed to Vygotsky (1896-1934), who in his later life was influenced by Gestalt psychology and Lewin's topological psychology, with Vygotsky's (1978) seminal work situated in the field of developmental psychology. Vygotsky theorised that both language and culture are important in cognitive

development and provide frameworks through which an individual's reality is perceived and understood. This theorising is important in the context of the collaborative nature of HE teamwork. The collaborative process has largely been influenced by Vygotsky's (1978) zone of proximal development (ZPD) which underpins the social constructivist perspective that students' can problem-solve beyond their current capability with the aid of educators and peers, promoting "exchange and participation of each member in order to build a shared cognition" (Roselli, 2016, p. 256). Vygotsky believed learning takes place within the ZPD, that is, students can master concepts and ideas they cannot understand on their own, with the help of more advanced students or adults. To ensure ZPD, the assistance/guidance received must have certain features. First, intersubjectivity is whereby people start with different understandings of a task but arrive at a shared understanding through communications and interaction to extend their knowledge. An argument can be made that the concept of intersubjectivity is not always applicable, for example, to students with learning difficulties who may not be able to come to shared understanding from interactions with more advanced peers or in group situations. Yet intersubjectivity remains a key feature of social constructivism as well as symbolic interactionism as noted later. Second, scaffolding is the process of learning with and from others where support is offered and built upon from the current level of an individual's understanding in manageable steps. A negative connotation to the metaphor of scaffolding in education is that it is possible that the learner reverts to novice once the scaffolding is removed (Malik, 2017). Third, guided participation, broader in concept than scaffolding, requires experts to guide less experienced individuals to shared understanding. This feature is most useful in HE where educators guide students through the processes and skills learning required for teamwork for example. While the features of ZPD appear as common-sense, there is no prescriptive guidance for educators to explain the interplay of exogenous variables impacting teaching and learning. This may be because

Vygotsky's (1978) focus was on cognitive development rather than specifically on learning in the educational sense.

Although Vygotsky's work was not widely known in Western countries until the 1970s, well after his death in 1934, Western scholars in the field of developmental psychology were espousing similar theoretical models of learning.

Urie Bronfenbrenner (1917-2005) was a German born, American raised developmental psychologist, who conceived the ecological systems theory, extending the notion of human development as more than knowledge constructed socially through language by including the person's interaction with the environment. Systems theory deals with the relationship between thought and language as distinct processes. Psychic (thoughts, feelings, ideas) and social (communication) processes attributed to learning and teaching have been negotiated through systems theory and explained as "the simultaneous independence and dependence of various relationships (in this case psychic processes and social processes)" (Rasmussen, 2001, p. 572). This construct supports and adds to Vygotsky's meaning making framework, enacted through interactions with social and cultural structures. To explain further, psychic and social interactions are embedded in teaching and learning relationships; hence a key sensitising concept in this research is the implication of the complex nature of these interactions across systems and environments existing in the HE teamwork context, an understanding of which contributes to SoTL and viewed as important connection in the present research.

Brofenbrenner (1995) saw the process of human development as being shaped by the interaction between the individual and their environment, with systems impacting individuals throughout their lifetime. That is, the path of human development is as a result of the influences of an individual's surroundings. Brofenbrenner placed emphasis on 'proximal processes' (often repeated engagement in activities and interactions, increasing in

complexity), which approximate Vygotsky's ZPD model (Jaegar, 2016), in the belief that potential can be realised, or not, via environmental and social forces. Brofenbrenner's systems are outlined as follows:

The *microsystem* refers to the immediate environment surrounding and influencing the individual, for example family, educators, peers. The *mesosystem* refers to interactions between different parts of an individual's microsystem, for example, university educator and another student in the individual's team. The *exosystem* refers to sites where the individual does not have an active role, but decisions are made that may have a bearing on the individual. For example, the university as an institution makes policy or strategy decisions that may indirectly impact the individual. The *macrosystem* refers to all other systems affecting the attitude and ideologies of the culture in which the individual is embedded, which may impact or influence their lives. For example, the political system, the economic system, cultural values system can all have an impact on the individual's world view. The *chronosystem* refers to the influence of time over an individual's life course, that is the occurrence of specific events and socio-cultural and historical changes over time, extending across all other systems.

Brofenbrenner suggested that "development could only be understood within the context of a series of nested systems" (Jaegar, 2016, p. 165). Brofenbrenner's belief that it was important to account for both personal and environmental factors was further explained by Jaegar (2016, p. 166) as "environments change people (the external is internalized and transacted) and people change environments (the internal is externalized and transacted)". Subjective meanings emerge from experience of changes in the environment over time and relates to the way in which both educators and students experience the teaching and learning of teamwork in the context of the everchanging environment of HE. Whilst conceptually, it is reasonable to perceive the impact of nested systems on actors within the sphere of teaching

142

and learning of HE teamwork, it is more difficult to fully understand all the influencing factors impacting every individual. It is more likely that once sensitised to the complex nature of interactions across systems and environments, individuals can adjust and adapt behaviours accordingly. The role of sensitising also arises in Blumer's work on symbolic interactionism.

Symbolic interactionism arose from the work of George Herbert Mead; however, the term 'symbolic interactionism' was originally coined by one of Mead's colleague, Herbert Blumer (1900-1987). Blumer "stressed the role of concepts that are sensitising rather than definitive, that gain utility and significance from patterned relationships rather than quantifiable correlations" (Heath & Cowley, 2004, p. 142). This theoretical perspective broadly draws together the interaction of the individual, collective (society) and the environment. In essence, interaction is essential in this model. Human beings construct and reproduce social structures through agency, imbuing them with choice to transact with the internal and external environments to inform conduct through interpretive action. This reciprocal process between the individual, society and environment is continuous and "recognises the relativity of varied standpoints and takes into account subjectivity of social actors as they engage in practical actions in the world" (Charmaz, 2014, p. 269). The subjectivity and agency of educators is seen in their response to performance paradoxes and the way in which their actions address the perceived transaction costs of teamwork pedagogy.

Blumer (1969, p. 3) specified three premises upon which symbolic interactionism is positioned:

1. Human beings act toward things on the basis of the meanings that things have for them;

2. The meaning of such things arises from, or out of, the social interaction that one has with one's fellows; and,

3. These meanings are handled in, and modified through, an interpretive process used by

the person in dealing with the things he encounters.

The significance of language for self-hood is stressed in symbolic interactionism such that meaning is not derived from the things/situations encountered, but by what people do with the things/situations with which they attach particular meaning emerging from their experiences. This is important in the context of this research because symbolic interactionism assists in explaining how participants assign meaning and interpret teamwork as encountered through their lived experience.

The interactive, interpretive, reciprocal process of symbolic interactionism can be overlayed on Brofenbrenner's systems theory model in the way in which both acknowledge the interplay of interactions between the self and the broader society and environment in process, action and meaning. Each of Brofenbrenner's nested systems impact on the individual's development through proximal processes, as theorised by Vygotsky, and including interactions of increasing complexity across systems and time. Blumer's symbolic interactionism emphasises how meanings are subjective and modified through interactions with other individuals, society and environment and how people have experiences that may trigger them to adapt behaviour and knowledge over time. Participating in HE teamwork incorporates such complex interactions across systems. For example, interactions with team members to adapt and/or create knowledge (microsystem), interactions with educators and the curriculum (mesosystem), following set teamwork procedures or policy (exosystem), ability to work with, and adapt to, culturally diverse others in teams (macrosystem) over a period of time (chronosystem). Meaning making through an individual's experiences and social interactions also underpin experiential and collaborative learning explained next.

The work of Dewey (1916) and Kolb (1984) provide insights into experiential and collaborative learning. However, collaborative learning has critisised for promoting conformity (Trimbur, 1989) and yet conversely, it also promotes learning intention through

self-reflection and extension of learning through interaction with the external environment (Kayes, 2002). Hence, collaborative learning is an important theory for HE teamwork because teamwork teaching and learning is influenced by the way students and educators experience interactions temporally and across systems. This means adapting subjective meanings arising from experiences, through interpreting and modifying actions according psychic and social processes experienced, and to changes encountered in the internal and external environments over time.

These sensitising concepts, explained as theories underpinning teamwork, support the interpretivist position adopted in this thesis of reality viewed as shaped by interactions as they are interpreted and constructed temporally through language, experiences and in relationships.

3.10 Ethical Considerations

Ethical considerations in this research relate to principles that inform a code of conduct (Collis & Hussey, 2014), protecting, for example, the safety, informed consent, confidentiality and anonymity of individuals and their data. These issues, including those of power distance between insider practitioner researcher and participants, were managed in this study by measures outlined in the following sections.

As a general overarching principle, research should do no harm (Farquhar, 2012), maintaining physical and psychological safety of the researcher, participants and others throughout the research process (Collis & Hussey, 2014). A purposeful sample was undertaken; however, some of the participants in this study were academic colleagues familiar to me. Although the risk was considered minimal, it was conceivable that individuals might reveal sensitive information during the interviews due to the familiarity factor and side-bar conversations. To counter this issue, any sensitive or off-topic information was deleted from analysis (Creswell, 1998).

Informed participation in case study research can include two levels of consent (Farquhar, 2012). The first level may be negotiating with an organisational gatekeeper to address organisational concerns and, the second level, to gain access to relevant staff. As this case study was focused on individual educators, albeit groups within specific universities, it was not necessary to negotiate with each university to access staff, and business educators were approached directly. All participants in the study were handed an information letter (see Appendix A) prior to beginning the interview, outlining the nature and purpose of the study, the relevant criteria, potential benefits of the study, and information about voluntary participation and withdrawal. Participants were asked to read and sign the informed consent letter (Kvale, 2007), which included an agreement to being audio recorded (see Appendix B). All participants confirmed their agreement to the conditions stated in writing, and this was again reconfirmed at the start of the audio recording.

The information letter further stated that all information would be treated as confidential, providing assurance that responses would not be associated with the individual's identity in any publications arising from the study. The participants' confidentiality and anonymity were achieved by referring to the participants and their place of work with a numeric descriptor or pseudonym. Quotations used in the thesis and resultant publications reflect these numeric and/or pseudonyms such that they cannot be linked to specific individuals or universities. All participants were made aware that if they had any reservations about the ethical conduct of the research, they could contact the researcher's University Ethics Office to lodge a complaint in confidence. None were received.

Data collection and storage procedures were also outlined for participants, in accordance with the National Statement on Ethical Conduct in Human Research. Participants were informed that data collected from the survey were to be (i) securely stored on a password-protected laptop of the chief investigator and backed up to a password-protected

external storage device, and (ii) destroyed as part of the routine records management process as per the policy in the Murdoch University School of Management and Governance. Final approval to conduct this study via face-to-face interviews with participants was obtained from Murdoch University's Human Ethics Research Committee (HREC) in September 2016.

3.11 Limitations

In this section, I outline some of the limitations with the methodological approach I have adopted. Though not considered an impediment in the current study, there are several issues worth noting.

The case study method has been noted as having limitations, for example, lack of generalisability (Yin, 2014), although generalisability is not a goal for this qualitative research. Instead, as Urquhart (2013) points out, analytic generalisability of findings from qualitative studies may be able to be related to other theories in the literature. Hence, lack of generalisability, as it is understood in positivistic terms, does not diminish the validity of the single case design whereby the qualitative research approach adopted emphasises richness of experience rather than generalisability (Grandy, 2010).

Purposeful sampling employed for this study sought out a particular group (i.e., HE business discipline educators who have taught teamwork) with the rationale being to provide focus for the research question to study the phenomenon of interest. While specific parameters for sampling were considered (Silverman, 2000), there were more participants from one HE institution than all the others and overall, more participants from the Management discipline than other disciplines. However, this did allow for insights to be developed across cases.

Interviewing as a method is a well-accepted qualitative research tool. However, one is reliant on self-reporting by participants at the time of the study in 2016. Hence, the recency

of the data may be considered a limitation in terms of interpretation of data collected from the participants' responses, documents and field notes available at the time.

Coding and theorising are interpretive actions in qualitative research. Others may apply different lenses and filters (Saldaña, 2016) to the qualitative data and code differently to imbue the data with alternative interpretations, thus generating alternative codes, categories and/or themes. In this thesis, the data coding is my contribution to meaning making for the purpose of interpreting participant responses.

3.12 Chapter Summary

This chapter has detailed the methodological approach adopted in this study. The interpretivist, social constructivist paradigm and qualitative methodology were explained in depth to delineate the positionality of myself as a researcher and to demonstrate an understanding of the epistemology, ontology, axiology and methodology of the various paradigms. The methods used to collect and analyse data necessary for answering the research questions have been described. The choice and justification of selecting the case study approach have been stated to illuminate and provide rich information on the research question and the qualitative single holistic case study (Creswell et al., 2007; Merriam, 1998; Stake, 1995) of business educators, within the bounded HE system in Western Australia. The findings and discussion chapter is presented next.

Chapter 4: Findings and Discussion

4.1 Overview

This chapter presents the findings from the qualitative analysis of the data collected across the semi-structured interviews with HE business educators. Findings and discussion around the interview questions are reported in this section to provide a comprehensive understanding of the way in which findings were aligned with data and how patterns and theories were captured, analysed, and interpreted in relation to the research question and aims. As outlined in the methodology section, this strategy operationalises transferability such that information flowing from the findings and discussion around each question could be transferred to other similar settings.

This chapter is divided into two main sections. First, a review of the coding for each of the semi-structured questions is provided to explain generation of categories emerging from constant comparison of in vivo codes and thematic analysis of categories resulting in a theme for each question, to provide a nuanced understanding of the factors influencing educators approaches to teamwork pedagogy. Second, through my interpretivist lens, two major themes arising from the holistic analysis of categories are presented.

4.2 The Interview Questions

Responses to each of the semi-structured interview questions assisted in establishing understanding from the participants' perspectives (see Appendix C for list of questions). The initial in vivo coding, reflecting the direct language of participants, was undertaken. I reviewed in vivo coded data for further analysis across the codes, using the constant comparison method, to organise codes into categories and question themes interpreted as factors affecting teamwork pedagogy.

The categories and theme for each question are displayed in table format at the end of each question and aligning with examples from relevant scholarly literature. The tables

provide links between participant responses and published literature, with the discussion that follows each table suggesting similarities, differences, and gaps in research, along with possible mitigation actions.

4.2.1 Question 1: In Your Own Words, Please Tell Me What You Understand 'Teamwork' to Mean?

This question sought to elicit a definition of teamwork based on the participants' experiences with teaching teamwork in a business discipline in the Australian HE context (such experience being a major criterion for participation in the study). Each interview was individually coded in order to establish categories. Most of the study participants gave succinct one- or two-sentence definitions supporting identification of some definitional factors that may be acting as affordances or constraints on HE teamwork pedagogy. The five categories that emerged from focused coding of Question One being (1) teamwork collaboration, (2) teamwork to achieve better goals or outcomes, (3) attitude to teamwork, (3) strengths and weaknesses, and (4) developing teamwork skills. These categories are elaborated next.

4.2.1.1 Collaboration

The in vivo coding of the definition responses revealed codes of collaboration through terms such as working together, working collectively, working effectively with others, and groups of people. Further codes included achieving goals, outcomes, strengths and weaknesses, synergy, skills, as well as attitudinal responses, for example, responsibility, commitment, and trust.

Similarities in definitions of teamwork across many responses were evident, with participants identifying collaboration as a critical attribute of their teamwork definition. Of the 30 responses, 24 (80%) participants used words or phrases linked to collaboration, for example, collaborate, engage collaboratively, working together/collaboratively in their

definitions, indicating that the majority of educators in this study identified collaboration and collaborative work as an affordance in HE teamwork. This is a significant finding supporting the research aim of identifying factors affording or constraining teamwork pedagogy.

4.2.1.2 Teamwork to Achieve Goals or Better Outcomes

Eighteen (60%) participants aligned their definitions of teamwork to achieving goals, outcomes, or products, with 12 (40%) specifically using the term 'goal', often preceded by an adjective indicating collaboration, for example, collective goal, mutual goal, common goal or purpose and 13% of participants referring to teamwork as the ability to achieve more than one could achieve alone. The remaining participants referred to achieving an outcome, product, or completing a task.

4.2.1.3 Attitude to Teamwork

Of those participants referring to attitudes towards teamwork, 80% were academics based at the same institution, signalling these participants' opaque reference to qualities outlined in the definitions in the literature in Chapter One of relying on one another (Ren & Wang, 2007). Trust, commitment, and responsibility were seen as aggregating the essence of the definition of teamwork by these participants. This is an interesting finding because it suggests that the institution is focused on instilling these attitudes in business students, which may be considered a functionalist conception of the hidden curriculum through "inculcating students with desirable societal values" (Gair & Mullins, 2001, p. 26) of which they may not be aware. Although developing activities to promote positive student attitudes during teamwork interactions may incur costs, positive attitudes can foster understanding of shared goals (Driskell et al., 2018) and expectations, which has implications for the way educators approach teamwork pedagogy

4.2.1.4 Strengths and Weaknesses

Differences in definitions were not pronounced; however, variations were noted. For example, 13% of participants referred to being able to identify and use the strengths and weaknesses of team members. P19 referred to using psychometric tests to identify team member strengths and weaknesses to form groups on the basis that team members discuss these with each other. Similarly, P16 required students to reflect on their strengths and weaknesses and how these can facilitate what they can actually contribute to teamwork. P24 elaborated that "*working with each other's strengths can be quite interesting because you realise what your weaknesses are and what others' weaknesses are and how you can help each other get through tasks more efficiently*". Alternatively, 10% of participants referred to synergy and/or dynamics as playing a part in defining what teamwork meant to them. For example, for P29 teamwork meant "*working together in order to achieve synergy and take collective responsibility for the outcomes of the project*" with P23 going one step further to indicate that synergy was taught, using the metaphor of the effort of individual rowers contributing to the strength of the team. The literature was sparse on the subject of team member strengths and weaknesses, although Olsen and Olsen's (1999) research reported on some specific attributes of team strengths in general. Although this definitional element appears to be a gap in the HE teamwork literature, strengths and weaknesses of team members were considered by some participants as defining teamwork.

4.2.1.5 Developing Teamwork Skills

One participant (P7) elaborated on the need for students to learn specific employability skills associated with teamwork, for example, collaboration, conflict resolution, active listening and valuing divergent views. It was considered important to include this divergent view as a point of difference, as such skills are referred to in the

literature (see for example, Saunders & Bajjaly, 2021), yet not pervasive views in the interview cohort.

Table 4.1 aligns the categories arising from the participants' definitions generally with the extant literature. Holistic analysis of participant responses to the question 'what do you understand teamwork to mean' resulted in developing the question theme 'sense of interdependence through collaboration' to reflect salient influences on participant understandings of their definition of teamwork. This then provides insights into the research aims that support the research question.

Table 4.1

Categories Aligning with Theme 'Sense of Interdependence through Collaboration

Category	Examples of relevant literature aligning with theme
Teamwork collaboration	Salas et al. (2000) suggest a team is a set of two or more people interacting adaptively, interdependently, and dynamically towards a common and valued goal.
	Rydenfält et al. (2017) apply a wide and pragmatic definition of teamwork suggesting a team is a group of people that are set to work together on a task, which also implies that their work is to some degree interdependent.
Teamwork to achieve goals or a better outcome	Earnest et al. (2017) elaborated on explicit team learning that creates environments where teams work interdependently towards common goals and are given explicit instruction and practice in teamwork.
Attitude to teamwork	Mendo-Lazaro et al. (2017) noted that if, during the process of teamwork, there is mature communication, responsible interdependence, psychological security, a common purpose, clear roles and goals, then the experience will have a positive effect on individuals' attitudes towards teamwork.
	Sabal (2009) suggested teamwork is a group of people who come together under shared leadership, mutual responsibility and conscious authority, to achieve agreed-on goals in a mutually effective fashion.
Strengths and weaknesses	Olson and Olson's (1999) empirical research noted strengths and weaknesses in teamwork. Reported strengths included having a facilitator at meetings, having an agenda at meetings, encouraging all members to participate in team decisions, and listening to one another. The identified weaknesses were associated with time concerns. The respondents felt meetings did not start nor end on time, and there were no timelines

Category	Examples of relevant literature aligning with theme
	assigned to agenda items. Further, timelines were not set for achieving team goals. These perceptions of practising educators can be used to guide the development and expansion of teamwork courses offered by HEIs.
Developing teamwork skills	Schullery and Gibson (2001) note examples of specific skills desired including confidence in one's functional expertise, 'great' interpersonal skills, open-mindedness, a willingness to listen, and a 'teaming attitude' that recognises the interdependence and contribution of other team members.

The analysis of the data related to Australian HE business discipline educators' definitions of teamwork suggested that although study participants were aware of the collaborative nature of teamwork, for the majority, there was no sense of elaboration on what collaboration really meant outside of students being able to work together, with some adding the need to achieve a common goal or purpose. Inclusion of definitions around collaboration and common goals were, to some extent, a predictable finding indicating that educators were aware of the importance of collaboration in teamwork, yet these statements stopped short, suggesting the participants in this study were not necessarily able or willing to elaborate how collaboration was implemented in their teamwork pedagogy. However, the experience of a few participants elaborated attitudes towards interpersonal relationships as being important in teamwork. Interpersonal relationships, including developing trust, commitment, and responsibility, were recognised as positive attributes in teamwork in the coding. This is an interesting finding in relation to understanding the challenge faced by educators in developing positive student attitudes when implementing teamwork pedagogy within the business curriculum, relating to the research question as a salient influence affecting the teaching of teamwork.

It may be that for some business educators, who are generally subject discipline experts, that teamwork is a means to obtaining an end product for an assignment in the discipline, rather than being process orientated where explicit team skills instruction is

required. The literature clearly suggests definitions for teamwork that incorporate an array of strategies for implementing teamwork as part of the curriculum. Specifically, pedagogical approaches to incorporating skills training (Ernest et al., 2017; Schullery & Gibson, 2001) and facilitating the development of communication (Mendo-Lazaro, 2017) and interpersonal skills (Bedwell et al., 2014; Saunders & Bajjaly, 2021). It is curious that more participants did not elaborate on the specific skills required for conducting teamwork, and this may reflect the paradox tension of temporal constraints, which was further explored in ensuing questions.

4.2.2 Question 2: What Do You Believe Are the Main Reasons for Including Teamwork in HE Business Courses?

This question sought to elicit participants' reasons for including teamwork in their courses. Most of the study participants elaborated in depth on their motivations for incorporating teamwork or team projects at university. Initial in vivo coding assisted to "preserve participants' meaning of their views and actions in the coding itself" (Charmaz, 2006, p. 55). In vivo coding of responses to Question Two resulted in nine codes. Three categories emerged from the coding of participant reasons for including teamwork in their courses: (1) preparing students for the world of work, in vivo codes included: prepare for workplace; industry requirement; accreditation; develop skills (2) providing experience to develop and understand team skills, in vivo codes included: develop skills; collaboration; understanding strengths and weaknesses; manage relationships; broader perspective/working with difference and, (3) reduce marking load.

The categories reflect sensitising concepts for business educators by which they justify the inclusion of teamwork in their course, whether it be by institutional demand or for their own purposes.

4.2.2.1 Preparing Students for the World of Work

This category elicited 27 (90%) responses, with just over 50% of participants responding that preparing students for the workplace was a major reason for including teamwork in their courses, suggesting preparing students for the world of work is a major influencing factor for the incorporation of teamwork in HE business courses. Indicative phrases from participant responses provided credence for their reasoning and the interpretation applied as related to the category. For example, *"it's what they are likely to be doing when they graduate"* (P17), *"students have to have some level of preparedness when they go out there"* (P6), *"essential part of education and training ... for the way we work in the workplace today"* (P28). Just over a quarter of participants (27%) mentioned teamwork being an industry requirement as their main reason for including teamwork in their courses, consequently identifying a further salient influencing factor for incorporation of teamwork in HE business courses.

Training in teamwork skills at university to better align with increasing industry demands for the skill has been widely noted in the academic literature (see Bedwell et al., 2014; Gueldenzoph-Snyder, 2009; Joseph & Payne, 2012) and in government and other reports (CBI, 2009; Deloitte, 2017). Business school accreditation organisations (e.g., AACSB) and professional qualification bodies (e.g., CPA Australia) also require evidence of skill development in graduates. These factors reinforce the rationale for a focus on HE teamwork skills for business students.

4.2.2.2 Providing Experience to Develop and Understand Team Skills

This category elicited 21 (70%) responses related to developing team skills. Broadly, participants indicated that students needed to develop teamwork skills within their business degree. Codes contributing to this category included developing skills, collaboration, understanding strengths and weaknesses, and managing relationships. Developing skills was

often cited as a generalisation. A point of differentiation was noted from those participants who explicated specific skills, such as the development of *"social skills"* (P1), *"ability to interact with others"* (P21), *"solve problems, liaise, negotiate"* (P6) and exposure to "*working with different ages, genders and cultures"* (P2). Such responses were clearly in the minority, as were references to students' understanding of the strengths and weaknesses of self and team members, suggesting the awareness of some participants of the need to provide students with experience with specific components that enhance teamwork.

4.2.2.3 Reduce Marking Load

Reducing the marking or workload through the implementation of teamwork was noted by seven (23%) participants. The demands placed on faculty to prepare work-ready graduates have dominated the work-readiness discourse (Borg et al., 2019), creating tensions in how performance is managed, especially given workload allocations. Workload was noted as a factor affecting the teaching of teamwork in both the global and Australian SLRs. Time is a scarce resource for educators and hence imbues the implementation of teamwork in courses with transaction costs for faculty (Riebe et al., 2016), for example, implementing collaborative learning theory and practices, assessment procedures, engaging with professional development (PD) in teamwork and, particularly, teaching teamwork skills demanded by employers. Transaction costs may be incurred when responding to the changing needs of employers to incorporate skill development and further impacted by university fiscal constraints to act on curriculum redesign in a timely manner. While some participants indicated motivation to promote teamwork learning for employability, one participant noted "*So if you have teams of three or four or more, you have less assignments to mark, particularly if you have big classes*" (P12). These sentiments align with findings by Sasshital et al., (2011), yet also foreshadows the way in which some educators manage the paradox tension of performativity further discussed in the article presented in Chapter Five. Reducing

marking demands is one-way participants in this study justified their inclusion of teamwork in their courses and to manage workload.

The overall theme arising from responses to Question Two is conceptualised as 'broadening HE students' employability opportunities.' The question theme affords insight into salient issues for including teamwork in HE business courses, with categories generally aligned with the literature as can be seen from Table 4.2.

Table 4.2

Categories Aligning with Theme 'Broadening HE Students' Employability Opportunities'

Category	Examples of relevant literature aligning with theme
Preparing students for the world of work	Bedwell et al. (2014) asserted that as "organisations need to select interpersonally competent individuals who can successfully engage in interactions immediately upon hire, students must acquire effective interpersonal skills prior to entering the workforce" (p. 171). Such a statement is contested by Sykes et al. (2014), who believe that teaching teamwork at university is a chimera, arguing that the student experience with teamwork at university is discrete and at odds with preparation for the real world of work.
Providing experience to develop and understand team skills	Research from Ellis et al. (2005) suggested that "developing generic teamwork competencies prior to the acquisition of taskwork skills can enhance team performance" (p. 28).
Reduce marking load	Sasshital et al. (2011) found that business school faculty were motivated to reduce their marking load for convenience while simultaneously wanting to promote teamwork learning.

Despite this alignment there are alternative views observed in the literature. Ettington and Camp (2002) questioned whether teamwork could be effectively transferred from the classroom to the workplace. Sykes et al. (2014) suggested that teamwork in the university context does not translate to preparation for teamwork in the workplace and hence such a concept is a 'chimera'. These views suggest implications for the development of teamwork competencies across the life of the business degree. The nexus of salient educator, institution and student factors can impact preparation and transfer of teamwork knowledge, skills, and

abilities to the workplace. For example, Jackson et al. (2018) found that students are aware of transfer of skills and knowledge from university to the workplace and that university preparation through activities such as authentic team projects provide opportunities to enhance skills learning and transfer to broaden students' employability opportunities. Broadly aligning with Brofenbrenner's (1995) conceptualisation of proximal processes, authentic development of teamwork must involve repeated engagement and interactions increasing in complexity over time to improve the potential for skills transfer. How this is to be accomplished across the life of a business degree is generally unclear, with salient factors influencing teamwork pedagogy conflated by the nexus of interactions between individuals and the environment. In the context of this question, transfer of teamwork skills in preparation for the workplace underpinned participant responses, suggesting these participants understood the main reasons why teamwork was included in their courses. but not necessarily how to action. Yet there are myriad examples in the literature that recommend coaching HE students in teamwork skills (see Gueldenzoph-Snyder, 2009; Hansen, 2006; Wesner et al., 2018) at university to prepare them for the workplace, offering pedagogical strategies to assist other educators. As noted earlier in this research, training in specific teamwork skills was considered by only one of the participants. It is possible that the training of students in teamwork skills elicits a transaction cost to the educator (as noted in Chapter Two), or it may be a way to manage the tensions associated with the performing paradox operating at the microlevel where tensions arise for educators in meeting competing demands of multiple stakeholders and the divergent priorities of their roles. The subjectivity and agency of educators is seen in their response to such paradox tensions, which are further elaborated in Chapter Five.

4.2.3 Question 3: Tell Me About How You Use Teamwork as Part of the Student Learning Experience.

This question sought to elicit the varied ways participants configured the student learning experience of teamwork. Analysis of holistic coding resulted in five categories. A major similarity across those participants interviewed suggested limited attention paid to guidance given to students in the development of team skills, aligning with the literature (Opdecam & Everaert, 2018; Saunders & Bajjaly, 2021). Teamwork pedagogy, including teaching teamwork process skills, was interpreted as not being a priority for the majority of business educators in this study. Rather, participant responses indicated that group activities or producing an end product as the output of an assessment contributed to the teamwork student learning experience.

4.2.3.1 Assigning Group Tasks

In vivo codes including activities in groups, debates, case studies, practice scenarios, interactive and embedded experiences; were noted as a major part of the student learning experience by 30% of participants, resulting in the category, 'assigning group tasks'. Participants in this category were focused on the incidental learning experience of teamwork by providing small group activities, not necessarily including any teaching of skills or processes. Such focus is not unnoticed in the literature, with Bedwell et al. (2014) noting that, for example, "in marketing classes, students are often assigned to work in teams to develop marketing plans. The goal is to teach the skill of marketing plan development … teamwork experience is not the underlying driver of the assignment" (p. 173). However, two participants referred to debriefing as an important aspect of the student learning experience, and another to Tuckman's (1965) stages of small group development. Whilst such group tasks may suggest an understanding of process elements of teamwork, the lack of explicit instruction points to teamwork as part of the hidden curriculum in business education.

160

A considered comment from one participant suggested that just "*having students do a group project and produce a group output, doesn't provide any evidence of teamwork and hence, if we have 30 teams, we send them away, and they're supposed to produce a group output, one group is dysfunctional, has lots of issues, we've done a disservice to those students, and I thought that was pretty powerful to me*" (P21). The statement from P21, particularly awareness of the possibility of 'a disservice to students', suggested adoption of a paradox mindset on the part of the educator through active acceptance of the tensions arising at the intersection of the performing/learning paradoxes. Such a paradox mindset can have powerful implications for enhancing present and future success of teamwork in business curricula. A further example of paradox mindset is elaborated in question four.

4.2.3.2 Preparing for the Workplace

In vivo codes of embedded learning for understanding and experience; developing cultural intelligence; putting theory into practice; industry-based project; simulated workplace environment; employability skill learning; and developing teamwork skills, were categorised as 'preparing for the workplace' and considered the main concern for 20% of participants. For example, P1 commented, *"teamwork is highly desired by employers and a key selection criterion for graduate positions…universities are trying to align curriculum to industry needs"* and P12 affirmed, *"it's a highly desirable skill as more teamwork is happening in the working world, a lot more project-based work and a lot of virtual teamwork, which requires a different set of team skills. One of the primary goals of a university is to get students to be work ready"*. These comments signify participants' understanding of how teamwork contributes to the student learning experience as preparing for the workplace.

4.2.3.3 Pondering Attitude

Five participants related the student learning experience to attitudes toward teamwork socialisation. For example: caring about each other, developing trust, cohesiveness, respect, responsibility through accountability. A preponderance with student attitude toward teamwork appears in the literature (see for example: Marks & O'Connor, 2013; Tseng & Yeh, 2013). Codes containing similar characteristics were grouped together in the category of 'pondering attitude' to elucidate the participants' preponderance with the importance of developing such attitudes as part of the student learning experience with teams. Interestingly, the majority of codes about attitude emanated from participants working at the same institution. Indicative of these responses was that from P23 who stated, "*there is very strict guidance in the assessment policy within the university on how we can or can't use group work and teamwork…we have to assess individual contributions*". This suggests that educators at the institution's business school were acting on clear messaging about performativity to meet expectations characteristic of a specific organisational policy but equally pointed to covert reproduction of societal values in the hidden curriculum of the student learning experience. One code in this category ran counterintuitively to the others, that is, "*student didn't want to work with anyone else*" (P17) with participant commentary indicating the educator would 'give in' if a student were to 'kick up' about teamwork. This suggests that management of teamwork can be challenging if little structure is in place (Wesner et al., 2018) to guide planning for contingencies, such as attitude toward teamwork, resulting in an ad hoc approach in consideration of the student learning experience.

4.2.3.4 Assessing

Four participants (13%) indicated that the student learning experience for teamwork was related mainly to a team assessment. Codes included reduced marking or the marking challenge, achieve a good grade and industry-relevant project. For some participants,

teamwork was a mandatory inclusion in the program of work because the unit was documented as introducing, consolidating, or demonstrating a course learning outcome (CLO). As P27 observed, "*I have to run it in my unit because it's one of the CLOs for my unit, so I have to run it*" suggesting teamwork was only included and assessed as a business school requirement, rather than adding to the student learning experience. On the other hand, incorporating teamwork in CLOs may reflect the institution's efforts to meet industry requirements.

4.2.3.5 Transaction Costs

The transaction cost category was established through veiled references in statements made by some participants, particularly around the resource of time. For example, this category included the codes: take extra time to meet with students or introduce team-based learning skills to improve the student learning experience. There are transaction costs for educators that are associated with implementing teamwork pedagogy, though investing time in course design at the early stages will reduce transaction costs (Shimazoe & Aldrich, 2010). Educators need time to learn and gain confidence with how to teach teamwork skills, evidenced in comments by these participants, "*having the training and skill to do it … about us having the confidence to do it*" (P16) and "*some sort of training would help*" (P27). This is juxtaposed with the time-consuming nature of teaching an already crowded, discipline specific HE business curriculum, with both identifying lack of training as a factor that may constrain teamwork pedagogy. Although not addressing the temporal cost trade-off between participating in PD and completion of other tasks, investing in educator PD in course design (Shimazoe & Aldrich, 2010) and team process skills to guide students' teamwork learning (Opdecam and Everaert, 2018) for example, could mitigate the sense of awkwardness that lack of training can engender in the student learning experience.

Categories for this question align with the literature outlined in Table 4.3, noting the complications, diverse approaches, awkwardness and need for guidance that supports the question theme of a 'lack of educator training in implementing teamwork pedagogy'.

