Precarious Work, Invisible Labour

Knowledge Production at the Institutional Periphery

Nour Nicole Dados
Precarious Work, Invisible Labour
Survey Findings

CONTINUUM OF PRECARITY

1 in 2 had worked on casual and fixed-term contracts for more than five years.

“Sometimes I am asked when I am going to get a real job.”

4 in 5 worked in both contract research and contract teaching.

“I don’t know whether I’ll be a lecturer, tutor or unemployed next semester.”

PROFESSIONAL IDENTITY

1 in 5 respondents included their contractual arrangement in their professional titles.

“The non-permanent character of the work means others consider me less of an academic.”

CONTRIBUTIONS TO RESEARCH

96% of respondents said it was important to them to pursue their own research projects and publications.

“It’s why I’m an academic. Everything else is just to put food on the table and keep a roof over my head.”

3 in 5 respondents completed publications that were counted in their institution’s research outputs while they were in insecure work.

95% of these respondents said that they were sole or first author on the publication.

89% of these respondents said that they were sole or first author on the publication.

UNSUSTAINABLE FUTURES

4 in 5 respondents worked unpaid hours to complete the requirements of their paid work.

“As a casual lecturer I want to know what I am speaking about and provide sound knowledge. This is an activity that can barely be measured in time.”

96% of respondents said it was important to them to pursue their own research projects and publications.

Only 4% of respondents in casual and fixed-term employment reported receiving compensation for producing publications while in precarious work.

96% of these respondents said that they were sole or first author on the publication.

4 in 5 respondents worked unpaid hours to complete the requirements of their paid work.

95% of these respondents said that they were sole or first author on the publication.
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About

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Note on the Survey Data in this Report

The survey data used in this report was collected independently by the author in 2018 and is not attributable to the author’s affiliation/s with any institution/s or organisation/s.
I acknowledge the Traditional Owners of the land where I live and work, the Gadigal people of the Eora nation, and pay my respect to Elders past, present and emerging. I acknowledge that sovereignty was never ceded.

I am immensely grateful to the contributors who shared their experiences in the survey I conducted in 2018, titled “Insecure Work and Research Outputs in the Australian University Sector”. The survey results form the basis of this report. The collection of the survey data was made possible through their generous intellectual and affective labour. This is labour that in many cases was contributed from positions of precarity, and on which much of the teaching and research capacity of our tertiary institutions is built.

I am very thankful for the support I have received from colleagues and friends. I especially thank Raewyn Connell, Lucy Taksa, Anne Junor and Daryll Hull who have provided support and encouragement. My profound thanks to Amy Thomas, Tricia Daly, Anne Junor and Raewyn Connell for the generous and invaluable feedback they provided on an earlier draft of this report, and to Dani Dados for reading and commenting on the final draft. My immense gratitude to Stephanie Ho for creating the amazing artwork that appears on the cover and throughout the report, and to Izabella Nantsou for the design of the report and accompanying documents. Thank you to Jason Antony who provided assistance with the programming of the “Insecure Work and Research Outputs in the Australian University Sector” survey in 2018, and to Paul Byron and Rebecca Pearse who provided constructive feedback on the survey instrument.

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I gratefully acknowledge the work of the National Tertiary Education Union (NTEU), both in organising against, and developing research capacity about, the growth of precarious work and its individual and collective impacts on the university sector. I thank the staff of the Workplace Gender and Equality Agency (WGEA) for providing public data by request in 2019. This data has been of critical importance for the development of this research.

The research presented here focuses on knowledge production in the university sector, but also seeks to build on and contribute to our collective social resources to resist and reverse labour insecurity and wider social precarity. It is one intervention among many in the struggle against precarious work and precarious lives, and for the collective wellbeing and economic security of precarious workers whose immense contributions go largely unacknowledged. While I am grateful for the support and assistance I have received in the production of this research, any errors, oversights or shortcomings are mine.
Australia’s university system has gone through massive changes in the last few decades. It has expanded in size, and transformed in character from a well-integrated national public service, to a disorderly collection of half-privatised, competing firms. Public funding as a basis for university life has taken a nose-dive; fees have climbed and climbed, with student debt heading for the stratosphere. Corporate-style management has become the dominant voice in universities. In this dangerous condition, universities have recently been subjected to arbitrary budget-slashing by governments, and then the COVID-19 epidemic.

Corporate management, in its drive for power and profit, routinely puts downward pressure on the wages and conditions of the workforce. A major accomplishment of the new managerial elite in Australian universities is the creation of a large, poorly-paid and precariously-employed workforce. The character and situation of this workforce, and its role in the creation of knowledge, is the focus of Dr Nour Dados’ report.

Dr Dados writes of what she knows. She is part of the generation of highly-trained and highly-skilled workers who have been caught up in this toxic transformation of the university system. She is acutely conscious of the pressures on personal life as well as professional identity that it creates. Her knowledge of the situation is now enriched through the exploratory survey described in this report, and through the synthesis of theoretical and policy issues that the report presents.

Dr Dados has an exceptionally wide view of the issues. She understands that knowledge, in the organised form represented in university curricula and research, is very much a social product. It depends on an institutional system that is vulnerable to pressure. The Australian branch of the worldwide university sector has been re-shaped by market-obsessed governments. On the one hand it has been made dependent on an increasingly volatile market in student fees and pushed towards a narrow vocationalism. On the other hand, a regime of surveillance and competition in research has narrowed the conception of research and of knowledge itself.

The creation of a permanently precarious intellectual workforce, that is so well documented in this report, is a disaster for Australian society as well as for many of the workers within it. So much talent is being misused, so many lives harmed, so much creativity wasted. Dr Dados’ work strikingly illuminates the interplay between socially-valuable knowledge and the conditions of the workforce who produce it. We ignore this connection at our peril.
Executive Summary

The expansion of Australia’s higher education system in the past three decades has been built on a model of student-centred funding that has made universities heavily reliant on enrolments. In response to fluctuating student numbers and funding uncertainty, universities have expanded their reliance on temporary forms of employment. Casual employment has been used to boost teaching capacity, and fixed-term employment to boost research capacity. This has enabled institutions to meet their teaching and research objectives, while cutting labour costs.

The result has been extensive fragmentation of the academic labour market and the academic role. On the one hand, the sector has seen the expansion of a secondary labour market of permanently precarious academics, and on the other, the unbundling of teaching and research, which together had constituted composite components of the balanced academic role. As the academic work role has been devolved into task-to-time units, the proportion of the workforce in continuing employment has declined, and their work has intensified. The balance of tasks has been parcellled out on casual and fixed-term teaching and research contracts to a generation of academics who have not known secure employment.

The academic role, the organisation of work, and the professional identity of knowledge workers in higher education have undergone significant change. Academic professional identity is shaped by a complex labour process that is socially organised, occupationally specific, and bound by discipline and field. This intellectual labour process is composed of composite abstract tasks like reading and teaching, thinking and writing. The labour process unfolds through the tasks themselves and cannot be contained within an externally imposed time allocation, making the slippage between tasks and the slippage of time a common feature of knowledge work. While components of the academic work role have been reconfigured into task units paid as specialised, time-limited contracts, these devolved tasks remain attached to a broader intellectual labour process that shapes professional identity. The external imposition of task-to-time units on the labour process leads to labour time that is always in excess of compensation received, consequently creating precarious working conditions and social and economic precarity for the segment of the workforce in temporary employment.

Although many precariously employed knowledge workers are only paid to undertake specific teaching related tasks like tutoring and marking, research remains central to professional identity formation, career progression, and future employment. Through engagement with the research process, knowledge workers develop their disciplinary scholarship and expertise, and build a portfolio of publications that demonstrates their grasp of abstract knowledge in relation to a profession. As precarious knowledge workers are not paid to do this, many engage in research and publishing in their own, unpaid time. Their contributions are an important component of collective social knowledge, and add value to the knowledge economies of institutions and nations. Yet, precarious knowledge workers remain structurally invisible in the circuits of knowledge production, and their scholarship unrecognised and undervalued.
About the Survey and Report

The survey that informs this report was designed to capture data about university employees in temporary employment who contribute to the production of knowledge at Australian universities. I refer to these employees as precarious knowledge workers and precarious university workers. While knowledge production generally encompasses teaching, research, and other types of work done at universities, the survey focused on the correlation between temporary employment and the production of measurable research outputs. Knowledge produced by academics in temporary employment contributes to institutional reputation and sector growth through research metrics, funding and student enrolments.

Despite the inclusion of their publications in the overall volume of institutional outputs, precarious knowledge workers are not acknowledged as equal contributors to research-based knowledge and their contributions are generally not compensated. Rather, it is expected that they will voluntarily contribute to knowledge production as this remains a key dimension of the intellectual labour process of academic work, and a critical factor in professional identity formation and career progression. Their research outputs are generally the product of unpaid labour. This pattern of fragmentation and unpaid labour threaten the future sustainability of the knowledge workforce and the social stock of knowledge.

Research Design and Data Collection

The survey was made available on Survey Monkey under the title “Insecure Work and Research Outputs in the Australian University Sector” and shared via a weblink in November 2018. Data was collected anonymously for respondents who indicated that they were, or had been, in casual and/or fixed-term employment at an Australian university.

A total of 231 responses were received, of which 152 were valid and complete.

The survey consisted of forty-three questions, using a combination of multiple choice and open-ended responses. Data was collected on the following:

- The characteristics of precarious employment in relation to tenure, work allocation and contractual arrangements
- The impact of precarious employment on professional identity formation and work organisation
- The form of the intellectual labour process in relation to labour time, institutional support and compensation
- The contribution of precarious academics to knowledge in the university sector

This report reviews existing literature and data, and presents the survey results with a contextual analysis of the contributions of precarious knowledge workers to knowledge production at Australian universities. The survey results are aggregated and organised as tables and figures. Written responses to the survey present a qualitative dimension to the data, providing further insight into the experience of precarious knowledge workers. While the data presented here makes a contribution to research on knowledge workers in precarious employment, the results should be read with care as the survey was not designed to be representative of this workforce.
Key Findings from the Survey

1. PRECARIOUS EMPLOYMENT AMONG KNOWLEDGE WORKERS OPERATES ON A CONTINUUM.

2. EXPERIENCES OF PRECARIOUS EMPLOYMENT ARE REFLECTED IN THE DURATION OF PRECARIETY AND THE RANGE OF ROLES AND MODES OF EMPLOYMENT.

“Sometimes I am asked when I am going to get a real job.”

Data and scholarship about precarious employment in the university sector treat employment categories separately, with a focus on either casual or fixed-term work. However, this report demonstrates that precarious knowledge workers often hold casual and fixed-term, academic and professional, and teaching and research roles simultaneously, moving between and across roles. This pattern of work can span long periods of time. Duration in temporary employment combined with the range of roles and modes of employment indicates the persistence of a pattern of long-term precarious employment among qualified knowledge workers due to the scarcity of continuing roles.

Among respondents to the survey, half had worked in precarious employment for five years or more, with four in five having worked in both contract research and contract teaching. 82% of respondents had worked across two different combinations of role and mode, while 45% had worked across at least three different combinations. Three fifths of respondents holding a higher degree stated that they were in casual and/or fixed-term employment because they could not find secure employment in their field, due to financial necessity, or to remain in the university sector while looking for continuing employment.

3. ACADEMIC PROFESSIONAL IDENTITY IS SHAPED BY EXPERIENCES OF PRECARIOUS EMPLOYMENT.

4. ENGAGEMENT IN THE INTELLECTUAL LABOUR PROCESS AND IN PAID EMPLOYMENT IMPACTS, AND IS IMPACTED BY, PROFESSIONAL IDENTITY FORMATION.