Table 4.3

Categories Aligning with Theme 'Lack of Educator Training in Implementing Teamwork Pedagogy'

Category	Examples of relevant literature aligning with theme
Assigning group tasks	Opdecam and Everaert (2018) noted that the "ability to work well in teams does not happen on its own. Although most instructors know this, in practice, they often unconsciously expect tertiary students to be able to cooperate, since limited or no attention is paid to the guidance in team skills." (p. 225).
Preparing for the workplace	Wesner et al. (2018) argued that "managing course-based teams, however, can be a challenging and complicated process for many instructors" (p. 119). However, preparing students to operate effectively in workplace teams should be a priority for business and management faculty. They further argue that there is less ambiguity for team members if there is a structure in place that provides for accountability.
Pondering attitude	Marks and O'Connor (2013) discussed the importance of cohesiveness and trust in teamwork. They review student concerns about instructor motivations for using teamwork and lack of management of the process by instructors.
	Tseng and Yeh (2013) found that student attitudes towards teamwork were positive when working with team members they trusted and with whom they had built good relationships. Team trust was built through reciprocal disclosure, equal effort and energy resulting in team cohesion.
	Jones and George (1998, p. 531) proposed "that the experience of trust is determined by the interplay of people's values, attitudes, and moods, and emotions", linking to symbolic interactionism and how trust builds and transforms with time.
Assessing	Augar et al.'s (2016) research "results suggest that staff have adopted highly diverse and idiosyncratic approaches to team assessment and have mixed views and varied approaches to managing and assessing teamwork. Findings identify a need for explicit guidance and professional development on designing, managing and grading team assessments" (p. 1150).
Transaction costs	Shimazoe and Aldrich's (2010) findings indicated that "an instructor's investment of time in course design at the beginning of the semester will reduce transaction costs and hence the sense of awkwardness felt by both instructors and students" (p. 55).

Abstracting from the data for Question Three required seeing the possibilities, establishing connections, and asking questions (Charmaz, 2006) arising from the participant responses.

In deciding the main issues with which the participants were grappling, it was evident there were connections through the implementation of group activities as a way to provide teamwork as part of the student learning experience. What is not well understood and referred to in the Australian SLR in Chapter Two, is the difference between groups and teams. "Groups can be any subset of people with similar traits, characteristics, culture or interests, whereas teams are usually formed to work interdependently to complete a project driven by a common goal" (Riebe et al., 2017). The literature notes differences between group work and teamwork. For example, Myers and Goodboy (2005) argue that simply participating in group work is not the same as learning about the process of teamwork. This is supported by Palit and Stein's (2009) results, which indicated that just grouping students into teams would not in itself make them better at teamwork, leading the authors to recommend explicit instruction in teamwork knowledge, skills, abilities, and other factors (KSAO) be included in the curriculum (see also, Riebe et al., 2016). This suggests that awareness raising of these differences and PD in teamwork pedagogy be undertaken. To many of the participants, providing group collaborative activities, for example, think, pair, share or working together in small groups on case studies, debates, or an assessment is the way in which they institute teamwork as part of the student learning experience. Some note that teamwork is simply incidental learning of the content components in a business discipline and therefore employed an idiosyncratic approach to teamwork pedagogy. A predisposition to seeing teamwork as incidental learning in a business discipline, for some participants, suggested that this may equate to inequitable teamworking experiences for students across their business degree. On the other hand, for those educators who fully engaged with teamwork pedagogy,

implementing the teaching and assessment of teamwork skills and processes to improve the student learning experience could be viewed as resulting in inequitable workload for them. An awareness of this potential inequity is an important consideration going forward.

4.2.4 Question 4: Tell Me About How You Approach the Teaching of Teamwork.

This question sought to elicit the varied ways participants approached teamwork pedagogy. Due to the broad nature of this question, a variety of in vivo codes were generated capturing the idiosyncratic way in which educators approach the teaching of teamwork. Some educators mentioned an experiential learning or student-centred learning approach, or the use of a specific framework, to guide the teaching of teamwork skills. Consistent with the previous responses, other participants indicated that they did not have an organised plan for teaching teamwork as teamwork was incidental to discipline content or avoided. Therefore, additional workload was avoided through adoption of an idiosyncratic approach to teamwork pedagogy by these participants.

4.2.4.1 Incidental Learning

In vivo coding of participant responses assigned to this category included: part of the hidden curriculum, no formal theory, using class time, taking a commercial approach, assessment of content as important, learning in an environment that is real, applying lecturer's own experience with teamwork, student responsibility (e.g., learning as a collective objective, raising issues before assessment, assessment goals, avoid groupthink/coasting), using textbook resources, small group activities (debates/case studies/Q&A), team contracts, and, not trained to teach teamwork.

For many, teaching teamwork was an incidental phenomenon, and possibly incorporated to reduce marking load in a content unit where teamwork was not a key outcome. In this regard, teamwork was considered part of the hidden curriculum explained

broadly in the literature as what is meant to happen per official curricula as opposed to what actually happens in teaching and learning "on the ground" (Sambell & McDowell, 1998, p. 392). The implication of incidental learning at the microsystem level is that teamwork is considered as embedded in the educational experience that working in a team provides. For example, P28 stated, "*the learning is incidental…the group is not necessarily set up with the intention of building teamwork skills…I think it happens incidentally anyway…it's a natural process*". P28's comment suggests teamwork is part of the hidden curriculum, and noted as a possible benefit, in that students also "learn from the experience of working in a team even though the teamwork experience is not the underlying driver of the assignment" (Bedwell et al., 2014, p. 173). It was apparent that although participants were employing various small group strategies, such strategies were justifications for their approach or having to fulfil an obligation to incorporate teamwork into their discipline units. For example, P2 stated "*I have never really been comfortable with it because I have never been trained in how to teach teamwork properly so in some ways, I found it easier to avoid it rather than learn about it*". This suggested, as noted by Sashittal et al. (2011), some discipline educators believe they do not possess the skills themselves to be able to teach teamwork. It is inferred, therefore, that there is a gap in educator PD in teamwork pedagogy, specifically relevant design, management, and assessment processes (Augar et al., 2016) acting as a salient influence on the teaching of teamwork in HE business courses. Professional development in teamwork pedagogy could go some way to minimising this gap to improve the student learning experience.

4.2.4.2 Explicitly Teaching Teamwork Theory, Skills and/or Behaviours

Explicitly teaching teamwork theory, skills, and behaviours to equip business students to deal with the challenges of teamwork is acknowledged in the literature (see for example, Bravo et al., 2014; Oakely et al., 2004; Riebe et al., 2010). Thirty per cent of participants in

this study indicated some form of explicit teaching of teamwork theory, skills and/or behaviours. The coding of explicit teaching included literature informed principles for teamwork, Tuckman's (1965) stages of development model, Belbin team roles, establishing team contracts/team norms, process of teamwork, debriefing activities, implementing university guidelines and policy on teamwork.

Explicitly teaching teamwork theory, skills or behaviours was articulated by some participants explicating working with specific frameworks or models to develop teamwork. In Question Four, 20% of participants reported using Tuckman's (1965) small group development model as the basis for teaching teamwork, for example P10 reported, *"we use Tuckman, becomes part of the conversation about when you do teamwork, it's about collaboration, how you often go through some stages".* Some participants provided experiences with skill development activities associated with teamwork: for example, P4 recounted that, *"as they [students] go into teamwork, we do actively focus on improving their practices, so the process of teamwork …, not just here you are, here's your team of four, now come up with a final product. We look at theory like Tuckman, using team norms to establish code of conduct to help sort things out before they start the process to make sure they are all on the same page and have clear expectations of each other's roles and commitment to the task".* This statement is supported by the view of Shimazoe and Aldrich (2010) that productivity can be improved when explicit teamwork strategies, policies/guidelines are incorporated into the planning stage, resulting in clear expectations for students working together. Some participants outlined the use of specific tools like the online Self and Peer Assessment Resource Kit (SPARK) (Freeman & McKenzie, 2002). For example, P21 explained that by adopting the SPARK tool "*where students can provide feedback on their own performance across teamwork skills, not just on output…[students] evaluate their own*

contribution and that of their peers" inferring a student-centred learning approach informing teamwork pedagogy.

Two participants from one university specifically noted the requirement to adhere to university policy and to implement university guidelines on teaching teamwork. These two educators were also some of those concerned with student attitudes to teamwork in earlier coding, indicating that the institution is having an impact on staff cognition of policy requirements around the approach to development of teamwork skills.

Evidence emerging from this study suggested that there was a growing awareness on the part of educators and institutions of benefits arising from providing explicit development of teamwork skills and behaviours. Teamwork pedagogy incorporating explicit teaching of theoretical models and tools used by participants in this study inferred scaffolding of teamwork learning to equip students with an understanding of some of the skills and behaviours required for teamwork.

4.2.4.3 Expecting Prior Learning of Teamwork Theory, Skills and/or Behaviours

Although teamwork is a reality of the global workplace, many educators who include teamwork in their courses are unsure of how to manage the delivery of pedagogy such that students attain team skills learning (Wesner et al., 2018). Over 40% of participants in this study indicated that they do not teach teamwork or any application of teamwork theory, with 38% expecting that their students will have had prior experience with teamwork pedagogy in previous units studied, exemplified in the comment from P7 "*I try and get students to put into practice what they have learned in preceding units. So I say, you've done these things, now put them into practice*". While there is some empirical data to support an expectation of transfer of prior teamwork learning (Prichard et al., 2006), there was no evidence in this study to support that participant expectations of prior teamwork learning had been verified. This was particularly evident in the literature (Bedwell et al., 2014; Bravo et al., 2014;

Wesner et al., 2018) where specific interpersonal skills and team cohesion were found to be necessary to develop and maintain teamwork processes. Alternatively, P4 offered, *"a lot of the early content that we do in the class introduces students to skills we like them to practice in their teamwork experience, so things like emotional and social intelligence, time management, stress management, conflict resolution, negotiation skills – those types of things which are good concepts to introduce but have more meaning when they're employed by the students in a teamwork situation"*. The implication of such an approach inferred adoption of a paradox mindset to navigate the nexus of temporal costs and performing/learning tensions through active acceptance of tensions inherent in developing specific teamwork skills and behaviours as salient factors of implementing teamwork pedagogy in the business curriculum.

4.2.4.4 Focusing on the Product Outcome

Those participants who specifically did not implement any teamwork theory tended to focus on the output of a team project assessment outcome as the way they formalised an approach to teaching teamwork. Justifications for a product outcome were coded as: socialise students to focus on outcomes in HE; formative feedback given; awareness of assessment expectations; awareness of roles in teams. The output of team projects approach has been highlighted in the literature (Main, 2010) as one of the ways in which participants considered teamwork to be taught as related to the world of work, exemplified in this comment from P25: *"It is only outcome-based on the output at the end of it. They have to do a report, then either the report is there, or it is not. It's based on our experience with the kind of workplace they will be in, the client wants something, it is either there or it is not"*. Yet this conflation of teamwork learning with task output evaluation is disputed in the literature (Main, 2010; Shimazoe & Aldrich, 2010). The implications of focusing on product output could be linked to the performing paradox and the way in which educators perceive the transaction cost of

teaching teamwork process skills as a factor influencing teamwork pedagogy. This factor is further explored in Chapter Five.

4.2.4.5 Seeing Teamwork as the Student's Responsibility

The constant comparative method revealed a further category of student responsibility that became clear during the analysis of differences of approach. Further insights were developed about the codes of developing collective objectives, setting expectations, assessment goals, raising issues prior to assessment, and avoiding groupthink/coasting, were all related to the educator placing responsibility on students for their teamwork learning experience. Supporting participant perceptions of teamwork as student responsibility is the view offered by P25 who stated, "*I put the responsibility in the students' hands and my approach is saying that 'while we are trying to teach you all the theoretical content of the unit and you have to do all of these team tasks to complete the assignment, how you manage your partnership will depend on you'. That's just putting the responsibility onto them*". Linking back to educator factors previously mentioned in Chapter Two, the statement connects with the traditional view of educators as discipline experts (Cotronei-Baird, 2020) and teaching as they were taught (Hora et al., 2020). The implication arising from these views is the hidden curriculum of disassociation of educator responsibility for teaching teamwork process skills, for which educators may not be trained, contributing to product-focused team projects.

A notable similarity between interview responses for this category was that of participants focusing on students being able to identify for themselves other students within the class who wish to obtain a similar grade or meet a collective objective for a team product. As an example, P7 reveals the belief that self-selection based on grade ambition makes students more accountable, "*we split the room up into four quarters where we have a HD corner, we have a Distinction corner, we have a Credit corner and a Pass corner, and we*

encourage students to go to the level you wish to work and maybe even aspire higher". The

concept of homogenous teams speaks to similarity theory in an argument that homogenous

work teams are more productive (Bowers et al., 2000), and a salient factor in the adoption of

such an approach. Yet forming HE teams based on homogeneity of academic attributes is

disputed (Matta et al., 2011) as diversity of grades and other attributes contributes to

increasing the quantity of solutions and alternatives generated. However, Sambell and

McDowell (1998) suggest that student's lived experiences with teamwork assessment are

"never entirely predictable" (p. 401) given their own construction of the hidden curriculum

based on previous involvement with teamwork.

Table 4.4 outlines the literature that aligns with the Question Four categories as

interpreted in relation to the hidden curriculum theme.

Table 4.4

Categories Aligning with Theme 'Surviving the Hidden Curriculum of Teamwork'

Category	Examples of relevant literature aligning with theme
Incidental learning	Sashittal et al. (2011) studied educator motivations and attitudes to teaching teamwork with results indicating a motivation-attitude gap. The motivations suggest that they seek to improve student learning as a result of teamwork, and their attitudes suggest they prefer not to teach teamwork skills. The authors suggest potential reasons for how educators approach teamwork pedagogy, including greater concern for teaching the content of the course within the time available at the expense of concern for learning processes (i.e., learning as a team), they preferred to empower their students and let them manage teamwork on their own, their belief that teaching teamwork is not what they do, or they do not possess the skills necessary for teaching teamwork in classes.
Explicitly teaching teamwork theory, skills and/or behaviours	Oakley et al. (2004) advocated that "if team assignments are to be given, explicit steps should be taken to help students learn those skills and equip them to deal effectively with the logistical and interpersonal problems that commonly arise in collaborative efforts" (p. 9). Likewise, Riebe et al. (2010) found that "explicit teaching of team skills and processes effectively increased student awareness, ultimately contributing to the development of sustainable and transferable team skills" (p. 536).
Expecting prior learning	Prichard et al. (2006) stated that there is a "prevailing assumption that student participants either already possess the necessary skills to work effectively together or that these skills are developed by the simple

Category	Examples of relevant literature aligning with theme
	imperative to work together. Such an assumption suggests that there is no need for any specific facilitation of team skill development through training since students either already possess team skills or else learn them on the job" (p. 256). However, the authors found there was little evidence to support such an assumption.
Focusing on product outcome	Main (2010) suggested that many studies of student groups have focused on the result or grade of the group's product output as a measure of the effectiveness of teamwork being 'taught'. However, this focus on students' output has revealed the quality of the end product or task completion but has done little to explore or assess the process or skills employed by individuals.
Seeing teamwork as the student responsibility	Research by Burbach et al. (2010) suggested it is incumbent on instructors to provide students with opportunities to practise teamwork. Although, "putting them in groups with the hope that they will work effectively together is not enough. Instructors must be trained in the pedagogies of teamwork and be responsible for actively employ these pedagogies in the classroom" (p.757).

Although many educators interviewed attempted to detail how they approached the teaching of teamwork into their units of study, the diverse responses to Question Four suggest that there is no particular theory evident in the business curricula for teaching teamwork across the university sector in Western Australia. Tuckman's (1965) model of small group development was mentioned by several participants; however, this is not considered an empirical theory for teaching teamwork (Riebe et al., 2010). A noted difference in responses was that two educators from the same university linked the teaching of teamwork to university policy and guidelines on the subject. While a desktop review of university graduate attributes (Riebe et al., 2017) indicated most universities include teamwork as a graduate attribute and therefore, expect mention, there were no further references to policy or guidelines by any of the educators at other universities. Seeing teamwork as the responsibility of students may be attributed to the way in which participants in this study managed the transaction costs of teamwork pedagogy. These factors suggested that the majority of participants deal with teamwork as part of the hidden curriculum to manage transaction costs,

rather than part of the organised curriculum in business courses and further supports findings of teamwork as incidental learning in the global SLR.

4.2.5 Question 5: If You Do Not Teach Teamwork Theory or Processes Prior to Implementing Team Assignments, Please Explain.

This question sought to elicit the participants rationale for not teaching teamwork theory or processes in their units. Not all participants answered this question, as some participants do teach teamwork theory and/or processes. For those who did respond, the in vivo coding revealed the following codes: content outcomes focus, teaching discipline theory, crowded curriculum, incidental learning, prior experience in teams, too much effort/hard work, just another thing to teach, and teamwork learning as student responsibility, as their rationale for not teaching teamwork theory or processes. Constant comparison across codes assisted in developing depth in the discovery of four main categories being (1) focusing on discipline content, (2) expecting prior teamwork learning experiences, (3) practising teamwork is the student's responsibility, and (4) teaching teamwork is a transaction cost.

4.2.5.1 Focusing on Discipline Content

Affording priority of discipline content over the importance of teaching teamwork processes was a major similarity across responses for those who did not implement teamwork pedagogy specifically. Generally, participant responses related this to the crowded curriculum of their discipline subject. Participants responding to this question inferred a value judgement (Kleigl & Weaver, 2013) when emphasising discipline content or teaching specific discipline-related theories as the priority, with teamwork being, for example, "*just another thing to teach*" (P27) and teamwork taking "*a lot of effort*" (P23) on the part of the educator inferred as perceived constraints to teaching teamwork. These participant statements converge with the assertions of implied transaction costs to educators of implementing teamwork pedagogy in the global SLR. For example, the distribution of allocated time to

teach discipline specific curriculum and skills as well as incorporating collaborative learning, giving formative feedback on teamwork and assessment of individual teamwork process skills, highlighting tensions that underpin conflicting demands on discipline educators that have the potential to influence their level of engagement with teamwork pedagogy. These factors are further explored in Chapter Five.

Articulating a rationale for a focusing on discipline content P27 related, "*I've never really thought that we should teach it [teamwork] because we've got so much content to teach…I suppose we could bring someone in who is an expert in the area maybe*". Interpretation of this statement suggests teamwork pedagogy is part of the hidden curriculum in business disciplines supported by the implication that responsibility for teaching teamwork lies outside the purview of discipline educator, with teaching discipline content the priority.

4.2.5.2 Expecting Prior Teamwork Learning Experiences

Similarities of responses were noted with the same category arising in Question Four. For those participants teaching third-year or capstone units, there was a clear delineation in rationales for not teaching teamwork. First, participants assumed that after at least two years at university, most students would have had the opportunity to work in teams. For example, P22 explained, *"it's a third-year unit so most of them have worked in teams for the previous two and a half years",* suggesting that third year is about consolidating and solidifying prior knowledge through application. Second, some participants at one university teaching third-year units provided students with written guidelines for teamwork, but no formal teaching of teamwork theory within the unit.

4.2.5.3 Practising Teamwork is the Student's Responsibility

Shifting the focus to teamwork as the student's responsibility aligned with educator statements on their focus on teaching discipline content. Aligning with responses in question four, one educator's definitive comment stated, "*I put the responsibility in the student's*

hands" (P25). Similarities in perspectives under this category suggest that it is about students managing the processes as their responsibility and being able to play with, practise, experience, and unpack teamwork as individuals. These perspectives run contrary to the literature that suggests educators should be responsible for employing adequate pedagogical guidance on teamwork (Burbach et al., 2010) and training students in teamwork skills to structure team experiences more effectively (Pineda & Lerner, 2006).

4.2.5.4 Teaching Teamwork is a Transaction Cost

Participant statements about teaching teamwork being "*a lot of hard work … it takes a lot of effort*" (P23), "*it's a lot of work*" (P30) and, "*dealing with team dynamics problems…marking teamwork [are] the hardest things to manage*" (P9), generally reflected participants' lived experience of temporal, fiscal and human resource transaction costs as constraining the implementation of teamwork pedagogy (Riebe et al., 2016). The time commitment associated with teaching teamwork skills, dealing with conflict in team dynamics, assessing process and product and/or assessing group and individual outcomes has been noted at the institutional level (see Carnegie Mellon University, n.d.) and faculty level (Siha & Campbell, 2015). This category also aligns with the category of focusing on discipline content. Participants in this study referred to "*so much content to teach*" (P27) and "*so many outcomes we want them [students] to demonstrate, it's probably understandable we don't give as much attention to the team component*" (P28). Transaction costs are inferred as salient factors influencing educator perceptions of constraints to teaching teamwork theory or processes prior to implementing team assignments.

Categories for this question generally align with the literature outlined in Table 4.5, in which a range of perceived barriers to teaching teamwork in HE is summarised.

Table 4.5

Categories Aligning with Theme 'Perceived Barriers to Teaching Teamwork'

Category	Examples of relevant literature aligning with theme
Focusing on discipline content	Bacon (2005) contends that Management course designers should make an explicit decision about whether a group project is intended to enhance content learning or enhance learning about teams.
Expecting prior teamwork learning experiences	Prichard et al. (2006) stated that there is a prevailing assumption that students either already possess the necessary skills to work effectively together or that these skills are developed by the simple imperative to work together. Such an assumption suggests no need for any specific facilitation of team skill development through training since students either already possess team skills or learn them on the job. However, the authors found there is little evidence to support such an assumption.
Practising teamwork is the student's responsibility	Research by Burbach et al. (2010) suggested it is incumbent on instructors to provide students with opportunities to practise teamwork. Although, "putting them in groups with the hope that they will work effectively together is not enough. Instructors must be trained in the pedagogies of teamwork and be responsible for actively employ these pedagogies in the classroom" (p.757).
Teaching teamwork is a transaction cost	Siha and Campbell (2015) noted that research on faculty perceptions of using teams is limited. "A common faculty complaint is that there is insufficient time to cover course content and train students on how to work effectively within a team" (p. 4). Faculty in this study also indicated they did not use teams due to feeling overwhelmed by the time commitment or as a consequence of a prior bad experience.

It is suggested that to overcome perceived constraints to teamwork pedagogy "collective development and consideration" (Biesta et al., 2015, p. 624) in terms of educator training and resource allocation is required to raise teamwork pedagogy beyond the hidden curriculum. Educators' individual and collective agency involves dynamic relations between motivation, intentions, and power relations. Thus, educators' agency depends on the beliefs that individual educators bring to their practice, inherent in the intersecting paradox tensions of performing/belonging, arising from maintaining self-beliefs while conforming to wider organisational demands. At the institutional level, guidelines and/or policy for teamwork,

including consideration of the temporal cost of developing and implementing teamwork, may go some way to mitigating the challenges of teamwork pedagogy in business disciplines.

4.2.6 Question 6: Tell Me About How You Assess Teamwork

This question sought to elicit how the participant assessed teamwork and measured team product output and/or processes. All participants answered this question, many going into great depth about how they addressed (or did not address) the question of assessing teamwork.

The in vivo coding revealed the following codes: assess both process and product, assess product only, assess product with some marks for contribution, peer assessment, formative feedback, reflective practice, teamwork not a prescribed learning objective, transaction cost, no assessment, and contracts. Constant comparison across codes assisted in developing depth in the discovery of three main categories being (1) assessing for process and product, (2) assessing product only, and (3) assessing product with some marks for contribution.

4.2.6.1 Assessing for Process and Product

A total of nine participants (30%) discussed how they believed they integrated assessment of process components and final team product. Differentiating process and product of teamwork can assist in illuminating educators' views on how they assess teamwork. The process side describes how people are doing teamwork, whereas, the product represents what people are doing, that is, the taskwork (Marks et al., 2001). Teamwork process is understood to include transition, action, and interpersonal processes. Pineda and Lerner (2006) state that:

> transition processes refer to those activities involved in mission and goal
>
> specification, and strategy planning. Action processes refer to those activities
>
> directly related to task attainment such as tracking task progress, assisting

teammates, and coordinating work. Interpersonal processes include those

activities teams engage into manage conflict, build confidence, and regulate

members' emotions. (p. 183)

Participants in this study used parts of the processes described by Pineda and Lerner (2006);

however, none were found to be implementing all elements of the transition, action, and

interpersonal processes. In terms of how educators were assessing teamwork process, ten

participants (33%) were using some form of peer assessment, summed up by one educator as

a "*systematic way of calculating their [individual student] contribution*" (P30). A further

eight participants (27%) were relying on formative feedback to teams from the lecturer to

keep students on task through action processes to assist with task attainment. Reflections, in

consideration of the student's contributions to the team, were initiated by three (10%)

participants as part of the interpersonal process component. While participants in this study

were implementing and assessing some teamwork processes, many were using ad hoc

approaches to teamwork assessment, which could be attributed to managing the temporal

costs encountered during heavy marking periods as a salient issue constraining assessment of

teamwork processes.

4.2.6.2 Assessing Product Only

Bacon (2005) has argued that team project design should enhance either content or

teamwork learning, not both, which supports the responses about assessment of teamwork by

participants in this category. There were some major similarities in the products being

assessed by participants. Eleven (37%) of the participants reported using class team

presentations to assess the product, although a novel and notable difference was the use of

Mp4 recordings by P17 to evaluate the team product. These participants indicated that using a

final team presentation represented a time-saving option (P7) in terms of reduced marking

load or marking on the day of the presentation (P20). Ten (33%) of participants used a report

to assess the team product. Business reports have been noted as an authentic assessment product in HE (James & Casidy, 2018); hence, it is understandable that business educators would highly utilise this form of assessment product. Participants assessing only the product of a team assignment (e.g., a presentation or report) provided various rationales for doing so. In the minority were those who, although incorporating a team assignment in their course, believed that as teamwork was not a prescribed learning objective it, therefore, did not warrant the additional marking workload associated with assessing teamwork process components at the individual student level. On the other hand, P17 stated that "*there is only one name on the parchment so predicating the results of teamwork on the efforts, acts and omissions of other students is fraught*" (P17), inferring dissatisfaction with grade reciprocity. Therefore, one of the implications of assessing the product of teamwork holistically is that individual team members are denied procedural justice, with grade reciprocity being seen as unfair when individual results are impacted by the work of other members of the team (Schultz et al., 2010). For other participants there was concern about time inferring the transaction cost of implementing assessment of teamwork processes, suggesting the paradox tension of conflicting demands encountered by educators of either increasing workload through individual assessment of teamwork or marking teamwork products holistically.

Assessing the product of teamwork only could be interpreted as efficient use of workload allocation in discipline specific subjects implicating transaction costs through the resource allocation of time saved by assessing team assignments holistically. P16 considered the temporal cost of assessing teamwork stating, "*I do focus more on the end outcome and that might be more time than anything else … I think it's about us having enough time in the curriculum*". Maintaining efficiency and maintaining personal efficacy are critical tension points. As outlined in Chapter Two, and discussed further in Chapter Five, critical tension points (Jarzabkowski et al., 2013) for educators arise when they are confronted with a

paradox entailing persistent, conflicting, or contradictory demands between interdependent elements (Schad et al., 2016). These conflicting demands give rise to tensions which may cause cognitive disequilibrium inducing "high levels of stress around resource allocation, communication and control of the labour process" (Sutton, 2017, p. 629) and may contribute to educators grading team projects holistically rather than grading individual team members. Perceptions of holistic grading of teamwork, including reduction in workload for the educator, the risk of grade inflation and benefits of grade reciprocity for students are discussed further within responses to questions nine and ten.

4.2.6.3 Assessing Product with Some Marks for Contribution

Seven participants (23%) indicated that although they provided a grade for the final product, there was some scope to modify marks based on individual contributions, even though they were not formally marking teamwork processes. For all but one of these participants, this was a relatively informal approach, utilising some form of feedback mechanism. According to Shute (2008), formative feedback is "defined as information communicated to the learner that is intended to modify his or her thinking or behavior to improve learning" (p. 153). It should be meaningful to, and supportive of, the learner to keep students engaged (Biesta et al., 2015). Three of the participants intimated that they provided formative feedback. However, in each of these cases, the feedback was on an informal basis throughout the semester or in meetings as needed, suggesting educator agency in the management of teamwork feedback. Peer feedback between team members was favoured by all seven participants, with two using more formalised contract arrangements to guide peer assessment of other team members. In each case, the participants acknowledged that they would have the final say on how contribution marks were applied. One participant quipped that "*the class members were harder markers than me … my mark always over-rode*" (P26), and another stating "*if I think he doesn't deserve the same mark as all the others … I'll mark*

him down" (P5) and P9 stated that "*marking teamwork is one of the hardest things to manage*" in a discipline-based unit. These statements suggested educator agency in decision-making about grade reciprocity in team projects and their management of transaction costs. Table 4.6 provides an overview of literature aligning with the question theme.

Table 4.6

Categories Aligning with Theme 'Assessment of and for Learning Teamwork'

Category	Examples of relevant literature aligning with theme
Assessing for process and product	Lambert and Carter (2014) argued that without a transparent approach to assessing teamwork processes, some students could receive marks they do not deserve. The authors refer to procedural justice in grading team assignments, including the allocation of individual marks, so students perceive the procedures for allocating marks to be fair.
Assessing product only	Sashittal, Jassawalla and Markulis (2011) findings suggested that despite educators wanting students to learn important teamwork related skills, they "were driven by their desire to make more efficient use of their time and energy" (p. 95), in that teamwork reduced their workload as they could grade less assignments. Student views on grading the product only, with lack of individual assessment as part of the assessment process, were noted as being unfair that results are based on other people's work (Healy et al., 2018; Shultz et al., 2010).
Assessing product with some marks for contribution	Assessing product with some marks for contribution, while maintaining control over the assignation of contribution marks, suggests teacher agency in the decision-making process in teamwork assessments. Biesta et al. (2015) suggest that "much teacher agency is shaped by short-term aspirations to tick curricular boxes, deliver enjoyable lessons and keep students engaged…" (p. 635).

Assessment in HE has been researched widely in the literature in general (see for example, Boud & Associates, 2010; Knight & Yorke, 2003; Ramsden, 1992). Assessment is a complex undertaking that requires educators to consider not only what is to be assessed but also how students are inducted into the assessment process. Measurement of team processes and how these may be assessed have been addressed in the team studies literature for more than 40 years. For example, see Marks et al. (2001) who provide a framework for reviewing team processes in organisations. Research on assessment of teamwork processes in HE has also proliferated. See, for example, Zhang and Ohland's (2009) research into individualised

teamwork assessment and development by Ohland et al. (2012) of a behaviourally anchored rating scale for teamwork assessment. There are also specific examples of the assessment of teamwork in business disciplines which incorporate instruments to measure product and process outcomes: see, for example, in Organisational Behaviour (Kemery & Stickney, 2013), Accounting (Delaney et al., 2013) and Marketing (Preston, 2017). However, in this study, a preference for assessing teamwork holistically was inferred, suggesting educators may be unaware of how to individualise assessment of teamwork processes or constructively align team processes with teamwork activities and assessments.

Constructive alignment of curricula to articulate links between the activities, learning outcomes and assessments (Biggs, 1999) engages students in learning, so that they may effectively participate in assessments. The use of constructive alignment to link learning outcomes and activities with assessments was noted in the global SLR as demanding, with considerable transaction cost of time and cognition, yet limited attention was given to the topic in the articles reviewed in the global SLR. The ad hoc approaches to assessment of and for learning by most participants in this study may suggest constructive alignment was not a factor in curriculum design and that teamwork assessment raises performing paradox tensions of competing roles and conflicting temporal demands associated with design and management of teamwork assessment.

4.2.7 Question 7: Tell Me About How Your Students Apply Any Teamwork Theories or Processes When Explicitly Taught as Part of a Unit/Course.

This question sought to elicit how the participants in this study perceived students to be applying teamwork, theories and/or processes when these had been explicitly taught as this factor was found to be a gap in the literature. Consistent with the noted gap, few participants in this study could answer this question directly, with 60% of those responding to the question explaining they did not explicitly teach teamwork theories and/or processes in

their particular units. One participant who did explicitly teach both theory and processes commented that application was "*particularly difficult to see*" (P4). However, communication through discussion fora, along with their own anecdotal observations, assisted.

The in vivo coding revealed the following codes: ability to work with others, difficult to see, not explicitly taught, peer feedback, observe stages of development, reflect at end of assignment, and transfer not verified by educator. Constant comparison across codes assisted in the discovery of one main category being observing the application of teamwork.

4.2.7.1 Observing the Application of Teamwork

There were some unverified assumptions by participants that teamwork theories and/or processes had been incorporated in other units of study within a student's degree course. However, as they did not explicitly teach teamwork in their units, these participants were not looking for the application of theories or processes. Still, others in this category were cognisant through their own anecdotal observations of application of theory (such as Tuckman's stages being utilised by student teams), conflict management strategies, and reflection and/or debriefing at the end of a team project. More formally, P21 required students to participate in an online self and peer assessment tool throughout the project, which enabled students to adjust their teamwork behaviours based on the feedback from other team members, allowing P21 to observe application of teamwork behaviours during the course.

Table 4.7 addresses examples in the literature of research aligning with the Question Seven theme. It is often the case with teaching that learning is not always immediately apparent to the educator. As Hughes and Jones (2011) note, faculty members may see the application of student teamwork in a more limited way than that of students' peers. Further, transfer of teamwork skills learning is based on many factors that may not always be

observable by educators. However, team projects can offer insights to group effectiveness to both students and educators when teamwork skills are explicitly taught.

Table 4.7

Categories Aligning with Theme 'Observing the Application of Teamwork'

Category	Examples of relevant literature aligning with theme
Observing the application of teamwork	Research by Jackson (2016a) advocated that educators should be "teaching underlying theory for the targeted skill, explicitly imparting each skill's relevance by relating them to career objectives and developing learning contexts which emulate the workplace environment" (p. 221).
	Ettington and Camp's (2002) research proposed experiential learning as a way to help students understand transfer of teamwork skills from school to work. However, they question whether such an "approach is effective for transfer of learning to the workplace" (p. 358) Essentially, it may not be possible to observe the work outcomes of HE graduates teamwork learning as research in the field is lacking.
	Markulis et al. (2006) conducted a survey grounded in instructors' observations about the conversations occurring in teams and the issues that emerged. The questions focused on perceptions of leadership, group effectiveness, communication, and conflict.

There is a clear gap in the research in relation to educator perceptions of applying teamwork theory and/or processes when explicitly taught. The focus of research literature is far more aligned with student perceptions on explicit learning of teamwork skills (Jackson et al., 2014) and employer perspectives on graduate skills in teamwork (Marks & Richards, 2012), as well as other generic skills demanded by employers (McMurray et al., 2016). Given business educators' responses to Question Two about preparing students for the world of work, by making clear the relevance of teamwork theory, explicit teaching of teamwork skills and relating these to the workplace through observable assessment, educators could enhance students' team effectiveness and career readiness.

4.2.8 Question 8: Tell Me About What You Perceive Your Students Dislike About Teamwork

This question sought to elicit participants' views on what they perceived students disliked about teamwork, contributing to understanding the research aim of identifying factors that afford, or as in this question, constrain teamwork pedagogy. Despite the many advantages of teamwork, participants in this study recounted their experiences with feedback sourced from student evaluations conducted by the institution, or student comments made to the participant, or from their anecdotal recollections of having implemented teamwork projects in their courses. Of all the questions analysed, this one raised the most commentary.

Most participants elaborated on more than one aspect of teamwork with which they perceived their students to be disgruntled. In vivo coding revealed issues of dislike in codes of sharing grades/unfair process, free-riding/free-loading/social loafing/lack of contributions, high achievers, time management, personality clashes, cultural/language issues, lack of communication, transaction costs/additional workload. These challenges were noted and discussed in both SLRs in Chapter Two. After constant comparison across codes and categories, four main categories emerged being (1) slacking off, (2) grading risk, (3) diverging views on personality and culture, and (4) transaction costs for students.