“I am not considered a true colleague by full-time academics.”

Precarious employment arrangements are profoundly changing individual and collective identity among knowledge workers. Academic professional identity is a composite identity. Precarious knowledge workers may identify with a professional or disciplinary field, or as a researcher or educator, in addition to identifying as an academic. While the label ‘academic’ is an important component of identity formation among survey respondents, precarious employment is reshaping how this label is applied. One in five respondents included a contractual descriptor like ‘casual’ or ‘sessional’ alongside ‘academic’ in their work title. The use of labels like ‘casual academic’ or ‘sessional academic’ indicates that the growth of insecure employment has had an impact on the shape of professional formation.

Professional identity formation among precarious employees is broader and more complex than the categories used for workforce reporting. While paid employment is an important factor shaping identity formation, work identity is also linked to holding a professional qualification like a PhD and remains connected to an intellectual labour process that is socially structured, occupationally specific, and bound by discipline and field. Consequently, professional identity extends beyond immediate paid employment and into periods between semesters where work may be limited or unavailable. Workforce data only captures those in employment on a particular reporting date, but professional identity extends beyond immediate periods of paid employment. Professional identity is not constrained by academic classifications and pay schedules, as employees can see their primary professional identity as academic while employed to perform research assistance duties under a professional staff classification.
More than half of survey respondents in precarious work held a higher degree, with roughly three fifths of these respondents engaged in non-continuing employment due to the scarcity of continuing work. Employment status impacted how participants perceived their professional identity and how they felt it was perceived by others. 96% of respondents said that their paid employment always or sometimes affected their own perceptions of their professional identity, and 95% felt that their paid employment always or sometimes affected others’ perceptions of their professional identity. Paid employment had legitimating effects on the development of professional identity among respondents, while the absence of continuing employment led to anxiety about professional identity and status.

The engagement of precarious knowledge workers in the intellectual labour process is shaped by professional identity and employment. Precarious knowledge workers are employed to undertake prescribed task-to-time units. However, these task-to-time units are inadequate measures of the temporality of knowledge work, which unfolds through an intellectual labour process attached to a professional identity. The high incidence of unpaid labour time among precarious knowledge workers and their participation in scholarship and research beyond their paid employment requirements demonstrates the inadequacy of these contractual arrangements. Four in five survey respondents said they worked at least five unpaid hours per week to complete the requirements of their paid employment, and 96% of respondents felt it was important to pursue their own research projects and publications.

5. EMPLOYEES IN PRECARIOUS WORK MAKE AN IMPORTANT CONTRIBUTION TO KNOWLEDGE.

“It’s why I’m an academic. Everything else is just to put food on the table and keep a roof over my head.”

Precarious university workers make an important contribution to research-based knowledge that is generally unrecognised and uncompensated. This is in the form of publications and non-standard outputs that arise from the knowledge workers’ disciplinary expertise and professional engagement with research and scholarship, but which are not monetarily compensated within their paid employment. Although data on the extent of this contribution is limited, the Excellence in Research for Australia (ERA) exercise for 2015-2016 reveals that 9% (n=6257) of staff who contributed outputs to Australia’s research capacity were casual employees (ARC 2016).

Of respondents to this survey, two in three indicated that they had produced publications that were counted towards their institution’s research outputs during periods of precarious employment. Of these respondents, 89% were sole or first author on the publications. Further analysis of the data revealed that of 80 casual respondents to the survey, 29 had produced publications as sole or first author during periods of precarious employment. Of 44 respondents in fixed-term employment, 30 had produced publications as sole or first author during periods of precarious employment. Survey respondents indicated a range of reasons for engaging in research without pay. These included being competitive for future employment or grants, particularly a continuing role. More than half of respondents indicated that their motivation was to pursue their own interest in the research.

Career progression and securing continuing employment are important indicators for engagement with research and publishing. However, research and its dissemination are elements of the intellectual labour process. Despite the fragmentation of the academic role into task and time units, the devolved tasks remain connected to an intellectual labour process which shapes academic identity by connecting it to disciplinary expertise and professional formation. Consequently, research and publishing remain critical elements of academic work and career progression despite their functional separation from teaching in the modern university.
“If I am somebody’s tutor or research assistant, that pays my rent, but to get a job I need to publish my own research, which I must do in my own time.”

Opportunities to pursue research and publications for those in casual and fixed-term employment is often constrained by a combination of factors arising from the nature of their employment, particularly the lack of paid research time. Unpaid labour time related to paid employment negatively impacts their capacity to pursue publications that could contribute towards securing future employment or funding. Among respondents who reported undertaking unpaid labour time as part of their paid employment (n=110), 95% stated that this unpaid labour time negatively impacted their capacity to pursue their own research.

In addition to unpaid labour time as part of their paid employment, precarious employees subsidise the higher education system through the research knowledge they produce from positions of precarity. Support and recognition for these contributions is limited. Of survey respondents in casual employment, only one reported that they had access to paid time to pursue their own research and publications. Among respondents in fixed-term employment, 24 of 44 reported having paid time for their own research. Access to facilities and resources was also limited, with 27 of 80 casual respondents and 22 of 44 fixed-term respondents reporting the provision of in-kind support to pursue their own research projects.

Academics in precarious work contribute to knowledge production from positions of labour insecurity. This contribution is generally unpaid and occurs without adequate support or acknowledgement. The combination of lack of professional recognition and uncompensated working time negatively impacts the career progression of precarious knowledge workers and creates social and economic insecurity. Labour insecurity shifts institutional risk onto precarious workers, allowing organisations to manage economic uncertainty by outsourcing it to employees at the institutional periphery. This arrangement has serious social and economic consequences for workers. It also places the production of knowledge at risk by fragmenting the workforce and exposing sections of it to economic precarity. Over time, the reproduction of the workforce cannot be guaranteed, threatening the future sustainability of the social stock of knowledge.
Introduction

I started working on this project in 2018. At the time, I’d been working on a research-only contract for almost two years. When I began collecting survey data, I was waiting to sign a contract that would extend my employment for two more months. One month had already lapsed since the end of the previous contract. As a parent of a young child, the future didn’t seem particularly promising. My back-up plan was that I’d be entitled to some parenting assistance, though I wasn’t yet. At least, we’d be able to get by for a little while until I worked out what to do next.

I applied for everything that I could, including short-term and hourly contracts that were not ideal. I even spent a couple of days writing up a project summary as part of a job application for a job I didn’t have, and that I didn’t get. After more than a decade of precarious employment, some colleagues suggested it was time to look for greener pastures elsewhere. In the end, I stumbled upon some good fortune in the form of a fixed-term appointment that allowed me to contribute to research and pay my bills for a little longer. The fallout of months and years of uncertainty is that it is impossible to set up research to be institutionally viable, because it is impossible to know how much longer I’ll be employed in the university sector. Precarity limits, and even destroys, the possibilities of what research could be.

Higher education institutions are places of power and privilege. They are also places where inequalities in society are accentuated. As an undergraduate, I couldn’t escape the awkwardness of negotiating this unfamiliar world as a woman from a migrant working-class background. As the first in my family, on both sides, to attend university, it seemed more of an accident than an achievement.

My career trajectory has certainly not been straight forward. I’ve worked as a sales assistant, receptionist, administrative assistant, library assistant, English as a second language teacher, translator, pizza shop waitress, research assistant and as a casual tutor. My work in the university sector has spanned fourteen years of casual and fixed-term contracts, with one and a half years of unpaid maternity leave in the middle. I’ve had to reinvent my professional identity out of financial necessity, put projects on hold so I could hold down paid work, and put my own research projects at the bottom of an ever-growing to-do list.

None of this will be unfamiliar to the thousands of academics in precarious work, scraping together a life while they try to piece together a career, and hoping that one day the pieces fall into place. That it should be so familiar is an indictment of an industry that prides itself on being one of Australia’s largest ‘exporters’, contributing $41 billion to the economy in 2018. There is a dark side to these figures, and it is written in the not-so-hidden precarious labour of around two thirds of the workforce, and the precarious lives of a large cross-section of its student population.

While I would like to think that I work within an intellectual professional formation, my capacity to continue to work as an academic is contingent upon an occupational job market that has been restructured almost completely around a volatile student market. That market is constructed upon the myth of endless growth and domestic and international competition. But because it is a myth, labour insecurity is built into the model, it is not an accidental outcome. A secondary academic labour market has always existed, but in
the neoliberal university, it is economically imperative. The pool of precarious knowledge workers operate as a buffer at the institutional and sector level. If student numbers drop, classes can be cancelled, support services shelved, research left unfunded, and a host of work contracts can be withdrawn at the drop of a hat. The growth of labour insecurity in higher education is a central factor in the establishment of quasi-markets. It has been enabled through a host of regulatory changes in industrial relations, education and training, and governance and accountability frameworks. This is neoliberalism in action.

Fast forward to 2020, and the sector is in the throes of a new crisis. The COVID-19 pandemic has shut down much of the economy and universities, like many things, have moved online. International students enrolled to study in Australia have been either unable to travel into the country, or are stranded with limited means of support (Tran & Tan 2020a, 2020b; Berg & Farbenblum 2020). Many have lost their casual or part-time jobs, and most have no family or support networks. At this moment of extreme vulnerability, they have also been abandoned by the Federal Government, wilfully excluded from any form of income assistance or welfare and told to ‘go home’ if they can’t afford to support themselves. International graduates from Australian universities working under the Temporary Graduate Visa (sub-class 485), along with the entire temporary visa workforce have been similarly left in financial dire straits, with no access to income support or welfare. It has been entirely up to individual universities and states to come forward with assistance. Coverage has been far from even, and many have been left without any form of support.

Viewed side by side with the immense contribution international students and temporary visa workers make to the economy on an annual basis, the extent of this abandonment is astonishing. My intention here is not to suggest that we view the contribution of international students and temporary workers in economic terms, or to make the argument that because of their economic contribution, these students and workers should be entitled to support. These arguments have been made, and while they may be well-intentioned, they proceed from the premise that international students and temporary visa workers are primarily economic factors within a national economy. The problem with this argument is that it continues to construct international students and temporary workers as variables within a dehumanising economic exchange, and does nothing to expose the purely transactional purpose of the international student market, made clear by the complete abrogation of a duty of care towards them in the midst of a global health crisis. That international students and temporary workers should be told to ‘go home’, despite the substantial economic value of their contributions, is a symptom of the recommodification of education and labour. Within the globalised higher education and labour markets, they have been assigned only one value, and that value is economic.

The Federal Government has also gone to great lengths to ensure that university employees are universally excluded from income assistance programmes like JobKeeper (Moodle 2020), designed to keep people in paid employment during the economic downturn. As the fee revenues that public universities depended on have been severely disrupted, thousands of jobs, particularly those of casual and fixed-term employees, have already been lost, or are at risk. In 2018, international student fees contributed $8.84 billion to the tertiary sector, around one quarter of total sector revenue (DESE, 2018b). Modelling from the Mitchell Institute on the impact of the COVID-19 pandemic on international student enrolments suggests that the university sector stands to lose $10 billion to $19 billion between 2020 and 2023 (Hurley & Van Dyke 2020).

Preliminary assessments of what this collapse will mean for the future of the university workforce, and for research, predicted devastating losses of 21,000 Full-Time Equivalence (FTE) positions, with 7000 FTE in research (Larkins et al. 2020). While the problem of using FTE as a measure of the university workforce is discussed later in this report (see Chapter 2) and in more detail elsewhere (Yasukawa & Dados 2018; Dados et al. 2019), it suffices to say that FTE measurements generally amount to a gross underestimation of job losses by head count if those losses are of casual and fractional-time employees. Even at the predicted numbers, the losses will be devastating for the knowledge workforce.
More recently, analysis of research income and expenditure based on 2018 figures suggests that future research revenue will see a $7.23 billion decline over the next five years (Larkins 2020), with the loss of a predicted 4600 FTE research positions (Larkins & Marshman 2020). A report by Frank Larkins has described 2018 as “a landmark year”, since it was the first time that university spending on research from discretionary funds exceeded income received from competitive grants (Larkins 2020, p.6). Larkins traces this trend back to 2008, with discretionary funding growing from 41.3% of research expenditure to 50.7% in 2018. While sources of discretionary funding include income from student fees, investments, royalties, contracts and other miscellaneous items, of the $6.2 billion committed to research in 2018, 57% was sourced from student fees, the revenue stream most impacted by COVID-19.

The COVID-19 pandemic has brought the crisis of higher education full circle. The over-exposure of the entire sector to student markets has gone hand in hand with the expansion of a large secondary academic labour market that is permanently on standby to provide teaching and research capacity, and a workforce that is mainly comprised of precarious workers (Thomas et al. 2020; Goodman et al. 2019; Bredehoeft 2018; Ryan et al. 2017; Broadbent & Strachan 2016; May, et al. 2013; Ryan et al. 2013). The crisis has revealed publicly, how heavily student fee revenue was subsidising critical, yet, grossly under-funded research (Larkins 2020; Larkins et al. 2020; Larkins & Marshman 2020). It has also exposed the galling precarity with which workers in casual and fixed-term employment live, in order to facilitate markets in education provision that do not improve learning (UNSW Casuals Network 2020; University of Sydney Casuals Network 2020; Ribeiro 2020). The government response so far has signalled an intention to repurpose universities for vocational training, reduce funding for government supported places, and preference industry-partnerships in research (DESE 2020b). These responses do nothing to address the injustices to staff and to students of the application of a “just-in-time” education model, or to stem the loss of thousands of jobs from the sector.

Overview of the Survey and Report

This report was largely completed before the COVID-19 crisis began. The pandemic has highlighted the urgency with which we ought to address the vulnerability of staff and students within the system to avoid a deepening of precarity and the widening of risk. This vulnerability is the product of decisions that disproportionately expose students and staff to social precarity and risk arising from fluctuations in the global economy.

This report is based on a survey conducted in November 2018 on the experiences of precariously employed higher education employees who contribute to research outputs at Australian universities. I refer to these employees as precarious knowledge workers and precarious university workers. The survey, “Insecure Work and Research Outputs in the Australian University Sector”, was designed to capture data about the experiences of precarious knowledge workers in relation to their employment arrangements, duration in precarious employment, labour time, professional identity, and contributions to research.

The report argues that while professional identity among precarious knowledge workers has been impacted by the segmentation of the academic labour market and the fragmentation of academic work, it remains connected to an intellectual labour process that is socially organised, occupationally specific, and bound by discipline and field. This means that even when employment status is precarious and employment arrangements temporary and limited, the temporality of the work that precarious knowledge workers actually do is still shaped by an intellectual labour process attached to a professional formation. While precarious knowledge workers may be paid as tutors to undertake a limited amount of teaching work, their engagement stems from a broader identification as academics and unfolds through a work process where the task itself determines the time spent, rather than the time they are paid for the task. Given that the temporality of knowledge work doesn’t fit into the inadequate time units allocated in contracts of employment, this means that precarious knowledge workers are underpaid for their labour, contributions, experience and expertise.
This is particularly the case for the production of research outputs. Precarious knowledge workers are generally not paid to develop their professional scholarship and produce research. Yet these activities remain central to academic professional identity, disciplinary expertise and career progression. Consequently, precarious knowledge workers engage in research and publishing in an unpaid capacity. This adds value to the knowledge economy by extracting unpaid labour time from the knowledge workers, and subsidises the higher education sector. Employment arrangements and the organisation of work make precarious knowledge workers institutionally and structurally invisible, erasing their unpaid labour time, experience, expertise, and contributions, and condemning them to insecurity of employment and economic precarity. In the long term, this arrangement is unsustainable and jeopardises the production of knowledge and its social value.

The report is organised into five main chapters. The first two chapters provide the context for the research. Chapter 1 begins with an overview of precarious employment, particularly the forms it takes at universities, and considers some of the issues and debates that are relevant to the concerns discussed in the report. The segmentation of the academic labour market and the fragmentation of academic work are discussed in relation to their impact on professional identity formation, the intellectual labour process, and the temporal organisation of knowledge work.

Chapter 2 looks at the measurement of precarious employment at universities and the limitations of the available data about the knowledge workforce. It considers the specificities of precarious employment in the university sector, particularly how professional identity and engagement with the intellectual labour process interact with employment status, extending both occupational identity and work process beyond periods of paid employment. Existing quantitative and qualitative data on the precarious knowledge workforce is reviewed. While acknowledging gaps and limitations, this data is synthesised to consider some of the common characteristics of the precarious knowledge workforce, particularly in relation to professional status, duration in precarious employment, employment arrangements, unpaid labour, and engagement with research. The chapter concludes with a discussion of how knowledge is produced and valued at universities, and the engagement of precarious workers in the process of knowledge production.

Chapters 3 to 5 focus on the results of the survey. Chapter 3 gives an overview of the survey design and administration, and the demographic characteristics of survey respondents. Chapter 4 provides a detailed account of the survey results, with responses to questions given in tables and figures. Additional written comments from participants are also included in the data. Chapter 5 is a discussion of the survey and its main findings; it is divided into four sections. The first section considers precarious employment in higher education as operating on a continuum, with duration in precarious work and combinations of work roles and modes of employment as indicators of precarity. The second section considers the impact of precarious employment on professional identity and work process. It looks at the ways in which the intellectual labour process of academic work unfolds in relation to professional identity and the impact of labour precarity on professional formation. The third section addresses the labour process of academic work and the experience of unpaid labour time among precarious knowledge workers. The final section considers the conditions under which precarious workers produce knowledge, and the contributions they make to research outputs at Australian universities.

The conclusion summarises the context of the research and the main findings of the report.
Higher education in Australia has undergone massive change in the past three decades. While accessibility has been a key policy initiative in the expansion of the system, this has been built on a model of student-centred funding that has seen a decline in long-term government investment, and the creation of student-centred markets which make universities heavily reliant on enrolments (Connell 2019; Spina et al. 2019; Goodman et al. 2019; Ryan et al. 2017; May 2014; Thornton 2014; Larkins 2012; Ross 2009; Marginson & Consodine 2000). In response to the sector’s heavy dependence on student markets and fluctuating student numbers, universities have made the workforce the target of cost-cutting measures, while massively expanding their reliance on temporary forms of employment (Dados et al. 2019; Bredehoft 2018; Morgan & Wood 2017; May 2014; May et al. 2013; Brown et al. 2010; Brown et al. 2006; Junor 2004). This has resulted in labour market fragmentation and a growth in temporary employment, and also led to an intensification of work for continuing academic roles. Academic work, roles, and professional identity have undergone significant change, as knowledge workers have been faced with demands to adapt to changing mandates determined by an institution’s financial position (Goodman et al. 2019; Ryan et al. 2017; Forsyth 2014; Thornton 2014; Probert 2013; Barcan 2013; Bexley et al. 2011).

Three decades ago, casual employees comprised 7% of the university workforce (in full-time equivalence (FTE), Department of Education, Skills and Employment (DESE) 1997). By headcount today, casuals are almost 50% of the workforce (Workplace Gender Equality Agency (WGEA) 2018). Combined, fixed-term and casual employees are now two thirds, 67%, of the university workforce (by headcount, WGEA 2018; see discussion in chapter 2 on the use of DESE and WGEA figures). Employees classified as academics are twice as likely as those classified as professional staff to be in casual employment, primarily as a result of the substantial proportion of teaching-only work that is performed by casualised labour. As a proportion of the university workforce, casual teaching-only full-time equivalence (FTE) is one eighth of all FTE. A longer discussion on FTE as a measure follows in the next chapter, but it is worth noting here that particularly in regard to teaching-only casual employment, FTE amounts to a gross underestimation of actual staff numbers (see Dados et al. 2019; Yasukawa & Dados 2018).

This report focuses on the segment of the university workforce engaged in producing new knowledge while in temporary forms of employment. ‘Casual academic’ is the most frequently used label to refer to university employees in temporary employment who are engaged in academic work. This is because hourly-paid casual teaching appointments are one of the main forms of employment for precarious knowledge workers. However, as this report demonstrates, university employees who contribute to knowledge through research and publishing are engaged in a range of non-continuing contractual arrangements and roles — casual and fixed-term, teaching and research, academic and professional. Consequently, this report uses the terms precarious university worker and precarious knowledge worker. The contention of this report, one that is supported by the survey findings, is that precarious employment in the university sector operates on a continuum. Precariously employed knowledge workers can be engaged across roles, classifications and modes of employment for many years, while producing research outputs and publications in their unpaid time. Some of these are roles and modes are more precarious than others, however, even the more secure fixed-term arrangements do not provide the necessary labour security on which to build a career.
Changes in the structure of the workforce, the organisation of work, and the academic role have been enabled by large-scale shifts in industrial relations, education policy, and risk and governance frameworks (Goodman et al. 2019; Connell 2019; Bredehoft 2018; Andrews et al. 2016; May 2014; Marginson & Consodine 2000; Marginson 1997). Higher education funding models have been restructured around forms of revenue that are heavily marketised and given to fluctuation. As government sources of funding have decreased, universities have increasingly operated on the basis of a state of perpetual financial crisis, implementing arbitrary performance indicators to enforce redundancies and workplace restructurings (Connell 2019; Robinson et al. 2017; Barcan 2013; Gill 2009).

Departments, disciplines, degrees and courses have been restructured around budgetary considerations, primarily through a reduction in expenditure on continuing academic positions. The proportion of staff in continuing positions has been steadily declining while at the same time, universities have increased their reliance on temporary workers to expand teaching capacity and research and administrative support. This arrangement has led to the institutionalisation of precarious work and the reorganisation of professional identity (Thomas et al. 2020; Spina et al. 2019; Goodman et al. 2019; Cahill 2014; Broadbent et al. 2013; Junor 2004). Governance and accountability frameworks monitor broad trends and calculate risk, however, the measures they use are designed to capture extreme variation. On their own, they do not reflect the scale of change in higher education, or its impact on precariously employed knowledge workers.

The use of the workforce as a buffer against changes in the market has serious consequences for knowledge workers and for knowledge production. Behind the buzzwords of efficiency and productivity there has been a shifting of risk from the organisation to the employees, through the erosion of labour security (Spina et al. 2019; Rafferty & Yu 2010; Broadbent et al. 2013; Wilson & Ebert 2013; Burgess & Price 2013; Frade & Dramon 2005; Moody 1997). The use of forms of labour flexibility to vary the size of the workforce through temporary work arrangements and the reorganisation of work roles and functions, means employees lose employment protections and social benefits associated with continuing employment — sick and personal leave, long service leave, and rates of superannuation (Goodman et al. 2019; Broadbent et al. 2013; Rafferty & Yu 2010; Frade & Dramon 2005; Junor 2004).