4.2.8.1 Slacking Off

The constant comparative method assisted in integrating those codes that had similar properties. For example, the codes of free-riding, free-loading, social loafing and carrying others were subsumed into the category 'slacking off' as all terms are closely associated. Free-riding/free-loading being more closely associated with economics, or sharing of scarce resources, and social loafing arising from the social psychology literature in discussions of motivation, responsibility, and effort. Further, the code of lacking commitment was also subsumed into this category. Lacking commitment was referred to as students not

responding, not turning up, and not pulling their weight. Eleven participants (37%) perceived slacking off by team members to be a major factor in student dislike of teamwork. Two participants indicated that there might be two sides to the story with social loafing, suggesting that they believe there may be genuine reasons for lack of contribution. For example, "*students are quite busy*" (P13) and "*group members may unintentionally exclude someone from discussions without realising*" (P3), or "*others who are quite good just end up doing the work*" (P2). However, other participants believed that some teams get "*stuck with someone who does not contribute*" (P27), and the rest of the team has to "*pick up the pieces*" (P30).

Carrying others was emphasised by five participants in this study as the attitude attributed to those students with a high achievement orientation. Students with this orientation are described in the literature as being competitive and less accepting of grade reciprocity and more likely to want to work alone (Burdett & Hastie, 2009). Participant comments aligned with the literature evidenced by statements such as the "*reluctance they have for working in a team environment*" (P29) and having to deal with teams that "*implode … because they [high achievers] are carrying the non-performing students*" (P22).

A variety of interventions were noted by participants for this category. P29 suggested sorting high performing students into like-minded teams, as did P7 who advocated team selection based on grade ambition. While the suggested intervention may alleviate these students' reluctance to work in a team, it may not allay the prospect of carrying others even in homogenous groupings as student teamwork experiences are "never entirely predictable" (Sambell & McDowell, 1998, p. 401). Alternate interventions were proposed by participants to mitigate against team members slacking off. For example, P24 instigated a team contract to hold team members accountable to one another, P22 offered the option of peer reviews resulting in individual team member marks adjusted according to peer reviews, and P21 used an online self and peer assessment tool to adjust for social loafers. Application of these types

of interventions suggest that peer interventions were used to inhibit social loafing via educators guiding students with the use of tools to assist with accountability of individual team members, interpreted as a way in which participants sought to moderate student dislike of teamwork and the temporal and psychological costs of dealing with teamwork issues.

4.2.8.2 Grading Risk

Grading risk was perceived by eight participants (27%) as contributing to student dislike of teamwork. A common property arising from the comments from these participants was communicated as grade reciprocity applied to teamwork assignments. One participant evidenced their statement about first year students "*detesting being graded on a team project*" (P1) as a clear indication that students did not enjoy teamwork, validated in the blowback the unit received in the end of semester university teaching evaluations and acting as a constraint to teamwork pedagogy. Students' complaints about sharing their grade (grade reciprocity) are summarised in another participant's perception of the rationale for disliking teamwork: "*their individual mark is going to be determined or controlled by the effort of these other people they don't really know*" (P16). Sensitivity to grading issues is noted in the literature, (Schultz et al., 2010) along with recommendations and suggestions for individual grading methods for student teamwork (see for example, Ohland et al., 2012).

4.2.8.3 Diverging Views on Personality and Culture

Participants gave multiple reasons for personality clashes in student teams, including cultural reasons "*ethnic background, religious background*" (P18), students not having relevant people skills and "*having to learn social skills, management skills, leadership skills, motivation skills, time management*" (P23). Divergent views on personality incorporated issues around the stress of dealing with new people in teamwork, and students adjusting to working with people they do not like or with whom they do not want to work. Participants

identified these issues as factors contributing to student dislike of teamwork and possible factors constraining teamwork pedagogy.

Divergent cultural views were perceived by five educators (17%) as contributing to student dislike of teamwork. The issues were presented from an ethnocentric point of view with international students interpreted as 'other', and domestic students' points of view interpreted as legitimate by some participants. These participants stated there were issues arising from international students possessing varying levels of English language skills, noting domestic students' complaints that international students "*didn't quite know how to do the English, we had to do the proofreading etc.*" (P7), or that "*they feel as though they are dragging their marks down*" (P20). Although there were only a few comments related to cultural issues as a rationale for student dislike for teamwork, it did raise some interesting questions about the perspective of educators and how their personal views could be adapted to accommodate an ethnorelative approach to afford effective teamwork pedagogy in a multicultural environment.

The code of performance anxiety was subsumed into this category after constant comparison across codes. The performance anxiety code arose from participant comments about the difference in how individual student personalities manage their time, with P14 summarising as "*they do all the work because others can't manage their time, whereas they can and have all their work done early ... even though the other person is quite capable, they don't go through the full process to get them there*". This statement inferred conflicting tensions of responsibility assignation for investment in student training and coaching and, therefore, associated transaction costs further explored next.

4.2.8.4 Transaction Costs for Students

Temporal and human resource costs of teamwork were noted in eight comments emanating from participants across the universities. Temporal cost factors are associated with

time management, free-loading and additional workload placed on other team members when they believe a team member is not contributing at an adequate standard. Encapsulating this view, P2 opined, "*the quality of what one person produces isn't up to the standard of what they want so they have to redo things, which adds to their workload*". Students' time management was a particularly salient factor noted by participants as being an underlying negative antecedent of teamwork dislike. For example, "*might not work at your time, at your pace, and they might have very different views or expectations as to where things should be and when*" (P25) and "*they try and fit in their 12 hours of study in three hours, and they go off and do what they've got to do, so I think genuinely our students are quite busy. They don't put aside the full, we say 10 hours per unit per week for a 40-hour week, I couldn't name a student who actually does that*" (P13). Human resource costs associated with student dislike of teamwork related to managing interrelationships and/or "*opting to complete a team assignment individually*" (P25) adding to workload because the student does not like working with others. These examples of transaction costs for students highlight implications for educators of the need to teach students interpersonal skills, especially those associated with teamwork, particularly conflict management and negotiation skills. Data related to transaction costs emerged as a category and transaction cost is further included as a theme in this thesis. Table 4.8 below outlines the literature that aligns with the Question Eight categories as interpreted in relation to negative student perceptions of teamwork.

Table 4.8

Category Aligning with Theme 'Negative Student Perceptions of Teamwork'

Category	Examples of relevant literature aligning with theme
Slacking off	Maiden and Perry (2011) noted the interchangeable use of the terms 'free rider' and 'social loafer' in scholarly literature. The authors make recommendations to mitigate free riding in team projects.
	Zhang and Ohland (2009) stated that the appropriate accountability of contributions may improve motivation, perception and involvement

Category	Examples of relevant literature aligning with theme
	when individual contributions are rewarded. The use of holistic rubrics is suggested.
	Jassawalla et al. (2009) pointed out that faculty agree that "social loafing is about the reduction of physical, perceptual, or cognitive effort in the presence of others, and that loafers expect others to pick up the slack even as they receive the same reward" (p. 42).
	Burdett and Hastie (2009) reviewed the literature and found that "those with high achievement orientation are often competitive, seek to work alone, are less accepting of group-based rewards…were significantly less satisfied with group work compared to those with curious, conscientious, and sociable learning styles" (p. 62).
Grading risk	In results of a study by Schultz et al. (2010), post-secondary students indicated that working in a team was "uncomfortable and vulnerable because students are forced to rely on peers with the end result impacting on their individual grade on the assignment and ultimately within the course" (p. 20). Further, students did not want to be responsible for other people's grades.
	Zhang and Ohland's (2009) research recommended individualised grades for team assessments in order to mitigate issues arising with fairness and validity of grading group performance.
Diverging views on personality and culture	Hunter and Westwick's (2019) study identified personality clashes as a contributing factor to group hate. Their findings suggest that giving students the opportunity to "identify their personality traits and apply their knowledge of individual personality differences" (p. 22) promotes small group success.
	Takeuchi et al. (2013) discussed the impacts of high context versus low context and individualistic versus collectivist cultures and how these can affect approaches to teamwork cohesion.
	Strauss et al. (2011) found that research shows "that the uncertainty created when students are required to work in groups for assessed projects induces anxiety, which can manifest itself both cognitively and affectively. Such anxiety may influence student attitudes towards the selection and formation of the groups" (p. 815).
Transaction costs for students	Hall and Buzwell (2012) noted "other academic pressures and time constraints" (p. 40) impede students' ability to assist one another in group work in HE.
	Pfaff and Huddleston's (2003) seminal work suggested that educators assign a reasonable workload and time in class to work on projects to improve student teamwork experiences. Workload has also been noted as a transaction cost for students (McCorkle et al., 1999).

Linked to the research question, the participants' responses to negative student

perceptions of teamwork highlight the many challenges faced by educators in implementing

teamwork as part of the business curriculum as expressed through their lived experiences. Negative student perceptions identified salient factors that constrain teamwork pedagogy and were interpreted as performing/learning paradox tensions, the interplay between establishing new understandings to enhance present and future success while navigating competing demands and goals. The intersection of performing/learning tensions is noted in the way in which discipline-focused educators reacted to negative student feedback, with participant comments reflecting sensitivity to the competing demands of their discipline role with the conflicting demands of student stakeholders.

4.2.9 Question 9: Tell Me About What You Perceive Your Students Like About Teamwork

This question sought to elicit participants' views on what they perceived students liked about teamwork. The responses were mainly directed at the perceived experience of working with others in teams and what participants perceived students to gain from that experience. What became apparent in analysing responses to this question after coding of responses from the previous question about what students' dislike, was that there appears to be a continuum whereby at one end students like an aspect of teamwork, for which there are as many others who do not like that aspect at the other end of the continuum. Specific examples were noted with grading reciprocity and experiencing intercultural interactions.

Initial in vivo coding revealed codes of, for example: learn from others, engage with others, share ideas, team works well, new experience, shared workload, social interaction, human contact, equality, working with other cultures, synergy, class time, grading, and nothing (one participant believing there was nothing that students liked about teamwork). Constant comparison across codes resulted in five categories being (1) learning from peers, (2) experiencing the social environment, (3) grading reciprocity, (4) finding synergy, and (5) experiencing intercultural interactions.

4.2.9.1 Learning from Peers

Learning from peers was discussed by participants as being liked by students because of shared learning, providing opportunities to talk and engage and learn hints and tips from peers, work in a supportive, social environment and develop networks. This category speaks to the necessity for students to have the opportunity to develop collaborative skills. Collaborative learning is an umbrella term for a myriad of approaches to learning. Collaboration builds connections between diverse learners, requiring proactive engagement with learning (Boud et al., 2013) and is an especially prevalent approach in teamwork. Learning from peers through the sharing of ideas can build understanding from multiple perspectives with which students are scaffolded to gain new insights (Vygotsky 1978). One of the main concerns with collaborative learning has been that educators are not necessarily trained in teaching collaborative skills (Burbach et al., 2010) and/or do not see it as within their purview to do so (Sashittal et al., 2011).

4.2.9.2 Experiencing the Social Environment

Experiencing the social environment of a team was typified by comments about the team working well together by identifying synergies: that is, each other's strengths, weaknesses and/or areas of expertise. However, there were also comments around aspects of social cohesion, the sharing of ideas and enjoyment of team interaction generally. This aspect was summarised by P29 as "*I suspect a lot of students who like the teamwork aspect, they are very social in their orientation, a lot of students have strong relational needs, and if they need a supportive social environment, they really enjoy the team environment. I think that's generally the case*". This is contrasted with statements in the previous question in relation to students with high achievement orientation who were perceived as disliking teamwork.

4.2.9.3 Grading Reciprocity

Participants, in the main, were aware that holistically marked team assignments (that is, no individually graded component was in place) were likely to inflate some student's grades. They suggested that this was one reason why some students liked teamwork. "*Sometimes, you get students who are not poor performers, but just sort of average, middle of the road, and they get in a group, and for whatever reason, the group works really, really well and actually pulls all of the students' marks up*" (P9) and "*they like relying on other people to get them a grade or a mark*" (P24). This is a clear example of the like/dislike continuum of grade reciprocity. The academic literature contains many examples of why students dislike holistic teamwork grading (for example: Healy et al., 2018; James & Casidy, 2018; Schultz et al., 2010), but there is little that points to grading reciprocity as beneficial. This may be because grading is a sensitising concept for educators, and there are many strategies suggested for self and peer assessment or ways in which individual marks can be allocated for team assignments as previously discussed.

4.2.9.4 Finding Synergy

A generic first response to the question of what students liked about teamwork elicited many comments like "*What they like about it is when it works well*" (P8). Seventy per cent of comments in this category were coded as 'team works well'. In probing what participants meant by such statements, the additional factors related to team synergy. Team synergy has been defined by May and Carter (2012) as "a sense of purpose shared among team members" (p. 18). Being able to find synergy in strengths and weaknesses among team members and contribute different expertise to the team were cited as examples: "*I think that they know that if they work as part of a team that there can be some synergies and some opportunities to combine strengths within the team even though they realise that there may be some weaker members of the team*" (P28). Likewise, "*identifying what those strengths are*

and then dividing the labour in a way, and it will never be absolutely equitable" (P6) and
"*much better for having a team where people were able to contribute different expertise and to the final output*" (P21). Participants asserted that teams worked well when they had synergy, and the antecedents may be related to a shared purpose of contributing their different strengths and weaknesses, previously explored in participant definitions.

4.2.9.5 Experiencing Intercultural Interactions

Even though there were only a few comments related to the cultural aspects of teamwork as a positive experience, each related to domestic students' viewpoints about learning from different cultures, which assisted them in thinking differently. As one participant described it, "*working with other cultures and they get the viewpoint from four or five cultures and frameworks and how that's made them think differently and it's like anything else, when it works well it's outstanding*" (P12). Watson et al. (1993) point out that in the longer term, it is possible that the ability to generate a variety of alternatives to solving problems is an outcome of culturally diverse teams. In the global and gig economies, it is likely that graduates will work with others from different cultures at some point. One participant summarised their response to why students liked teamwork in multicultural teams as "*I do think that the way it is taught will have an impact on how students perceive it*" (P14). Colvin et al. (2014) note that enjoyment of multicultural teamwork at university is dependent on the extent to which the student has adopted an ethnocentric or ethnorelative conceptualisation of culture. Hence, familiarisation with intercultural teams at university through heterogenous teaming would be of benefit if pedagogical strategies were put in place to aid intercultural understanding and communication.

Table 4.9 outlines the literature that aligns with the Question Nine categories as interpreted in relation to positive student perceptions of teamwork.

Table 4.9

Categories Aligning with Theme 'Positive Student Perceptions of Teamwork'

Category	Examples of relevant literature aligning with theme
Learning from peers	Boud et al. (2013) highlighted the positives of peer learning in HE: "Peer learning can prompt a sense of responsibility for one's own and others' learning and development of increased confidence and self-esteem through engaging in a community of learning and learners … Peer learning necessarily involves students working together to develop collaborative skills. Working together gives them practice in planning and teamwork and makes them part of a learning community in which they have a stake" (p. 8).
Experiencing team social environment	"Much learning takes place from sharing others' experiences, existing knowledge and skills. Students learn to acknowledge the backgrounds and contributions of the people they are working with" (Boud et al., 2013, p. 8).
Grading reciprocity	In results of a study by Schultz et al. (2010), post-secondary students indicated that working in a team was uncomfortable because they were vulnerable as individuals if they were forced to rely on peers, resulting in their individual grades for the assignment and the course overall, being impacted. Students did not want to be responsible for other people's grades.
Finding synergy	Stagl et al. (2006) link team synergy to adaptation. The ability to coordinate and share team tasks is beneficial in maximising workflow and addressing reduction in performance during adaptation.
Experiencing intercultural interactions	Colvin et al. (2014) research into local student intercultural interactions and experiences at university supports previous research in the area, related to the level of complexity with which one construes the intercultural event as a determinant of how deeply it is experienced. Findings indicate that students with an ethnorelative conceptualisation of culture enjoy the experience of intercultural interactions leading to emerging relationships.

The overall picture of what students like about teamwork is inferred as bound to factors of trust and the affective state of psychological safety (Ulloa & Adams, 2004). Where teams are able to develop trust, respect and synergy, the implication is that they are more likely to speak up, share and contribute to the team and have a positive experience of teamwork (Mendo-Lazaro et al., 2017), whether or not their suggestions are ultimately functional (Stagl et al., 2006). HE students' positive perceptions of teamwork, and the way in

which these perceptions are drawn upon by educators, contributed to an understanding of salient influences affecting teamwork pedagogy.

4.2.10 Question 10: Tell Me About Any Challenges You Have Faced with Teaching Teamwork.

There was a multitude of participant stories arising from responses to this question that indicated the salient issues participants faced in teaching teamwork. In turn, a multitude of codes and categories were established. However, during the constant comparison between and across categories, the analysis resulted in five categories being (1) communicating effectively, (2) dealing with social loafing, (3) managing conflict, (4) grading, and (5) revealing transaction costs.

4.2.10.1 Communicating Effectively

Communicating effectively is a broad category encompassing varied factors challenging educators and students. Cultural and language issues that constrain or inhibit the way in which stakeholders understand one another, leading to the perception of lack of commitment, were evident. Group diversity having a negative impact on low-quality communication is supported by the findings of Curşeu and Pluut (2013). Ethnocentricity of Western educators and students is reflected in the 'it's them, not me' attitude that can be interpreted from some responses. This is particularly seen in responses related to the assessment of teamwork. For example, "*To get them (international students) to engage in [Australian themed projects], they had little interest because as soon as they finished their course in two months' time, they would be straight back home*" (P22) and "*in their group oral assessment some of the international students were like watching tennis, and they couldn't jump in and contribute, consequently got zero because they didn't contribute*" (P7). Yet others conveyed their challenges as attitudes being associated with ineffective communication between themselves and the students as "*not understanding what I say*" (P4),

197

and insightfully, "*it never ceases to amaze me how many different perspectives that students can take on the one assignment. So, trying to get everyone on the same page to understand what that assignment is within a team and across teams is quite challenging ... and you know, we have our own frame of reference, and even if you give them an exemplar, it's something about human nature*" (P12). Participant statements about challenges with teaching teamwork indicated communication issues can be critical tension points arising for all stakeholders.

4.2.10.2 Dealing with Social Loafing

Dealing with social loafing and the inherent conflict that is sometimes associated with intervening in teamwork was seen as a challenge for 20% of participants in this study. Participants referred to social loafing factors of student non-attendance, not being contactable, not doing what was required/on time, conflict in direction or between stories. Participants in this study were challenged by how they ensured fairness of outcomes and the time taken to deal with such issues. The time factor surfaced performing paradox tensions as educators seemingly struggle to deal with conflicting demands on their time with the plurality of stakeholders' competing goals. This was simply expressed by one participant as "*time taken sorting out problems when students can't sort themselves out*" (P17). This is particularly salient when educators do not have strategies in place to deal with social loafing and other team conflicts. Having such strategies in place would assist educators in reducing the fundamental complexity of the temporal demands associated with social loafing.

4.2.10.3 Managing Conflict

Eight participants (27%) indicated that their greatest challenge was managing conflict arising between team members. This suggests that educators are either ill-prepared or unwilling to intervene in team conflict. Managing conflict was interpreted as time-consuming in "*sorting out problems when they can't sort themselves out*" (P17) and, not having

strategies in place to impede conflict with a consequence being that students resort to handing the problem to the educator. Responses demonstrating this consequence include statements inferring reliance on the educator such as "*it tends to be the 'go to' thing to do, like 'I'm going to tell the teacher on you'. It's that kind of high school kind of thing*" (P24) and "*another challenge I face is 'he said that, she said that, what do we do?' Then dumping it all on you at the end and you feel that you are carrying their weight now. I know it is also my fault because I tend to say, 'it's okay, I'll fix it'. I shouldn't say that*" (P30). Being ill-prepared to deal with conflict arising in teams and student reliance on the educator to fix problems were identified as challenges to teamwork pedagogy. Managing conflict was interpreted as a temporal cost to educators, contributing to performing paradox tensions.

4.2.10.4 Grading

Grading teamwork was seen by 17% of participants as challenging in two main ways. First, ensuring distributive justice, where efforts match rewards, in summative assessments. This was especially prevalent for those participants who marked the teamwork holistically without acknowledgement of individual team member efforts. Second, students with a high achieving orientation were noted as being "*very focused on marks*" (P29). In a confirmatory observation, one participant recounted, "*a student said to me that he felt that he deserved a higher mark for the presentation mark and the research report and he said, my bit is on page … and I said, no you were working in a team, but he felt that his contribution was worth more than the others*" (P20). While the literature abounds with many strategies for grading teamwork to ensure distributive and procedural justice (see Augar et al., 2016; Burdett & Hastie, 2009; Zhang & Ohland, 2009), it appears that many of the participants in this study took an ad hoc and idiosyncratic approach to grading team-based assessments unless specific teamwork policy and or guidelines were in place.

4.2.10.5 Revealing Transaction Costs

Just over 50% of participant codes related to challenges were categorised as transaction costs, although there were no overt statements using the terminology for the purpose of in vivo coding. Fiscal, human resource and temporal transaction costs were most often interpreted through participant statements around the impact of implementing teamwork on workload.

The human resource cost of challenges with teaching teamwork was interpreted through the lens of a senior academic's comment "*While we are on challenges ... one of them is, in the main, universities do not have the sort of academics who can teach those sorts of skills because they are so focused on the [content] theory*" (P6). The statement acknowledges the human capital resource specificity of educators employed on the basis of discipline knowledge in business schools. Lack of prior training in pedagogical strategies and theory to assist with collaborative learning required for teamwork is also a sentiment present in statements from coal face educators who question "*how do you scaffold existing lecturers into doing these things? One way would be doing professional development on teamwork*" (P10). Providing PD is a human resource transaction cost for the institution in designing and providing PD and for educators having to attend PD to learn new skills.

Interpreted as a fiscal cost, some responses highlighted measures at the institutional level that were often out of the educator's control. Organisational paradox tensions arising from university budgetary constraints and the quest for efficiency were highlighted in participant statements. For example, one participant states "*cost wise it is actually cheaper to run it as a seminar, but why the insistence to have it as a lecture? I haven't got that answer ... but I think the structure and format of how it is run if you want teamwork then you have to design how it is delivered to encourage teamwork*" (P3). In turn, this participant's emotions, expressed as frustration, inferred a critical tension point associated with lack of appropriate

teaching spaces. P19 further elaborates this point, stating "*the learning spaces aren't really built around teamwork*". Participants' references to teaching spaces raise spatiality as an element of the hidden curriculum (Jandrić & Loretto, 2021) in shaping educator and student experiences as a salient influence on teamwork pedagogy. University learning spaces have traditionally been built around the lecture hall, tutorial room and case study rooms, generally reflecting didactic teaching modes. Building new collaborative teaching spaces or even converting traditional spaces is a costly exercise for the universities.

Other participants noted that the mode for teaching delivery is a fiscal cost to the educator. "*If you are the person delivering the repeat, you don't get as much bang for your buck in terms of time because it's a repeat seminar or repeat lecture, so you are just filling up your time with lots of face-to-face classes*" (P16). Interpreted as effect on workload, for tenured staff, this aspect indicates more classes are added to the educator's workload when teaching a repeat of the originally delivered class. For casual staff, there is a tangible financial impact as the rate of pay can be less for repeat lectures/seminars.

Temporal transaction costs were interpreted through participant statements about balancing time across a myriad of academic functions. P13 provided an insight into temporal transaction costs as "*I don't think we've been given the time to be good teachers … Teaching is getting squeezed into a smaller and smaller basket, we've got to be research active, we've got to be held accountable*". This statement signals performing/belonging tensions arising from negotiating teaching workload with a wider organisational goal of active research. Replicating teaching online or developing 'real-world' scenarios or industry-related team projects, as well as research commitments, were common challenges inferred as transaction costs, raising critical tension points for business educators.

Table 4.10 outlines the literature that generally aligns with the Question Ten categories as interpreted in relation to challenges of teaching teamwork.

Table 4.10

Categories Aligning with Theme 'Challenges Teaching Teamwork'

Category	Examples of relevant literature aligning with theme
Communicating effectively	Troth et al. (2012) highlighted that communication skills training early in a university degree could result in students who are better able to engage in teamwork and have a more positive experience.
	Curşeu and Pluut (2013) found that group diversity may have a negative impact on commitment and be "associated with higher levels of conflict and low-quality communication and collaboration" (p. 88).
Dealing with social loafing	Hall and Buzwell (2013) pointed out that social loafing may well be misunderstood and sought to review antecedents leading to underlying causes for loafing behaviour. They believe that by intervening at the origin of the problem and providing the correct support, free-riding may be impeded.
Managing conflict	Results from Stone and Bailey's (2007) empirically tested model indicated that instructors can manipulate and influence conflict self-efficacy and affect students' behavioural intentions in teamwork.
	Lang (2009) found that university projects are often assigned with limited information regarding how individuals or groups should deal with conflicts that may arise.
Grading	Grade reciprocity is a major concern for students, but just as much a concern for educators. Burdett and Hastie (2009) pointed to the necessity for educators to explain how distributive justice issues will be addressed through workload and assessment procedures.
	Healy et al. (2018) identified significant differences with students identifying as high ability. Their research found that high ability students preferred to work with others of similar ability, who were hard workers receiving good grades. These students considered outputs of group work to be of a lower standard than that which they could achieve on their own and were more concerned with free riders and the logistics of teamwork. Positively, they gained more from the social experience and significantly stronger leadership skills gains.
Revealing transaction costs	Riebe et al. (2016) identified that transaction costs are apparent in the implementation of teamwork pedagogy in HE. For educators, these transaction costs are related to temporal, fiscal and human resource costs. Transaction costs of teamwork for students are often measured temporally (time required to work in a team). However, this is referred to more generically, for example, as 'time constraints' (Hall & Buzwell, 2012) or 'opportunity loss' related to time (Bacon, 2005).

Challenges encountered by business educators teaching teamwork were clearly

influenced by the transaction costs and tensions emanating from communications between

educator and student and between students, often arising from cultural issues. Social loafing, managing team conflict and grading were generally seen as temporal transactions costs, suggesting impact on workload, with the conflicting demands on educator time contributing to tensions associated with "high levels of stress around resource allocation, communication and control of the labour process" (Sutton, 2017, p. 629). However, the way in which educators choose to transact with the internal and external environments at the nexus of educator, student and institution levels may inform how they enact their response to the transaction costs and paradox tensions challenging teamwork pedagogy.

4.2.11 Question 11: How Have/Could You Address These Challenges?

The categories arising from the previous question highlight the many challenges that participants perceived as perplexing when implementing teamwork. Broadly speaking, the participants in this study found it a challenge to answer how they addressed challenges. I argue that this may be due to the breadth of challenges that were articulated, making in vivo coding initially laborious by having to stay open to discerning all possible challenges being communicated.

Initial in vivo codes included team norms, contracts, individual assignments, practice, team formation, discussions, questions, appealing to students, document experiences, reflection, relate to real-world consequences, additional resources, online tools, staffing, and avoiding teamwork. These initial codes all link to how participants chose to manage inherent transaction costs and the paradox tensions arising from often contradictory multiple demands.

Constant comparison across coded data assisted in developing the categories. Four main categories emerged being (1) getting students to own responsibility, (2) investigating problems, (3) assessing individual's contributions, and (4) providing additional resources.

4.2.11.1 Getting Students to Own Responsibility

Nine participants (30%) discussed how they reverted responsibility for challenges that student teams faced back to the student. Responses were peppered with phrases evidencing the participants' feelings when dealing with student complaints about teamwork, such as "*flick it back to them because it's their issue*' (P26) and "*I can't take that responsibility*" (P20). Others dealt with teamwork challenges by interactively reflecting with the student on real-world consequences of teamwork issues such as personality clashes "*what's your personality and ... how does that affect your behaviour in the workforce*" (P12) or "*I say, let's take this out of the university environment ... I try to make it into a real-world situation*" (P23). However well intentioned, this latter approach still signifies the issue as the student's responsibility. Yet others were more circumspect in their approach, telling students to "*document things*" (P30) and "*provide evidence*" (P27) of the problems, essentially splitting responsibility with the student. Although there are scholarly articles referring to ways in which educators have attempted to deal with teamwork challenges from many different perspectives, there appears to be little focused research on the issue of who is responsible for sorting out team problems.

4.2.11.2 Investigating Problems

Six participants (20%) focused their responses on specific ways in which they investigated teamwork challenges. For all of the participants, there was a temporal transaction cost associated with investigating challenges arising from teamwork. One participant detailed the way in which they would ask students to "*identify what the problem is*" (P12), try to remove the emotional aspect and work with students to come up with some strategies to deal with the problem. This participant included skills training and personality profiling in their unit. This factor suggests that the educator is more adept at confronting the tensions and accepting responsibility for assisting students in refocusing on their teamwork

through various strategies. For others, the temporal transaction cost associated with the strategy of speaking to all of the affected parties was through spending time "*getting the group back together*" (P9) and discussing and questioning students about their individual input to teamwork (P3, P5, P17). For one participant, teamwork challenges arose from high achieving students squabbling over marks and/or team leadership. This was seen as being associated with "*the high bar used as a marketing tool for prospective [postgraduate] students*" (P8), ostensibly assigning responsibility for this particular challenge to the institution.

4.2.11.3 Assessing Individual's Contributions

The ways in which educators have sought to ameliorate some of these challenges as their responsibility intersects with forethought about pedagogical strategies to engage individual team member participation, including pre-planning for course delivery involving teamwork. Four participants (13%) in this study indicated that they implemented certain process requirements early on to which teams would need to adhere. Examples of these processes included the use of team contracts and team charters, also referred to as norms or codes of conduct, to ensure acknowledgement of individual team member accountability and responsibility. As one participant explained, "*the norms set boundaries and expectations*" (P14). For some, "*teaching teams to contract, teaching students to document*" (P16) was about assisting students in managing the work as an example of what occurs in the workplace. For another, it was about being able to use the team contract to "*pay it back to them by asking if they had 'done x, y, z' in their contracts*" (P24). While this participant introduced contracts to ensure the accountability of individual team members, responsibility was essentially reassigned to students when challenges were encountered.

4.2.11.4 Providing Additional Resources

Resourcing teamwork was noted by three participants (10%) as a way to deal with challenges arising from student teamwork. Resource requirements were varied, and multiple forms of resourcing to reduce teamwork challenges were discussed. One participant brought in a guest speaker from an influential employer to elaborate on "*the importance of teamwork*" (P21) if students aspired to work in that firm, which that participant stated, "*worked a treat*". The same participant introduced an online self and peer assessment tool to encourage students to evaluate their own and other's contributions to teamwork that had the ability to impact individual team member grades and allowed for educator observation of teamwork skills and behaviours. This type of resourcing for teamwork suggested the participant was taking responsibility for assisting students with the development of teamwork processes. Providing live online access to on-campus seminars so "*on liners could participate in real time*" (P13) was not only an additional resource but also an additional transaction cost to the participant who had to access particular software and set up cameras, clearly interpreted as the educator taking responsibility for aiding student learning. Alternatively, a sense of shared responsibility is interpreted through the response of another participant in "*lots of resources available on Blackboard. Academic Skills Centre is available for students*" (P4). From an emic perspective, having knowledge of the unit in which they teach, I understood the resources referred to as being templates for agenda items, minutes of meetings, team norm and contract documents, peer evaluation forms and so on. While the educator took responsibility for uploading such documents, it was then also the students' responsibility to access and avail themselves of these resources to mitigate challenges with teamwork. What was not stated was the concept of regular meetings between the educator and the teams, which the educator considered their responsibility and that I note is a temporal transaction cost for the educator.

Table 4.11 outlines the literature that generally aligns with the Question Eleven

categories as interpreted in relation to question theme of assigning responsibility.

Table 4.11

Categories Aligning with Theme 'Assigning Responsibility'

Category	Examples of relevant literature aligning with theme
Getting students to own responsibility	Star and Hammer (2008) questioned if the teaching of generic skills, such as teamwork, erodes the higher purpose of education. The authors note many challenges including "inconsistencies in interpretation, and by extension, disagreement over who is responsible for skills-based teaching; associated risk in implementation, including financial costs and staff training; and finally, the possibility of mixed student responses to changes in teaching brought about by adopting a skills focus" (p. 238).
Investigating problems	LaBeouf et al. (2016) recommended examining the "impact of age, gender and ethnic background on group work performance" (p. 21) to mitigate some of the challenges with teamwork and how group work projects are distributed across courses for the benefit of students. Further, they highlight the need for educators to be aware of "best practices in group work course development, delivery and faculty training" (LaBeouf et al., 2016, p. 21).
Assessing individual's contributions	Aaron et al. (2014) investigated the use of team charters on student behaviour. They assert that introducing team charters early in team development improves "process outcomes, including communication, effort, mutual support, cohesion, and member satisfaction" (p. 90), and creates a positive experience for business students. Over a decade ago, Snyder (2010) also recommended pre-planning in that "instructors should prepare students by teaching them team development, communication skills and emotional intelligence factors" (p. 65) before assigning collaborative work.
Providing additional resources	Hubbard (2005) recommended adding project management tools as resources enabling students to manage teamwork better. These tools, "agendas, information sheets, performance contracts, project management plan and team evaluations" (p. 369) were to be used as resources on which the educator could evaluate team effectiveness. In relation to using guest speakers as a resource, Riebe et al.'s (2013) research with business students indicated "that an appropriately briefed, qualified, interesting and engaging guest speaker plays an important role in active learning by exposing students to the 'real world' of the workplace and can reinforce the significance of key employability skills for future career success" (p. 55).

Thematically, the categories aligned with how responsibility for the challenges was

assigned by participants in response to how they addressed the challenges of HE teamwork.

Participant's responses were interpreted as the either accepting responsibility and attempting to ameliorate problems with teamwork or assigning mitigation of teamwork challenges to the responsibility of students. Lack of contributions by other team members and grading of team assignments were major concerns perceived by participants for themselves and for students. Some categories were developed from one or two responses that were considered outliers and worthy of discussion points. For example, one senior educator discussed the challenge of providing staff who can teach teamwork as "*we don't have the people who can manage, facilitate, coordinate those programs in the main at universities*" (P6). It is an interesting point because as previously raised, most university business educators are employed on the basis of their specific discipline knowledge and research skills. In transaction cost terms, there is a human resource cost for institutions in recruiting staff with not only the relevant technical skills but also relevant pedagogical knowledge to be able to teach teamwork and other soft skills. Participants provided many ideas for overcoming challenges and resourcing teamwork, both from an innovative or roundly accepted perspective. What became clear was the nuanced comments by participants interpreted as teamwork being the student's responsibility. This is an interesting finding, reflecting the hidden curriculum, as the literature provided little guidance on this issue. Rather, the literature indicated that it is the HE educator's responsibility to be trained in teamwork pedagogies and actively employ relevant pedagogies (Burbach et al., 2010) in teaching teamwork skills and managing teamwork challenges (Hansen, 2006).

4.3 Research Question Alignment

Presenting my interpretation of the responses analysed for each question has built a scaffold for answering the research question and aims. Categories were clustered according to the interview question order, although recurring categories sharing similar traits overlapped

across some questions. The following paragraph highlights insights into examples of salient influences that affect the teaching of teamwork in the Australian HE business school context.

Key findings aligning with the research question were noted in the patterns that emerged across the 44 categories. Grading and/or assessing teamwork were noted as recurring categories in eight questions (questions 2, 3, 4, 6, 8, 9, 10 and 11), establishing grading and/or assessing teamwork as a major salient influence on teamwork pedagogy. Another salient influence affecting the teaching of teamwork was related to expectations of student prior learning of teamwork and/or the expectation that teamwork learning was a student responsibility, indicating participant rationales for their approach in constraining the teaching of teamwork. These rationales were present in six categories across questions four, five, eight and eleven. Though a less frequently cited category, preparing students for the workplace was noted as a salient influencing factor affording the inclusion of teamwork in a course and contributing to the student learning experience; however, for some participants the student learning experience of teamwork was incidental; thus, affecting the teaching of teamwork in business courses by acting as either an affordance or constraint. Comparing across categories and seeing patterns consolidated understandings of salient issues aligning with the research question and aims of the study. The following section details how data were themed.

4.4 Theming the Data

Question themes were developed at the latent level to "capture the essence and essentials of participant meanings" (Saldaña, 2016, p. 80), and contributed to transcending the reality of categories and progressing toward more abstract themes and assertions, as noted in Figure 4.1 and detailed in Appendix D. Two main themes were identified, being (1) the hidden curriculum – hiding in plain sight, and (2) negotiating the transaction costs of HE teamwork. At a higher conceptual level, the analytic goal was to develop an overarching

theme/theory assertion (see Figure 4.1) to holistically unify the data corpus. A worked

example from the data analysed in this study appears in Figure 4.1 demonstrating the codes-

to-theory process.

Figure 4.1

Codes-to-Theory Example
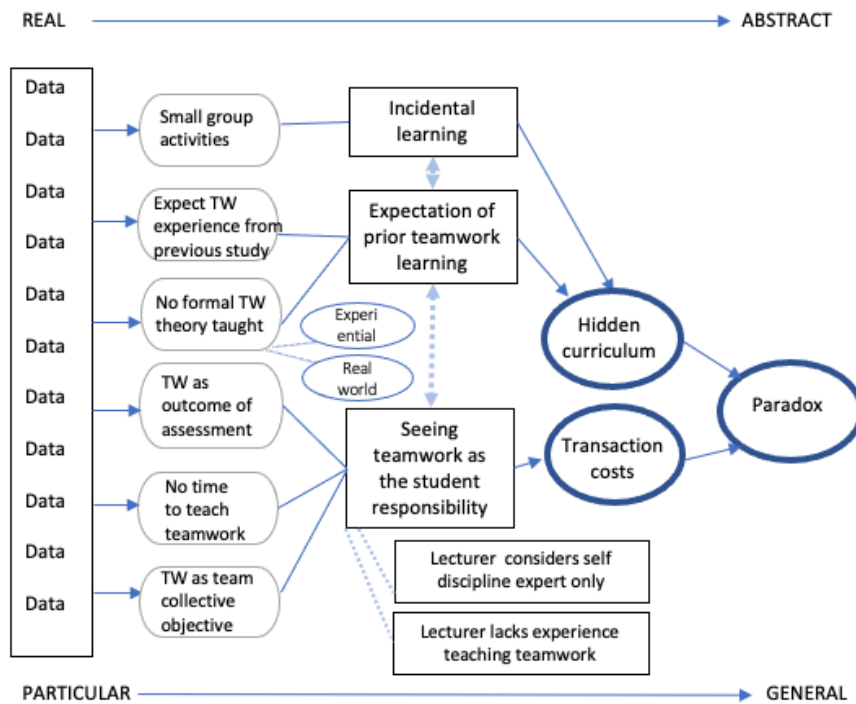
Note: Streamlined codes-to-theory model adapted from *The Coding Manual for Qualitative Researchers* (3rd Edition, p. 14) by J. Saldaña, 2016. Sage Publications. Copyright 2016 by Sage Publications. Adapted with permission.

Participant responses to interview questions suggested there were critical tension

points arising from competing elements such as contradictory demands, goals, interests, and

perspectives affecting performativity. Aligning with the hidden curriculum theme were

tensions arising from, for example, perceiving teamwork as incidental in business discipline

courses, or educator expectations that HE students have prior learning in teamwork

processes. Transaction cost tensions associated with the implementation of teamwork

pedagogy were generally not referred to overtly but interpreted as salient influences affecting the teaching of teamwork, requiring negotiation with various stakeholders in the academic environment. Both themes are discussed in more detail under the theme headings.

Organisational paradox theory was appropriated as the heuristic lens to explore and explain paradox tensions arising for business educators. The theoretical contribution of organisational paradox theory to explore the lived experience of educators was woven throughout the findings and discussion in this chapter and is further discussed in detail in the published article in Chapter Five.

4.4.1 The Hidden Curriculum – Hiding in Plain Sight

As noted in Chapter One, integrating teamwork into HE, and in particular business-related disciplines and curricula has been part of the employability skills agenda for decades, with employers noting teamwork as an essential skill for graduates to develop (AAGE, 2019). As such, industry requirements are a powerful force underlying the development of teamwork skills, yet how educators approach the inclusion of teamwork pedagogy, in part, was found to be in the hidden curricula informing the interplay between education and the economy and the performativity tensions arising for discipline-based educators. The following outlines the relevance of findings contributing to the hidden curriculum in answering the research question and aims.

The diverse responses from participants across a range of questions in this study suggested that teaching teamwork was an incidental phenomenon in business school curricula and hence, part of the hidden curriculum, in what could be referred to as "hiding in plain sight" (Gair & Mullins, 2001, p. 21), embedded in expectations, values and attitudes. In this study, therefore, the theme 'hidden curriculum - hiding in plain sight' was considered to encompass those factors identified as implicitly affecting the teaching of teamwork in the Australian business school context. The hidden curriculum may be viewed as "separating

conceptions from execution in teachers' work" (Apple, 2013, p. 122). Stakeholder expectations of teamwork learning through workload models, graduate attribute and/or employability skill statements, teaching spaces, and transaction costs to the educator, contributed to revealing the hidden curriculum of teamwork pedagogy.

Workload models. It was apparent that although participants were employing various pedagogical strategies to incorporate teamwork into their discipline units, especially where teamwork was an expected outcome of a course, such strategies were justifications for having to fulfil a workload obligation. As noted by Sashittal et al. (2011), some discipline educators believe it is not what they do, and/or they do not possess the skills themselves to be able to teach teamwork. The latter is highlighted in a statement by P2, who stated: "*I have never really been comfortable with it because I have never been trained in how to teach teamwork properly*". Other participants teaching third year units had the expectation that after at least two years at university, most students would have had the opportunity to work in teams, yet this reflects an assumption, interpreted as the hidden curriculum, of third year being about consolidating and solidifying teamwork through application, although prior knowledge of teamwork was not confirmed by participants in this study prior to launching team projects. Business school workload may also be driven by expectations of employers, noted in the global SLR in Chapter Two, and manifesting in what Margolis et al., (2001) refer to as the hidden curriculum "grounded in industry's attempt to control labour and increase productivity…in the neutral environment of education" (p. 5). Preparing students for the workplace was expressed by participants in this study as a main reason for including teamwork in their discipline units. P1 explained "*teamwork is highly desired by employers … universities are trying to align curriculum to industry needs*" thereby expressing this as an embedded organisational value hiding in plain sight.

Symbolism of teaching spaces. Teaching space in traditional HE physical class and lecture theatre environments was found to be an influencing constraint on teamwork pedagogy summarised by P19 as "*the learning spaces aren't really built around teamwork*", suggesting teamwork in the formal curriculum is undermined in the implicit messaging of inappropriately configured teaching spaces (Ottewill et al., 2005) at the exosystem level where university policy has a bearing on business educators and students which is generally out of their control. Spatiality messaging, as part of the hidden curricula, has contributed to the shaping of both educators and students "perspective and approach to the process of learning and what is being learnt*"* (Jandrić & Loretto, 2021, p. 313) in business school spaces. The hidden curriculum of spatiality may reflect the polarisation of fiscal priorities of HE institutions with educator performing/belonging paradox tension in their perceived requirements for teaching spaces that encourage teamwork pedagogy while conforming with wider organisational goals.

Costs of transacting teamwork pedagogy. The costs associated with the intensification of labour (Apple, 2013) required to implement teamwork pedagogy are often hidden within approaches to teamwork pedagogy. Perceived psychological costs associated with lack of educator training in teamwork pedagogy may underpin some participants' rationale for not explicitly teaching teamwork skills explained as an expectation of prior learning.

Grading and assessment, although accepted as part of the explicit curriculum expected in higher education to legitimate knowledge, aligned with hidden curricula elements related to the transaction costs influencing teamwork pedagogy. Assessment in HE speaks to the implicit messages framing what students need to do to be rewarded (Boud & Associates; 2010; Ramsden, 1992; Semper & Blasco, 2018). Even if motivated to activate teamwork pedagogy to promote teamwork learning (Sasshital et al., 2011), the grading of teamwork holistically was, for some participants, a way to control the labour process by reducing the

213

temporal costs of marking the individual contributions of a student's teamwork. As P12 summed up "*if you have teams of three or four or more, you have less assignments to mark*". However, an interesting finding in this study was that both educators and students saw holistic grading of team assessments, or grading reciprocity, as having both positive and negative costs, as earlier discussed in questions nine and ten. Whilst grading and assessment is generally acknowledged as an explicit part of business curricula, the hidden curriculum encompassing grading reciprocity was acknowledged as an underlying factor acting as an affordance or a constraint in teamwork pedagogy.

In HE, workload models speak to conceptions of performativity, yet the reality of performativity in the execution of teamwork pedagogy focused attention on the scarcity of resources and what actually happens when teamwork pedagogy is employed. Aligned with performativity conceived in workload models, were accountability and productivity tensions intensifying workload. As noted by P13 "*we've got to be research active, we've got to be held accountable… I don't think we've been given the time to be good teachers*". The statement by P13 inferred that the cost of academic professionalism as a consequence of the hidden curriculum was the conflicting tensions between institutional demands for scholarship and educator expectations of being a good teacher and active researcher. Increasing stressors related to accountability, performativity and productivity can help to explain conflicting tensions "around resource allocation, communication and control of the labour process" (Sutton, 2017, p. 629) that can be attributed to the symbolic interactionism of educators' lived experiences of dealing with teamwork as part of the curriculum in the business school context.

The concept of the hidden curriculum is not new, although there remains debate about a consensus definition, with the term initially coined by Jackson (cited in Semper & Blasco, 2018) in response to the ineffectiveness of schooling in eradicating systemic inequalities of

class, race, and gender. Portelli (1993) identified four main meanings for hidden curriculum including (i) the implicit, unofficial expectations, values and messages implied by education actors, (ii) unintended learning outcomes, (iii) implicit messages from the structure of education, and (iv) student inferential understanding of what needs to be done to be rewarded (Semper & Blasco, 2018). However, put simply, Killick (2014) refers to hidden curriculum as "unplanned, yet ever present" (p. 126), harbouring messages about values, expectations, preferred behaviours, and characteristics. In the context of this study, hidden curriculum is the incidental learning and implicit messaging often experienced in the academic learning environment by both educators and students and expected by HE institutions.

The participant responses in the findings and discussion in this chapter also created grounds for consideration and exploration of transaction costs as a theme, discussed next.

4.4.2 Negotiating the Transaction Costs of HE Teamwork

Another salient theme to emerge from participant data was that of negotiating the transaction costs of HE teamwork. Transaction costs refer to the temporal, physical, fiscal, and human resource costs of HE teamwork. Contributing to answering the research question, findings from this study identified transaction costs as salient influences that affect the teaching of teamwork in the Australian business school context. While the focus of this study was on educators, the interconnectedness of educator, student and institutional factors was apparent in the way in which costs impacted as perceived affordances or constraints on teamwork pedagogy. Acting mainly as constraints, where costs were perceived to be high and benefits low, educators were less likely to engage in teamwork pedagogy (Riebe et al., 2016; 2021). Often related to performativity, participants in this study acknowledged paradox tensions, either latent or salient, arising from contradictory demands inherent in negotiating the costs of teamwork pedagogy. Examples of latent or salient transaction costs arising from coding of participant responses are elucidated in the following section supporting the theme.

Temporal cost factors comprising the amount of time available for educator PD, and a requirement for continuous action (Tseng & Seidman, 2007) with teamwork transactions, included for example, curricula preparation, formative and summative feedback and mediation of team behaviours. Physical cost factors considered included allocation of space (Jandrić & Loretto, 2021; Sivunen & Putnam, 2019) that can constrain the teaching of teamwork, such as large classes and overcrowding, as well as development of curricula materials and access to technology, considered "important physical resources for instruction" (Tseng & Seidman, 2007, p. 222). Economic or fiscal transaction cost factors span both tangible and intangible costs. Tangible costs can include expenditure by the institution on wages, buildings, upgrade of physical teaching spaces, and an intangible cost may be the effect on the reputation of the educator or institution. Human resource cost factors refer to how institutions implement contractual arrangements with educators for their labour costs and productivity. For example, the HEI may consider the level of education, training, and skills pertinent to an educator's specific role and have policies in place for the specification of workload, required training to improve productivity and/or behaviours, as there is an expectation of durability of tenure of highly specialised human resource assets.

Little is known about the impact of transaction costs associated with the teaching of teamwork as a means of evaluating teaching loads amid organisational and technological change, the disaggregation of HE and other disruptions for educators, institutions, and students. Though not specifically named as transaction costs for coding purposes, educators inferred costs associated with implementing teamwork pedagogy in their units and/or courses. The interconnectedness of factors impacting transaction costs was surprising, generating interest in further investigating transaction costs as nested across institutional, student and educator relationships as important outcomes in answering the research question

and aims. Hence, transaction cost interactions in HE were addressed in the global SLR (Riebe et al., 2016) in Chapter Two and affirmed in the empirical findings as noted in this chapter.

Organisational paradox theory was appropriated as the heuristic lens to explore paradox tensions arising for business educators from the hidden curriculum and transaction cost themes. The organisational paradox lens affords an understanding of contradictory demands on educator performativity as salient influencing factors that affect the teaching of teamwork in the Australian business school context. Thus, the theoretical contribution of organisational paradox theory is derived from insights into the way in which participants in this study navigated the salient and/or latent tensions through their lived experiences with teamwork pedagogy.

4.5 Chapter Summary

This chapter has examined and discussed the findings from the analysis of coding and categorising responses to the interview questions from the perspective of HE business school educators. Categories arising within each question were themed to provide a nuanced understanding of the factors impinging on HE educator approaches to teamwork pedagogy and the underpinning decisions made according to the perceived costs and tensions encountered. Categories aligning with question themes were explored to connect with existing literature. The major themes were discussed and respectively linked to organisational paradox theory. The research found that participants in this study employed various strategies to manage the tensions arising across intersecting paradoxes from having to teach teamwork. Paradox tensions were highlighted and woven throughout discussion points in this chapter.

Chapter Five is presented next where organisational paradox theory will be explained in depth and further insights provided into paradox through the systems perspective frame making salient the latent interconnected tensions in the ontological realm (Schad & Bansal, 2018) to elevate levels of analysis. Salient performing paradox tensions perceived as

epistemological factors affecting the teaching of teamwork in the Australian business school

context are identified. Chapter Five also includes the published article 'Exploring the

Paradoxes and Tensions of Business Faculty Teaching Teamwork in a Changing Academic

Environment'. The published article reviews findings emerging from analysis of participant

data related to their responses to critical tension points arising at the intersection of

performing/learning, performing/organising, and performing/belonging paradoxes impacting

educator performativity with teamwork pedagogy.

Chapter 5: Faculty Paradoxes and Tensions

5.1 Overview

This chapter reviews insights from an organisational paradox perspective to derive an understanding of how educators respond to factors influencing teamwork pedagogy in HE business education.

First, the paradox lens is introduced through a model developed to demonstrate the nexus of interrelated factors influencing teamwork pedagogy as depicted in Figure 5.1, which builds upon the model of transaction cost interactions presented in the global SLR in Chapter Two and the findings presented in Chapter Four. In the global SLR, TCE theory (Williamson, 1979) was appropriated and applied as a heuristic lens with which to consider affordances and constraints of teamwork pedagogy. Interrelated transaction costs in that model were identified as factors strategies and interventions applied by educators that represented costs incurred for "undertaking the design, development and maintenance of effective pedagogy" (Riebe et al., 2016, p. 16). Next, organisational paradox theory and paradox tensions are elaborated to incorporate literature supporting the theoretical basis for the chapter. Then, the way in which business school faculty deal with paradox tensions related to performativity in the contemporary university environment is explored in the published paradox article included in this chapter, linking research findings with the theoretical perspective of organisational paradox and representing an original and novel contribution to the teamwork literature.

## 5.2 Nexus of Salient Influences on the Teaching and Learning of Teamwork

In Figure 5.1, the interconnectedness of factors as the derivation of transaction costs and hidden curriculum emerging from Chapter Four is made transparent through the interpretive process, revealing the paradox of contradictory yet interrelated factors in the consequent overlap of the three circles. Nested systems are indicated in the outer ring to

integrate environmental impacts of the ontological realm and assumptions about the nature of reality imposed by the hidden curriculum. Time is represented by the arrowed lines that flow around the model to symbolise the temporal persistence of interdependent elements continuously being impacted by all of the factors.

Figure 5.1

Nexus of Salient Influences on the Teaching and Learning of Teamwork
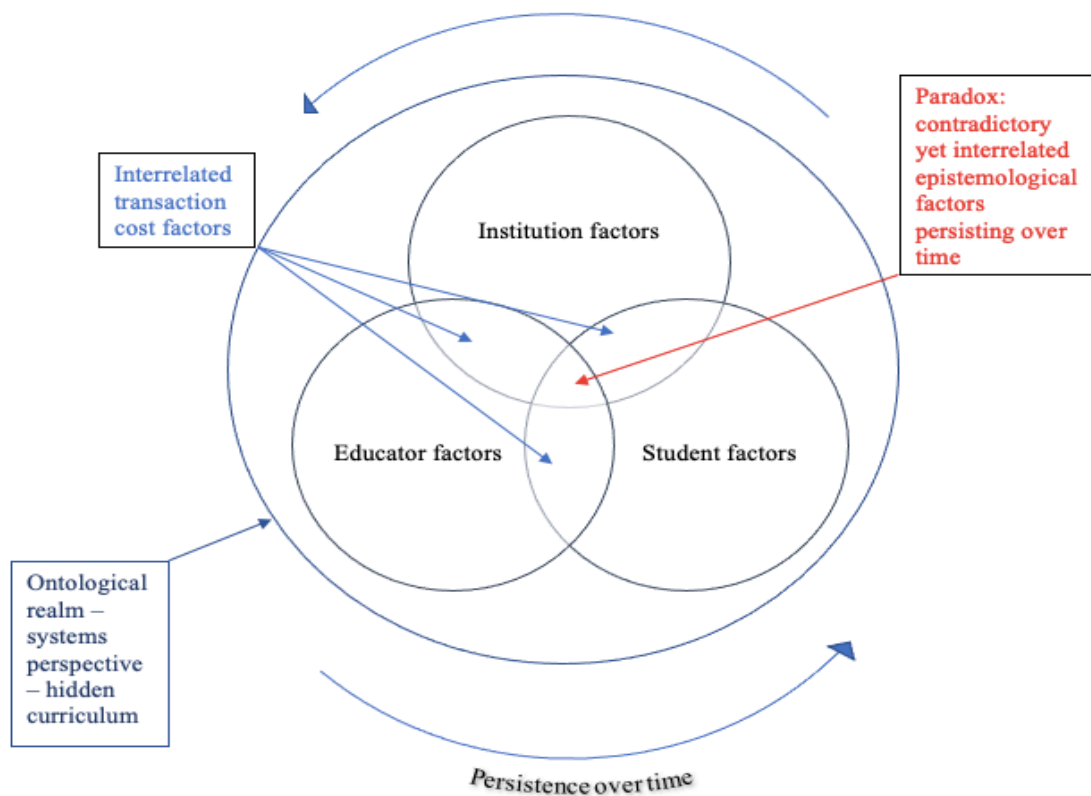
In examining the hidden curriculum and transaction cost themes, a more abstract construct was conceived and linked to organisational paradox theory as paradoxes and tensions emerged from qualitative analysis of interviews with 30 educators across four public universities. The application of theory "attempts to progress from the particular to the general by inferring transfer" (Saldaña, 2016, p. 15), that is, what is observable at one site may also

be observed at comparable sites, which is relevant to the case study utilising organisational paradox theory presented in this chapter. Paradoxes and tensions are evident in this research through the multiple demands and divergent priorities of multiple stakeholders when educators seek to achieve focused objectives.

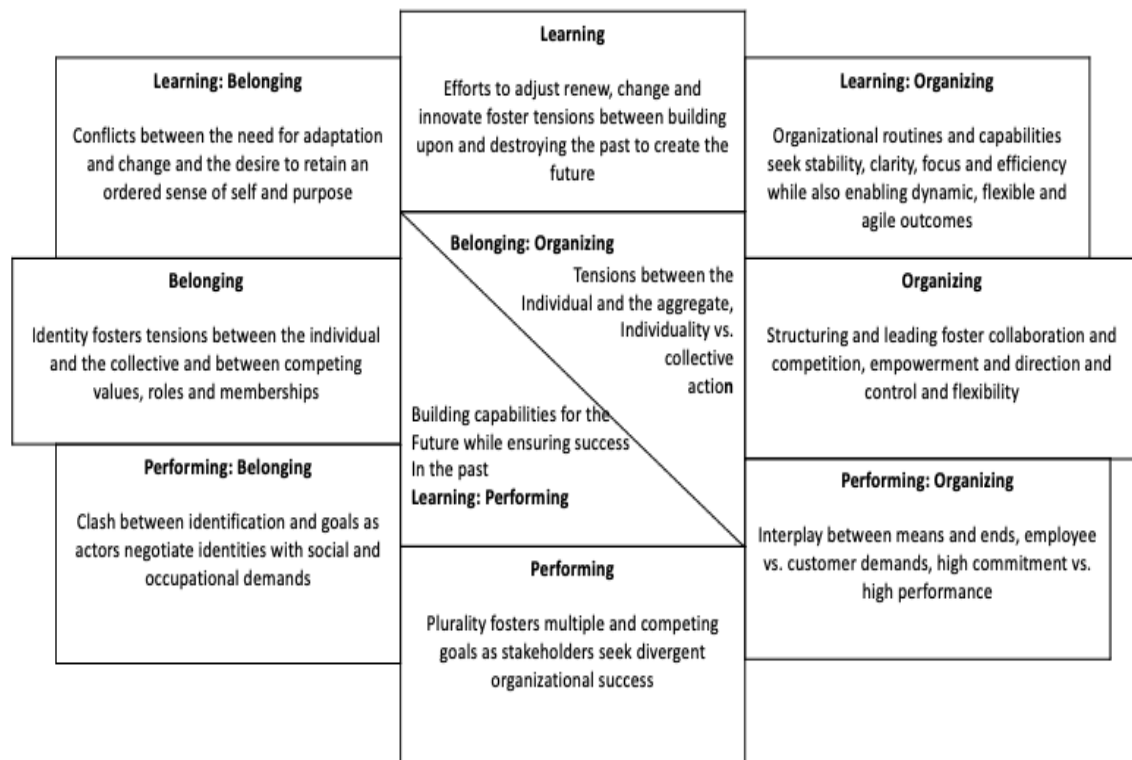## 5.3 Organisational Paradox Theory

The literature presents various definitions as to how paradox theory is understood. For example, De Keyser et al., (2019) reviewed 476 articles in the management and organisation literature to outline paradox's conceptual core. Three key features were noted as common across definitions. First, paradox is denoted as contradictory; second, the contradictions are between interdependent elements "that define one another to the extent they are ontologically inseparable" (p. 144); and third, there is temporal persistence of interdependent elements not easily resolved. The authors constructed a typology of three approaches to generate paradox contributions in the literature reviewed. The first approach leverages paradox as a way of theorising, contributing to the scholarly discussion of paradox. The second approach utilises insights from paradox to derive notionally better understandings of theory in a particular field of research. The third approach in the typology specifies paradox as utilised to qualify research objectives where findings are surprising or puzzling, assisting readers in making sense of the research discourse.

According to Quinn and Nujella (2017, p. iv) "paradox has emerged as a necessary tool to theorize about organizations' responses to complex environments that impose competing demands such as simultaneous social and financial obligations, or flexibility and stability." As an organisational concept, Smith and Lewis (2011) define paradox as "contradictory yet interrelated elements that exist simultaneously and persist over time" (p. 382). This definition is broadly accepted in the current literature (see Cunha & Putnam, 2019; Niestan & Stefan, 2019; Schad & Smith, 2019; Waldman et al., 2019). Given this broad

acceptance, Smith and Lewis' (2011) categorisation of organisational paradox tensions framework is applied in this research as it pertains to educator performance. Smith and Lewis (2011) categorise four organisational paradox tension types and six subsets that indicate the crossover combination of tensions that are denoted in the framework presented in Figure 5.2.

Figure 5.2

Categorisation of Organisational Tensions

Note: Categorisation of Organisational Tensions adapted from Figure 1 in, "Toward a theory of Paradox: A dynamic equilibrium model of organizing" by W. Smith and M. Lewis, 2011. *Academy of Management Review, 36*(2). p. 383. Reproduced with permission from the Academy of Management.

Organisations host a variety of these paradox tensions, categorised as performing tensions; learning tensions; belonging tensions; and organisational tensions, which as

depicted in Figure 5.2, can also appear in tandem as the interplay of paradox tensions intersect (Smith & Lewis, 2011).

The epistemological realm of paradox studies focuses on understanding salient, perceived tensions. Epistemological questions, such as those in this study, address theories of knowing and understanding factors that influence the phenomenon. Paradox tensions are salient influences on educator factors that affect the teaching of HE teamwork. Schad and Bansal (2018) explored how the ontological realm, which addresses the participants lived experiences, can provide insights to latent and interconnected tensions. Through the application of a systems perspective on paradox, probing of those ontological realities that cause tensions is made explicit.

The systems perspective of interconnectedness helps to conceptualise "how paradox is nested across levels" (Schad & Bansal, 2018, p. 1497). The performing paradox operates at the micro level and arises when there are competing demands from stakeholders, all requiring different outcomes, creating conflicting tensions in performance. Performing tensions operate "at the microlevel of actors interacting over their roles" (Jarzabkowski et al., 2013, p, 264) where competing goals overlap. The learning paradox category encompasses tensions around knowledge building, producing tensions between old and new knowledge. Individuals need to be able to accommodate new knowledge in order to adjust to change but may first have to reframe or destroy past cognitive frames to create and become comfortable with change. The belonging paradox operates at the mesosystem level and speaks to the individual's identity and interpersonal relationships and the tensions arising from competition, as an individual within a group and the need for cohesion with a group. Group cohesion is activated through valuing diversity of group members and interconnectedness with other groups (Lewis, 2000). The belonging paradox can initiate defensiveness, manifested through intragroup conflict and polarisation often driven by power imbalances, complexity and plurality of goals.

Management of this paradox requires "deep social acceptance of differences, aided by critical examination of artificial distinctions" (Lewis, 2000, p. 770). The organising paradox operates at the macrosystem level and surfaces tensions between what can be considered mixed messages in large systems. For example, autonomy and structured direction, routine and change, collaboration and competition (Smith & Lewis, 2011) can co-exist as competing yet complementary tensions in play to achieve a goal.

Tensions are made salient when they are observed in actor's language, emotions, and actions (Jarzabkowski et al., 2018) and/or through the effects of scarcity, plurality and/or change (Miron-Spektor et al., 2018). When latent tensions become salient, critical tension points (CTP) (Jarzabkowski et al., 2013) become evident. CTPs are considered evident when oppositional demands influence the ability to problem solve unless using a traditional either/or trade-off (Smith et al., 2017) and their contradictory and inconsistent nature is experienced by organisational actors inducing "high levels of stress around resource allocation, communication and control of the labour process" (Sutton, 2017, p. 629), ultimately contributing to faculty disengagement, despondency, and/or performative paralysis.

Insights into the ontological features of latent tensions to make them salient can be achieved by zooming in and zooming out (Nicolini, 2009). Zooming in assists in uncovering the dominant processes and emergent tensions; while zooming out gives a macro-perspective to see new relationships hierarchically. As a consequence of findings emerging in Chapter Four, deeper analysis of perceived latent tensions generated by teamwork pedagogy was undertaken to more fully appreciate educators' actions and reactions to such tensions. By zooming in on paradox tensions that appeared in tandem with the performing paradox, evidence of educator reactions to navigating tensions was uncovered and tensions made salient through interpretation of participants' both/and or either/or responses to intersecting

paradox tensions. The interplay of these intersecting tensions is briefly described next and in more depth in the article in this chapter.

The interplay of performing/organising paradox tensions, for example between, efficiency and efficacy (means and ends), control versus flexibility (educator versus student/institutional demands), and change versus stability and the mixed messages that can manifest across levels in large organisations. The interplay of performing/learning paradox tensions arose from multiple demands versus focused objectives, multiple stakeholders and divergent priorities, and destroying past frames to build and reframe future actions. In this study, the performing/learning paradox tensions emerged as the multiple demands and divergent priorities of multiple internal and external stakeholders when educators sought to adjust to change and innovate. The interplay of performing/belonging paradox tensions elicited the clash between individual and group identity, and stability versus change, as educators negotiated individual identity with wider social and occupational demands. In this study, the salient performing/belonging tensions emerged in the way in which educators responded to performance demands when attempting to align individual goals with those of the wider group.

There are implications for educators in the way in which they respond to, and navigate, the salient tensions of teamwork pedagogy in their teaching roles and context and, as a result whether a paradox mindset is adopted.

5.4 Overview of Article Three

The article explores the way in which business school educators deal with paradox tensions related to performativity in the changing HE landscape. The perceptions of participants in this study highlights the "struggle between the need to change and adapt and their desire for order and stability" (Sparr, 2018, p. 163) and the interrelated educator, student and institutional factors impacting the implementation of teamwork pedagogy.

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The following authors contributed to this manuscript as outlined below.

Authorship order	Contribution (%)	Concept Development	Data Collection	Data Analyses	Drafting of manuscript
LINDA RIEBE	80	X	X	X	X
CRAIG WHITSED	10	X			X
ANTONIA GIRARDI	10	X			X

Contribution indicates the total involvement the author has had in this project. Placing an 'X' in the remaining boxes indicates what aspect(s) of the project each author engaged in.

By signing this document, the Candidate and Principal Supervisor acknowledge that the above information is accurate and has been agreed to by all other authors.

Candidate   **Principal Supervisor**

5.5 Article Three: Exploring the Paradoxes and Tensions of Business Faculty Teaching Teamwork in a Changing Academic Environment

Abstract

The contemporary university is now characterised as a complex working environment wherein faculty must negotiate increasing demands for accountability, performativity, and productivity. A multiplicity of expectations adds to this complexity. Specifically, expectations set by employers in developing 'work-ready' graduates have compelled faculty to negotiate interdependent contradictions that focus on developing employability skills alongside technical skills. This qualitative study reports on the lived experiences of 30 business school teaching faculty, negotiating tensions as they relate to the teaching of one type of employability skill: teamwork. Paradox theory is appropriated to better understand how faculty perceive their professional environment and practices related to teamwork pedagogy. The findings reveal that faculty navigate the performing/learning, performing/organising and performing/belonging paradoxes of teamwork pedagogy by passively suppressing tensions or through proactive acceptance strategies.

Introduction

Change is a dominant feature across the higher education (HE) landscape, and the pressures resultant from the COVID-19 pandemic have accelerated change in universities and expectations of faculty, increasing demands on performativity. Performativity, Sutton (2017) argues, is that which contributes to economic cost efficiencies and therefore, only measured by quantitative indicators, and hence it is reductionist in approach. Faculty across all disciplines must now negotiate increasing demands for accountability, performativity, and productivity. Macfarlane (2020, p. 798) observes, 'performative demands… are now part of academic life with more emphasis on meeting targets and performance measures in respects to both research and teaching quality at the institutional and individual level.' Faculty are increasingly measured against quantifiable metrics (Papadopoulos, 2017) and commercial values (Sutton, 2017). This context compels faculty to negotiate a work environment inherent with interdependent contradictions (Smith, et al., 2017) including, competing demands of prioritising research over teaching, the introduction of performance-based funding (PBF) emphasizing teaching and measuring graduate employment outcomes, and a range of

complex paradoxes arising as change at the macro level of internal and external policies induces change at the individual level. The expectations placed on faculty to prepare work-ready graduates have dominated work-readiness discourses (Borg et al., 2019) and created tensions for faculty who are expected to satisfy calls from employers to develop the technical and employability skills graduates require for employment.

Within the current literature what is unknown is how faculty who are faced with such tensions react; and the strategies they undertake to navigate these work exigencies. Set against this backdrop, and the increased demand for work-ready graduates, this exploratory study aimed to understand how business faculty construe and negotiate performativity within their professional environment and the conditions that influence their approach to the development of one employability skill: teamwork. This leads to the research question:

How do faculty in business schools, in the Australian university context,

navigate performativity within their professional environment to understand,

react and influence their approaches to teamwork pedagogy?

This paper offers an original contribution to the literature by applying the theoretical lens of paradox to conceptualise how business school faculty negotiate the inherent stresses, conflicts, and tensions in their teaching and work environments. It is an important contribution because it highlights how paradox has the potential to influence how faculty understand and react to tensions in their institutional context, influence performativity, and is enacted in approaches to, and levels of, engagement with teamwork pedagogy. The following first elaborates the rationale for the focus on employability in HE teamwork and teamwork pedagogy, then outlines the paradox theory, which is the conceptual framework informing this research.

Employability, HE teamwork and teamwork pedagogy: A challenging confluence of tensions

The concept of employability has, broadly, been observed in Australia as driven by the HE policy agenda, resulting in 'reductionist graduate outcomes discourse' (Bennett, 2018, p. 45). Such discourse has seen the rise in pressure exerted by governments on HE institutions to produce employable graduates. In employability terms, teamwork is a continually sought-after skill by employers seeking graduates who are 'work-ready' (Borg et al., 2019) and able to demonstrate employability skills critical to future success (Deloitte, 2017), representing a saving on skills training to the employer. Surveys of graduate employers in Australia report that recruiters consistently assess for teamwork skills and rank demonstrable learning in this skill as very important, rating teamwork in the top three skills that employers seek in graduates during the application and selection process, with teamwork skills noted as 'essential' (Australian Association of Graduate Employers [AAGE], 2019, p. 12). Affirming the importance of teamwork, over 70% of Australian university websites (Riebe et al., 2017) make statements about teamwork as an attribute expected of graduates. Yet, introducing teamwork and other employability skills in HE alongside crowded, discipline-specific content curricula has raised significant paradox challenges for some faculty, reported as additional transaction costs given lack of time, resources and/or expertise (Bennett, 2018).

The rationale for teaching teamwork at university is apparent through the demands exerted by employers and aspects of government policy that influence institutions and consequently impact faculty. Changes to the nature of work as a response to evolving work demands, amplified by the COVID-19 pandemic, have meant that faculty are faced with conflicting performativity demands. This paper explores the conflicting demands of effective teamwork pedagogy. Riebe et al. (2016) found that faculty involved with teamwork pedagogy were influenced by the perceived transaction costs to themselves, their students,

and their institutions. Where the costs were perceived to be high (i.e., expenditure of time and psychological effort) and the benefits low, faculty were less likely to fully engage in design, development, or delivery of teamwork pedagogy. The present research therefore extends Riebe et al. (2016) transaction cost reasoning construction by overlaying it with paradox theory. Employing a paradox theory lens can provide a useful framework for interpreting how faculty manage and negotiate tensions and contradictions inherent in their teaching and work contexts.

The conceptual framework: Paradox theory

Research in paradox theory has grown rapidly over the last three decades (Cunha & Putnam, 2019), with conceptualisations of paradox wide-ranging and diverse (see O'Driscoll 2008; Smith et al., 2019). For example, De Keyser et al. (2019) reviewed 476 articles in the management and organisation literature to develop a typology of three approaches to paradox, noting the 'versatile ways in which paradox can be leveraged for generating theoretical contributions' (p. 152) applied across multiple contexts. Lewis and Smith (2014) 'position paradox as a metatheory to inform practice of paradox research' (p.128) and identify key elements and diverse applications of a paradox lens. Lewis (2000) highlighted three key characteristics of paradox:

> First…a paradox may denote a wide variety of contradictory yet interwoven elements: perspectives, feeling, messages, demands, identities, interests, or practices. Second, paradoxes are constructed as actors attempt to make sense of an increasingly intricate, ambiguous, and ever-changing world, they frequently simplify reality into polarized either/or distinctions that conceal complex interrelationships. Third, paradoxes become apparent through self- or social reflection or interaction that reveals the seemingly absurd and irrational coexistence of opposites (p. 761).