Knowledge workers reliant on temporary employment encounter the most severe aspects of labour insecurity, in particular enduring job insecurity frequently leading to sudden and unexpected loss of work without compensation or explanation, and social precarity that can span an entire career. This shifting of risk means precarious knowledge workers have to construct an academic career without institutional support, recognition or compensation, having to “fall back on their own resources to construct their own employment biographies, negotiating the hazards and opportunities in inventive ways” (Allen & Henry 1997: 184, cited in Broadbent et al. 2013, p.280; Spina et al. 2019; Thomas et al. 2019).

The work that precarious knowledge workers do is shaped by an intellectual labour process tied to a professional formation (Connell 2019; O’Carroll 2015; Barcan 2013; Roggero 2011; Junor 2004; Abbott 1988). It requires the application of knowledge and expertise to a range of interconnected tasks. The labour process is determined by the task at hand, rather than externally imposed task-to-time units (O’Carroll 2015; Roggero 2011; Connell & Crawford 2007; Connell 2006; Junor 2004). Precarious knowledge workers engaged in the intellectual labour process are motivated by a sense of vocation, ethical responsibility, and professional commitment (Connell 2019; Morgan & Wood 2017; Bousanquet et al. 2017; May 2014, 2011; Brown et al. 2006; Junor 2004). In teaching as well as research, precarious knowledge workers make a substantial contribution to the social stock of knowledge, working many more hours than they are paid while contributing to research outputs in their unpaid time.

In return for their professionalism and sustained, ethical engagement with knowledge, precarious workers have had to shoulder the financial and market risks of institutions and the sector, risks over which they have no control, subsidising the knowledge economy at great personal cost (Spina et al. 2019; Morgan & Wood 2017; Broadbent et al. 2013; Rafferty & Yu 2010; Ross 2009; Goodman et al. 2006).
Forms of Precarity

Precarious work is on the rise across the economy as a whole. Precarious employment is waged work of limited or uncertain duration lacking regulatory protections, with limited control of working conditions, and low or variable income (Kalleberg 2018; Campbell & Burgess 2018; Campbell & Price 2016; Vosko 2010; Vosko et al. 2009; Rodgers 1989). Precarious work is sometimes defined as work that diverges from the Standard Employment Relationship (SER), that is full-time permanent employment with the benefits of labour security. Forms of work that diverge from the SER fall under the umbrella of non-standard employment and include casual, fixed-term and contract work. Scholars agree that non-standard forms of employment, like casual and fixed-term work, contribute to the experience of precariousness, however, there is also consensus that the dimensions of precarious work are multiple and greater than the form of the employment relationship (Campbell & Burgess 2018; Alberti et al. 2018; Rubery et al. 2018; Campbell & Price 2016; Tweedie 2013; Vosko 2010; Vosko et al. 2009).

While the form of employment should not be used as a proxy measure for precarious work, it is important to consider how particular forms of non-standard employment, like temporary work, create labour insecurity and generate precariousness by shaping the regulatory dimensions of work (Cranford & Vosko 2006, p.47). Temporary work is precarious because it lacks the basic features of labour security including adequate opportunities for employment, reasonable tenure, prospects for skills development and promotion, protections against excessive working hours, a stable income, and representational rights (Kalleberg 2018; Campbell & Burgess 2018; Lewchuk 2017; Campbell & Price 2016; Standing 2011; Vosko 2010). These employment arrangements generate large amounts of uncertainty and anxiety about the future.

Temporary work falls under the broad umbrella of non-standard employment (see ILO 2020 for a useful summary; also Laß & Wooden 2020; Howe et al. 2018, Kalleberg 2018; Campbell & Burgess 2018, Carney & Stanford 2016). It is marked by its temporal limits (i.e. an end of contract date or no guarantee of ongoing employment), and the absence of employment and income protection. Temporary workers are employed from contract to contract, often with only short periods of notice. They may be employed on a ‘temporary’ basis over long periods of time. The incidence of long-term temporary employment is shaped by the national regulatory context, particularly the framework of the industrial relations system (Kalleberg 2018). In Australia, the notion of the ‘permanent casual’ is both prevalent, and a peculiar feature of the labour market when compared to similar economies (Kalleberg 2018; Tweedie 2013; Owens 2001). Temporary workers employed as casuals have no access to paid sick leave, annual leave or other types of paid leave, and also receive lower rates of superannuation.

The most prevalent forms of temporary employment at universities are ‘fixed-term’ contracts, which can be full-time or fractional and span anything from a month up to two years, and ‘casual’ contracts, which are paid by the hour and contain no provisions for sick or personal leave1. Universities also have two pay scales, one for academic staff and one for professional staff. While most teaching employment is classified as academic, a significant proportion of casual and fixed-term researchers are payed under the Professional Staff Pay Schedule and not technically classified as academics (FWO 2020a, 2020b)2.

The vast majority of temporary teaching work is conducted by staff employed as casuals under the Academic Pay Schedule (generally at Level A). It is sometimes referred to as ‘sessional’ employment as the contract covers an entire session or teaching period. Casual teaching employment is marked by specific sets of practices and contract types that set it apart from other types of casual work at universities, and in other sectors. Academics employed as tutors or lecturers are employed for a fixed period of time (generally a

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1 I limit myself to the prevailing forms of precarious work in higher education, and not the full spectrum of forms of employment that deviate from the Standard Employment Relationship (SER), for example, I do not discuss continuing, part-time work, in which workers may experience poor job quality and low wages due to the insufficient number of hours they are employed.

2 Employees at most universities are covered by an Enterprise Agreement between the University and the Union. The Higher Education Awards form the basis of these Agreements, although the conditions and pay under the Agreements exceeds the basic provisions of the Awards.
semester) to teach in a particular subject. However, they are generally paid on a casual per hour basis with no entitlements to leave provisions. The number of hours they are paid is determined by the type of activity they are required to undertake, whether lecturing, tutoring or marking, rather than the amount of work actually done. Many who are employed to teach are re-employed from semester to semester, and year to year, with no prospect of conversion into a continuing, or even a fixed-term, role.

Research employment is more varied, with a mix of work roles and modes of employment under both the Academic and Professional Pay Schedules (FWO 2020a, 2020b). While Research Associate positions are appointed as academic positions, Research Assistant positions are paid under non-academic employment categories (HEW 1-8) (FWO 2020a, 2020b). Research Assistants are not included in the academic staff counts, even though such roles often require forms of knowledge and expertise perceived to fall within the scope of academic work. In many cases the determining factor is the research budget.

In Australia, casual and fixed-term employment is sometimes referred to as insecure work. The Independent Inquiry of the Australian Council of Trade Unions (Howe et al. 2011, p.1), defines insecure work as “poor quality work that provides workers with little economic security and little control over their working lives”. The Australia Institute's Factbook describes insecure work as work which “imposes great uncertainty in the hours, pay, and tenure of employment” (Carney and Stanford 2018, p.4). These definitions correspond to the broader features of non-standard employment and share much in common with the principle features of labour insecurity and precarious employment.

‘Fixed-term’ and ‘casual’ work are often treated separately, however, this report aims to demonstrate that they operate on a continuum. Understanding precarious wage work on a continuum makes the dimensions of precariousness visible within different forms of employment, as opposed to determining precariousness on the basis of the form of employment (Cranford & Vosko 2006, p.47). Precarious knowledge workers hold multiple casual and fixed-term contracts, often simultaneously, and move between different teaching and research contracts over long periods of time (Spina et al. 2019; May 2014; Bexley et al. 2011; Brown et al. 2006; Junor 2004). Neither offers secure or continuing employment. Conditions for longer contracts are generally preferable to hourly contracts, but in the medium and long term, temporary forms of employment hamper professional identity formation and career progression, and diminish representational rights due to the absence of tenure (McCarthy et. al. 2017; Morgan & Wood 2017; May 2014; MacFarlane 2011; Goodman et al.2006; Churchman 2006; Junor 2004).

Precariousness at work contributes to a more general sense of social precarity, particularly in the absence of robust social rights and protections, many of which have been severely eroded in recent decades (Kalleberg 2018; Campbell & Burgess 2018; Lewchuk 2017; Campbell & Price 2016; Standing 2011). Access to social protections and welfare are determined by the context of employment and the employee’s social location (Campbell & Price 2016; Vosko 2010; Clement et al. 2009). The lack of entitlements, or restricted access to them, amplifies the social risks of precarious employment (Lewchuk 2017; Campbell & Price 2016; Vosko 2010; Clement et al. 2009). As precarity extends beyond work and into the social world, it makes life itself precarious.

Judith Butler (2009) defines precarity as a condition that is socially produced by uneven exposure to specific economic and political rationalities (Butler 2009), while Guy Standing (2011) has argued that precarious workers constitute a distinct class, ‘the precariat’3. Precarity may be experienced by a delivery worker in the gig economy and an academic worker on temporary contracts, but these experiences should not be collapsed into identical vulnerabilities. Experiences of precarity are shaped

3 I do not use the term precariat because I do not see precarious workers as constituting a specific class, but rather, I understand precarity as a condition that is experienced across class, situated within different classes, occupations and industries, and shaped by gender and race.
by industry and occupation, and are socially differentiated by gender, race and class, producing both commonalities and differences (Lewchuk 2017; Campbell & Price 2016; Alberti 2012; Standing 2011; Vosko 2010; Clement et al. 2009). The prevalence of precarity creates opportunities for coalition building, if we are careful not to reduce it to a singular, quantifiable entity.

In using the terms *precarious knowledge worker* and *precarious university worker* throughout this report, I seek to highlight the continuum of precariousness in employment experienced by knowledge workers in various forms of temporary work. While mindful of the intersectional dimensions that constitute precarious workers as individuals and as a group, my move from precarious work to precarious worker seeks to highlight the productivity of labour arrangements in producing social conditions. *Precarious knowledge workers* are those who are in employment that is “not autonomously sustainable” (Clement et al. 2009, p.241), that is, work that is not viable without support or supplementation from other sources, whether family or social welfare. The presence or absence of these social supports is often seen as cushioning or amplifying the social risk of precarious work, consequently determining whether a worker in precarious work becomes a precarious worker (Campbell & Price 2016; Clement et al. 2009). What I seek to highlight however, is the impact of precarious employment in shaping particular kinds of workers as precarious in relation to professional identity, career stage and life course. The social dimensions of this precarity may be mitigated by the presence of other factors. This, however, does not change the way in which participation in particular forms of employment has become productive of occupational forms and identities that are shaped by precarity.

**Education Restructured**

The end of long-term government investment in higher education has meant that the system expanded through a neoliberal model based on student-centred markets (Connell 2019; TEQSA 2018a; Barcan 2013; Marginson and Consodine 2000; Marginson 1997). Direct government funding has been dramatically cut from around 80% of total university revenue in 1986, to just 40% in 2018 (TEQSA 2018a, p.10; Larkins 2012). The conditions of this funding have also changed so that it is directly indexed to student placements through the Commonwealth Grant Scheme (CGS) (DESE 2020c). This funding is proportional to the number of Commonwealth Supported Places (CSP) as it is intended to cover the balance for tuition fees financed through the debt-driven national loans scheme HECS-HELP4 (Parliament of Australia 2019, 2018).

Fees accounted for 44% of total university revenue for 2018, with 24% from local students and 21% from international students in full-fee paying courses (TEQSA 2018a). The combination of CGS, CSP and international student fees constitutes around 84% of university funding today. While the regulatory framework requires that these revenue streams are differentiated on a balance sheet in order to assess risk, in reality they are all dependent on a single variable: student enrolments.