Schad et al. (2016) weave these characteristics together in their concise definition of paradox as 'a persistent contradiction between interdependent elements' (p. 6). According to

O'Driscoll (2008), paradox offers researchers, 'a potentially powerful framework for examining the impacts of plurality and change,' and understanding 'divergent perspectives and coping with disruptive experiences' (p. 95). Recent research using a paradox framework lens has explored performing, organising, learning, and belonging paradoxes and tensions in healthcare (Gilbert et al., 2018) and telecommunications (Jarzabkowski et al., 2013). Yet specific application of paradox theory to explore the lived experience of faculty teaching teamwork in HE business schools is not apparent in the literature. The paradox framework and organisational paradox categories are now elaborated as applied to this research.

The paradox framework: Organisational paradox categories and intersecting tensions

Smith and Lewis' (2011) framework of organisational paradox categories is appropriated in this research to first uncover the types of contradictory tensions experienced by faculty and then their reactions to these tensions. The framework comprises four paradox types: performing, learning, belonging, and organising. The **performing paradox** arises when individuals are required to perform multiple, competing roles or tasks, meeting competing demands from stakeholders, all requiring different outcomes which creates conflicting tensions in performance. The **learning paradox** reflects tensions that arise when new replaces old or established knowledge, or as Smith and Lewis (2011, p. 383) observe, 'building upon, as well destroying, the past to create the future.' The **belonging paradox** speaks to individual identity and interpersonal relationships and the tension arising from competition as an individual within a group versus the need for cohesion of a group. The **organising paradox** arises from the inherent contradictions between different parts of the organisational whole (Lewis, 2000) surfacing tensions between what can be considered mixed messages in large systems. Paradoxes can also appear in tandem (see Smith & Lewis, 2011) as the interplay across paradoxes and tensions intersect. We focus on the performing

paradox and its intersection with the organising, learning, and belonging paradoxes to review tensions arising for faculty, outlined next. The intersection of **performing/organising** is the interplay between means and ends, for example, academic versus student/institutional demands. The intersection of **performing/learning** tensions is the interplay between establishing new understandings to enhance present and future success while navigating competing demands and goals. The intersection of **performing/belonging** is the interplay of tensions emerging when individual identity goals clash with wider organisational demands.

Competing demands give rise to conflicting tensions in performance, which may cause cognitive disequilibrium for faculty inducing 'high levels of stress around resource allocation, communication and control of the labour process' (Sutton, 2017, p. 629), and ultimately contributing to faculty disengagement, despondency, and/or performative paralysis. However, the same contradictory tensions when made salient may enable virtuous cycles of learning, creativity, and contribute to sustainable resilience (Miron-Spektor et al., 2018). Salience refers to tensions being observable through actor's language, emotions, and actions (Jarzabkowski et al., 2018) and/or through environmental factors such as scarcity, plurality, and change. Scarcity involves limited temporal, fiscal, and human resources, generating conflicting oppositional demands. Plurality surfaces competing goals across multiple stakeholders' competing needs. Change fosters tensions with short- and long-term competing, yet coexisting, goals (Smith & Lewis, 2011; Smith & Tracey, 2016). When latent tensions become salient, critical tension points (CTP) (Jarzabkowski et al., 2013) arise. CTPs are considered evident when oppositional demands influence the ability to problem solve unless using a traditional either/or trade-off (Smith et al., 2017) and their contradictory and inconsistent nature is experienced by organisational actors (in this case faculty) who then engage certain behaviours and strategies.

Navigating organisational paradoxes and tensions

Navigating paradox tensions in the workplace can be debilitating and manifest defensive behaviours (Smith & Lewis, 2011) or even paralysis (Smith & Berg, 1997), demonstrated in resistance or avoidance of paradoxes particularly where there is a power imbalance and 'open dialogue and feedback are not facilitated' (Aust et al., 2019, p. 423). When facing inconsistencies and contradictions it has been observed (Schad et al., 2016) that individuals employ a range of defence mechanisms including *splitting* by emphasising contradiction, *projecting* anxiety elsewhere, *repression* of experiences, *regression* to past understandings, *reaction formation* conveying opposite feelings or practices to those that are threatening, and *ambivalence* of reaction signifying compromise. To make sense of perceived paradoxes and negotiate contradictory tensions in the ever-changing academic environment, faculty may employ strategies to simplify demands on their physical and psychological resources.

Strategies for navigating paradox tensions diverge between passive or active (Aust et al., 2019), acceptance and/or resolution (Smith & Lewis, 2011). The acceptance strategy encourages living with paradox (Lewis, 2000). Acceptance, as a passive strategy, has the potential to assert a heavy emotional or psychological toll on individuals struggling to 'accept paradoxes as persistent unsolvable puzzles' (Smith & Lewis 2011, p. 385). As an active strategy, acceptance can reduce defensiveness and enhance performance to fuel virtuous cycles (Aust et al., 2019). Resolution focused strategies do not imply eliminating tension, rather they illuminate finding a means of meeting competing demands or considering divergent demands simultaneously. Smith and Tracey (2016, p. 458) observe, 'paradoxes must be accepted and accommodated,' which necessitates embracing a paradox mindset. Adoption of a paradox mindset to become comfortable with, and accepting of, conflicting tensions (Lewis, 2018) can mitigate the experience of such tensions as the individual gains comfort from learning to live with tensions and thrive despite inherent contradictions and

conflicting demands in the workplace. It is therefore necessary to better understand the reactions and responses of faculty to the tensions of teaching teamwork.

The severity and nature of the tensions associated with teamwork pedagogy as experienced by faculty have yet to be fully explored. This may be because tensions 'may remain *latent* – dormant, unperceived, or ignored – until environmental factors or cognitive efforts accentuate the oppositional and relational nature of dualities' (Smith & Lewis 2011, p. 390). Faculty are more prone to break apart conflicting demands, into *either/or* frames that reflect linear thinking (Lewis, 2000), rather than *both/and* frames that acknowledge contradictions to confront, accept or accommodate tensions (Lewis, 2018). If individuals are unable to cope with contradictory demands and the tensions experienced as an *either/or* situation a vicious cycle (Lewis, 2018) or internal struggle may ensue, which may hinder capacity to deal with change when role-specificity is altered, ultimately affecting job performance. On the other hand, the same contradictory tensions when experienced as a *both/and* situation may evoke virtuous cycles (Lewis, 2018).

Method

This research is phenomenological in that it aims to understand how faculty experience and perceive the contexts in which they work afford, constrain, or shape their responses to teamwork pedagogy. Empirically, the study is exploratory and qualitative in design and employed semi-structured, in-depth interviews with 30 faculty teaching in business schools across four Australian universities, with most (57%) being from the Management discipline.

Purposeful case sampling (Patton, 2015) was undertaken to ensure a broad, representative sample of faculty teaching teamwork across a range of business-related disciplines. Criteria for selection included prior experience working in industry and participants' potential capacity to offer useful insights to the phenomenon. Prior to

commencing the research, ethics approval was obtained. All interviews were audio recorded and transcribed with the participants' consent in accordance with the Australian National Statement on Ethical Conduct in Human Research (nhmrc.gov.au).

Data collection and analysis

Data collected from the participants included demographic information and responses to 12 questions on aspects of teamwork pedagogy to guide the semi-structured interview process. Interviews were conducted face to face in November 2016. Of the 30 participants, 19 were female and 11 were male, 20 held PhD qualifications, seven held as their highest qualification a Master degree and three a Bachelor degree. There was a broad range of teaching experience, with 46% of participants teaching in HE between six and 15 years, 13% teaching across the 0-5 year range, 20% teaching between 16-20 years, 13% teaching 21-25 years and 7% teaching for over 26 years. Twenty-four participants were tenured faculty, 22 worked full time, two worked part-time and six participants were on contract. All participants had some experience working in industry.

The interview questions invited participants to discuss topics including their rationale for inclusion of teamwork in their courses, pedagogical approaches, assessment, contextual challenges, and perceptions of students' application of teamwork. The interviews ranged from 15 to 35 minutes with transcripts ranging from 900 to 4680 words. Participants were anonymised and referred to as P1 to P30. Thematic analysis (Braun & Clarke, 2012) was undertaken to identify and organise patterns in the data that reflected CTP (Jarzabkowski et al., 2013). CTP reflected how faculty made salient their experiences through their responses informing specific actions across intersecting paradoxes. Sensitising concepts related initially to transaction costs were coded first, then these were further interrogated for latent meaning utilising organisational paradox theory to interpret the data and answer the research question.

CTP was then applied in the analysis of participant's interviews about teamwork pedagogy, to gain a nuanced understanding of how business school faculty navigate the ambiguity, complexity and contradictory conditions in their work and teaching environments. Employing the paradox lens, a range of CTP emerged. These are presented next.

Findings and discussion

The analysis identified paradox CTP related to performativity that participants reported negotiating in their academic work lives. Salient findings emerging out of the analysis clustered around the intersections of the performing/organising, the performing/learning and the performing/belonging paradoxes.

Performing/organising

Across the interviews, performing/organising tensions were identified as salient and recurrent; however, there were variations in responses as each participant focused on different challenges with teamwork pedagogy given the open-ended questions around challenges experienced, how challenges could be addressed, and additional resources required.

Performativity associated with meeting institutional expectations characteristic of organisational policies, fiscal and temporal cost efficiencies, and continual upgrade of teaching qualifications (building capability for the future) underlie the intersection of the performing/organising paradoxes and interplay of CTP. Commonly surfaced CTP were the quest for cost efficiency in provision of services and mixed messages about rewards. These tensions are now elaborated.

Efficiency v efficacy. Efficiency versus efficacy emerged as a salient tension in the context of workload allocation practices. Some participants referred to the way in which the institution's workload allocation was applied to gain cost efficiencies from certain teaching delivery modes over others, possibly at the expense of quality of instruction (see Mitten & Ross, 2018). Faculty responded with ambivalence to this tension. For instance, P16 noted, '*you don't get as much bang for your buck in terms of time because it's a repeat…you are just filling up your workload,*' surfacing the tension of plurality and stakeholder demands on faculty.

Coping with tensions of organisational demands, P23 remarked, '*the curriculum structure is based on the university guidelines conforming to the assessment policy and I, as an academic, spend most of my time just making sure I tick all the boxes*' signifying the defence of regression in 'resorting to actions that have provided security in the past' (Lewis, 2000, p. 763). In responding to system contradictions relating to resource demands versus expectations for teamwork pedagogy, P3 lamented, '*You can't do any activities around teamwork in a lecture theatre, especially when you've got over 200 students in a massive lecture room…Cost wise it is actually cheaper to run it as a seminar but why the insistence to have it as a lecture?...I've asked the question but haven't got an answer, but I think the structure and format of how it is run if you want teamwork then you have to design how it is delivered to encourage teamwork.*' This splitting reaction further emphasising the contradiction in messaging made salient as P3 projected performance anxiety through the polarising contradictions of the impact on personal efficacy when cost efficiencies are applied through changing delivery modes, interpreted as performing/organising tensions as faculty are confronted with prioritised cost efficiencies impacting the workload allocations. The reactions can be considered as passive acceptance, rather than active or resolution

focused, further highlighting the struggle some faculty face as they simultaneously recognise and experience environmental factors of plurality, resource scarcity and change.

Control v Flexibility. Mixed messages emerge in how organisations value and determine faculty productivity across teaching and research (Papadopoulos, 2017) making latent tensions salient as faculty confront loss of flexibility in one or other area. Across the interviews, faculty reported on their struggle to come to terms with contradictory organisational demands. In navigating these mixed messages, faculty employed several strategies. P13 projected conflicting feelings onto the organisation, '*I don't think we've been given enough time to be good teachers and I think it just comes down to do we want to be good teachers or adequate teachers and at the moment I think we're very much leaning towards adequacy because of this push to publish and push to make [the institution] more research focused.'* P19 similarly used projecting reaction: '*The curriculum is crowded. You have to provide time for this stuff [teaching teamwork] and if the institution doesn't value it across the curriculum…then they will not make space to develop teamwork.*' In both instances, the perceived mixed message of good teaching (and affordances for teamwork pedagogy) versus publishing research results in a defensive either/or decision, rather than active acceptance of the tension and the development of a both/and approach. The conflicting tensions of control and flexibility are made salient by faculty simultaneously experiencing the interplay of performing/organising tensions, which has in turn caused a cognitive disequilibrium (Smith & Lewis, 2011).

One way that faculty have actively resolved performing/organising tensions is to eliminate the tensions. It is an expectation in the HE context that faculty participate in professional development that is 'driven by management priorities' (Vos & Page, 2020, p. 75) to ensure optimal control over teaching and research priorities in demonstrating value to

stakeholders. However, P2, a management educator with 16 years HE experience articulated the strategy of avoidance of teamwork pedagogy, '*I have never been trained in how to teach teamwork properly, so in some ways I found it easier to avoid it rather than learn about it.*' Echoing P2, P11 a management educator with 19 years HE experience, conveyed either/or thinking, '*I've always kind of avoided group work or teamwork because I think there are so many challenges with it and I didn't grow up with it…so I tended to avoid it …obviously then there's a need to train staff because you're just told 'do that' and you have to put teamwork in your curriculum. We do have some courses, but I couldn't tell you what half of them were, I have looked every now and then, but then I go, ok where can I fit that in? No, I can't do it because I've got so many other things to do.*'

In these cases, the control to engage with training in teamwork pedagogy is inferred as discretionary. Faced with conflicting demands and resource scarcity, the tensions encountered by P2 and P11 indicate the internal struggle associated with the lack of training, resulting in managing tension by avoidance of teamwork, rather than seeking professional development opportunities. Invoking either/or decisions, these faculty wrestle with control and flexibility. Whilst avoiding teamwork pedagogical practices might not be considered ideal, it is an example of learning to live with the contradiction of expecting faculty to implement teamwork pedagogy without appropriate professional development.

Change v stability. Participants discussed change versus stability tensions, at the level of leadership, when expressing the need for change. Change fosters tensions with short- and long-term competing yet coexisting demands. The ability of leaders to demonstrate paradoxical leadership is crucial in constructively communicating legitimate purposes for change. Explaining to faculty why change is necessary promotes faculty motivation to adapt (Sparr, 2018) and stimulates both/and thinking about change and stability. With 23 years-

experience and now in a full-time leadership position, P6 observed, '*In universities up until now things have been good but things are starting to get tight. It is becoming more of a service and it's about providing products, being our graduates, that industry wants to buy. If we produce people who are not actually work-ready, then they [employers]are not going to buy from us anymore and people are not going to get jobs and therefore not going to come to us.*' This indicates understanding of changing environmental conditions and plurality of stakeholder expectations. Improving institutional reputation through active acceptance strategies, P6 noted, '*Things like [business school] accreditation will obviously make dramatic improvements… the teaching of soft skills, which includes teamwork, is particularly set in stone and you have to be able to prove that you are doing that as assurance of learning*'. Implicit in this statement is the performing/organising paradox tension between change and stability, leadership vision and faculty compliance with accreditation standards in implementing teamwork pedagogy. Addressing the need for compliance with such changes to ensure student learning of teamwork to meet business school accreditation standards, P19 a management educator stated, '*teamwork is one of the key elements [in the accreditation standards]. I mean it keeps coming up all the time. I cannot stress, in a business school how critical [teamwork] is*' demonstrating both/and thinking through proactive acceptance of change for sustainability.

Performing/learning

Faculty performativity associated with meeting stakeholder demands, renewing established understandings to accommodate the new and faculty experiencing competing goals while attempting to perform their roles along with scarce resources, temporal and psychological costs underlie the intersection of the performing/learning paradoxes. The performing/learning paradox manifested in the interviews across all university levels, most notably at the level of

pedagogy and in-class interactions between faculty and students in business schools. These are now elaborated.

Multiple stakeholders and divergent priorities. Tensions are compounded where there exist multiple stakeholders with divergent priorities and/or interests (Smith & Lewis, 2011) and faculty are attempting to perform their roles. The temporal cost of teaching was a common tension arising for participants who reported having to do more with less; corroborated in findings by Vos and Page (2020) who noted that the pressure of growing expectations on faculty significantly affects time available for teaching. As P30 lamented about introducing teamwork pedagogy, *'time is a factor, the resource of time. You're expected to do so much. Not that I don't love my job, I do, but the expectations are there.'* Increasingly scarce resources in the HE environment have become a new normal as HE institutions across Australia grapple with changes, for example, in policy, and the influence of COVID19.

Across the interviews, faculty identified a range of competing goals in their universities and schools and within their immediate teaching context. For instance, P27 reflected on the challenge of including teamwork with ambivalence, '*I guess the only thing about running team projects is that you get penalised in university teaching evaluations. I have to run it in my unit because it's one of the course learning outcomes for my unit, so I have to run it,*' inferring passive acceptance of divergent priorities impacting on performativity. In addressing challenges of teamwork, P15 projected discomfort onto the university's teaching evaluation instrument based on student feedback on faculty performance when students dislike teamwork, '*It's really awful when they say things about you…They can say whatever they like because it's anonymous and we're letting 17-year-olds make decisions that we need to rely upon in order to use for promotion.*' Similar findings have been validated in the literature, with student evaluations being noted as 'ridiculous' and

'popularity contests' (Mitten & Ross, 2018) promulgated through institutional stakeholder emphasis on performance measures (Macfarlane, 2020). Both statements highlight the competing goals of various stakeholders with divergent priorities impacting faculty perceptions of performativity. In both instances however, faculty responses point to a passive acceptance strategy, and a physical and psychological toll on staff in meeting these competing goals.

Multiple demands v focused objectives. Most often employed to teach discipline specific knowledge (Cotronei-Baird, 2020) faculty face tensions between teaching technical knowledge and implementing collaborative pedagogical practices, such as teamwork, for which they have not been trained. At the class level faculty frequently identified dealing with team conflict between students as an underlying tension in the performing/learning paradox. Managing team conflict surfaces contradictory demands for faculty. Invoking either/or thinking, management educator with 17 years' experience, P8 related an impromptu conflict resolution approach, '*I take the view that you want to try to just create the environment where people feel comfortable with each other so in a sense it doesn't get to that point…I make it explicit…come and speak to me before it becomes a problem.*' The response indicates a strategy of regression – resorting to actions that have provided comfort in the past. Similarly, P17 a management educator with 25 years' experience, believes an institution-wide policy on conflict management would make things equitable for all staff supporting '*what to do when there's conflict within groups because some people might do it differently*'. The passive response of splitting to polarise the distinction of responsibility to others suggests a need for focused objectives for team conflict management when there are multiple and contradictory demands placed on faculty.

With 28 years HE experience, P26 articulated the anxiety faced by faculty in negotiating paradoxical relationships of conflicting demands of availability of resources and the process of innovating delivery of a focused objective for teamwork, '*I was under the pump. I had this third-year unit. I also had first year and some other units, so it was just a case of on the fly each week, going how can I make this work?*' Contextually, P26 struggles with polarising learning tensions of exploration 'radical innovation and experimentation' and exploitation 'incremental innovation and refinement' (Raisch & Zimmerman, 2019, p. 315). Leaning into the latter to cope with the stress of multiple conflicting demands, an ad hoc approach to teamwork pedagogy results, yet P26 provides an example of ambidexterity and learning to thrive with the inherent tensions of time versus teaching teamwork.

Destroying the past v building and reframing future actions. As Smith and Lewis (2011, p. 384) observe 'learning and performing spur tensions between building capabilities for the future while ensuring success in the present.' Faculty experience these tensions at different levels, but often student interactions are the most revealing.

An example at the student level of the performing/learning paradox is provided by P24 recognising the need to destroy past cognitive frames to ensure success in the present. P24 recounted tension between faculty versus student responsibility as '*students tend to rely on lecturers a lot rather than trying to communicate with their team members and work through issues.*' P24 engages both/and thinking using a proactive acceptance response, viewing the tension as an opportunity to learn and enable innovation through the use of a team contract. Team responsibility for resolving conflict is made clear through the team contract as P24 explains to students '*this is to hold each of you accountable within your teams… If they come to me, I say, 'have you done x/y/z in your contracts?' and then put it back to them.*' The approach of P24 highlights performing/learning tensions and the ability to

accommodate new ways of being comfortable with both/and thinking to enhance job performance.

Juxtapose the previous example with that of P17, a marketing educator with 25 years' experience lamenting the temporal cost to faculty associated with teamwork conflict issues as, '*sorting out problems when students can't sort themselves out*' indicating either/or thinking through the projection of blame onto students. Alternatively, instead of projecting blame on students, P30 a marketing educator with eight years' experience confronts the performing/learning tension of mixed messages in managing team conflict situations thus, '*another challenge I face is he said, she said, what do we do? Then dumping it all on you at the end and you feel that you are carrying their weight now. I know it is also my fault because I tend to say 'it's okay, I'll fix it. I shouldn't say that. Now, giving guidelines, I tell them they have to document things.*' By making the mixed message tension salient and acknowledging the import of changes to practice, P30 has reframed understandings of how past actions have previously led to a vicious reinforcing cycle reflecting proactive acceptance: a cognitive shift to reframe divergent demands and construct a new frame of reference for future success. In comparison, another marketing educator with 5 years' experience, P27 accepts the first reaction was '*to get management involved*' indicating a resolution focused strategy that would not eliminate the tension but offer a way in which to maintain success in the present. One manages tension positively through confrontation, provoking insight for future change, the latter manages by regressing to an action that has provided security in the past, enabling success in the present. The responses of these participants reveal the polarity of destroying the past versus reframing for present or future success.

Performing/belonging

At the individual level faculty experience tensions in workplace routines and must respond to them in their actions and interactions. Faculty performativity associated with negotiating work goals as an individual and part of a group manifested in performing/belonging tensions arising from maintaining self-beliefs and values and conforming to wider organisational demands.

Individual v Group Identity. Tensions arising from the intersection of the performing and belonging paradoxes became apparent when faculty identified contradictory performance demands made salient when they attempted to align individual goals with those of the collective, impacting how they negotiated their individual and work identities and goals. The paradox of performing/belonging can induce defensive reactions of polarisation in an us/them response as noted by P3, '*I think if university wants teamwork included, then they need to provide the right format to deliver and encourage it. It's an institutional issue that needs to be addressed'.* Alternatively, P6 states '*one of the first things that I did with my new team that I put together was to do something about behavioural preferences because when people understand each other and their strengths and weaknesses they can work better together'* reframing understanding that individual goals can aid in the development of group identity and demonstrating paradoxical leadership.

Stability v Restructuring. The fluid operational contexts of HE often necessitates changes in work teams that can impact on performativity of faculty as they realign individual goals with those of the wider group. Demonstrating positive acceptance of change, P3 states *"we can't always choose the people we work with. Some people have the same work ethic as we do, some don't so it's about managing your work relationships with other people as well."* However, the intangible cost of change can have negative effects on faculty, from emotional

exhaustion to burnout as they wrestle with the paradox of performing/belonging in implementing new demands.

The performing/belonging paradox is infused across macro- and micro-levels, between individuals and groups, when identities are challenged. Finding balance through acceptance strategies in responses to the intersection of the performing/belonging paradoxes can optimise embedding of wider organisational goals.

Conclusion

Business schools across the Australian HE landscape have long functioned within fluid operational contexts, adapting to changes accelerated by government policy, funding arrangements and recently, the COVID19 pandemic, placing further performance expectations on faculty to do more with less in times when organisational restructuring is expected. Yet this does not diminish the fact that teamwork is considered essential (AAGE, 2019) for HE graduates to develop and a pedagogical imperative for business schools aspiring to meet or maintain accreditation standards.

This study contributes insights into the utility of paradox as a heuristic lens to interrogate and understand how faculty in dynamic organisational change contexts, negotiate complex and often latent organisational tensions in their professional environment, and how these then playout in teamwork pedagogy as an exemplar. In this research, findings focused on the convergence and interactions of contradictory tensions persisting over time and made salient through the faculty interviews about teamwork pedagogy thus making a unique contribution to the existing literature exploring the lived experiences of faculty.

In the context of teamwork in business schools, faculty are constantly torn in contradictory directions in a struggle or strive dynamic. The extent to which faculty lean into the dynamic informs their mindset and influences their approach to teamwork pedagogy.

Some participants engaged either/or thinking, passively suppressing tensions through avoiding, splitting, and projecting, indicating the vicious cycle of struggle impacting their performativity. For others, responses were shaped by both/and thinking through proactive acceptance strategies, such as reframing or confronting tensions, to engender value in the paradox mindset of finding comfort through discomfort and living with tension to enhance teamwork pedagogy. Faculty engaging a paradox mindset will recognise the inherent tensions being simultaneously experienced and be able to see them as affordances in order to manage tensions. A paradox mindset can be cultivated; however, this requires strategic and open communication managed through paradoxical leadership (Lewis, 2000) to invoke both/and thinking to explore tensions, eliminate mixed messages and promote virtuous cycles of creativity, innovativeness, sustainability, and ambidexterity (Aust et al., 2019).

While organisational paradox has been used to study individuals, teams, leadership, and organisations, it has not been applied within HE to better understand how faculty respond to salient tensions inherent in teamwork pedagogy. This limitation is addressed by applying a paradox theory lens to focus on HE business faculty and how they approach and engage with teamwork pedagogy.

Further research into the broader applications of organisational paradox theory in HE across other disciplinary contexts and impact on faculty and the development of the paradox mindset is warranted where external conditions require universities to be agile and reflexive locally, nationally, and internationally, as COVID19 has demonstrated.

Note: Full text references for this article appear in the final end text reference list.

5.6 Article Summary

A paradox lens (Smith & Lewis, 2011) was adopted to explore the tensions of teamwork pedagogy in HE in the paradox article. Specifically, a focus on educators was adopted to zoom in on the perceived salient paradox tensions generated by teamwork pedagogy. In this research the focus on performativity, and the salient influences that affect the teaching of teamwork in the Australian business school context, is therefore linked to the performing paradox and how this then intersects with the interplay of simultaneous contradictory tensions encountered across the subsets of paradox tensions.

HE educators who chose to adopt a paradox mindset, becoming comfortable with the disequilibrium generated by paradox tensions found ways to work with tensions in what has been termed a "virtuous cycle" (Miron-Spektor, 2018, p. 28). This research identified that contradictory tensions, when educators adopt a paradox mindset, can enable learning, creativity, and contribute to sustainable resilience (Miron-Spektor et al., 2018). If educators are unable to adopt a paradox mindset, they may find themselves enveloped in paradox paralysis that can lead to the vicious downward spiral brought about by a lack of confidence, resilience, or performance anxiety. Evidence of vicious spiral and virtuous cycle reactions to paradox tensions were evident through zooming in on participants' lived experiences in this study, demonstrating the link between research findings and the theoretical perspective of organisational paradox and representing an original and novel contribution to the teaching of teamwork literature.

5.7 Chapter Summary

Chapter Five introduced the model developed to explain the nexus of salient influences on the teaching and learning of teamwork experienced ontologically and epistemologically across systems and time, integrating the earlier model presented in the global SLR in Chapter Two. This chapter has also presented key features and definitions of

organisational paradox theory based on Smith and Lewis' (2011) categorisation of organisational paradox tensions. The article in this chapter linked research findings with the theoretical perspective of organisational paradox tensions to provide an understanding of those interrelated factors influencing educator approaches to teamwork pedagogy performativity in the HE business school context. The cultivation of a paradox mindset to become comfortable with navigating and accepting conflicting tensions can mitigate the experience of such tensions as the individual gains comfort from discomfort and this finding is a vital contribution to understanding the paradox tensions of teamwork pedagogy and how such tensions can be managed. The next chapter concludes the thesis.

Chapter 6: Conclusion

6.1 Overview

In this chapter, the contributions of this research to the scholarship of teaching and learning (SoTL) as it relates to the functionality of teamwork pedagogy is outlined through Boyer's (1990) four function framework of scholarship. Furthermore, practical implications especially as they relate to leadership and governance are presented. Finally, future research which focuses on better understanding the epistemological factors that help explain educator decision-making are elaborated.

6.2 Rationale Revisited

In Australia government policy, in the form of human capital development associated with the employability agenda, has placed pressure on HEIs by linking HEI funding to producing employable graduates, providing further impetus for HEIs to work toward meeting the employability agenda operating at government and industry levels. The employability agenda, in brief, emphasises not only technical skills acquired through discipline related degree credentials, but also those "broad, generic, work-related competencies and personal attributes valued by employers" (Australian Government, 2009, p. 46).

As previously stated in Chapter One, and reaffirmed through this research, the rationale for researching teamwork pedagogy in HE business schools is attributed to the importance placed upon teamwork, considered an essential skill by employers (AAGE, 2019), with an emphasis on HE graduates developing the ability to collaborate with others in diverse settings (Hart Research Associates, 2010). Therefore, this research is important, particularly in light of rapidly changing labour market conditions and training trends (Cascio, 2019), to identify salient issues with teamwork pedagogy when developing work-related competencies in curricula, such as teamwork, to meet industry and government requirements.

A model was developed to explain the nexus of salient influences on teamwork pedagogy. The contribution of the model is discussed further in the following section.

6.3 Contribution and Significance

The principal focus of this research was to understand the factors affecting the teaching of teamwork in Australian higher education business schools.

It is noted that for HEIs, encompassing scholarship relates to specific requirements of the Higher Education Standards Framework (TEQSA, 2018) and to satisfy TEQSA with "evidence of scholarship informing individual teaching or supervision…relevant to their teaching roles as required by the Standards" (TEQSA, 2018, p. 6) to demonstrate scholarship. This research contributes to academic scholarship of teaching and learning as framed by Boyer (1990). Importantly, Boyer's (1990) four function framework of scholarship is highlighted as it connects to business school education. Each of the four functions is outlined in this chapter to evidence the significance of contribution of academic engagement through empirical research and published articles presented in this thesis.

The functions of scholarship have been engaged in addressing the primary research question:

What are the salient influences on educator factors that affect the teaching of teamwork in the Australian HE business school context?

The following three aims supported the objective of answering the research question:

1. identifying factors that are perceived to afford or constrain teamwork pedagogy in HE contexts

2. exploring the salient issues associated with teaching teamwork skills in the Australian HE business school context

3. understanding the challenges of implementing teamwork as part of the curriculum through educators' experience in the Australian HE business school context.

Both the global and Australian SLRs highlighted factors that afford or constrain HE teamwork and infer the tensions arising from educators' experiences of the challenges encountered in adopting teamwork pedagogy and/or implementing strategies to mitigate issues. Outcomes from the published articles subsequently confirmed gaps in the literature of the previously under-explored themes of teamwork including the hidden curriculum and transaction costs and the implications of paradox theory for teamwork pedagogy in the HE context. This study, therefore, significantly contributes to the understanding of the transaction costs of HE teamwork through identifying temporal, psychological, fiscal and human resource costs, and to the discovery of the interplay of paradox tensions identified as arising from the implementation of teamwork, thus contributing to new knowledge in the field. The following integrates Boyer's (1990) four functions of scholarship with the findings of this thesis.

6.3.1 The Scholarship of Discovery

The scholarship of discovery expands knowledge in a field by challenging current understandings of what is known and stimulating curiosity for discovery of new knowledge contributing to the intellectual academic environment (Hofmeyer et al., 2007). Therefore, it is acknowledged that epistemological knowledge (how we know what we know) can be disrupted, with theoretical understandings informing practice or practice informing theory (MacAulay et al., 2020). The empirical research in this thesis represents *discovery* of new knowledge through peer-reviewed, published articles identifying transaction costs and paradox tensions as factors influencing teamwork pedagogy.

The costs associated with implementing teamwork pedagogy in HE business schools are explained through the heuristic lens of transaction cost theory and the development of the '*Transaction Cost Interactions'* (TCI) model in the global SLR in Chapter Two. The global SLR in Chapter Two provides an in-depth account of the affordances and constraints imposed

by tangible and intangible transaction costs incurred by HE educators, students, and institutions. For the first time in the business school context, the TCI model uniquely contributes to the discovery of knowledge of the intersection of educator, student and HEI factors in undertaking the design, development, delivery and maintenance of teamwork pedagogy. While there is some evidence of the consideration of the transaction costs of teamwork pedagogy in the extant literature (Bacon, 2005; McCorkle et. al, 1999), a thorough review and explanation of the impacts of transaction costs in HE business schools was not found.

Likewise, there is little information on organisational paradox theory applied to the tensions faced by HE educators implementing teamwork pedagogy. Therefore, the scholarship of discovery is further advanced with understanding the challenges of implementing teamwork pedagogy as part of the curriculum as viewed through the lens of organisational paradox theory. Analysis of educators' lived experience of practice through this lens has contributed to the intellectual academic environment, advancing knowledge in the field.

6.3.2 The Scholarship of Teaching

This research contributes to the scholarship of *teaching* function demonstrated through engagement in pedagogic research to keep abreast of developments in the field and disseminating good practice in one's specialist field to extend the understanding of others and develop ongoing reflective evaluation of one's own practice. This is evident in the SLRs in Chapter Two and in Chapter Four, encompassing a repository of SoTL literature that revealed a range of pedagogic approaches and strategies to teamwork, recognised as disseminating good practice evident in published articles. Furthermore, Chapter Four explored teamwork pedagogy through engaging with stakeholder responses to the interview questions, where educators reflected upon and evaluated their approaches to teamwork pedagogy, providing a

practical contribution to the field. This contribution is demonstrated through the identification of salient issues associated with teaching teamwork skills and how HE educators in Australian business schools manage issues as affordances or constraints. A range of approaches to HE teamwork were revealed in the literature with instructional strategies receiving the most attention (Riebe et al., 2016; 2017). However, research for this study revealed that the application of teamwork pedagogy in Australian business schools was considered minimal (Riebe et al., 2017) and participant interviews in this study exposed underlying educator tentativeness with HE teamwork. For example, lack of professional development and training for educators was noted by participants as impacting through discretionary effort and motivation to engage with training for teaching teamwork processes, surfacing tensions of multiple demands versus personal focused objectives. Yet the literature affirms that developing teamwork processes with HE students is important, suggesting HE educators must be trained in teamwork pedagogies (Burbach et al., 2010) to upskill their competency.

Chapter Four provides a comprehensive resource of a range of approaches and strategies to teamwork pedagogy that other educators can access to extend their scholarship of teaching. Thus, this thesis identifies recommendations for review and/or development of actions to navigate costs and tensions arising from teamwork pedagogy as further outlined in section 6.4 of this chapter.

6.3.3 The Scholarship of Integration

The scholarship of *integration* is demonstrated in connections made across disciplines of affordances and constraints of teamwork pedagogy, as noted in the global SLR in Chapter Two and further consolidated in Chapters Four and Five, to advance perspective in a larger context.

The TCI model introduced in Chapter Two was expanded upon in Chapter Five (see Figure 5.1) to integrate the nexus of salient influences on teamwork pedagogy experienced ontologically and epistemologically across systems and over time. The unique contribution of the updated model is that it offers a macro view particular to HE culture, providing new insights and synthesising original research, in the specific field of HE teamwork pedagogy not previously considered. The ontological realm of the business educator incorporates a systems view of the hidden curriculum of teamwork pedagogy, raising awareness of the incidental or unplanned nature of teamwork in many business discipline units. The ontological position emphasises a social constructivist view that affects but does not determine the epistemological position (Marsh & Furlong, 2002) with the implication that educators may proceed on the basis of adhocracy to manage teamwork pedagogy. The epistemological position of the constructivist paradigm in this study focuses on subjective interaction with real-world phenomena (Scotland, 2012), in this case HE teamwork pedagogy. The model's depiction of transaction cost and paradoxical factors assists in raising educator awareness, and also awareness across HE leadership domains, of intersecting elements persisting over time. The scholarship of integration is demonstrated in this model with implications for educators in interpreting and analysing these elements to enable integration of knowledge from a new and innovative perspective to provide solutions to problems not previously addressed through existing theory or frameworks.