In reporting on revenue and expenses, the federal agency charged with monitoring risk, the Tertiary Education Quality Standards Agency (TEQSA), states that: “[a] high reliance on a single source of revenue may impair a provider’s ability to respond effectively to changes in its operating environment” (TEQSA 2018a, p.20). Measuring resilience against economic shock through the diversification of revenue has become an important mechanism for demonstrating accountability and compliance. Despite the vulnerability of all major revenue streams to student markets, a point devastatingly demonstrated by the COVID-19 crisis in 2020, ‘revenue diversification’, however fictional, operates as a form of mandatory compliance whereby universities must demonstrate that they are not exceedingly dependent on a single source of income.

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4 As of March 2018, outstanding higher education student debt was an estimated $62 billion, up 13% from the previous year (Parliament of Australia 2019, 2018).
The changed funding environment has also impacted Research and Development, with research growth tied heavily to student revenue. Gross expenditure on Research and Development, as a % of GDP, has been falling since 2008, with a corresponding decline in Higher Education expenditure on Research and Development from 2012 (ABS 8111.0, 2016; OECD 2020). These trends are examined in detail by Frank Larkins:

Since 2012 the proportion of total university expenditure directed to research has declined from the 2012 level of 41.3%. For 2018 expenditure was down to 37.4%, a very similar level to 2008 at 36.8%. The R&D expenditure growth rate from 2012 to 2018 decreased to 4% p.a. from 9% p.a. for the previous period (Larkins 2020, p.4).

At the same time however, Larkins has shown that a growing share of total research expenditure between 2008 and 2018 was from university discretionary funds, rather than competitive grants (2020, pp.5-6). In 2018, the largest portion of this, 57% of the $6.2 billion of discretionary funds that universities committed to research, was from international student fees (Larkins and Marshman 2020). Current levels of investment in research and the volatility of the student-market mean research-only positions continue to be predominantly fixed-term and project-based.

Long before the introduction of the vocationally oriented ‘Job-Ready Graduates’ reform package under the cover of COVID-19 (DESE 2020b), the objectives of research and teaching had been increasingly instrumentalised (Connell 2019; Collini 2017; Taksa and Kalfa 2015; Larkins 2012), and re-oriented towards performance-based outcomes and ‘metric cultures’ (Connell 2019; Grealy and Laurie 2017). Taksa and Kalfa (2015) demonstrate that the introduction of graduate workplace attributes into learning outcomes for university courses involved significant change in the pedagogical organisation of academic work. Under the new regulatory requirements, academics were asked to modify course materials to foreground the acquisition of generic graduate workplace attributes, in contrast to the previous focus on the acquisition of disciplinary knowledge (Taksa and Kalfa 2015). This has been achieved through regulatory means, by making funding at the faculty level contingent on the university’s compliance with requirements for integrating graduate workplace attributes into course units (Taksa and Kalfa 2015).

The administration of Higher Degree Research (HDR) has been reorganised along similar lines, narrowing the scope of the research process to limited definitions of success and failure (Grealy & Laurie 2017). Grealy and Laurie (2017, pp.467-468) note that under the guise of simplifying the research process, changes to HDR candidatures have excluded and deemed failures those who do not or cannot produce the desired metrics within a specified timeframe. This shift has the potential for real, adverse impacts on students and research cultures, hollowing out research by removing the learning potential of experimentation and non-standard experiences (Grealy & Laurie 2017; Collini 2017).

Knowledge produced by universities has been exposed to increasing levels of industry orientation, bureaucratic influence and political interference. Research, and the income generated by it, is intensively measured through a range of indicators. These include macroeconomic measures of Higher Education Resources Devoted to Research (HERD) (ABS 8111.0, 2016) and Gross Expenditure on Research and Development (GERD) (ABS 8104.0, 2018), as well as more detailed measures of the research produced across the sector in the annual Higher Education Research Data Collection5 (HERDC) (DET 2019) and the Excellence in Research for Australia (ERA) exercise (Australian Research Council 2018). The outputs produced by these activities form the commodity basis of other industries that are attached to the university sector. Large publishing houses own numbers of pay-walled, academic journals, and research activities feed directly into the university rankings industry, which is influential in determining the status of universities internationally, and thereby influencing the revenue they are able to generate through student enrolments.

5 As of 2017, the Department of Education stopped collecting publication data for universities and now collects only research commercialisation and revenue data.
As Sheila Slaughter and Gary Rhoades (2004) illustrate in their book on academic capitalism, the boundaries between universities and corporations have become increasingly entwined through industry partnerships and privately funded research. The very definition of research has been subject to a market-oriented historical revisionism and procedural narrowing (Morrish and Sauntson 2016). Since 2017, government policy documents have adopted a scientific ‘research and development’ definition favoured by the OECD that is oriented towards income generating activities, and which strategically excludes countless creative fields and outputs (DESE 2019). In recent years, over $4 million in research project funding won by individual recipients through the highly competitive, peer-reviewed Australia Research Council grants scheme have been revoked through direct ministerial intervention (Piccini & Moses 2018).

Professional Formation and Intellectual Labour Process

Universities are institutions concerned primarily with knowledge, whether creating new knowledge through research or the transfer of existing forms of knowledge through teaching. Both research and teaching involve what Raewyn Connell terms ‘a composite labour process’ (2018, pp.18-19 and pp.46-48). This refers to the way that the work is divided into two complementary segments, one involves an intensive process of working through the material, the other an externally facing process of disseminating and broadcasting. This composite labour process unfolds in and is sustained by a social logic, creating the ‘research-based knowledge formation’ (Connell 2019, pp.24-30). In The Good University, Connell describes this formation as:

> a socially organised body of information, concepts, methods, norms of truth, genres of communication, and applications; persisting through time, and capable of developing itself. A knowledge formation, in other words, is an epistemology in its practical existence (2019, p.24).

The reproducibility and development of the knowledge formation through time is dependent on the reproduction of the workforce. The university workforce, a labour formation Connell calls the ‘collective intellectual’, is central to the intellectual labour process that produces knowledge (Connell 2019; Connell 2015; Connell & Crawford 2007; Connell 2006). Knowledge created through the intellectual labour process is produced within a social context that requires the cooperation and coordination of thousands of people around the world (Connell 2019; Connell 2015; Connell & Crawford 2007; Collyer et al 2019).

The networks which make the intellectual labour process possible on a global scale hold vast amounts of institutional knowledge, but they are shaped by an uneven geopolitical landscape structured by economic inequalities between North and South, and by gender, race, and class differences. As these networks are generally informal, built on cooperation rather than coercion, they cannot be fully captured by bureaucratic methods of measurement, evaluation, and accounting, and attempts to do so can damage them or result in their destruction (Connell 2019; Connell & Crawford 2007; Connell and Wood 2002; Collyer et al 2019).

The intellectual labour process of knowledge work is closely connected to professional identity formation. Professional identity formation is multi-dimensional and does not neatly correspond to work roles, let alone task-to-time units. It can be centred around an occupational identity (academic, lecturer, tutor) or a disciplinary orientation (biologist, historian, mathematician). Quite often it is both, with different labels being used in different contexts.

Professional identity among knowledge workers is being reshaped by precarious employment, to the extent that it is possible to speak of an emerging professional identity that is defined by the experience of precarious employment. In recent years, employment precarity has become an important qualifier of academic work, with labels like ‘casual academic’ and ‘sessional tutor’ being used more frequently. The depth and breadth of experience within a range of temporary employment arrangements makes professional identity formation among precarious knowledge workers complex and multifaceted. The emergence of new expressions of
identity and professional formation among precarious knowledge workers is noted in Brown, Goodman and Yasukawa’s report, with casual staff described as forming “their own milieu” within the institutional context (2006, p.40; Brown et al. 2010).

Despite their professional experience and vocational commitment, precarious academic workers have inadequate access to resources and are excluded from important dimensions of the work process due to their marginal status, leading to a sense of being “isolated and expendable” (Brown et al. 2006, p.38; Bousanquet et al. 2017, pp.899-900). As a result of their employment arrangements and institutional isolation, precarious academic staff are excluded from full identification with academic professional identity and are under-recognised by their permanent colleagues as contributors to the knowledge production process (Brown et al. 2006, p.37). Lack of recognition of “casuals as co-professionals” and of “casuals’ professional status” leads to perceptions of being “second-class citizens” and suggests the emergence of a class consciousness among precarious workers in the academy (Brown et al. 2006, p.37, p.40-41; Brown et al. 2010).

Changing perceptions of academic professional identity are connected to changes in the organisation of academic work (McCarthy et al. 2017; MacFarlane 2011; Churchman 2006). The current organisation of academic labour in the modern university, with its heavy reliance on precarious employment and ‘just-in-time’ production, jeopardises the sustainable reproduction of the workforce and reshapes the relationship between the intellectual labour process and professional identity formation. One of the ways this occurs is through the imposition of management principles designed to reorganise the temporality of knowledge production into measurable units by breaking down the intellectual labour process down into parts (Thomas et al. 2020; McCarthy et al. 2017; Bond & O’Byrne 2013; MacFarlane 2011; Churchman 2006). Previously complex work processes and job profiles are reorganised into discrete task units.

The traditional ‘balanced’ academic role is comprised of teaching, research and service. Formally institutionalised under the unified national system introduced in 1988, the “40:40:20” work allocation of the ‘balanced’ role required academics to undertake an equal amount of teaching and research. However, work role specialisation for continuing academic roles has been increasing since 2009, with a larger proportion of new appointments defined as ‘teaching-only’ or ‘research-only’ (Goodman et al. 2019; Probert 2013; MacFarlane 2011). The associated growth of temporary work means precarious knowledge workers are employed on contracts comprised of tasks that have been devolved from the ‘balanced’ academic role and reorganised as individual task-to-time units (Goodman et al. 2019; McCarthy et al. 2017).

Despite the reconfiguration of intellectual labour into specialised task-to-time units and the growth of contractual employment, knowledge workers paid to perform precise units of labour work well in excess of the compensation received for the task itself. This occurs in various ways, including, though not exclusive to, work completed to task units remunerated by inadequate time units, the addition of task units, including work expected in a voluntary capacity, without additional remuneration, and importantly, participation in the production of research-based knowledge outside the scope of task-to-time unit.

While the tasks that precarious knowledge workers are employed to perform as individual units are monetarily compensated as such, they remain interwoven into a complex intellectual labour process in which the temporal boundaries are determined by the task rather than the time unit (O’Carroll 2015; Connell 2015; Roggero 2011; Connell & Crawford 2007). The temporal pattern of knowledge work is such that the boundaries between each task, and between work and non-work time, are ‘blurred’, constituting a temporal slippage between one task and another that Aileen O’Carroll calls ‘spaghetti time’ (O’Carroll 2015). The application of expert knowledge to the labour process intersects with the ethical dimensions of the profession. This means that despite the allocation of remuneration to time units, the labour process cannot be detached from the temporality of the task nor separated from the ethical requirements of the profession (Thomas et al. 2020; O’Carroll 2015; Roggero 2011). Despite the fragmentation of work roles, professional identity remains connected to an intellectual labour process that is socially organised, occupationally specific, and bound by discipline and field.
Externally imposed temporal limits create what McKenzie Wark calls “the artificial imposition of scarcity”, aimed at reducing knowledge “to a temporally defined unit of measure” (Wark discussed in Roggero 2011, p.74). While the imposition of time scarcity does not produce conformity to the allocated time for the task, ‘fictional’ task-to-time units consistently lead to an excess of working time (Morrish 2019). Confronted with unrealistic time allocations for the completion of tasks, which in practice are either impossible to achieve or which would seriously undermine the integrity of the work if achieved, precarious knowledge workers subsidise the task with their unpaid time, resulting in vast amounts of wage theft, a phenomena that the UK’s University College Union (UCU) terms ‘time-laundering’ (Morrish 2019, p.30).