6.3.4 The Scholarship of Application

The scholarship of *application* is aligned with research activities that utilise knowledge to address problems and activate possible solutions to specific problems in the academy, and wider social context, in a specialist field. This thesis has given voice to the salient factors associated with teaching teamwork in the Australian HE business school context through the lived experience of HE business educators. Although paradox theory has

been applied across a range of organisational issues in the literature, there is no evidence of the application of paradox theory in clarifying the lived experience of HE business educators with teaching teamwork. This research has contextually expanded insights for the integration and application of paradox theory in the HE business school context and more broadly, for organisational paradox theory. Application of the paradox lens in this study has highlighted the contradictions from mixed messages emanating from a myriad of stakeholders impacting educator performativity in their teaching roles. At the organisational (institutional) level, competing demands have been revealed as manifesting as mixed messages about prioritising research over good teaching with the underlying expectation of having to do more with less (Vos & Page, 2020). As a consequence, high levels of stress (Sutton, 2017) were noted at the educator level, for example, around control versus flexibility and resource allocation. Some educators in this study reacted to lack of resources for implementing teamwork pedagogy with a variety of strategies including by passively suppressing tensions through avoiding, splitting, projecting or passive acceptance through polarisation of reactions related to performativity to maintaining personal efficacy. Alternatively, other educators adopted a paradox mindset employing proactive acceptance strategies, such as reframing or confronting tensions, to improve their performativity and enhance their pedagogical approach.

6.3.4.1 The Adhocracy Instinct

The evidence from the findings reflected the adhocracy of teamwork pedagogy and application of theory related to HE teamwork, requiring the individual initiative of educators to manage factors affording or constraining the application of teamwork pedagogy. An ad hoc pedagogical approach can stimulate questioning of existing paradigms and paradoxes that can morph into educator freedom to construct new knowledge to enhance present and future success, highlighted in the performing/learning paradox. The ad hoc and self-reliant approach adopted by educators is, therefore, an affordance that provides paradoxical ambidexterity

(Raisch & Zimmerman, 2019) to innovate, experiment and refine their teamwork pedagogy. Although temporal, physical, psychological, fiscal and human resource costs were identified as constraints to integrating teamwork pedagogy (Riebe et. al, 2016), in some cases, educators' adopting pedagogical adhocracy applied an innovative epistemological approach as an affordance toward managing performance and organisational factors persisting over time.

To engage the academy with possible solutions to the problems arising from transaction costs and paradox tensions of teamwork pedagogy, the published articles in this thesis elaborate more fully on the salient issues arising and how HE business educators, through their lived experience of implementing teamwork in their courses, have applied their knowledge through the scholarship of discovery, teaching, integration and application.

This thesis provides clarity around the experience of business school educators with HE teamwork in a cohesive and comprehensive review not previously undertaken. It is in understanding the nexus of transaction costs and paradox that has progressed significant insights into how educators approach and navigate the tensions of one part of their working lives, specifically the teaching of teamwork, impacting their performativity. This thesis makes a significant contribution by providing an account of the lived experience of educators with the paradoxes and tensions encountered and the strategies applied to navigate paradox tensions, affording the opportunity for wider engagement with understanding the needs of the future academic workforce.

This thesis provides a starting point for leadership of HE institutions to reconsider the ways in which resources are allocated in times of resource scarcity, plurality and change and, how best to support academic staff through paradoxical leadership. Deploying strategic and open communication to eliminate mixed messages will assist academic staff to navigate the complexity of shifting work roles and responsibilities in a changing academic environment.

6.4 Implications and Recommendations for Theory, Practice and Policy

The findings from this thesis have implications for the application of educational theories in teaching practice in the business school context, addressed as knowledge gaps in the HE teamwork literature. A bricolage of theories underpins the teaching and learning of HE teamwork, yet from the business discipline educator perspectives in this study, and largely apparent in the literature, these theories appear not to be transparently applied to HE teamwork. It is the contention in this thesis that social constructivism, ecological systems, symbolic interactionism and experiential and collaborative learning are all contributing theories underpinning HE teamwork to advance the scholarship of teamwork pedagogy.

6.4.1 Educational Theories for Teamwork to Inform Practice

There is no prescriptive guidance for HE business educators on how to use educational theories for navigating teamwork pedagogy, nor is there any "universal agreement on the approach individual academics should adopt toward teaching practice" (Vos and Page, 2020, p. 64). Theories underpinning HE teamwork are rarely outlined in journal publications, rather teamwork models are described (Driskell et al., 2018) or applied and reported on in the literature.

Ontologically, social constructivist theory aligns with the belief that reality is socially constructed through language and interaction with others, yet issues emerge with the application of theory to HE teamwork where subjective meaning-making may not be consistent between people, (for example, between team members and/or the educator and students) and/or where scaffolding of learning is inconsistent or withdrawn too early in the learning process, especially as there are many influencing factors impacting on individual student's learning across the levels of the individual student's ecosystem. Educators, faced with temporal and other constraints, cannot always provide for examination of learning at the level of the individual student's environmental ecosystem. Yet gaining awareness of the role

of concepts that are sensitising, rather than definitive or prescriptive, may "suggest directions along which to look" (Blumer, 1969, p. 148), as a precondition to fostering a paradox mindset, for example, through sensitising interactions between educator and student. Thus, this awareness of the complex nature of interactions across systems and environments has implications for HE educators in developing pathways to ambidexterity (Raisch & Zimmerman, 2019) to explore and exploit new opportunities for SoTL.

Symbolic interactionism provides educators with perspective on the role of emotions, attitudes, moods and trust in interactions with others to give clarity to developing positive affective states (Jones & George, 1998). Engaging with symbolic interactionism is important because latent paradox tensions can be made salient by actor's observing emotions and attitudes (Jarzabkowski et al., 2018), in this case to teamwork, to raise educator sensemaking of pedagogical issues as they arise. Linking to Blumer's (1969) premise that people act toward things that have meaning for them and these meanings are handled and modified through dealing with things encountered, is the example of the pedagogical issue of managing teamwork conflict. In this study, some educators felt ill-prepared to manage teamwork conflict, perceived as a temporal cost. Subjectivity and agency of educators is seen in their response to performance paradoxes and the way in which their actions address the perceived transaction costs of teamwork pedagogy. As previously stated, raising the level of sensemaking of teamwork conflict as it arises can assist educator decision-making in confronting performing/learning paradox tensions. Developing a positive affective state for teamwork can be achieved through the introduction of teamwork processes, models and tools. Providing clarity around the purpose for teamwork, establishing clear roles and the development of trust through social interactions during collaborative learning can foster understanding of shared goals (Driskell et al., 2018) and expectations, which can provide students with a positive experience of teamwork. Such actions can also assist in mitigating

teamwork conflict and alleviating performing/learning tensions for the educator through early, focused preparation.

These theoretical perspectives are important as they demonstrate the overlap between educator and student relationships in the teaching and learning process. The findings of this study indicate that some educators' use models such as Tuckman's (1965) stages of small group development, or use web-based tools, for example, SPARK (Freeman & McKenzie, 2002) or instructional strategies such as team-based learning, with little evidence presented of underpinning educational theory integrated into pedagogical practice. This suggests implications for policy and practice in that there is an opportunity for HEIs to provide professional development for HE business school educators to understand educational theories informing teamwork teaching and learning processes as one way to manage tensions and navigate paradoxes.

6.4.2 Theory to Practice: Temporal, Fiscal, Physical, Psychological, and Human Resource Factors

The application of a transaction cost lens to identify factors affecting the teaching of teamwork from the HE business school educator perspective has not previously been reported on in-depth. The findings in this thesis present transaction costs as influencing factors from which to explore the implications of HE teamwork from a fresh theoretical perspective.

The transaction cost lens applied in this research aimed to better understand the affordances and constraints of the temporal, fiscal, physical, psychological, and human resource costs associated with teamwork pedagogy. Critical insights were developed around the moderating effects of transaction costs associated with "developing, coordinating, monitoring, participating in, interacting with, and evaluating teamwork pedagogy" (Riebe et al., 2016, p. 635). The application of the transaction cost lens, in the HE business school context, presents options for evaluating the return on investment of implementing teamwork

pedagogy by unpacking the multilevel interactions that emerge from understanding the tangible and intangible cost factors involved.

There are implications for the institution through broader consideration of human resource costs when this view is adopted. Human resource cost factors refer to how institutions implement contractual arrangements with educators for their labour costs and productivity. For example, the HEI may consider the level of education, training, and skills pertinent to an educator's specific role and have policies in place for the specification of workload, required training to improve productivity and/or behaviours, as there is an expectation of durability of tenure of highly specialised human resource assets.

HEIs could consider human resource transaction costs associated with teamwork pedagogy in educator workload models by incorporating levers that adjust for additional time and resourcing requirements in an environment where workloads have increased due to evolving technology, class sizes and composition (Mitten & Ross, 2018). For example, where educators are responsible for high-level teamwork course learning objectives over and above discipline teaching and research commitments, a time allocation be provided in workload. HEIs could mandate training and professional development in educational theory and pedagogical strategies for teaching teamwork, encompassing explicit instruction in teamwork process skills, as part of the institution's human resource policy to advance consistency of instruction across the business curriculum. The implication for practice is to encourage focused programming of teamwork process elements in curriculum design, including relevant assessment techniques, to mitigate the transaction cost of implementing teamwork pedagogy. Further, this approach to policy and practice aligns with findings in Chapter Two in this research about transaction cost concerns of educator preparedness to teach teamwork, cooperative learning, meeting employer expectations for work-ready graduates, resourcing, and workloads.

There are temporal, psychological, and physical resource costs to HE business school educators in teaching teamwork, but who are most often employed to teach discipline-specific knowledge (Cotronei-Baird, 2020). Temporal costs include the time to develop teamwork pedagogy, and incorporate theory to coordinate, monitor, and evaluate collaborative teamwork strategies in a business discipline curriculum and develop physical resources. Findings in the research suggest that HE educators are largely unaware of underpinning teamwork theory and the dynamic elements (Dinh & Salas, 2017) of specific teamwork teaching and learning processes. Educators noted the accountability pressure from institutions to be research active, where *"teaching is getting squeezed into a smaller and smaller basket" (P13)*, converging with the literature around implicit messages in HE that research productivity is what is valued and "enforced through the culture and tangible rewards" (Mitten & Ross, 2018, 1349). Hence, there is a psychological cost to HE educators for undertaking professional development in pedagogical practices where professional development in discipline-related research and practice is more highly valued by business schools (Boyer, 1990; MacAulay et al., 2020; Vos & Page, 2020). Policy and practice guidelines for teamwork in HE may alleviate some of the costs by explicitly demonstrating the value of professional development of pedagogical practices and incorporating levers in workload models that address workload issues.

Students also encounter transactions costs arising from engagement with HE teamwork. Educators in this study perceived that students liked the social environment of teamwork and learning from their peers. Although this is considered positive, results from this research suggest that negative student responses to HE teamwork were more impactful, suggesting educators need to consider temporal, psychological and fiscal transaction costs associated with teamwork for students.

Findings in this research indicated that educators perceived that students disliked HE teamwork due to holistic grading of teamwork products that do not account for individual team member input. Psychological costs arise for students when there is a perception that their grade is impacted by having to carry social loafers. For some students, there are fiscal costs that could be encountered as it is rare for students not to have part- or full-time employment. Participating in HE teamwork outside of assigned study time can impinge on earnings (or other commitments), referred to in the literature as lost opportunity costs (Bacon, 2005; McCorkle et al., 1999). It is imperative that time constraints on teamwork projects are achievable and realistic and common issues addressed in practice, with the implication that students will have a more positive experience with teamwork at university.

Transaction costs which afford or constrain teamwork pedagogical activities and decisions were identified in this thesis, providing critical insights for many of the interactive effects of educator, student and institutional factors and their influence on the uptake of teamwork pedagogy as presented in Chapter Two. Overall, an emphasis on identifying, acknowledging, and addressing transaction costs of HE teamwork can have implications for how HE institutions shape policy and/or guidelines to inform professional development of teamwork pedagogy, thereby contributing to improved teamwork experiences for educators and students.

6.4.3 Cultivating and Leading with a Paradox Mindset

There was broad agreement in the teamwork pedagogy literature of the need for appropriate curriculum design (Kidder & Bowes-Sperry, 2012; Shimazoe & Aldrich, 2010) and assessment procedures (Augar et al., 2016; Loughry et al., 2014) and explicit student training in team skills (Earnest et al., 2017; Pineda & Lerner, 2006; Riebe et al., 2010). Yet the findings of this research indicate that there was an ad hoc approach to teamwork pedagogy. It is possible that the ad hoc approach adopted by some educators has been

developed over time as a result of the hidden curriculum and emanating from mixed messages across systems informing educator actions. For example, the way in which productivity in research is implicitly rewarded over teaching (Boyer, 1990; MacAulay et al., 2020; Vos & Page, 2020), yet this may not be reflected in workload model policy (Papadopoulos, 2017) as adequate return on investment where teaching allocations are generally higher than research allocations. These mixed messages drive educator focus, shaping either/or, or both/and responses to paradoxical tensions influential in determining the cultivation of a paradox mindset, which was shown in this thesis to be a way of navigating tensions associated with teaching teamwork.

Overlaying an organisational paradox lens in this thesis provided a unique contribution, explaining how Australian HE business educators navigate the intersection of performing paradox tensions with organising, learning, and belonging tensions, evoked by the challenges encountered with integrating teamwork pedagogy related to performativity in business disciplines. Tensions are made salient through observation of changes to environmental factors, or individual's social, emotional and cognitive processes, which shape responses to paradox tensions and when individuals are ready to engage in paradoxical thinking (Pradies et al., 2021). Cunha and Putnam (2019) describe the performance paradox as "ways that past successes contribute to the persistence of a given path of action through following the same strategies" (p. 95). This research found that educators reacted to paradox tensions with a range of strategies. Some engaged with tensions by passively suppressing the tension through either/or decision-making to manage contradictory tensions. For other educators' proactive acceptance, using both/and strategies to reframe or confront contradictory tensions, allowed them to make changes to their pedagogy, fuelling a paradox mindset.

There are implications for business school leaders and educators in cultivating a paradox mindset as a way to navigate these and other tensions evident in HE (Pradies et al., 2021). HE business school leaders interviewed in this study demonstrated a paradox mindset by enacting paradoxical leadership through open communication and eliminating mixed messages in the business school. Clear messaging and open communication thus engaged staff with the need for change to enhance sustainability through paradoxical sensemaking (Sparr, 2018) promoting a bottom-up effect in developing "shared collective sense-making" (Liu et al., 2020, p. 359). Educators engaging a paradox mindset in this research recognised the contradictory tensions arising from implementing teamwork pedagogy and were able to manage tensions as affordances rather than constraints through the use of both/and thinking, rather than linear either/or decision-making processes.

A key recommendation for HE leadership then is to provide direction, bolstered by paradoxical sensemaking (Liu et al., 2020) that frames "situations in meaningfully symbolic terms" (Nayak et al., 2020, p. 282), empowering academic staff to "deal flexibly and creatively with changing circumstances" (Pradies et al., 2021, p. 156) as noted recently with the move to wholly online teaching and learning during the COVID19 pandemic, for example. Paradox mindset training to influence innovative work behaviours (Liu et al., 2020) and design strategies to navigate such tensions using both/and thinking, is recommended as a key outcome from this research.

Advancing academic engagement through SoTL in relation to teamwork pedagogy has been demonstrated throughout this thesis. Boyer's (1990) four functions of scholarship are dynamic and do not translate to a linear process, rather they interact to inform and extend understandings. In summary, the following illuminates examples of each function as they relate to this thesis.

The scholarship of discovery has expanded insights into educational theories to inform practice and stimulate curiosity for new knowledge in the field. The scholarship of teaching has been expounded through the inclusion of a repository of pedagogical research articles and, through interview analysis, educators' experiential reflection on approaches to HE teamwork. The scholarship of integration is reflected in the cross disciplinary research conducted and consequently published in the global SLR to advance perspective on teamwork pedagogy in a wider social context. The scholarship of application is aligned with research activities, conducted in this thesis, that have addressed problems with teamwork pedagogy and provided possible solutions to specific challenges associated with teaching teamwork in the HE business school context.

Acknowledging the four functions of SoTL has made transparent academic engagement with research throughout this thesis, further contributing to understandings of teamwork pedagogy benefitting the wider academic community.

6.5 Limitations of Research

The research data were obtained from a sample of 30 HE business academics across four public universities in Western Australia which may be considered a limitation for generalisability. While generalisability is considered a positivistic term (Farquhar, 2012), associated more closely with quantitative studies, the qualitative case study design of this thesis presents internal validity through trustworthiness developed through four criteria of credibility, transferability, dependability and confirmability as sound methodology. The qualitative interpretivist research approach adopted in this thesis places emphasis on thick description and richness of experience (Grandy, 2010) to illuminate answers to the research question, endowing the research with trustworthiness (Farquhar, 2012).

A potential limitation to the SLR methodology is the key word selection and search strings applied which influenced the number of journal articles retained for review. However,

both a broad and specific set of search criteria were applied as part of a sequential two-phase design and a further literature search was undertaken post-SLR to mitigate SLR exclusion criteria and make connections with previously reviewed literature.

Data collection through interviewing may impose limitations through self-reporting by participants (Sutton & Austin, 2015) and interpretivist researcher bias (Bolderston, 2012). The role of the researcher in this case, was to interpret meanings and understanding drawn from participant responses rather than eliminating bias (Farquhar, 2012).

Coding and theorising are interpretive actions in qualitative research. Others may apply different lenses and filters (Saldaña, 2016) to the qualitative data, and code differently to imbue the data with alternative interpretations, thus generating alternative codes, categories and/or themes. In this thesis, the data coding is my contribution to meaning making for the purpose of interpreting participant responses.

6.6 Future Research

There are several opportunities for future research as noted throughout this thesis. The global SLR in Chapter Two called for more focused research to explore the dynamic interactions which place transaction costs at the nexus of educator, student, and institutional interactions with teamwork pedagogy. The Australian SLR in Chapter Two acknowledged the need for further research on the teaching of teamwork skills and unpacking factors that influence this across Australian universities. The paradox article in Chapter Five recommended further research be conducted on the broader applications of the paradox lens in HE across other disciplinary contexts and the impact of paradox on faculty where external conditions require universities to be agile and reflexive. The paradox and transaction cost lenses could be applied to teamwork pedagogy in disciplines other than those associated with business schools and extended to encompass educators from a wider range of universities in Australia and internationally, which could strengthen the findings of this study.

From the perspective of research methods, this study found that the majority of HE teamwork research was presented using quantitative research methods. Employing research methods capable of capturing more nuanced interactive effects of HE teamwork across educator, student and/or institutional factors, using larger sample sizes and longitudinal designs in future HE teamwork research, would further contribute to rigorous, evidence-based knowledge of implications of HE teamwork pedagogy.

Finally, future research on the increased pressures of economic rationalisation in the HE sector and impacts of digitisation on the teaching and learning of teamwork during and after COVID-19 could be investigated to highlight further salient influencing factors.

6.7 Final Thoughts

This thesis began with a desire to understand the salient influences on factors affecting the teaching of teamwork in HE business schools. In addressing the research question and aims, the educator perspective on teamwork pedagogy and the influences of transaction costs and paradox tensions encountered were highlighted. The employability agenda driven by government initiatives and employer demand remains a major rationale for HE teamwork development. Whilst teamwork is consistently rated by employers as an important skill to develop at university, there exist constraints on formal implementation of teamwork pedagogy in the HE business school context. Even though such constraints exist and an underlying tentativeness with teaching teamwork was inferred from participant responses, there is a noticeable undertaking by business educators in this research to prepare students for the world of work with the transferable skill of teamwork. The application of the paradox and transaction cost lenses in this thesis has added an innovative way in which to view and interact with the challenges of HE teamwork pedagogy and the complex nested system of relationships and tensions to be navigated by HE educators.

References

Aaron, J., McDowell, W., & Herdman, A. (2014). The effects of a team charter on student team behaviours. *Journal of Education for Business, 89*(2), 90–97. https:doi.org/10.1080/08832323.2013.763753

Ahern, A. (2007). What are the perceptions of lecturers towards using cooperative learning in civil engineering? *European Journal of Engineering Education*, *32*, 517–526. https://doi.org/10.1080/03043790701433152.

Albon, R., & Jewels, T. (2014). Mutual performance monitoring: Elaborating the development of a team learning theory. *Group Decision and Negotiation, 23*(1), 149–164. https://doi.org/10.1007/s10726-012-9311-9.

Allen Consulting Group. (2006). *Assessment and reporting of employability skills in training packages*. Report to the Department of Education, Science and Training.

Apple, M. W. (2013). *Knowledge, power, and education: The selected works of Michael W. Apple*. Routledge, Taylor and Francis Group.

Archer, W., & Davison, J. (2008). *Graduate employability: What do employers think and want?* Council for Industry and Higher Education.

Association to Advance Collegiate Schools of Business [AACSB]. (n.d.). *2013 Business Accreditation Standards*. http://www.aacsb.edu/accreditation/standards/2013-business

Augar, N., Woodley, C., Whitefield, D., & Winchester, M. (2016). Exploring academics' approaches to managing team assessment. *The International Journal of Educational Management, 30*(6), 1150–1162. https://doi.org/10.1108/IJEM-06-2015-0087.

Aust, I., Brandl, J., Keegan, A., & Lensges, M. (2019). Tensions in managing human

    resources: Introducing a paradox framework and research agenda. In K. Smith, M.

    Lewis, P. Jarzabkowski & A. Langley (Eds.), *The Oxford handbook of organizational*

    paradox. Oxford University Press.

Australian Association of Graduate Employers [AAGE]. (2012). *AAGE Employer Survey:*

    Survey Report. High Flyers Research.

Australian Association of Graduate Employers [AAGE]. (2014). *AAGE employer survey:*

    Survey report. https://aage.com.au/surveys-research

Australian Association of Graduate Employers [AAGE]. (2019). *AAGE employer survey:*

    Survey report. https://aage.com.au/surveys-research

Australian Business Deans Council [ABDC]. (2021). *The future of Australian business*

    schools. https://abdc.edu.au/wp-content/uploads/2021/03/qs_abdc_fobs13.pdf

Australian Chamber of Commerce and Industry [ACCI]. (2002). *Employability skills — an*

    employer perspective getting what employers want out of the too hard basket. AGPS.

Australian Education Council Review Committee [AEC]. (1991). *Young people's*

    participation in post-compulsory education and training: Report of the AEC Review

    Committee [Finn review]. https://www.voced.edu.au/print/1131481

Australian Education Council Mayer Committee. (1992). *Key competencies: Report of the*

    committee to advise the Australian Education Council and Ministers of Vocational

    Education, Employment and Training on employment-related key competencies for

    post-compulsory education and training [Mayer report].

    https://catalogue.nla.gov.au/Record/1144387

Australian Government. (2019). *Performance-based funding for the Commonwealth Grants*

    Scheme. https://www.dese.gov.au/uncategorised/resources/final-report-performance-

    based-funding-commonwealth-grant-scheme

Australian Industry Group and Deloitte. (2009). *National CEO survey — skilling business in tough times*. Australian Industry Group. https://catalogue.nla.gov.au/Record/5150788

Australian Parliament. House of Representatives. Standing Committee on Education Training. (2009). *Adolescent overload?: Report of the inquiry into combining school and work: supporting successful youth transitions* (pp. xvii, 169 p. + appendices). Commonwealth of Australia.

Australian Qualifications Framework Council [AQF]. (2013). *Australian Qualifications Framework* (2nd ed.). Australian Qualifications Framework Council.

Bacon, D. (2005). The effect of group projects on content-related learning. *Journal of Management Education, 29*, 248–267. https://doi.org/10.1177/1052562904263729.

Barrie, S. (2006). Understanding what we mean by the generic attributes of graduates. *Higher Education, 51*(2), 215–241, https://doi.org/10.1007/s10734-004-6384-7.

Bazeley, P. (2010). Computer-assisted integration of mixed methods data sources and analyses. In A. Tashakkori & C. Teddlie (Eds.), *Sage handbook of mixed methods in social & behavioral research.* https://doi.org/10.4135/9781506335193.n18

Becker, G. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy, 70*(5), 9–49. https://doi.org/10.1086/258724

Bedwell, W., Fiore, S., & Salas, E. (2014). Developing the future workforce: An approach for integrating interpersonal skills into the MBA classroom. *Academy of Management Learning & Education, 13*(2), 171–186. https://doi.org/10.5465/amle.2011.0138

Bennett, D. (2018). Graduate employability and higher education: Past, present and future. *HERDSA Review of Higher Education, 5*, 31–61.

Bennett, R. (2002). Employers' demands for personal transferable skills in graduates: A

    content analysis of 1000 job advertisements and an associated empirical study.

    Journal of Vocational Education & Training, 54(4), 457-476.

    https://doi.org/10.1080/13636820200200209

Berger, P., & Luckmann, T. (1966). *The social construction of reality: A treatise in the*

    sociology of knowledge: Doubleday.

Betta, M. (2016). Self and others in team-based learning: Acquiring teamwork skills for

    business. *Journal of Education for Business, 91*(2), 69–74.

    doi:10.1080/08832323.2015.1122562

Biesta, G., Priestly, M., & Robinson, S. (2015). The role of beliefs in teacher agency.

    Teachers and Teaching, 21(6), 624–640.

    https://doi.org/10.1080/13540602.2015.1044325

Biggs, J. (1999). What the student does: Teaching for enhanced learning. *Higher Education*

    Research & Development, 18, 57–75. https://doi.org/10.1080/0729436990180105

Billot, J. (2010). The imagined and the real: identifying the tensions for academic identity.

    Higher Education Research & Development, 29(6), 709-721.

    https://doi.org:10.1080/07294360.2010.487201

Blumer, H. (1969). *Symbolic interactionism: Perspective and method*. Prentice Hall.

Boardman, A. E., Greenberg, D. H., Vining, A. R., & Weimer, D. L. (2017). *Cost-benefit*

    analysis: Concepts and practice. Cambridge University Press.

Bolderston, A. (2012). Conducting a research interview. *Journal of Medical Imaging and*

    Radiation Sciences, 43, 66–76. https://doi.org/10.1016/j.jmir.2011.12.002

Bolton, R. (2019, 2 October). University funding to be tied more to producing students who get jobs. *Australian Financial Review.* https://www.afr.com/policy/health-and-education/university-funding-to-be-tied-more-to-producing-students-who-get-jobs-20191001-p52wkz

Borg, J., Scott-Young, C. M., & Turner, M. (2019). Smarter education: Leveraging stakeholder inputs to develop work ready curricula. In V. Uskov, R. Howlett & L. Jain (Eds.), *Smart education and e-learning 2019* (pp. 51–61). Springer.

Boud, D. & Associates. (2010). *Assessment 2020: Seven propositions for assessment reform in higher education*. http://www.uts.edu.au/sites/default/files/Assessment-2020_propositions_final.pdf

Boud, D., Cohen, R., & Sampson, J. (2013). *Peer learning in higher education*. Routledge.

Bowers, C. A., Pharmer, J. A., & Salas, E. (2000). When member homogeneity is needed in work teams: A meta-analysis. *Small Group Research, 31*(3), 305-327. https://doi.org/10.1177/104649640003100303

Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*: ERIC. https://eric.ed.gov/?id=ED326149

Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. D. Panter, D. Rindskopf & K. J. Sher (Eds.), *APA handbook of research methods in psychology* (vol. 2, pp. 57–71). American Psychological Association.

Bravo, R., Catalán, S., & Pina, J. M. (2019). Analysing teamwork in higher education: An empirical study on the antecedents and consequences of team cohesiveness. *Studies in Higher Education, 44*(7), 1153–1165. https://doi.org/10.1080/03075079.2017.1420049

Bravo, R., Lucia-Palacios, L., & Martin, M. (2014). Processes and outcomes in student teamwork. An empirical study in a marketing subject. *Studies in Higher Education*, 1-19. https://doi.org/10.1080/03075079.2014.926319

Bridgstock, R. (2009). The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. *Higher Education Research & Development, 28*(1), 31–44. https://doi.org/10.1080/07294360802444347.

Briner, R., & Denyer, D. (2012). Systematic review and evidence synthesis as a practice and scholarship tool. In D. Rousseau (Ed*.), The Oxford handbook of evidence-based management* (pp. 112–129). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199763986.013.0007.

Brofenbrenner, U. (1995). Developmental ecology through space and time: A future perspective. In P. Moen, Elder, G.H., Lüscher, K. (Ed.), *Examining Lives in Context: Perspectives on the Ecology of Human Development*: American Psychological Association.

Brown, P., Hesketh, A., & Williams, S. (2003). Employability in a knowledge-driven economy. *Journal of Education and Work, 16*(2), 107–126, https://doi.org/10.1080/1363908032000070648.

Bryant, B., & Charmaz, K. (2007). *The SAGE Handbook of Grounded Theory.* https://dx.doi.org/10.4135/9781848607941.n1

Burbach, M., Matkin, G., Gambrell, K., & Harding, H. (2010). The impact of preparing faculty in the effective use of student teams. *College Student Journal, 44*, 752–761.

Burdett, J., & Hastie, B. (2009). Predicting satisfaction with group work assignments. *Journal of University Teaching and Learning Practice, 6*(1), 61–71.

Burke, A. (2011). Group work: How to use groups effectively. *The Journal of Effective Teaching*, *11*, 87–95.

Business Industry and Higher Education Collaboration Council [BIHECC]. (2007). *Graduate Employability Skills*. BIHECC.

Carmichael, T., & Cunningham, N. (2017). Theoretical data collection and data analysis with gerunds in a constructivist grounded theory study. *The Electronic Journal of Business Research Methods, 15*(2), 59–73.

Carnegie Mellon University. (n.d.). *What are the challenges of group work and how can I address them?* https://www.cmu.edu/teaching/designteach/teach/instructionalstrategies/groupprojects /challenges.html

Carter, S., & Little, M. (2007). Justifying knowledge, justifying method, taking action: Epistemologies, methodologies, and methods in qualitative research. *Qualitative Health Research, 17*(10), 1316-1328. https://doi.org/10.1177/1049732307306927

Cascio, W. (2019). Training trends: Macro, micro, and policy issues. *Human Resource Management Review, 29*(2), 284–297. https://doi.org/10.1016/j.hrmr.2017.11.001

Certified Practising Accountants [CPA] Australia. (n.d.) *Skills list.* https://www.cpaaustralia.com.au/cpa-program/cpa-program-candidates/your-experience/skills-list.

Chad, P. (2012). The use of team-based learning as an approach to increased engagement and learning for marketing students: A case study. *Journal of Marketing Education, 34*(2), 128–139. https://doi.org/10.1177/0273475312450388

Chapman, K., Meuter, M., Toy, D., & Wright, L. (2010). Are student groups dysfunctional: Perspectives from both sides of the classroom. *Journal of Marketing Education, 32*(1), 39–49. https://doi.org/0.1177/0273475309335575

Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. In K. Denzin, Lincoln, Y. (Ed.), *Handbook of qualitative research* (2nd ed.). Sage Publications.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Sage Publications.

Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). Sage Publications.

Clarke, A. (2006). Qualitative interviewing: Encountering ethical issues and challenges. *Nurse Researcher, 13*(4), 19–29. https://doi.org/10.7748/nr2006.07.13.4.19.c5987

Clarke, S., & Blissenden, M. (2013). Assessing student group work: Is there a right way to do it? *The Law Teacher, 47*, 368–381. https://doi.org/10.1080/03069400.2 013.851340.

Clews, D. (2003). Imaging in education: Imaging in preliminary-level studio design technology projects. *Art, Design & Communication in Higher Education, 2*(1/2), 7–28. https://doi.org/10.1386/adch.2.1.7/0.

Collis, J., & Hussey, R. (2014). *Business research* (4th ed.). Palgrave Macmillan.

Colvin, C., Volet, S., & Fozdar, F. (2014). Local university students and intercultural interactions: Conceptualising culture, seeing diversity and experiencing interactions. *Higher Education Research & Development, 33*(3), 440–455. https://doi.org/10.1080/07294360.2013.841642

Confederation of British Industry [CBI]. (2009). *Future fit: Preparing graduates for the world of work*. https://www.voced.edu.au/content/ngv%3A13894.

Considine, J. (2013). What do students really do in learning groups? *Communication Teacher, 27*, 223–229. https://doi.org/10.1080/17404622.2013.798011.

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research* (3rd ed.). Sage Publications.

Cotronei-Baird, V. S. (2020). Academic hindrances in the integration of employability skills development in teaching and assessment practice. *Higher Education, 79*(2), 203–223. https://doi.org/10.1007/s10734-019-00405-4

Cox, P., & Friedman, B. (2009). The team boat exercise: Enhancing team communication mid-semester. *Business Communication Quarterly, 72*, 230–236. https://doi.org/10.1177/1080569909334561.

Cranmer, S. (2006). Enhancing graduate employability: Best intentions and mixed outcomes. *Studies in Higher Education, 31*(2), 169–184, https://doi.org/10.1080/03075070600572041.

Creswell, J. (1994). *Research design: Qualitative and quantitative approaches*. Sage Publications.

Creswell, J. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Sage Publications.

Creswell, J. (2007). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* (2nd ed.). Sage Publications.

Creswell, J. (2014). *Research Design* (4th ed.). Sage Publications.

Creswell, J., & Miller, D. (2000). Determining validity in qualitative inquiry. *Theory into Practice, 39*(3), 124–130. https://doi.org/10.1207/s15430421tip3903_2

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Sage Publications.

Crumbley, D., Smith, K., & Smith, L. M. (1998). Educational novels and student role-playing: A teaching note. *Accounting Education, 7*, 183–191. https://doi.org/10.1080/096392898331252.

Cunha, M., & Putnam, L. (2019). Paradox theory and the paradox of success. *Strategic Organization, 17*(1), 95–106. https://doi.org/10.1177/1476127017739536

Curşeu, P. (2011). Intra-group conflict and teamwork quality: The moderating role of leadership styles. *Administrative Sciences, 1*, 3–13. https://doi.org/10.3390/admsci1010003.

Curşeu, P., & Pluut, H. (2013). Student groups as learning entities: The effect of group diversity and teamwork quality on groups' cognitive complexity. *Studies in Higher Education, 38*(1), 87–103. https://doi.org/10.1080/03075079.2011.565122.

Curtis, D., & McKenzie, P. (2001). *Employability skills for Australian industry: Literature review and framework development — report to Business Council of Australia and the Australian Chamber of Commerce and Industry.* http://www.voced.edu.au/content/ngv33428

D'Alessandro, S., & Volet, S. (2012). Balancing work with study: Impact on marketing students' experience of groupwork. *Journal of Marketing Education, 34*, 96–107. https://doi.org/10.1177/0273475311432115.

David, F. R., David, M., & David, F. R. (2011). What are business schools doing for business today? *Business Horizons, 54*, 51–62. https://doi.org/10.1016/j.bushor.2010.09.001.

Davidson, C. (2009). Transcription: Imperatives for qualitative research. *International Journal of Qualitative Methods, 8*(2), 35–52. https://doi.org/10.1177/160940690900800206

De Keyser, B., Guiette, A., & Vandenbempt, K. (2019). On the use of Paradox for generating theoretical contributions in management and organization research. *International Journal of Management Reviews, 21*(2), 143–161. https://doi.org/10.1111/ijmr.12201.