Precariously employed academics who undertake casual teaching, for example, are paid on casual teaching-only contracts which calculate pay based on whether the task is lecturing, tutoring or marking, and the time allocated for that task (DESE 2020a; Dados et al. 2019). These rates are determined when appointees sign a contract at the beginning of semester that allocates a set number of hours for each activity, regardless of how much work they actually do. Time allocations for the composite components of the teaching-related work, for example preparation and marking, are wound back so severely as to be barely paid at all. A recent investigation by the national broadcaster has revealed systemic underpayment of casual teaching staff is rampant at Australian universities. In some cases, work has been miscategorised and paid at a lower rate, in others, staff are given such unrealistic time frames to complete tasks that they are barely compensated at all for the work they actually do (ABC 2020).

Academics’ sense of self, and the consequent formation of professional identity, are often tied to activities like research that are seen as substantive and giving meaning to their labour (Bousanquet et al. 2017; Osbaldiston et al. 2016 p.746). As research and the development of expert knowledge continue to inform professional identity formation among precarious knowledge workers despite the fragmentation of work organisation and work roles, the participation of precarious academics in the production of research outputs expends labour time that is always in excess of the compensation received. Precariously employed knowledge workers contribute to the production of research-based knowledge in the form of publications and non-standard outputs that are not monetarily compensated within their paid employment. The higher education system leverages the labour insecurity of academics in precarious employment against their professional identity and career aspirations, capturing unpaid labour time and intellectual outputs, and adding value to the knowledge economy in the process.

Internationally, many universities are collaborating on strategies to meet the UN’s Sustainable Development Goals (2018) and to demonstrate compliance with this initiative. Yet, they are in the midst of their own “gathering crisis of sustainability” (Connell 2019, p.72). University employees in temporary work have borne the brunt of cost-cutting and risk-shifting arrangements, on a scale that precarious knowledge workers are characterised as the “generation lost to casualisation” (May 2011). By failing to prioritise the sustainable reproduction of the workforce, universities risk damaging the social fabric that holds the “research-based knowledge formation” together and makes the production of knowledge possible over time (Connell 2019).
One of the difficulties of studying the impact of precarious work on knowledge production is determining the exact number of casual and fixed-term staff engaged in insecure work who contribute to research. This is partly because the most comprehensive data published on the university workforce, biannually by the Department of Education, Skills, and Employment (DESE, formerly Department of Education and Training), does not provide a headcount figure for the workforce. Headcount workforce data published by the Workplace Gender Equality Agency (WGEA) goes some way to remedy this, but it does not correspond to the employment classifications and functions used by DESE. WGEA data (2018) shows that by headcount, staff in insecure employment (casual and fixed-term) accounted for 67% of non-managerial university employees in 2017. This is compared to the official workforce figure of 48% published by DESE (2018a; see Figure 3).

Leaving the question of measure aside, it remains impossible to attain a true picture of precarity in the sector through the use of workforce data alone. This is because the available data measures employment within specific roles at fixed points in time. It is not designed to capture the duration of precarious work, movement between roles or contracts, overlapping or multiple roles, and periods of unemployment for insecure workers. Workforce data alone does not reflect the scale of precarity.

Added to this, employment classifications do not capture the complexity of professional identity, its formation and fragmentation. While university employees in precarious work may publish research outputs and identify professionally as academics, they are not necessarily classified as academics or paid at academic scale rates, which are supposed to account for training, skills, and level of expertise. This is one small aspect of the broader erasure of the precarious workforce from research metrics. Research data collections abstract the intellectual labour process into quantifiable outputs, displacing both the intellectual labour and the knowledge workers involved in the process. In published research data collections, this displacement makes precarious labour and its products very difficult to trace.

Survey and interview data address some of the knowledge gaps about the composition of the precarious university workforce and their contribution to research. While the volume of survey-based research is small, it provides an important resource on the experience, aspirations, and professional identity of university employees in precarious work. Available data includes quantitative studies focused on casual and fixed-term employees (Junor 2004), and wider surveys of university staff which include data on this cohort (Strachan et al. 2012; Bexley et al. 2011; McInness 1999). Trade union research (NTEU 2012), and work produced by disciplinary associations (Fathi & Megarrity 2019) and Casuals Networks (UNSW Casuals Network 2020; University of Sydney Casuals Network 2020) also make important contributions to closing the knowledge gap. Interview-based research adds another dimension to understanding the experiences of the precarious university workforce, demonstrating the complexity of relationships and aspirations, as well as the scope of working arrangements and engagement with the profession (Goodman et al. 2019; Bousanquet et al. 2017; Cannizzo 2017; May 2014; Brown et al. 2006).

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6 The most recent figures available from DESE are for 2017, and for 2018 from WGEA.
Measuring Precarity

Official data is reported annually by the Department of Education, Skills, and Employment (DESE, formerly Department of Education and Training), and the Workplace Gender and Equality Agency (WGEA). While neither agency publishes a headcount figure that permits an assessment of the scale of precarity based on the statistical data, viewed together, the two sets of data provide useful information on patterns of insecure work in higher education.

The data published by DESE is based on full-time equivalence (FTE). This is a measure of resources that aggregates casual and fractional-time workloads into full-time units (DESE 2020a). One FTE could be equivalent to as many as 5 fractional time staff. The picture is more complicated for casual teaching-only academics whose workload is aggregated as FTE through different formulas based on the type of activity undertaken (DESE 2020a). Calculating casual teaching FTE in this way presents a number of problems, in particular, there is a risk that the aggregation of workload activities using these methods leads to the inclusion of individual FTE units in which weekly working hours exceed an average 35-hour working week (for a detailed discussion see Dados et al. 2019 and Yasukawa & Dados 2018).

Regardless of how it is calculated, the FTE construct does not reflect, and is not intended to reflect, the true size of the casual and fixed-term workforce. Headcount data, more useful for this purpose, is published by the Workplace Gender Equality Agency (WGEA 2018). This data is reported by 43 universities and published by the agency each year. This data provides information on workforce profile by contract and mode of employment. The data is organised by major occupational groupings under the Australia and New Zealand Standard Classification of Occupations (ANZSCO) and separated into managerial and non-managerial occupations. Academic workers are counted in the major non-managerial category, ‘professionals’. In the absence of specific details about role or classification, and in light of the broadness of the category ‘professionals’, it is not possible to determine the exact proportion of academic and non-academic workers included within.

Another issue that arises when working with statistics published by the Department of Education, Skills, and Employment and the Workplace Gender and Equality Agency relates to the question of reporting dates. The data collected captures only those casual and fixed-term employees in employment on an assigned reporting date each year. The reporting date provides a snapshot of the workforce at a fixed point in time, potentially missing long-term casual and fixed-term employees who are not in employment on a given data collection date, regardless of the number of years they may have been re-employed.

For 2017, DESE reported casual full-time equivalence (FTE) to be a combined 23,205 for both academic and general staff in a total workforce of 129,493 FTE (DESE 2018a). This puts casual FTE at 18% of the university workforce. By comparison, fixed-term employment for 2017 was 38,671 FTE, 30% of the workforce, and continuing employment was 67,292 FTE, 52%. While continuing FTE has been contracting, casual FTE has risen annually from around 7% in 1990 (see Figure 1).

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7 The explanatory notes and glossaries on the use of full-time equivalence as a measure of staff resources and its calculation can be found on the Heimshelp website (DESE 2020a).
8 The University of Divinity, which has a small workforce of under 100 employees, does not provide data to the WGEA.
9 The data reported here was provided by the WGEA as a public data file, on request in April 2019. This file contains information on all organisations that report to the agency. The data reported here has been extracted from the public data file and is for 43 universities for 2017-2018. The list of universities included in this analysis can be found in Appendix 2.
Casualisation within the university workforce is also differentiated by employment classification, with academic classifications having a higher proportion of casual FTE, at 24%, compared to non-academic classifications which have a casual FTE of 13%. Casual academic employment is concentrated in teaching. In 2017, casual FTE was 77% of teaching-only employment, 8% of research-only roles, and 1.8% of combined teaching-and-research roles (DESE 2018a).

The FTE data from DESE shows continuing employment as the largest employment category at 52% of the workforce (DESE 2018a). By contrast, combined casual and fixed-term employment is 48% (DESE 2018a). These proportions differ in important ways when headcount data from the WGEA is considered, with the casual proportion of the university workforce by headcount almost four times greater than the FTE figure (NTEU 2018a, 2018b, 2016). Table 1 below shows the number and proportion of staff in each mode of employment by FTE (DESE 2018a) and headcount (WGEA 2018).

<table>
<thead>
<tr>
<th>Source</th>
<th>Casual</th>
<th>Fixed-term</th>
<th>Continuing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESE 2017 Full-time equivalence</td>
<td>23,205 (18%)</td>
<td>38,671 (30%)</td>
<td>67,292 (52%)</td>
<td>129,493</td>
</tr>
<tr>
<td>WGEA 2017 Headcount</td>
<td>94,639 (47%)</td>
<td>39,153 (19.5%)</td>
<td>67,087 (33.4%)</td>
<td>200,879</td>
</tr>
</tbody>
</table>

Table 1 Mode of Employment by FTE and Headcount. Source: DESE (2018a), Selected Higher Education Statistics – Staff Appendix and WGEA (2018).
Casual staff comprise 47% of the non-managerial university workforce by headcount (WGEA 2018). While fixed-term and continuing staff numbers do not vary greatly from those published by DESE, the large number of casual employees means the workforce figure by FTE is roughly two-thirds of the headcount figure (DESE 2018a; WGEA 2018). When casual employment is viewed by headcount, it changes the relative workforce proportions for fixed-term and continuing staff, as can be seen in Figure 2 below.

Comparatively, this means that by headcount, precarious university workers are the majority of non-managerial employees, at 67% of the workforce (WGEA 2018). Staff in permanent employment comprise only 33.4% (WGEA 2018). The contrasting share of secure and insecure employment by FTE (DESE 2018a) and headcount (WGEA 2018) can be seen in Figure 3 below.

![Mode of Employment (%)](image)

*Figure 2 Mode of Employment by FTE and Headcount. Source: DESE (2018a), Selected Higher Education Statistics – Staff Appendix and WGEA (2018).*

![Casual vs Insecure](image)

*Figure 3 Secure vs Insecure work by data type and source. Source: DESE (2018a), Selected Higher Education Statistics – Staff Appendix and WGEA (2018).*
While around three fifths of the workforce are female (as reported by DESE 2018a, WGEA 2018), the distribution by gender and mode of employment for both DESE (2018a) and WGEA (2018) shows that female employees are also more likely to be in casual, part-time (fractional) or fixed-term (contract) work. Female employees comprise more than half of casual FTE (DESE 2018a) and around three fifths of employees in casual and fixed-term employment (WGEA 2018) (see Figure 4 and Figure 5).

**Figure 4 Gender distribution by mode of employment, % based on full-time equivalence (FTE). Source: DESE (2018a), Selected Higher Education Statistics – Staff Appendix.**

**Figure 5 Gender distribution as % of workforce**

DESE provides an age profile of the full-time and fractional full-time university workforce, showing a concentration of employees in the 30-60 year age range. Figure 6 below shows the gender distribution and the total number of employees within each age bracket.
While neither DESE or WGEA provide an age profile of the precarious academic workforce, data from other surveys suggests that those in insecure modes of employment are more likely to be younger. 43% of sessional academics and 49% of academics on short-term contracts surveyed by Bexley, James, and Arkoudis (Bexley et al. 2011, p.38 and p.41) were under 40 years of age. 59% of the sessional teaching cohort in the Work and Careers survey were under 40 compared to 38% of total survey respondents (Strachan et al. 2012, p.7 and p.59). In the NTEU's survey of casuals (2012, p.10), 36% of respondents were aged under 40.