De Vita, G. (2002). Does assessed multicultural group work really pull UK students' average down? *Assessment & Evaluation in Higher Education, 27*(2), 153–161. https://doi.org/10.1080/02602930220128724.

Delaney, D., Fletcher, M., Cameron, C., & Bodle, K. (2013). Online self and peer assessment of teamwork in accounting education. *Accounting Research Journal, 26*(3), 222–238. https://doi.org/10.1108/arj-04-2012-0029

Deloitte. (2017). *Global trends in human capital*.

    https://www2.deloitte.com/au/en/pages/human-capital/articles/global-human-capital-

    trends-2017.html

Denscombe, M. (2014). *The good research guide: For small-scale social research projects*

    (5th ed.). Open University Press.

Denzin, N. K., & Lincoln, Y. S. (1998). *Collecting and interpreting qualitative materials*.

    Sage Publications.

Denzin, N. K., Lincoln, Y.S. (2000). The discipline and practice of qualitative research. In N.

    K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed.). Sage

    Publications.

Department of Education, Skills & Employment [DESE]. (2020). 2019 Student summary

    infographic. https://www.dese.gov.au/higher-education-statistics/resources/2019-

    student-summary-infographic

Department of Education Science & Training [DEST]. (2002). *Employability skills for the*

    future. Report by the Australian Chamber of Commerce and Industry and the

    Business Council of Australia. Commonwealth of Australia.

Dewey, J. (1916/1966). *Democracy and education: An introduction to the philosophy of*

    education: The Free Press; Collier-Macmillan.

Dey, I. (2004). Grounded theory. In C. Seale, G. Gobo, J. Gubrium & D. Silverman (Eds.),

    Qualitative research practice (pp. 80–93). Sage Publications.

Ding, H., & Ding, X. (2008). Project management, critical praxis, and process oriented

    approach to teamwork. *Business Communication Quarterly, 71*, 456–471.

    https://doi.org/10.1177/1080569908325861.

Dinh, J., & Salas, E. (2017). Factors that influence teamwork. In E. Salas, R. Rico, & J. Passmore (Eds.), *The Wiley Blackwell handbook of the psychology of team working and collaborative processes.* Wiley Blackwell.

Driskell, J. E., Salas, E., & Driskell, T. (2018). Foundations of teamwork and collaboration. *American Psychologist, 73*(4), 334–348. https://doi.org/10.1037/amp0000241

Dunne, C. (2011). The place of the literature review in grounded theory studies. *International Journal of Social Research Methodology, 14*(2), 111–124. https://doi.org/10.1080/13645579.2010.494930

Dunne, E., & Rawlins, M. (2000). Bridging the gap between industry and higher education: Training academics to promote student teamwork. *Innovations in Education & Training International, 37*(4), 361–371. https://doi.org/10.1080/1355800000750052973

Earnest, M., Williams, J., & Aagaard, E. (2017). Toward an optimal pedagogy for teamwork. *Academic Medicine, 92*(10), 1378–1381. https://10.1097/acm.0000000000001670

Eisenhardt, K. (1989). Building theories from case study research. *The Academy of Management Review, 14*(4), 532–550. https://doi.org/10.2307/258557

Ellis, A. P. J., Bell, B., Ployhart, R. E., Hollenbeck, J. R., & Ilgen, D. R. (2005). An evaluation of generic teamwork skill training with action teams: Effects on cognitive and skill-based outcomes. *Personnel Psychology, 58*(1), 641–672. https://doi.org/10.1111/j.1744-6570.2005.00617.x.

Ettington, D., & Camp, R. (2002). Facilitating transfer of skills between group projects and work teams. *Journal of Management Education, 26*(4), 356–379. https://doi.org/10.1177/105256290202600404

Evans, G. (2013). A novice researcher's first walk through the maze of grounded theory. *The Grounded Theory Review, 12*(1), 37-55.

http://groundedtheoryreview.com/2013/06/22/a-novice-researchers-first-walk-

through-the-maze-of-grounded-theory-rationalization-for-classical-grounded-theory/

Farquhar, J. (2012). *Case study research for business*. Sage Publications.

Fleming, D. L. (2008). Building bridges to connect the disconnects: An analysis of business

program design processes. *American Journal of Business Education, 1*(2), 21–49.

https://doi.org/10.19030/ajbe.v1i2.4621.

Frazer, S., & Bosqanquet, A. (2006). The curriculum? That's just a unit outline, isn't it?

Studies in Higher Education, 31(1), 269–284.

https://doi.org/10.108003075070600680521.

Fittipaldi, D. (2020). Managing the dynamics of group projects in higher education: Best

practices suggested by empirical research. *Universal Journal of Educational*

Research, 8(5), 1778-1796. https://doi.org//10.13189/ujer.2020.080515

Frederick, T. A. (2008). Facilitating better teamwork: Analyzing the challenges and strategies

of classroom-based collaboration. *Business Communication Quarterly, 71*, 439–455.

https://doi.org/10.1177/1080569908325860.

Freeman, M. (2012). To adopt or not to adopt an innovation: A case study of team-based

learning. *International Journal of Management Education, 10*(3), 155–168.

https://doi.org/10.1016/j.ijme.2012.06.002

Freeman, M., & McKenzie, J. (2002). SPARK, a confidential web-based template for self

and peer assessment of student teamwork: Benefits of evaluating across different

subjects. *British Journal of Educational Technology, 33*, 551–569.

https://doi.org/10.1111/1467-8535.00291.

Gair, M., & Mullins, G. (2001). Hiding in plain sight. In E. Margolis (Ed.), *The hidden*

curriculum in higher education: Routledge.

Gibson, C. B., & Saxton, T. (2005). Thinking outside the black box: Outcomes of team decisions with third-party intervention. *Small Group Research, 36*(2), 208–236. https://doi.org/10.1177/1046496404270376

Gilbert, F., Michaud, V., Bentein, K., Dubois, C-A., & Bédard, J-L. (2018). Unpacking the dynamics of paradoxes across levels. In M. Farjoun, W. Smith, A. Langley, & H. Tsoukas (Eds.), *Dualities, dialectics, and paradoxes in organizational life*: Oxford University Press.

Gillies, D. (2011). State education as high-yield investment: Human capital theory in European policy discourse. *Pedagogicky Casopis, 2*(2), 224–245. https://doi.org/10.2478/v10159-011-0011-3

Gilson, L., Maynard, M. T., & Bergiel, E. B. (2013). Virtual team effectiveness: An experiential activity. *Small Group Research, 44*, 412–427. https://doi.org/10.1177/1046496413488216.

Gokhale, A. (1995). Collaborative learning enhances critical thinking. *Journal of Technology Education, 7*(1), 22–30. https://doi.org/10.21061/jte.v7i1.a2

Goldfinch, J., Laybourn, P., MacLeod, L., & Stewart, S. (1999). Improving group-working skills in undergraduates through employer involvement. *Assessment & Evaluation in Higher Education, 24*, 41–51. https://doi.org/10.1080/0260293990240104.

Gottschall, H., & Garcia-Bayonas, M. (2008). Student attitudes towards group work among undergraduates in Business Administration, Education and Mathematics. *Education Research Quarterly, 32*(1), 3–28.

Grandy, G. (2010). Instrumental case study. In A. D. Mills, G. & Wiebe, E. (Eds.), *Encyclopedia of case study research* (pp. 474–475). Sage.

Grossman, R., & Salas, E. (2011). The transfer of training: What really matters. *International Journal of Training and Development, 15*(2), 103–120. https://doi.org/10.1111/j.1468-2419.2011.00373.x.

Grzimek, V., Kinnamon, E., & Marks, M. B. (2020). Attitudes about classroom group work: How are they impacted by students' past experiences and major? *Journal of Education for Business, 95*(7), 439-450. https://doi.org/10.1080/08832323.2019.1699770

Gueldenzoph-Snyder, L. (2009). Teaching teams about teamwork: Preparation, practice and performance review. *Business Communication Quarterly, 72*, 74–79. https://doi.org/10.1177/1080569908330372.

Gueldenzoph, L. (2007). Using teaching teams to encourage active learning. *Business Communication Quarterly, 70*, 457–462. https://doi.org/10.1177/10805699070700040303.

Gueldenzoph, L., & May, G. (2002). Collaborative peer evaluation: Best practices for group member assessments. *Business Communication Quarterly, 65*, 9–20. https://doi.org/10.1177/108056990206500102.

Hall, D., & Buzwell, S. (2012). The problem of free-riding in group projects: Looking beyond social loafing as reason for non-contribution. *Active Learning in Higher Education, 14*(1), 37–49. https://doi.org/10.1177/1469787412467123.

Hampson, I., & Junor, A. (2009). *'Employability' and the substance of soft skills*. Paper presented at the 2009 International Labour Process Conference, 6-8 April, Edinburgh, Scotland., Edinburgh, Scotland.

Hansen, R. (2006). Benefits and problems with student teams: Suggestions for improving team projects. *Journal of Education for Business, 82*, 11–19. https://doi.org/10.3200/JOEB.82.1.11-19.

Harder, C., Lane, J., & Jackson, G. (2014). *Talent is not enough: Closing the skills gap*.

    Canada West Foundation: Centre for Human Capital Policy.

Hart Research Associates. (2010). *Raising the bar: Employers views on college learning in*

    the wake of the economic downturn.

    http://www.aacu.org/leap/public_opinion_research.cfm

Hart Research Associates. (2015). *Falling short? College and career success*.

    https://www.aacu.org/sites/default/files/files/LEAP/2015employerstudentsurvey.pdf

Hatzinikolakis, J., & Crossman, J. (2010). Are business academics in Australia experiencing

    emotional labor? A call for empirical research. *Journal of Management &*

    Organization, 16(3), 425–435. https://doi.org/10.5172/jmo.16.3.425

Hawker, S., Payne, S., Kerr, C., & Hardey, M. (2002). Appraising the evidence: Reviewing

    disparate data systematically. *Qualitative Health Research, 12*, 1284–1299.

    https://doi.org/10.1177/1049732302238251.

Healy, M., Doran, J., & McCutcheon, M. (2018). Cooperative learning outcomes from

    cumulative experiences of group work: Differences in student perceptions.

    Accounting Education, 27(3), 286–308.

    https://doi.org/10.1080/09639284.2018.1476893

Heath, H., & Cowley, S. (2004). Developing a grounded theory approach: a comparison of

    Glaser and Strauss. *International Journal of Nursing Studies, 41*(2), 141–150.

    https://doi.org/10.1016/s0020-7489(03)00113-5

Hershey, L., & Wood, P. (2011). Using the Blackboard CMS to develop teamwork skills in

    undergraduate marketing principles class. *Academy of Educational Leadership*

    Journal, 15(1), 57–64.

Hobson, C., Strupeck, D., Griffin, A., Szostek, J., & Rominger, A. (2013). Assessing and

    teaching team leadership capabilities: Field testing a behavioral roles approach with

    business undergraduate students. *Journal for Excellence in Business Education, 2*, 1–

    20.

Hobson, C., Strupeck, D., Griffin, A., Szostek, J., Selladurai, R., & Rominger, A. (2013).

    Facilitating and documenting behavioral improvements in business student teamwork

    skills. *Business Education Innovation Journal, 5*(1), 83–95.

Hofmeyer, A., Newton, M., & Scott, C. (2007). Valuing the scholarship of integration and the

    scholarship of application in the academy for health sciences scholars: Recommended

    methods. *Health Research Policy and Systems, 5*(1), 1-8.

    https://doi.org/10.1186/1478-4505-5-5

Hogarth, A. (2008). Introducing a collaborative strategy for higher education students:

    Recommendations and the way forward. *Education and Information Technologies,*

    13, 259–273. https://doi.org/10.1007/s10639-008-9064-x.

Holt, D., Michael, S., & Godfrey, J. (1997). The case against cooperative learning. *Issues in*

    Accounting Education, 12, 191–193.

Hora, M. T., Chhabra, P., & Smolarek, B. B. (2020). Exploring the factors that influence how

    (and why) community college instructors teach communication and teamwork skills

    in computer technology courses. *Community College Journal of Research and*

    Practice, Online, 1-20. https://doi.org/10.1080/10668926.2020.1859417

Hubbard, R. (2005). Project management tools that facilitate team projects. *International*

    Journal of Case Method Research & Applications, 17, 368–373.

Hughes, R., & Jones, S. (2011). Developing and assessing college student teamwork skills.

    New Directions for Institutional Research, Spring (149), 53–64.

    https://doi.org/10.1002/ir.

Hunt, S. C. (2015). Research on the value of AACSB business accreditation in selected areas: A review and synthesis. *American Journal of Business Education, 8*(1), 23–30. https://doi.org/10.19030/ajbe.v8il.9014

Hunter, J., Vickery, J., & Smith, R. (2010). Enhancing learning outcomes through group work in an internationalised undergraduate business education context. *Journal of Management and Organization, 16*(5), 700–714. https://doi.org/10.5172/jmo.2010.16.5.700

Hunter, K., & Westwick, J. (2019). 'I see your True Colors': Mitigating group hate by exploring personality differences. *Communication Teacher, 34*(1), 19–23. https://doi.org/10.1080/17404622.2019.1593476

Hrynchak, P., & Batty, P. (2012). The educational theory basis of team-based learning. *Medical Teacher, 34*, 796–801. https://doi.org/10.3109/0142159X.2012.687120.

Jackling, B., Natoli, R., Siddique, S., & Sciulli, N. (2014). Student attitudes to blogs: a case study of reflective and collaborative learning. *Assessment & Evaluation in Higher Education, i-first*, 1–15. https://doi.org/10.1080/02602938.2014.931926.

Jackson, D. (2013). Student perceptions of the importance of employability skill provision in business undergraduate programs. *Journal of Education for Business, 88*(5), 271–279. https://doi.org/10.1080/08832323.2012.697928.

Jackson, D. (2014). Testing a model of undergraduate competence in employability skills and its implications for stakeholders. *Journal of Education and Work, 27*(2), 220–242. https://doi.org/10.1080/13639080.2012.718750.

Jackson, D. (2016a). Modelling graduate skills transfer from university to the workplace. *Journal of Education and Work, 29*(2), 199–231. https://doi.org/10.1080/13639080.2014.907486

Jackson, D. (2016b). Re-conceptualising graduate employability: the importance of pre-professional identity. *Higher Education Research & Development, 35*(5), 925–939. https://doi.org/10.1080/07294360.2016.1139551.

Jackson, D., & Chapman, E. (2012). Non-technical competencies in undergraduate business degree programs: Australian and UK perspectives. *Studies in Higher Education, 37*(5), 541-567. https://doi.org/10.1080/03075079.2010.527935

Jackson, D., Fleming, J., & Rowe, A. (2018, 23-27 June). *Student transfer of skills and knowledge across university and work contexts.* Paper presented at the 3rd International Research Symposium on Cooperative and Work-Integrated Education, Stuttgart, Germany.

Jackson, D., Riebe, L., Meek, S., Ogilvie, M., Kuilboer, A., Murphy, L., Collins, N., Lynch, K., & Brock, M. (2020). Using an industry-aligned capabilities framework to effectively assess student performance in non-accredited work-integrated learning contexts. *Teaching in Higher Education, online*, 1–20. https://doi.org/10.1080/13562517.2020.1863348

Jackson, D., Sibson, R., & Riebe, L. (2013). Delivering work-ready graduates - keeping our promises and evaluating our performance. *Journal of Teaching and Learning for Graduate Employability, 4*(1), 2–22. https://doi.org/10.21153/jtlge2013vol4no1art558.

Jackson, D., Sibson, R., & Riebe, L. (2014). Undergraduate perceptions of the development of team-working skills. *Education + Training, 56*(1), 7–20. https://doi.org/10.1108/ET-01-2013-0002.

Jackson, D., & Tomlinson, M. (2020). Investigating the relationship between career planning, proactivity and employability perceptions among higher education students in uncertain labour market conditions. *Higher Education, Online.* https://doi.org/10.1007/s10734-019-00490-5

Jaegar, E. L. (2016). Negotiating complexity: A bioecological systems perspective on literacy development. *Human Development, 59*(4), 163–187. https://doi.org/10.1159/000448743

James, L. T., & Casidy, R. (2018). Authentic assessment in business education: its effects on student satisfaction and promoting behaviour. *Studies in Higher Education, 43*(3), 401–415. https://doi.org/10.1080/03075079.2016.1165659

Jandrić, J., & Loretto, W. (2021). Business school space, the hidden curriculum, and the construction of student experience. *Management Learning, 52*(3), 311–327. https://doi.org/10.1177/1350507620934068

Jarzabkowski, P., Bednarek, R., & Lê, J. K. (2018). Studying paradox as process and practice. In M. Farjoun, W. Smith, A. Langley, & H. Tsoukas (Eds.), *Dualities, dialectics, and paradoxes in organizational life*: Oxford University Press.

Jarzabkowski, P., Lê, J., & Van den Ven, A. (2013). Responding to competing strategic demands: How organizing, belonging, and performing paradoxes coevolve. *Strategic Organization, 11*(3), 245–280. https://doi.org/10.1177/1476127013481016

Jassawalla, A., Sashittal, H., & Malshe, A. (2009). Students' perceptions of social loafing: Its antecedents and consequences in undergraduate business classroom teams. *Academy of Management Learning & Education, 8*, 42–54. https://doi.org/10.5465/amle.2009.37012178.

Jassawalla, A., Sashittal, H., & Malshe, A. (2010). Effects of transparency and at-stakeness on students' perceptions of their ability to work collaboratively in effective classroom teams: A partial test of the Jassawalla and Sashittal Model. *Decision Sciences Journal of Innovative Education, 8*, 35–53. https://doi.org/10.1111/j.1540-4609.2009.00242.x.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher, 33*(7), 14–26. https://doi.org/10.3102/0013189x033007014.

Jones, G. R., & George, J. M. (1998). The experience and evolution of trust: Implications for cooperation and teamwork. *Academy of Management Review, 23*(3), 531–546. https://doi.org/10.2307/259293

Joseph, A., & Payne, M. (2012). Efficacy of monitoring and supporting college students teamwork: A case study. *The International Journal of Learning, 18*(9), 223–240. https://doi.org/10.18848/1447-949/cgp/v18i09/47741

Kalfa, S., & Taksa, L. (2015). Cultural capital in business higher education: Reconsidering the graduate attributes movement and the focus on employability. *Studies in Higher Education, 40*(4), 585–595, https://doi.org/10.1080/03075079.2013.842210.

Katzenbach, J., & Smith, D. (2013). The discipline of teams. In J. R. Katzenbach, K. M. Eisenhardt, & L. Gratton (Eds.), *HBR's 10 must reads on teams.* Harvard Business Press.

Katzenbach, J. R., & Smith, D. K. (1993). *The wisdom of teams: Creating the high-performance organization*. Harvard Business School Press.

Kayes, D. C. (2002). Experiential learning and its critics: Preserving the role of experience in management, learning and education. *Academy of Management Learning & Education, 1*(2), 137–149. https://doi.org/10.5465/amle.2002.8509336

Kedrowicz, A., & Nelson, B. (2007, 24–27 June). *Dramatizing engineering education: The performance of teamwork*. Paper presented at the American Society for Engineering Education Conference and Exposition, Honolulu, HI. https://peer.asee.org/2180

Kemery, E., & Stickney, L. (2014). A multifaceted approach to teamwork assessment in an undergraduate business program. *Journal of Management Education, 38*, 462–479. https://doi.org/10.1177/1052562913504762.

Kidder, D. L., & Bowes-Sperry, L. (2012). Examining the influence of team project design decisions on student perceptions and evaluations of instructors. *Academy of Management Learning & Education, 11*, 69–81. https://doi.org/10.5465/amle.2010.0040.

Killick, D. (2014). *Developing the global student higher education in an era of globalization*. Routledge.

Kinash, S. (2006). Paradigms, methodology and methods. http://bond.edu.au/prod_ext/groups/public/@pub-tls-gen/documents/genericwebdocument/bd3_012336.pdf

King, S., Greidanus, E., Carbonaro, M., Drummond, J., Boechler, P., & Kahlke, R. (2010). Synchronous problem-based e-learning (ePBL) in interprofessional health science education. *Journal of Interactive Online Learning, 9*, 133–150. www.ncolr.org/jiol

Kirby, D. (2011). 'No-one can whistle a symphony. It takes an orchestra to play it.' H. E. Luccock. *Asian Social Science, 7*(4), 36–43. https://doi.org/10.5539/ass.v7n4p36

Kirschner, P. A., Sweller, J., Kirschner, F., & Zambrano, J. (2018). From cognitive load theory to collaborative cognitive load theory. *International Journal of Computer-Supported Collaborative Learning, 13*(2), 213–233. https://doi.org/10.1007/s11412-018-9277-y

Kliegl, J., & Weaver, K. (2013). Teaching teamwork through coteaching in the business classroom. *Business and Professional Communication Quarterly, 77*, 204–216. https://doi.org/10.1177/1080569913507596.

Knight, P. T., & Yorke, M. (2003). *Assessment, learning and employability*. SRHE and Open University Press.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development.* Prentice-Hall.

Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice, 24*(1), 120–124. https://doi.org/10.1080/13814788.2017.1375092

Kouliavtsev, M. (2012). Social loafers, free-riders, or diligent isolates: Self-perceptions in teamwork. *Atlantic Economic Journal, 40*, 437–438. https://doi.org/10.1007/ s11293-012-9333-3.

Kuh, G. D. (2008). High-impact educational practices: What they are, who has access to them, and why they matter. Association of American Colleges and Universities. https://www.aacu.org/publications-research/publications/high-impact-educational-practices-what-they-are-who-has-access-0

Kvale, S. (2007). Analyzing interviews. In U. Flick (Ed.), *Doing interviews*. Sage Publications. https://doi.org/10.4135/9781849208963.n9

LaBeouf, J., Griffith, J., & Roberts, D. (2016). Faculty and student issues with group work: What is problematic with college group assignments and why? *Journal of Education and Human Development, 5*(1), 13–23. https://doi.org/10.15640/jehd.v5n1a2

Lambert, S., Carter, A., & Lightbody, M. (2014). Taking the guesswork out of assessing individual contributions to group work. *Issues in Accounting Education, 29*(1), 169–180. https://doi.org/10.2308/iace-50637

Lancellotti, M., & Boyd, T. (2008). The effects of team personality awareness exercises on team satisfaction and performance. *Journal of Marketing Education, 30*, 244–254. https://doi.org/10.1177/0273475308322282.

Lang, M. (2009). Conflict management: a gap in business education curricula. *Journal of Education for Business, 84*(4), 240-245. https://doi.org/10.3200/JOEB.84.4.240–245.

Lasrado, F., & Kaul, N. (2021). Designing a curriculum in light of constructive alignment: A case study analysis. *Journal of Education for Business, 96*(1), 60–68. https://doi.org/10.1080/08832323.2020.1732275

Lawson, R., Fallshaw, E., Papadopoulos, T., Taylor, T., & Zanko, M. (2011). Professional learning in the business curriculum: Engaging industry, academics and students. *Asian Social Science, 7*(4), 61–68. https://doi.org/10.5539/ass.v7n4p61

Lewis, M. (2000). Exploring paradox: Toward a more comprehensive guide. *Academy of Management, 25*(4), 760–776.

Lewis, M. (2018). Vicious and virtuous cycles. In M. Farjoun, W. Smith, A. Langley, & H. Tsoukas (Eds.), *Dualities, dialectics, and paradoxes in organizational life*. Oxford University Press.

Lewis, M., & Smith, W. (2014). Paradox as a metatheoretical perspective. *The Journal of Applied Behavioral Science, 50*(2), 127–149. https://doi.org/10.1177/0021886314522322

Lincoln, Y. S., & Guba, E. G. (2000). Paradigmatic controversies, contradictions and emerging confluences. In N. K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed.). Sage Publications.

Lincoln, Y. S., & Guba, E. G. (2016). *The constructivist credo*. ProQuest Ebook Central: Routledge.

Liu, Y., Xu, S., & Zhang, B. (2020). Thriving at work: How a paradox mindset influences innovative work behavior. *The Journal of Applied Behavioral Science, 56*(3), 347–366. https://doi.org/10.1177/0021886319888267

Loughry, M., Ohland, M., & Woehr, D. (2014). Assessing teamwork skills for assurance of learning using CATME team tools. *Journal of Marketing Education, 36*, 5–19. https://doi.org/10.1177/0273475313499023.

Lowden, K., Hall, S., Elliot, D., & Lewin, J. (2011). *Employers' perceptions of the employability skills of new graduates*. Edge Foundation.

Lusher, D., Kremer, P., & Robins, G. (2014). Cooperative and competitive structures of trust relations in teams. *Small Group Research, 45*(1), 3–36. https://doi.org/10.1177/1046496413510362

MacAulay, K. D., Mellon, M. J., & Nord, W. R. (2020). Reorienting business education through the lens of Ernest Boyer. *American Journal of Business, 35*(1), 45–59. https://doi.org/10.1108/AJB-05-2019-0027

Macfarlane, B. (2017). The paradox of collaboration: a moral continuum. *Higher Education Research & Development, 36*(3), 472–485. https://doi.org/10.1080/07294360.2017.1288707

Macfarlane, B. (2020). The CV as a symbol of the changing nature of academic life: Performativity, prestige and self-presentation. *Studies in Higher Education, 45*(4), 796–807. https://doi.org/10.1080/03075079.2018.1554638

Maiden, B., & Perry, B. (2011). Dealing with free-riders in assessed group work: Results from a study at a UK university. *Assessment & Evaluation in Higher Education, 36*, 451–464. https://doi.org/10.1080/02602930903429302.

Main, K. (2010). Teamwork - teach me, teach me not. *The Australian Educational Researcher, 37*(3), 77–93. https://doi.org/10.1007/bf03216931

Malik, S. A. (2017). Revisiting and re-representing scaffolding: The two gradient model. *Cogent Education (Open Access), 4*(1), 1–13. https://doi.org/10.1080/2331186X.2017.1331533

Margolis, E., Soldatenko, M., Acker, S., & Gair, M. (2001). Peekaboo: Hiding and outing the curriculum. In E. Margolis (Ed.), The hidden curriculum in higher education (pp. 1-18). Routledge.

Marks, A., & Richards, J. (2012). Developing ideas and concepts in teamwork research: where do we go from here? *Employee Relations, 34*(3), 228–234. https://doi.org/10.1108/01425451211217743.

Marks, M. B., & O'Connor, A. (2013). Understanding students' attitudes about group work: What does this suggest for instructors of business? *Journal of Education for Business, 88*(3), 147–158. https://doi.org/10.1080/08832323.2012.664579.

Marks, M., Mathieu, J., & Zaccaro, S. (2001). A temporally based framework and taxonomy of team processes. *The Academy of Management Review, 26*(3), 356–376.

Markulis, P., Jassawalla, A., & Sashittal, H. (2006). The impact of leadership modes on team dynamics and performance in undergraduate management classes. *Journal of Education for Business, 81*(3), 145–150. https://doi.org/10.3200/JOEB.81.3.145-150.

Marsh, D., & Furlong, P. (2002). A skin, not a sweater: Ontology and epistemology in political science. In V. Lowndes, D. Marsh, & G. Stoker (Eds.), *Theory and methods in political science* (pp. 17-41). Palgrave.

Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews *Forum: Qualitative Social Research, 11*(3), 1–19. http://nbn-resolving.de/urn:nbn:de:0114-fqs100387

Mathieu, J., Maynard, M. T., Rapp, T., & Gilson, L. (2008). Team effectiveness 1997–2007: A review of recent advancements and a glimpse into the future. *Journal of Management, 34*, 410–476. https://doi.org/10.1177/0149206308316061.

Matta, V., Luce, T., & Ciavarro, G. (2011). Exploring impact of self-selected student teams and academic potential on student satisfaction. *Information Systems Education Journal, 9*(1), 14–23. http://isedj.org/2011-9/N1/ISEDJv91p14.html

Maxwell, J. (2008). Designing a qualitative study. In *The SAGE handbook of applied social research methods* (vol. 2, pp. 214–253). Sage Publications.

May, A., & Carter, S. (2012). From 'learning' to 'employability': Informing successful teamwork through social and emotional competencies. *Economics, Management and Financial Markets, 7*(3), 11–30.

McConlogue, T. (2020). *Assessment and feedback in higher education: A guide for teachers*: UCL Press.

McCorkle, D., Reardon, J., Alexander, J., Kling, N., Harris, R., & Iyer, R. V. (1999). Undergraduate marketing students, group projects, and teamwork: The good, the bad and the ugly? *Journal of Marketing Education, 21*, 106–117. https://doi.org/10.1177/0273475399212004.

McMurray, S., Dutton, M., McQuaid, R., & Richard, A. (2016). Employer demands from business graduates. *Education + Training, 58*(1), 112–132. https://doi.org/10.1108/ET-02-2014-0017

Melguizo, T., & Strober, M. (2007). Faculty salaries and the maximization of prestige. *Research in Higher Education, 48*(6), 633–668. https://doi.org/10.1007/s11162-006-9045-0.

Mendo-Lazaro, S., Polo-del Rio, M., Iglesias-Gallego, D., Felipe-Castaño, D., & León-del-Barco, B. (2017). Construction and validation of a measurement instrument for attitudes towards teamwork. *Frontiers in Psychology, 8*, 1–10. https://doi.org/10.3389/fpsyg.2017.01009

Merriam, S. (1998). *Qualitative research and case study applications in education*. Jossey Bass Publishers.

Milligan, L. (2016). Insider-outsider-inbetweener? Researcher positioning, participative methods and cross-cultural educational research. *Compare, 46*(2), 235–250. https://doi.org/10.1080/03057925.2014.928510

Miller, A., Taylor, S., & Bedeian, A. (2011). Publish or perish: Academic life as management faculty live it. *Career Development International, 16*(5), 422–445. https://doi.org/10.1108/13620431111167751.

Miron-Spektor, E., Ingram, A., Keller, J., Smith, W., & Lewis, M. (2018). Microfoundations of organizational paradox: The problem is how we think about the problem. *Academy of Management Journal, 61*(1), 26–45. https://doi.org/10.5465/amj.2016.0594

Miron-Spektor, E., & Paletz, S. (2017). Collective Paradoxical Frames: Managing tensions in learning and innovation. In L. Argote, & Levine, J. (Ed.), *Handbook of Group and Organizational Learning*. Oxford University Press.

Mitten, C., & Ross, D. (2018). Sustaining a commitment to teaching in a research-intensive university: What we learn from award-winning faculty. *Studies in Higher Education, 43*(8), 1348–1361. https://doi.org/10.1080/03075079.2016.1255880

Morris, M. W., Leung, K., Ames, D., & Lickel, B. (1999). Views from the inside and outside: Integrating emic and etic insights about culture and justice judgment. *The Academy of Management Review, 24*(4), 781–796. https://doi.org/10.2307/259354

Mourshed, M., Farrell, D., & Barton, D. (2015). *Education to employment: Designing a system that works* (Research report). McKinsey. http://mckinseyonsociety.com/education-to-employment/report/

Mumford, T. (2010). Just teams: The relationship between team roles, fairness and performance. *Journal of the Academy of Business Education*, *11*, 12–30.

Myers, S., & Goodboy, A. (2005). A study of group hate in a course on small group communication. *Psychological Reports, 97*, 381–386. https://doi.org/10.2466/pr0.97.2.381-386.

National Association of College Employers [NACE]. (2014). *Job outlook 2015*. NACE.

National Association of College Employers [NACE]. (2018). *Job outlook 2019*. NACE.

National Association of College Employers [NACE]. (2019). The four career competencies employers value most. Retrieved from https://www.naceweb.org/career-readiness/competencies/the-four-career-competencies-employers-value-most/

Nayak, A., Chia, R., & Canales, J. I. (2020). Noncognitive microfoundations: Understanding dynamic capabilities as idiosyncratically refined sensitivities and predispositions. *Academy of Management Review, 45*(2), 280–303. https://doi.org/10.5465/amr.2016.0253

Newell, C., & Bain, A. (2020). Academics' perceptions of collaboration in higher education course design. *Higher Education Research & Development, 39*(4), 748–763. https://doi.org/10.1080/07294360.2019.1690431

Nicolini, D. (2009). Zooming in and out: Studying practices by switching theoretical lenses and trailing connections. *Organization Studies, 30*(12), 1391–1418. https://doi.org/10.1177/0170840609349875

Niesten, E., & Stefan, I. (2019). Embracing the paradox of interorganizational value co-creation–value capture: A literature review towards paradox resolution. *International Journal of Management Reviews, 21*(2), 231–255. https://doi.org/10.1111/ijmr.12196.

O'Connor, D., & Yballe, L. (2007). Team leadership. *Journal of Management Education, 31*(2), 292–312. https://doi.org/10.1177/1052562905282158

O'Driscoll, A. (2008). Exploring paradox in marketing: Managing ambiguity towards synthesis. *Journal of Business and Industrial Marketing, 23*(2), 95–104. https://doi.org/10.1108/08858620810850209

O'Neill, T., Larson, N., Smith, J., Donia, M., Deng, C., Rosehart , W., & Brennan, R. (2019). Introducing a scalable peer feedback system for learning teams. *Assessment & Evaluation in Higher Education, 44*(6), 848–862. https://doi.org/10.1080/02602938.2018.1526256

Oakely, B., Felder, R. M., Brent, R., & Elhaji, I. (2004). Turning student groups into effective teams. *Journal of Student Centred Learning, 2*(1), 9–34.

Oakley, B., Hanna, D., Kuzmyn, Z., & Felder, R. M. (2007). Best practices involving teamwork in the classroom: Results from a survey of 6435 engineering student respondents. *IEEE Transactions on Education, 50*, 266–272. https://doi.org/10.1109/te.2007.901982.

Ohland, M. W., Loughry, M. L., Woehr, D. J., Bullard, L. G., Felder, R. M., Finelli, C. J., Layton, R. A., Pomeranz, H. R., & Schmucker, D. G. (2012). The comprehensive assessment of team member effectiveness: Development of a behaviorally anchored rating scale for self- and peer evaluation. *Academy of Management Learning & Education, 11*(4), 609–630. https://doi.org/10.5465/amle.2010.0177.

Olson, J., & Olson, P. (1999). Teamwork strengths and weaknesses: Perceptions of practicing educators. *Academy of Educational Leadership Journal, 3*(1), 9–15.

Onwuegbuzie, A., & Leech, N. (2005). On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies. *International Journal of Social Research Methodology, 8*, 375–387. https://doi.org/10.1080/13645570500402447.

Opatrny, C., McCord, M., & Michaelsen, L. (2014). Can transferable team skills be taught? A longitudinal study. *Academy of Educational Leadership Journal, 18*(2), 61–72.

Opdecam, E., & Everaert, P. (2018). Seven disagreements about cooperative learning. *Accounting Education, 27*(3), 223–233. https://doi.org/10.1080/09639284.2018.1477056

Organisation for Economic Co-operation and Development [OECD]. (2005). The definition and selection of key competencies: Executive summary. https://www.deseco.ch/bfs/deseco/en/index/02.parsys.43469.downloadList.2296.DownloadFile.tmp/2005.dskcexecutivesummary.en.pdf

Ottewill, R., McKenzie, G., & Leah, J. (2005). Integration and the hidden curriculum in business education. *Education+ Training, 47*(2), 89–97. https://doi.org/10.1108/00400910510586515

Page, D., & Donelan, J. G. (2003). Team-building tools for students. *Journal of Education for Business, 78*, 125–128. https://doi.org/10.1080/08832320309599708.

Palit, M., & Stein, C. (2009). How to collaborate in a virtual world: Teaching teamwork and technology. *American Journal of Educational Studies, 2*, 39–50.

Papadopoulos, A. (2017). The mismeasure of academic labour. *Higher Education Research & Development, 36*(3), 511–525. https://doi.org/10.1080/07294360.2017.1289156

Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Sage Publications.

Paulus, T., Horvitz, B., & Shi, M. (2006). Isn't it just like our situation? Engagement and learning in an online story-based environment. *Educational Technology Research & Development, 54*, 355–385. https://doi.org/10.1007/s11423-006-9604-2.

Perry, A., & Hammond, N. (2002). Systematic reviews: The experiences of a PhD student. *Psychology Learning and Teaching, 2*(1), 32–35. https://doi.org/10.2304/plat.2002.2.1.32

Pfaff, E., & Huddleston, P. (2003). Does it matter if I hate teamwork? What impacts student attitudes toward teamwork. *Journal of Marketing Education, 25*, 37–45. https://doi.org/10.1177/0273475302250571.

Pickering, C., & Byrne, J. (2014). The benefits of publishing quantitative systematic literature review for PhD candidates and other early career researchers. *Higher Education Research & Development, 33*, 534–548. https://doi.org/10.1080/07294360.2013.841651.

Pickering, C., Grignon, J., Steven, R., Guitart, D., & Byrne, J. (2014). Publishing not perishing: How research students transition from novice to knowledgeable using systematic quantitative literature reviews. *Studies in Higher Education, 40*, 1756–1769. https://doi.org/10.1080/03075079.2014.914907.

Pieterse, V., & Thompson, L. (2010). Academic alignment to reduce the presence of social loafers and 'diligent isolates' in student teams. *Teaching in Higher Education, 15*, 355–367. https://doi.org/10.1080/13562517.2010.493346.

Pineda, R., & Lerner, L. (2006). Goal attainment, satisfaction and learning from teamwork. *Team Performance Management, 12*, 182–191. https://doi.org/10.1108/13527590610687938.

Planas-Lladó, A., Feliu, L., Arbat, G., Pujol, J., Suñol, J. J., Castro, F., & Martí, C. (2021). An analysis of teamwork based on self and peer evaluation in higher education.

Assessment & Evaluation in Higher Education, 46(2), 191–207.

https://doi.org/10.1080/02602938.2020.1763254

Pogge, E. (2013). A team-based learning course on nutrition and lifestyle modification.

American Journal of Pharmaceutical Education, 77(5), 1–6.

https://doi.org/10.5688/ajpe775103.

Pollard, K., Miers, M., & Gilchrist, M. (2004). Collaborative learning for collaborative

working? Initial findings from a longitudinal study of health and social care students.

Health and Social Care in the Community, 12, 346–358.

https://doi.org/10.1111/j.1365-2524.2004.00504.x.

Portelli, J. P. (1993). Exposing the hidden curriculum. *Journal of Curriculum Studies, 25*(4),

343–358. https://doi.org/10.1080/0022027930250404

Pradies, C., Aust, I., Bednarek, R., Brandl, J., Carmine, S., Cheal, J., Cunha, M., Gaim, M.,

Keegan, A., Lê, J. K., Miron-Spektor, E., Nielsen, R., Pouthier, V., Sharma, G., Sparr,

J., Vince, R., & Keller, J. (2021). The lived experience of paradox: how individuals

navigate tensions during the pandemic crisis. *Journal of Management Inquiry, 30*(2),

154–167. https://doi.org/10.1177/1056492620986874

Preston, T. (2017). A group independent study using a client-based promotional plan project:

Design and assessment. *Marketing Education Review, 28*(3), 170–186.

https://doi.org/10.1080/10528008.2017.1355735

Prichard, J., Stratford, R., & Bizo, L. (2006). Team skills training enhances collaborative

learning. *Learning and Instruction, 16*, 256–265. https://doi.org/10.1016/j.learnin-

struc.2006.03.005.

Priestley, M., Edwards, R., Priestley, A., & Miller, K. (2012). Teacher agency in curriculum

making: Agents of change and spaces for manoeuvre. *Curriculum Inquiry, 42*(2),

191–214. https://doi.org/10.1111/j.1467-873x.2012.00588.x

Quality of Education Review Committee. (1985). *Quality of Education in Australia: Report of the Review Committee, April 1985 [Karmel report]*. https://www.voced.edu.au/print/1138780

Quality Indicators for Learning and Teaching. (n.d.). *Graduate employment.* https://www.qilt.edu.au/qilt-surveys/graduate-employment.

Quality Indicators for Learning and Teaching [QILT]. (2020). 2020 Student experience survey.   Retrieved from https://www.qilt.edu.au/docs/default-source/default-document-library/2020-ses-national-report.pdf?sfvrsn=d1237953_5

Quinn, R., & Nujella, M. (2019). Foreword: Paradox in organizational theory. In W. Smith, M. Lewis, P. Jarzabkowski, & A. Langely (Eds.), *The Oxford handbook of organizational paradox*: Oxford University Press.

Rafferty, P. (2012). Group work in the MBA classroom: Improving pedagogical practice and maximizing positive outcomes with part-time MBA students. *Journal of Management Education, 37*, 623–650. https://doi.org/10.1177/1052562912458644.

Raisch, S., & Zimmerman, A. (2019). Pathways to ambidexterity. In W. Smith, M. Lewis, P. Jarzabkowski & A. Langley (Eds.), *The Oxford handbook of organizational paradox*. Oxford University Press.

Rakestraw, T. (2014). The role of performance feedback in the transfer of teamwork skills. *Business Education Innovation Journal, 6*(1), 41–47.

Ramsden, P. (1992). *Learning to Teach in Higher Education*. Routledge.

Rapley, T. (2004). Interviews. In C. Seale, Gobo, G., Gubrium J.F. and Silverman, D. (Eds.), *Qualitative research practice* (pp. 15–33). Sage Publications.

Rapp, T., & Mathieu, J. (2007). Evaluating an individually self-administered generic teamwork skills training program across time and levels. *Small Group Research, 38*, 532–555. https://doi.org/10.1177/1046496407300479.

Rasmussen, J. (2001). The importance of communication in teaching: A systems-theory

    approach to the scaffolding metaphor. *Journal of Curriculum Studies, 33*(5), 569–582.

    https://doi.org/10.1080/00220270110034369

Rasmussen, T., & Jeppesen, H. (2006). Teamwork and associated psychological factors: A

    review. *Work & Stress, 20*, 105–128. https://doi.org/10.1080/02678370600920262.

Reinig, B., Horowitz, I., & Whittenburg, G. (2011). The effect of team-based learning on

    student attitudes and satisfaction. *Decision Sciences Journal of Innovative Education,*

    9, 27–47. https://doi.org/10.1111/j.1540-4609.2010.00289.x.

Ren, J., & Wang, E. (2007). Interdependence and teamwork. *Advances in Psychological*

    Science, 15(1), 146–153.

Richards, L., & Morse, J. M. (2013). *Readme first for a user's guide to qualitative methods*

    (3rd ed.). Sage Publications.

Riebe, L., Girardi, A., & Whitsed, C. (2016). A systematic literature review of teamwork

    pedagogy in higher education. *Small Group Research, 47*(6), 619–664.

    https://doi.org/10.1177/1046496416665221.

Riebe, L., Girardi, A., & Whitsed, C. (2017). Teaching teamwork in Australian university

    business disciplines: Evidence from a systematic literature review. *Issues in*

    Educational Research, 27(1), 134–150.

Riebe, L., Roepen, D., Santarelli, B., & Marchioro, G. (2010). Teamwork: Effectively

    teaching an employability skill. *Education + Training, 52*(6/7), 528–539.

    https://doi.org/10.1108/00400911011068478.

Riebe, L., Roepen, D., Sibson, R., & Meakins, K. (2013). The impact of industry guest

    speakers on business students' perceptions of employability skills development.

    Industry and Higher Education, 27(1), 55–66. https://doi.org/10.5367/ihe.2013.0140

Riebe, L., Whitsed, C., & Girardi, A. (2021). Exploring the paradoxes and tensions

    encountered by business faculty teaching teamwork in a changing academic

    environment. *Higher Education Research & Development* (iFirst).

    https://doi.org/10.1080/07294360.2021.1979939

Roselli, N. (2016). Collaborative learning: Theoretical foundations and applicable strategies

    to university. *Propósitos y Representaciones, 4*(1), 219–280.

    https://doi.org/10.20511/pyr2016.v4n1.90

Ross, J. (2020). Economic ramifications of the COVID-19 pandemic for higher education: A

    circuit breaker in Australian universities' business model? *Higher Education*

    Research & Development, 39(20), 1351–1356.

    https://doi.org/10.1080/07294360.2020.1825350

Rousseau, D., Manning, J., & Denyer, D. (2008). Evidence in management and

    organizational science: Assembling the field's full weight of scientific knowledge

    through syntheses. *Annals of the Academy of Management, 2*, 475–515.

    https://doi.org/10.1080/19416520802211651.

Rousseau, V., Aubé, C., & Savoie, A. (2006). Teamwork behaviors: A review and an

    integration of frameworks. *Small Group Research*, *37*, 540–570.

    https://doi.org/10.1177/1046496406293125.

Rydenfält, C., Odenrick, P., & Larsson, A. (2017). Organizing for teamwork in healthcare: an

    alternative to team training? *Journal of Health Organization and Management, 31*(3),

    347–362. https://doi.org/10.1108/JHOM-12-2016-0233.

Sabal, R. (2009). The individual in collaborative media production. *Journal of Film and*

    Video, 61, 6–17. https://doi.org/10.1353/jfv.0.0019.

Salas, E., Burke, C. S., & Canon-Bowers, J. (2000). Teamwork: Emerging principles. *International Journal of Management Reviews, 2*, 339–356. https://doi.org/10.1111/1468- 2370.00046.

Salas, E., Cooke, N. J., & Rosen, M. A. (2008). On teams, teamwork, and team performance: Discoveries and developments. *Human Factors: The Journal of the Human Factors and Ergonomics Society, 50*(3), 540–547. https://doi.org/10.1518/001872008x288457.

Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). Sage Publications.

Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Sage Publications.

Saldaña, J. (2015). *Thinking qualitatively: Methods of mind*. Sage Publications.

Sambell, K., & McDowell, L. (1998). The construction of the hidden curriculum: Messages and meanings in the assessment of student. *Assessment and Evaluation in Higher Education, 23*(4), 391–402. https://doi.org/10.1080/0260293980230406

Sargent, L., Allen, B., Frahm, J., & Morris, G. (2009). Enhancing the experience of student teams in large classes: Training teaching assistants to be coaches. *Journal of Management Education, 33*(5), 526–552. https://doi.org/10.1177/1052562909334092

Sashittal, H., Jassawalla, A., & Markulis, P. (2011). Teaching students to work in classroom teams: A preliminary investigation of instructors' motivations, attitudes and actions. *Academy of Educational Leadership Journal, 15*(4), 93–106.

Saunders, L., & Bajjaly, S. (2021). Direct instruction of inter- and intrapersonal skills for business education. *Journal of Education for Business*. https://doi.org/10.1080/08832323.2021.1997884

Scager, K., Wiegant, F. A. C., Boonstra, J., Peeters, A. J. M., & Vulperhorst, J. P. (2016). Collaborative learning in higher education: Evoking positive interdependence. *CBE Life Sciences Education, 15*(4), 1–9. https://doi.org/10.1187/cbe.16-07-0219

Schad, J., & Bansal, P. (2018). Seeing the forest and the trees: How a systems perspective informs paradox research. *Journal of Management Studies, 55*(8), 1491–1506. https://doi.org/10.1111/joms.12398

Schad, J., Lewis, M. W., Raisch, S., & Smith, W. K. (2016). Paradox research in management science: Looking back to move forward. *Academy of Management Annals, 10*(1), 5–64. https://doi.org/10.1080/19416520.2016.1162422

Schad, J., & Smith, W. (2019). Addressing grand challenges' paradoxes: Leadership skills to manage inconsistencies. *Journal of Leadership Studies, 12*(4), 55–59. https://doi.org/10.1002/jls.21609

Schreiber, L. M., & Valle, B. E. (2013). Social constructivist teaching strategies in the small group classroom. *Small Group Research, 44*(4), 395–411. https://doi.org/10.1177/1046496413488422

Schullery, N., & Gibson, M. (2001). Working in groups: Identification and treatment of students' perceived weaknesses. *Business Communication Quarterly, 64*, 9–30. https://doi.org/10.1177/108056990106400202.

Schultz, J., Wilson, J., & Hess, K. (2010). Team-based classroom pedagogy reframed: The student perspective. *American Journal of Business Education, 3*(7), 17–24. https://doi.org/10/19030/ajbe.v3i7.455

Schwandt, T. A. (2001). *Dictionary of qualitative inquiry* (2nd ed.). Sage Publications.

Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology

and epistemology to the methodology and methods of scientific, interpretive, and

critical research paradigms. *English Language Teaching, 5*(9), 9–16.

https://doi.org/10.5539/elt.v5n9p9

Seethamraju, R., & Borman, M. (2009). Influence of group formation choices on academic

performance. *Assessment & Evaluation in Higher Education, 34*(1), 31–40.

https://doi.org/10.1080/02602930801895679

Seibold, D., & Kang, P. (2008). Using critical praxis to understand and teach teamwork.

Business Communication Quarterly, 71(4), 421–439.

https://doi.org/10.1177/1080569908325859.

Semper, J., & Blasco, M. (2018). Revealing the hidden curriculum in higher education.

Studies in Philosophical Education, 37, 481–498. https://doi.org/10.1007/s11217-018-

9608-5

Shaw, J. B. (2004). A fair go for all? The impact of intragroup diversity and diversity-

management skills on student experiences and outcomes in team-based class projects.

Journal of Management Education, 28, 139–169.

https://doi.org/10.1177/1052562903252514.

Shimazoe, J., & Aldrich, H. (2010). Group work can be gratifying: Understanding and

overcoming resistance to cooperative learning. *College Teaching, 58*(2), 52–57.

https://doi.org/10.1080/87567550903418594.

Shute, V. (2008). Focus on formative feedback. *Review of Educational Research, 78*(1), 153–

189. https://doi.org/10.3102/0034654307313795

Siha, S., & Campbell, S. (2015). Teamwork: Faculty and student experiences. *B>Quest,

(2015),* 1–21. *https://www.westga.edu/~bquest/2015/teamwork2015.pdf*

Silverman, D. (2000). *Doing qualitative research*. Sage Publications.

Sivunen, A., & Putnam, L. (2019). The dialectics of spatial performances: The interplay of tensions in activity-based organizing. *Human Relations, online*, 1–28. https://doi.org/10.1177/0018726719857117.

Sleesman, D. (2019). Pushing through the tension while stuck in the mud: Paradox mindset and escalation of commitment. *Organizational Behaviour and Human Decision Making, Online*. https://doi.org/10.1016/j.obhdp.2019.03.008

Smith, K., & Berg, D. (1997). *Paradoxes of group life: Understanding conflict, paralysis, and movement in group dynamics*. New Lexington Press.

Smith, W., Erez, M., Jarvenpaa, S., Lewis, M., & Tracey, P. (2017). Adding complexity to theories of paradox, tensions, and dualities of innovation and change. *Organizational Studies, 38*(3–4), 303–317. https://doi.org/10.1177/0170840617693560

Smith, W., & Lewis, M. (2011). Toward a theory of paradox: A dynamic equilibrium model of organizing. *Academy of Management Review, 36*(2), 381–403. https://doi.org/10.5465/amr.2011.59330958

Smith, W., Lewis, M., Jarzabkowski, P., & Langley, A. (2019). Introduction: The paradoxes of paradox. In W. Smith, M. Lewis, P. Jarzabkowski & A. Langley (Eds.), *The Oxford handbook of organizational paradox* (pp. 1–24). Oxford University Press.

Smith, W., & Tracey, P. (2016). Institutional complexity and paradox theory: Complementarities of competing demands. *Strategic Organization, 14*(4), 455–466. https://doi.org/10.1177/1476127016638565

Snyder, L. G. (2010). The use of pre-group instruction to improve student collaboration. *Journal of Applied Research for Business Instruction, 8*, 65–69.

Sondergaard, L., & Murthi, M. (2012). *Skills, not just diplomas: Managing education for results in Eastern Europe and Central Asia* (Research report). World Bank.

Sparr, J. (2018). Paradoxes in organisational change: The crucial role of leaders' sensegiving. *Journal of Change Management, 18*(2), 162–180. https://doi.org/10.1080/14697017.2018.1446696

Speight, S., Lackovic, N., & Cooker, L. (2013). The contested curriculum: Academic learning and employability in higher education. *Tertiary Education and Management, 19*(2), 112–126. https://doi.org/10.1080/13583883.2012.756058

Spowart, L., Turner, R., Shenton, D., & Kneale, P. (2016). 'But I've been teaching for 20 years …': Encouraging teaching accreditation for experienced staff working in higher education. *International Journal for Academic Development, 21*(3), 206–218. https://doi.org/10.1080/1360144X.2015.1081595.

Staggers, J., Garcia, S., & Nagelhout, E. (2008). Teamwork through team building: Face to face to online. *Business Communication Quarterly, 71*, 472–487. https://doi.org/10.1177/1080569908325862.

Stagl, K. C., Burke, C. S., Salas, E., & Pierce, L. (2006). Team adaptation: Realizing team synergy. In C. S. Burke, L. Pierce & E. Salas (Eds.), *Understanding adaptability: A prerequisite for effective performance within complex environments* (pp. 117–141). https://doi.org/10.1016/S1479-3601(05)06004-2

Stake, R. (1995). *The art of case study research*. Sage Publications.

Star, C., & Hammer, S. (2008). Teaching generic skills: eroding the higher purpose of universities, or an opportunity for renewal. *Oxford Review of Education, 34*(2), 237–251. https://doi.org/10.1080/03054980701672232.

Stevens, M., & Campion, M. (1994). The knowledge, skill, and ability requirements for teamwork: Implications for human resource management. *Journal of Management, 20*(2), 503–530. https://doi.org/10.1177/014920639402000210.

Stone, R., & Bailey, J. (2007). Team conflict self-efficacy and outcome expectancy of business students. *Journal of Education for Business, 82*, 258–266. https://doi.org/10.3200/JOEB.82.5.258-266.

Stout, R., Salas, E., & Fowlkes, J. (1997). Enhancing teamwork in complex environments through team training. *Group Dynamics: Theory, Research, and Practice, 1*, 169–182. https://doi.org/10.1037/1089-2699.1.2.169.

Strauss, P., U, A., & Young, S. (2011). 'I know the type of people I work well with': student anxiety in multicultural group projects. *Studies in Higher Education, 36*(7), 815–829. https://doi.org/10.1080/03075079.2010.488720.

Strom, P., & Strom, R. (2002). Overcoming limitations of cooperative learning among community college students. *Community College Journal of Research and Practice, 26*, 315–331. https://doi.org/10.1080/106689202753546466.

Sutton, J., & Austin, Z. (2015). Qualitative research: Data collection, analysis, and management. *The Canadian Journal of Hospital Pharmacy, 68*(3), 226–231.

Sutton, P. (2017). Lost souls? The demoralization of academic labour in the measured university. *Higher Education Research & Development, 36*(3), 625–636. https://doi.org/10.1080/07294360.2017.1289365

Sykes, C., Moerman, L., Gibbons, B., & Dean, B. (2014). Re-viewing student teamwork: preparation for the 'real world' or bundles of situated social practices? *Studies in Continuing Education*, 1–14. https://doi.org/10.1080/0158037x.2014.904784.

Tabachnik, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Pearson.

Takeda, S., & Homberg, F. (2014). The effects of gender on group work process and achievement: An analysis through self and peer assessment. *British Educational Research Journal, 40*, 373–396. https://doi.org/10.1002/berj.3088.

Takeuchi, J., Kass, S., Schneider, S., & VanWormer, L. (2013). Virtual and face-to-face

teamwork differences in culturally homogeneous and heterogeneous Teams. *Journal*

of Psychological Issues in Organizational Culture, 4(2), 17–34.

https://doi.org/10.1002/jpoc.21112

Tannenbaum, S., Mathieu, J., Salas, E., & Cohen, D. (2012a). On teams: Unifying themes

and the way ahead. *Industrial and Organizational Psychology, 5*, 56–61.

https://doi.org/10.1111/j.1754-9434.2011.01406.x.

Tannenbaum, S., Mathieu, J., Salas, E., & Cohen, D. (2012b). Teams are changing: Are

research and practice evolving fast enough? *Industrial and Organizational*

Psychology, 5, 2–24. https://doi.org/10.1111/j.1754-9434.2011.01396.x.

Teo, S., Segal, N., Morgan, A., Kandlbinder, P., Wang, K., & Hingorani, A. (2012). Generic

skills development and satisfaction with groupwork among business students.

Education + Training, 54(6), 472–487. https://doi.org/10.1108/00400911211254262

Tertiary Education Quality and Standards Agency [TEQSA]. (2016). *Guidance note: Course*

design (including learning outcomes and assessment). Australian Government

Retrieved from http://www.teqsa.gov.au/hesf-2015-specific-guidance-notes.

Tertiary Education Quality and Standards Agency [TEQSA]. (2018). *Guidance note:*

Scholarship. Australian Government Retrieved from

https://www.teqsa.gov.au/sites/default/files/guidance-note-scholarship-v2-5-1-

web.pdf?v=1581303801.

Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. The Falmer Press.

Thornberg, R., & Charmaz, K. (2014). Grounded theory and theoretical coding. In U. Flick

(Ed.), *The SAGE Handbook of Qualitative Data Analysis* (pp. 153–170). Sage

Publications.

Tombaugh, J., & Mayfield, C. (2014). Teams on teams: Using advice from peers to create a more effective student team experience. *Academy of Educational Leadership Journal, 18*(4), 69–83.

Tomlinson, M. (2012). Graduate employability: A review of conceptual and empirical themes. *Higher Education Policy, 25*(4), 407–431, https://doi.org/10.1057/hep.2011.26.

Tomlinson, M., & Jackson, D. (2019). Professional identity formation in contemporary higher education students. *Studies in Higher Education, 46*(4), 885–900. https://doi.org/10.1080/03075079.2019.1659763

Trigwell, K., & Prosser, M. (2014). Qualitative variation in constructive alignment in curriculum design. *Higher Education, 67*, 141–154. https://doi.org/10.1007/s10734-013- 9701-1.

Trimbur, J. (1989). Consensus and difference in collaborative learning. *College English, 51*(6), 602–616. https://doi.org/10.2307/377955

Troth, A., Jordan, P., & Lawrence, S. (2012). Emotional intelligence, communication competence, and student perceptions of team social cohesion. *Journal of Psychoeducational Assessment, 30*(4), 414–424. https://doi.org/10.1177/0734282912449447

Truscott, D. M., Swars, S., Smith, S., Thornton-Reid, F. Zhao, Y., Dooley, C., Williams, B. A., Hart, L. C., & Matthews, M. W. (2010). A cross disciplinary examination of the prevalence of mixed methods in educational research: 1995-2005. *International Journal of Social Research Methodology, 13*(4), 317–328. https://doi.org/10.1080/13645570903097950.

Tseng, H., & Yeh, H.-T. (2013). Team members' perceptions of online teamwork learning

   experiences and building teamwork trust: A qualitative study. *Computers &*

   Education, 63, 1–9. https://doi.org/10.1016/j.compedu.2012.11.013.

Tseng, V., & Seidman, E. (2007). A systems framework for understanding social settings.

   American Journal of Community Psychology, 39, 217–228.

   https://doi.org/10.1007/s10464-007-9101-8.

Tuckman, B. (1965). Developmental sequence in small groups. *Psychological Bulletin, 63*,

   384–399. https://doi.org/10.1037/h0022100.

Tuckman, B., & Jensen, M. (1977). Stages of small-group development revisited. *Group &*

   Organization Studies, 2, 419–427. https://doi.org/10.1177/105960117700200404.

Tuli, F. (2010). The basis of distinction between qualitative and quantitative research in

   social science: Reflection on ontological, epistemological and methodological

   perspectives. *Ethiopian Journal of Education and Sciences, 6*(1), 97–108.

   https://doi.org/10.4314/ejesc.v6i1.65384

Ulloa, B., & Adams, S. (2004). Attitude toward teamwork and effective teaming. *Team*

   Performance Management, 10(7/8), 145–151.

   https://doi.org/10.1108/13527590410569869

U.S. Department of Labor: The Secretary's Commission on Achieving Necessary Skills.

   (1991). *What work requires of schools: A SCANS report for America 2000*. Author.

   Retrieved from https://eric.ed.gov/?id=ED332054.

Urquhart, C. (2013). *Grounded theory for qualitative research: A practical guide*. Sage

   Publications. https://dx.doi.org/10.4135/9781526402196

Usher, M., & Barak, M. (2020). Team diversity as a predictor of innovation in team projects

   of face-to-face and online learners. *Computers & Education, 144*, 103702.

   https://doi.org/10.1016/j.compedu.2019.103702

Volet, S., & Ang, G. (1998). Culturally mixed groups on international campuses: An opportunity for intercultural learning. *Higher Education Research & Development, 17*(1), 5–23. https://doi.org/10.1080/0729436980170101

Volkov, A., & Volkov, M. (2007). Teamwork and assessment: A critique. *e-Journal of Business Education & Scholarship of Teaching, 1*, 59–64. http://www.jbest.org

Volkov, A., & Volkov, M. (2015). Teamwork benefits in tertiary education: Student perceptions that lead to best practice assessment design. *Education + Training, 57*(3), 262–278. https://doi.org/10.1108/ET-02-2013-0025

Vos, L., & Page, S. (2020). Marketization, performative environments, and the impact of organizational climate on teaching practice in business schools. *Academy of Management Learning & Education, 19*(1), 59–80. https://doi.org/10.5465/amle.2018.0173

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Wade, C., Cameron, B., Morgan, K., & Williams, K. (2016). Key components of online group projects: Faculty perceptions. *The Quarterly Review of Distance Education, 17*(1), 33–41.

Waldman, D., Putnam, L., Miron-Spektor, E., & Siegela, D. (2019). The role of paradox theory in decision making and management research. *Organisational Behaviour and Human Decision Making*. https://doi.org/10.1016/j.obhdp.2019.04.006

Watson, W. E., Kumar, K., & Michaelsen, L. (1993). Cultural diversity's impact on interaction process and performance: Comparing homogenous and diverse task groups. *Academy of Management Journal, 36*(3), 590–602. https://doi.org/10.2307/256593

Wesner, B., Smith, A., & Austin, T. (2018). Ready for action: Developing classroom teams to prepare students for the business world. *Administrative Issues Journal: Connecting Education, Practice, and Research, 8*(2), 119–137. https://doi.org/10.5929/2019.1.14.9.

Wildman, J. L., Nguyen, D. M., Duong, N. S., & Warren, C. (2021). Student teamwork during COVID-19: Challenges, changes, and consequences. *Small Group Research, 52*(2), 119-134. https://doi.org/10.1177/1046496420985185

Williamson, O. E. (1979). Transaction-cost economics: The governance of contractual relations. *The Journal of Law & Economics, 22*, 233–261. https://doi.org/10.1086/466942.

Wilton, N. (2014). Employability is in the eye of the beholder: Employer decision-making in the recruitment of work placement students. *Higher Education, Skills and Work-based Learning, 4*(3), 1–17. https://doi.org/10.1108/heswbl-07-2014-0027

Wolcott, H. F. (2001). *Writing up qualitative research* (2nd ed.). Sage Publications.

Xiao, Y., & Watson, M. (2019). Guidance on conducting a systematic literature review. *Journal of Planning Education and Research, 39*(1), 93-112. https://doi.org/10.1177/0739456x17723971

Yamane, D. (1996). Collaboration and its discontents: Steps toward overcoming barriers to successful group projects. *Teaching Sociology, 24*(4), 378–383. http://www.jstor.org/stable/1318875

Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The Qualitative Report, 20*(2), 134–152. https://nsuworks.nova.edu/tqr/vol20/iss2/12

Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Sage Publications.

Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Sage Publications.

Yin, R. K. (2018). *Case study research and applications* (6th ed.). Sage Publications.

Young, R., & Collin, A. (2004). Introduction: Constructivism and social constructionism in
   the career field. *Journal of Vocational Behavior, 64*(3), 373-388.
   https://doi.org/10.1016/j.jvb.2003.12.005

Zhang, B., & Ohland, M. (2009). How to assign individualized scores on a group project: An
   empirical evaluation. *Applied Measurement in Education, 22*(3), 290–308.
   https://doi.org/10.1080/08957340902984075.

Zhang, X., & Zou, X. (2013). University students' employability skills model based on
   Chinese employer perspective. *Journal of Human Resource and Sustainability
   Studies, 1*, 29–33. https://doi.org/10.4236/jhrss.2013.13005.

Appendix A: Information Letter

Project: Teamwork in Higher Education Business Courses

Nature and purpose of the project
The purpose of this project is to explore how teamwork is being taught, practiced and assessed in Higher Education (HE) business courses in Australia, particularly educator factors associated with teaching teamwork, which will inform a larger investigation. The main research question is 'how is teamwork being taught, practiced and assessed in Higher Education business courses in Australia?'

Employers across culturally similar developed economies continue to indicate that the development of graduate employability skills is as important as mastering the technical skills required for a particular a business career. However, implementation of the teaching, learning and assessment of teamwork remains somewhat of a pedagogical conundrum. The broad aim for this study is to identify and consider the educator factors that influence the teaching and learning of teamwork in the Australian higher education (HE) business degree context.

Invitation to participate
You are invited to participate in an interview that should take no longer than 20 minutes to complete. Your consent to participate will be validated by signing the participant consent letter.

Criteria
The interview is intended for academics who are employed at an Australian university and have taught teamwork in a business discipline.

Potential benefits
Participation in the interview will assist you to reflect on the use of teamwork in your business discipline and elucidate those factors you find most affect teaching, learning and assessment related to student teamwork in higher education.

Voluntary participation and withdrawal from the study
Your participation in this study is entirely voluntary. You may withdraw at any time without discrimination or prejudice. There are no predetermined risks associated with participation in this study. All information is treated as confidential and no names will be used in any publication arising from the research. If you withdraw, all information you have provided will be destroyed. In order to give your consent to take part, it is important that you understand the purpose of this program and what is involved.

Feedback on research outcomes
Dissemination of results will be via appropriate professional presentations and/or academic conferences/journals.

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Appendix B: Interview Consent Form

Interview Consent Form

www.murdoch.edu.au

Murdoch
UNIVERSITY

TEAMWORK SKILLS IN HIGHER EDUCATION BUSINESS COURSES
Project number 2016/146

I have read the participant information sheet, which explains the nature of the research and the possible risks. The information has been explained to me and all my questions have been satisfactorily answered. I have been given a copy of the information sheet to keep.

I am happy to be interviewed and for the interview to be audio recorded as part of this research. I understand that I do not have to answer particular questions if I do not want to and that I can withdraw at any time without needing to give a reason and without consequences to myself.

I agree that research data from the results of the study may be published provided my name or any identifying data is not used. I have also been informed that I may not receive any direct benefits from participating in this study.

I understand that all information provided by me is treated as confidential and will not be released by the researcher to a third party unless required to do so by law.

Participant's name: _____

Signature of Participant: _____   Date: ..../........./........

I confirm that I have provided the Information Letter concerning this study to the above participant; I have explained the study and have answered all questions asked of me.

Signature of researcher: _____   Date: ..../........./........

CRICOS Provider Code: 001253
ABN 61 616 369 313

319

Appendix C: Interview Questions

Demographic Questions:

What is your primary business discipline area?

On which basis are you employed at the university?

How many years of university teaching experience do you have?

What is your current level of academic appointment?

How many years of industry/workplace experience do you have outside of university teaching?

Do you have a formal teaching qualification?

Teamwork Interview Questions:

In your own words, please tell me what you understand 'teamwork' to mean?

What do you believe are the main reasons for including teamwork in HE business courses?

Tell me about how you use teamwork as part of the student learning experience?

Tell me about how you approach the teaching of teamwork and what informs this. For example, how do you organise the curriculum? Please explain any particular framework, plan or sequence of activities to inform your teaching of teamwork.

If you do not teach teamwork theory or processes prior to implementing team assignments, please explain.

Tell me about how you assess teamwork (formative and summative/process and product).

Tell me about how your students apply any teamwork theories and/or processes when explicitly taught as part of a unit/course.

Tell me about what you perceive your students dislike about teamwork.

Tell me about what you perceive your students like about teamwork.

Tell me about any challenges you have experienced with teaching teamwork.

How have/could you address these challenges?

Can you think of any additional resources you need to teach teamwork effectively?

Would you like to provide any other comments?

Appendix D: Categories and Themes for Questions

Appendix D presents the initial 44 categories from focused coding of question responses and relationship to themes.

Question	Question essence	Question categories	Question theme	Relates to main theme
1	Definitions of teamwork	Collaboration	Sense of interdependence through collaboration	Transaction cost
		Teamwork to achieve goals or better outcomes		Transaction cost
		Attitude to teamwork		Hidden curriculum
		Strengths and weaknesses		Hidden curriculum
		Developing teamwork skills		Transaction cost
2	Reasons for including teamwork	Preparing students for the world of work	Broadening HE student employability opportunities	Transaction cost
		Providing experience to develop and understand team skills		Transaction cost
		Reduce marking load		Transaction cost
3	Teamwork as part of student learning experience	Assigning group tasks	Lack of educator training in implementing teamwork pedagogy	Transaction cost

Question	Question essence	Question categories	Question theme	Relates to main theme
		Preparing students for the workplace		Transaction cost
		Pondering attitude		Hidden curriculum
		Assessing		Transaction cost
		Transaction costs		Transaction cost
4	Approach to teamwork	Incidental learning	Surviving the hidden curriculum of teamwork pedagogy	Hidden curriculum
		Explicitly teaching teamwork theory skills and/or behaviours		Hidden curriculum
		Expecting prior learning of teamwork theory skills and behaviours		Hidden curriculum
		Focusing on product outcome		Hidden curriculum
		Seeing teamwork as student responsibility		Hidden curriculum
5	Why teamwork theory/process not taught	Focusing on discipline content	Perceived barriers to teaching teamwork	Transaction cost
		Expecting prior teamwork learning experiences		Hidden curriculum

Question	Question essence	Question categories	Question theme	Relates to main theme
		Practising teamwork is the student's responsibility		Hidden curriculum
		Teaching teamwork is a transaction cost		Transaction cost
6	How teamwork assessed	Assessing for process and product	Assessment of and for teamwork learning	Transaction cost
		Assessing product only		Transaction cost
		Assessing product with some marks for contribution		Transaction cost
7	How student apply teamwork theory	Observing the application of teamwork	Observing the application of teamwork	Hidden curriculum
8	What students dislike about teamwork	Slacking off	Negative student perceptions of teamwork	Transaction cost
		Grading risk		Transaction cost
		Diverging views on personality and culture		Hidden curriculum
		Transaction costs for students		Transaction cost
9	What students like about teamwork	Learning from peers	Positive student perceptions of teamwork	Hidden curriculum
		Experiencing the social environment		Hidden curriculum

Question	Question essence	Question categories	Question theme	Relates to main theme
		Grading reciprocity		Transaction cost
		Finding synergy		Hidden curriculum
		Experiencing intercultural interactions		Hidden curriculum
10	Educator challenges with teamwork	Communicating effectively	Challenges teaching teamwork	Hidden curriculum
		Dealing with social loafing		Transaction cost
		Managing conflict		Transaction cost
		Grading		Transaction cost
		Revealing transaction costs		Transaction cost
11	Overcoming challenges	Getting students to own responsibility	Assigning responsibility	Hidden curriculum
		Investigating problems		Transaction cost
		Assessing individual contributions		Transaction cost
		Providing additional resources		Transaction cost