**Previous Studies of Precarious Knowledge Workers**

Parallel to research on the size of the precarious university workforce, surveys and interviews have explored the demographic characteristics, experience and aspirations, and professional identity of this cohort. While only a small number of quantitative studies have focused on casual and fixed-term employees (NTEU 2012; Junor 2004), several wider surveys of university staff include data on this cohort (Strachan et al. 2012; Bexley et al. 2011; McInnes 1999). In addition to trade union research (NTEU 2018a, 2016, 2012), work produced by disciplinary associations and Casuals Networks adds another dimension. These include an online survey and report with 153 historians in casual employment produced by the Australian Historical Association (AHA) (Fathi & Megarrity 2019), and a working paper on the rise of contingent employment and possible responses to it from the Australian Sociological Association (TASA) (Natalier et al. 2016). More recently in the context of COVID, the UNSW and USyd Casuals Networks have published reports based on surveys of their members (UNSW Casuals Network 2020; USyd Casuals Network 2020). Interview-based qualitative and mixed-methods studies of casual academics (May 2014; Brown et al. 2006) and early career academics (Goodman et al. 2019; Bone 2017; Bousanquet et al. 2017; Cannizzo 2016) provide additional sources of data.

As the number of quantitative studies of the contingent academic workforce are small, and vary in sample size and target population, as well as methods and research design, it is difficult to generalise about the characteristics of this workforce with any degree of certainty. There is also the added difficulty of matching the survey profile to the population, given the prevailing labour insecurity of these employment arrangements (Bexley et al. 2011, p.11). Despite these limitations, large-scale surveys of the precarious knowledge workforce are essential to build an empirical base from which to examine precarious employment in higher education.

Representative data is required to understand the following:

- The proportion of temporary workers in casual and/or fixed-term employment who hold higher degrees and seek a tenured academic role but are unable to find secure employment
- The proportion of PhD qualified precarious knowledge workers who have been in casual or fixed-term employment for 3-5 years and longer
The proportion of precarious knowledge workers who support themselves entirely through casual and/or fixed-term work, their forms of employment, and the duration of these arrangements

The contribution to research made by precarious knowledge workers

The value of unpaid labour time contributed by precarious knowledge workers on an annual basis

It is not possible to provide definitive answers with the existing data, however it is possible to demonstrate a range of potential proportions on some of these issues. Table 2 below provides an evaluative summary of data from five different surveys to approximate the proportion of precarious workers in each of the following categories: (1) studying for higher degrees, (2) in precarious employment for more than three years, (3) would prefer continuing employment. This is intended as evaluative rather than comparative, since the original survey categories cannot be standardised for a true comparison. Additional explanatory notes have been provided.

Table 2 Evaluation of available survey data on the precarious knowledge workforce

<table>
<thead>
<tr>
<th>Survey</th>
<th>Sample and Administration</th>
<th>% HDR students</th>
<th>% insecure &gt; 3 years</th>
<th>% preferring continuing</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEU (2012)i</td>
<td>1243 casual academics (teaching and research). Online administration and accessible regardless of union affiliation.</td>
<td>44</td>
<td>62</td>
<td>58</td>
</tr>
<tr>
<td>Strachan et al. (2012)</td>
<td>2198 sessional teaching staff. 2198 sessional teaching staff of total survey responses of 21994 academic and professional staff at 19 universities. Online administration for sessional teaching staff.</td>
<td>54</td>
<td>31</td>
<td>54</td>
</tr>
<tr>
<td>Bexley, James &amp; Arkoudis (2011)i</td>
<td>622 casual academics 181 short-term academics 803 (622 casual and 181 short-term) of total survey responses of 5525. Online administration at 20 universities.</td>
<td>49</td>
<td>47</td>
<td>21</td>
</tr>
<tr>
<td>Junor (2004)ii</td>
<td>1337 casual academics 67 short-term academics 1128 casual general staff 123 short term general staff 2494 casual academic and general staff. 195 short-term academic and general staff. Written survey administered at 5 universities.</td>
<td>27</td>
<td>+40</td>
<td>55</td>
</tr>
<tr>
<td>McInness (1999)iii</td>
<td>464 casual and part-time academics. 464 casual and part-time academics of total survey responses of 2609. Written survey administered at 19 universities in 5 states.</td>
<td>20</td>
<td>n/a</td>
<td>30</td>
</tr>
</tbody>
</table>

i NTEU (2012) survey - The percentage preferring continuing employment is the proportion of respondents who aspired to an academic career and nominated a preference for full-time continuing employment, see Table 2, p.7. For student status see Table 1, p.6. For number of years in insecure work see Table 4, p.5.

ii Bexley, James & Arkoudis (2011) survey - The percentage of HDR students in the casual and short-term samples includes 3.5% undergraduate students for the casual cohort, and 3.1% undergraduate students for the short-term cohort, see Table 10, p.38 and Table 13, p.41. The percentage preferring continuing is based on the proportion of respondents who selected the main reason for their current employment arrangements as "no ongoing academic career options are available" – see Table 12, p.39 and Table 16, p.4. For years in insecure work, see Table 10, p.38 and Table 13, p.41.

iii Junor (2004) - The percentage of HDR students includes undergraduate students, see Table 4, p.286 and Table 5, p.287. The percentage preferring continuing in insecure work for more than 3 years was calculated from Figures 2 and 3 (pp.292-293). Figure 5 (pp.298-299) provides another breakdown of the proportion of casual academics in each category of tenure, however, this was not used as it does not correspond to the categories in Table 2 above. For proportion preferring continuing see Table 2, p.285, with further detail in Table 6, p.288, and Table 7, p.289.

iv McInness (1999) - Figures are approximate and based on the following (1) 30% said they were in casual or part-time work because “a full-time position was not available” (p.49) and, (2) “twenty percent had chosen part-time positions because they were working on a doctorate” (p.49).
The evaluation of existing survey data challenges the common assumption that casually employed university workers are students. Bexley, James, and Arkoudis found that only 48.9% of the sessional cohort were studying and only 20.1% of this cohort used sessional work “as a source of income while studying”, leading them to conclude that this was “far less than fits the often prevalent assumption that most sessional academics are HDR students” (Bexley et al. 2011, pp.37-38). Only one of the surveys evaluated had the student cohort at over 50% of the total sessional academic sample (Strachan et al. 2012), and another at over 50% for the casual general staff sample (Junor 2004).

On average, two fifths of respondents across the surveys indicated having been in insecure employment for three years or more. Junor assesses the long-term duration in casual employment in detail, finding that 20% of casual academics had been employed for more than five years, and 20% for more than ten years (2004, pp.298-299). More recent reports by the USyd Casuals Network (2020) and the UNSW Casuals Network (2020) have demonstrated the persistence of this pattern:

When analysing the length of time casuals have been employed in the higher education sector, one in three casuals surveyed (35.2%) said that they have been casually employed for six to over ten years in the higher education sector. Similarly, the UNSW casuals survey also found equivalent results amongst its casual cohort, with almost one in three respondents (31.4%) employed in the higher education sector for five or more years (UNSW Casuals Network, 2020). This is indicative of a much greater issue not just for the University of Sydney, but for the Australian higher education sector as a whole, reflecting a lack of opportunities to transition from casual to permanent work (USyd Casuals Network 2020, p.11).

Junor gives the median duration of casual academic employment as 3.6 years, “with an interquartile range of 1.5 to 8 years” (2004, p.298). While the AHA survey found that the proportion of PhD qualified academics in casual employment begins to decline after three years post-PhD (Fathi & Megarrity 2019, p.8), other studies show that PhD qualified knowledge workers are more likely to have been in insecure work for three years or more. Junor found that 40% of qualified academics had been in insecure employment for three years or more, compared to 30% of those who were undertaking study (Junor 2004, p.291). Similarly, the Work and Careers Survey found that 45% of those with a PhD, compared to 28% who were studying for a PhD, had been in precarious employment for longer than three years (Strachan et al. 2012, p.65).

Findings related to level of qualification and employment duration make pay scale and progression particularly significant. The available data certainly cautions against the assumption that that the majority of precarious knowledge workers are ‘academic apprentices in training’. Indeed, a significant proportion of this cohort are PhD-qualified professionals with a duration of employment of 3-5 years. Casual pay arrangements significantly undervalue the level of experience and expertise of these employees (Tweedie 2013; Junor 2004). In some cases, precarious knowledge workers who contribute to research may identify personally and professionally as academics, but they are not necessarily employed, or paid, under the Academic Pay Schedule. The lack of a Pay Schedule that correctly identifies and remunerates the expertise and experience of precarious knowledge workers signals the absence of comparative wage justice, despite the stated egalitarian principles of the Australian Industrial Relations System (Tweedie 2013; Junor 2004). The current wage structure for precarious knowledge workers means that even if they have the same level of experience and expertise as their continuing colleagues, they are paid at a lower rate (Tweedie 2013; Junor 2004), creating, in Junor’s words, “a strong case for incremental steps in casual academic employment” (2004, p.298).

Available survey data raises concern about the amount of unpaid time that precarious knowledge workers spend on various tasks. A survey of casuals conducted by the NTEU (2012, p.4), found that for 56-58% of respondents, the pay received to prepare lectures was insufficient for the time spent. 35% and 50% of respondents respectively, said the pay they received to prepare tutorials and demonstrations did not cover the actual time spent (2012, p.4). In addition, after they had received their final payment, 82% of participants had responded to emails or student enquiries on their university email address, 54% had responded to phone calls.
and emails in the workspace provided by the university, 83% had responded to emails and phone calls on their own equipment, and 72% had undertaken other work-related activities (NTEU 2012, p.9). Up to one quarter of respondents undertook or participated in induction sessions, student consultations, development and training, and meetings and events in an unpaid capacity (NTEU 2012, p.9).

The findings of other surveys reveal similar patterns. 87% of 153 respondents in the Australian Historical Association’s survey said that their paid hours “required ‘invisible’ and unpaid extra hours of work to be completed” (Fathi & Megarrity 2019, p.10). Of these respondents, 35% undertook 5-10 hours of unpaid work per week and almost 22% undertook over 10 hours of unpaid work per week (Fathi & Megarrity 2019, p. 10). Bexley, James, and Arkoudis found that casual/sessional academics routinely undertake “unpaid marking and overtime”, including being available to students outside of paid workdays and waiting for contracts in between semesters, with both activities not recognised by their institutions (Bexley et al. 2011, p.47).

The incidence of unpaid labour time is also a feature of the experience of respondents in Junor’s (2004) survey. While only 26% of survey respondents said they were required to undertake professional reading, 77% of this cohort said the activity was partly or wholly unpaid (Junor 2004, p.298). 21% of respondents said they were expected to attend seminars, conferences, and professional development activities with 69% reporting that these activities were partly or wholly unpaid (Junor 2004, p.298). 18% of respondents said they were expected to conduct research and publish, with 62% stating that these activities were partly or wholly unpaid (Junor 2004, p.298). 10% were engaged in research supervision, with 58% stating that this was partly or wholly unpaid (Junor 2004, p.298).

Data about the amount of research that precarious knowledge workers undertake, and their motivations for doing it, remains limited. As noted above, Junor found that 18% of respondents were expected to conduct research and publish, with 62% stating that these activities were partly or wholly unpaid (Junor 2004, p.298). McInness (1999, p.56) surveyed casual and part-time academics about the reasons they conduct research, finding that 88% of respondents reported it was because they “enjoy it, it motivates you, and it interests you”, 37% “to get publications”, 35% to increase the department’s income or profile, 51% to increase their chances of tenure or security, and 51% “to give inputs and stimulus to your teaching”. The Australian Historical Association’s survey (Fathi & Megarrity 2019, p.11) found that 83% of casual academic respondents “tried to remain ‘research active’ beyond their casual position” with around two fifths of respondents stating that they spent around 20 unpaid hours or more per week on this.

Bexley, James, and Arkoudis found that “over 80 percent of short-term contract academics undertake research” (Bexley et al. 2011, p.42), with 76.8% indicating that their work is essentially ongoing. This, the authors argue:

> ...points to this group being the so-called ‘lost generation’: generally PhD qualified, continuously employed, research active academic staff also undertaking lectureships, who, while otherwise fitting the profile of the ‘traditional’ academic are on short-term contracts with little job security. (Bexley et al. 2011, p.42)

This pattern of insecure employment among qualified professionals also impacts research support. McInness (1999, p.53) found that 25% of casual and part-time respondents were hindered or greatly hindered by lack of departmental support for their research, and 23% were hindered or greatly hindered by inadequate research equipment. Significantly, 55% of casual and part-time respondents reported being hindered or greatly hindered by difficulty in obtaining funding, compared to 48% of those in full-time work (McInness 1999, p.53). 45% found their teaching load impacted their ability to undertake research (McInness 1999, p.53).

The provision of practical resources for casual academics provides further challenges and contributes to the structural invisibility of precarious workers (Tweedie 2013; Brown et al. 2013; Junor 2004). The NTEU survey (2012, p.8) found that 50.4% of respondents had access to a space for student consultation, 9.8% to a personal
office, 65.1% to a shared office, 30.2% to a personal computer, 53.8% to a shared computer, 51.4% to out of hours office access, and 56% to a landline phone.

Many of the survey findings regarding unpaid work, access to resources, and motivations and aspirations are reflected in qualitative research about the experiences of precarious knowledge workers (Cannizzo 2017; May 2014; Brown et al. 2006.;). In their ‘City University’ case study which comprised 25 interviews with casual academics, Brown, Goodman, and Yasukawa (2006, p.22) found that many of the participants worked hours well in excess of the amount of pay they received, stating that, “[i]n terms of working time, the overwhelming majority of interviewees felt that the hours allocated in their contract in no way reflected the amount of work they did.” In some cases, this intersected with inadequate institutional resources and other incidental costs related to their work, leading one participant to describe the income from casual academic work as a ‘negative earning issue’ (Brown et al. 2006, p.22). This was compounded for many casuals, particularly those who chose to work from home in response to inadequate resources, by a sense of isolation from the university community (Brown et al. 2006, p.34-35).

While the studies presented here extend across a twenty-year period, many of the issues impacting and motivating knowledge workers in precarious work are unchanged. Job security remains a key concern, access to resources is uneven, and there is a lack of recognition of both the extent of unpaid work and its impacts on career development and professional identity. Experience and expertise are required for employment, but they are significantly undervalued, with proportionate remuneration decreasing as the level of experience increases. Academics in precarious work engage in research and produce outputs that are often unpaid and unrecognised. There are many factors shaping this process, among them the pressure to publish in order to be employable, the importance of scholarly and disciplinary knowledge and expertise to professional formation, and personal motivation and enjoyment in the research process.

**Knowledge Production and Research Outputs**

The social value of knowledge changes over time. Access to knowledge is determined by state formation, restricted by social class, race, and gender, and shaped geopolitically by the histories of imperialism and colonialism (Connell 2019; Forsyth 2017; Thornton 2014; Pietsch 2013). Expanded access to education as part of the post-war settlement, particularly in the Global North, corresponded with a more equitable redistribution of knowledge resources and the social benefits of education and research (Connell 2019, 2009; Forsyth 2017).

Since the 1970s, higher education institutions and academic research have been reoriented towards market rationalities. This has occurred through a dual-movement, the expansion of the system, sometimes referred to as ‘massification’, and its marketisation and commodification (Connell 2019, 2009; Collini 2017; Thornton 2014; Forsyth 2014; Barcan 2013; Marginson & Consodine 2000; Marginson 1997). Individual participation in education has been redefined away from building social capacity, and towards personal investment, as funding has become a form of value creation rather than part of a social contract. In identifying what he calls the “fatal conceptual error” of the transactional higher education funding system introduced in the UK, Stefan Collini (2017) highlights the institutional vulnerability this has created and the threat it poses to the sustainability of knowledge for future generations:

…the new university funding system … treats the fee as a payment by an individual customer to a single institutional provider for a specific service in the present. By contrast, the proper basis for funding education is a form of social contract whereby each generation contributes to the education of future generations. It cannot be for a specific service because the ‘customer’, in the form of the student, is not in a position to know in advance exactly what benefit they may obtain from a university education. And it cannot really be to a single institutional provider because each university is only part of the world of
learning: none of what they provide for their students would exist except for the work of many people over many generations in many other institutions. What we call a ‘fee’ is not really the price of a product: it is an undertaking to contribute to the costs of the system. (Collini 2017, chapter 11, part II).

As sites for the transfer of knowledge through education, and the creation of new knowledge through research, universities are central to the struggles over the social value of knowledge, its production and circulation. Knowledge created at universities is a social product and a part of the knowledge commons (Connell 2019; Collini 2017; Roggero 2011). Its production is marked by both resistance and compliance. The social and economic reorganisation of public universities has increased contestation over the social value of knowledge and led to resistance against markets in education (Goodman et al. 2019; Connell 2019; Collini 2017; Connell 2015; Thornton 2014; Marginson 1997).

University workforces are central to the intellectual labour process that makes the transfer and creation of knowledge possible (Connell 2019; Collyer et al. 2019; Grealy & Laurie 2017; Forsyth 2017; Collini 2017; Morrish & Saunston 2016; Lynch 2015; Barcan 2013; Gill 2009). Yet the distribution of economic value created by universities is inequitable, hierarchically oriented towards university executives. As the workforce has increased in size, its working conditions have deteriorated, with the transfer and production of knowledge often undertaken by precarious, low-paid knowledge workers in positions of economic precarity. Over the same period, the managerial workforce has installed itself as “a permanent administrative class”, receiving salaries on par with the corporate world (Schwartz 2014, cited in Connell 2019, p.128; Forsyth 2014).

With higher education institutions now expected to perform as market actors, knowledge has become a commodity that adds value to institutions, and a target of instrumentalisation and measurement (Connell 2019; Collyer et al. 2019; Grealy & Laurie 2017; Morrish & Saunston 2016; Lynch 2015; Gill 2009). Commodification, instrumentalisation, and measurement are made possible through a process of alienation, in which the outputs of intellectual labour are separated from the workforce that produces them (Roggero 2011, pp.68-74). Gigi Roggero describes a process of dereferentialisation, one which involves not only the alienation of living knowledge, but in which knowledge becomes an abstract concept, “deprived of a precise referent” (2011, pp.68-74). Like ‘culture’ or ‘excellence’, ‘knowledge’ circulates as a concept that is vested with economic value but emptied of the social dimensions of its production (Roggero 2011, pp.68-74).

Universities are often represented as egalitarian, democratic sites of knowledge production, organised as collegial milieu of cooperative work and shared values. This cooperative organisation of knowledge production, however, is increasingly controlled through hierarchical managerial processes. Indeed, the collective composition of the intellectual labour process makes universities particularly vulnerable to the reinscription of knowledge as an economic value emptied of its social dimensions, and the translation of a collective process into a series of outputs. This is primarily because the ownership of knowledge is collectively vested in social networks, in the institution and in the sector. In this cultural exchange, the institution circulates in place of the workforce as the locus of the production and circulation of knowledge. In an egalitarian sense, this signals collective ownership, but in the neoliberal world, the social dimensions of the intellectual labour process are reinscribed simply as outputs attributable to an enterprise, ultimately transforming the collective endeavour of knowledge production into an abstract output, ‘knowledge’.

This process is keenly observed in the auditing of university research. The annual Higher Education Research Data Collection (HERDC) (DESE 2019) organises information about published research as a balance sheet of production, according to the value allocated for each type of research output. There is no requirement to link these products to the labour that produces them, they are simply research products. In the previous two years however, even this balance sheet of production has been deemed unnecessary. Universities are now only required to submit data on the commercial value attached to research, through income data.
Similarly, the Excellence in Research for Australia (ERA) (ARC 2019, 2016) exercise coordinated by the Australian Research Council measures and ranks research outputs across global indicators. While outputs produced by employees in casual teaching, casual research, and non-academic classifications can be included in the volume of total outputs, those staff are not counted in the academic FTE for the field of study. They are however, statistically represented in the ERA 2015-2016 staff tables in the Appendices. For 2015-2016, 6257 casually-employed staff contributed to research outputs, accounting for 9% of all contributors (ARC 2016, Vol.1).

The research outputs produced by employees in precarious work can be counted as part of the university’s overall research outputs if they are deemed to be an ‘eligible researcher’ for reporting purposes. For publications to be included in ERA, the employee must be on a fraction of 0.4 or greater, and their work function must be either ‘teaching and research’ or ‘research only’. However, employees on a fraction of less than 0.4, employed in teaching-only, employed on a casual basis in teaching-only or research-only, or employed under a professional award, must also be included as eligible researchers if they have produced one or more research outputs with an institutional affiliation attributed to the university (ARC 2019, 2016).

The Guidance Notes on Research (TEQSA 2018b) and Scholarship (TEQSA 2018c) that inform the higher education policy framework require academic staff to participate in the creation of new knowledge. While this is not formally mandated for casually employed staff, precarious knowledge workers can and do contribute research outputs. This correlates strongly to professional identity formation and the development of disciplinary scholarship and expertise. It is also an expectation that aspiring academics will conduct research and publish papers if they wish to pursue an academic career, with the recruitment process for continuing positions heavily focused towards research-track records.

Precarious knowledge workers make an important contribution to the production and circulation of new knowledge, yet their labour is marginalised by the institutional processes that audit and valorise research. By detaching knowledge from knowledge producers, institutions and the sector benefit from the knowledge produced by precarious workers while erasing their unpaid labour in the statistical accounting of outputs. These accounting processes particularly disadvantage precarious knowledge workers whose unpaid labour is erased twice, firstly by the institutions that accept their contributions to knowledge and disciplinary scholarship without paying them, and secondly by the sector, in the process of auditing the products of institutional research. The contributions of precarious knowledge workers increase the social stock of knowledge, expand disciplinary scholarship and add value to the sector, yet their labour and expertise remains largely unrecognised and uncompensated.
3 The Survey: Design and Demographics

Survey Design and Purpose

The survey was designed to collect data about the experiences of temporary university employees who contribute research outputs to the higher education sector. I refer to these employees as precarious knowledge workers or precarious university workers. The questions were structured around employment arrangements, labour time, the formation of professional identity, and contributions to knowledge.

The fragmentation of the academic role and the allocation of task-to-time teaching and research units as casual and fixed-term contracts makes employment precarious for knowledge workers in higher education. While employment arrangements have fractured the constituent parts of the academic role, many PhD-trained professionals who seek a continuing academic position remain connected to academic professional identity through their engagement in disciplinary research and scholarship, and the development of their expertise through the production of knowledge. Academic professional identity is constituted through an engagement with an intellectual labour process that is occupationally specific and bound by disciplinary norms and practices. Even as research and teaching are restructured into individual, time-limited tasks, they remain attached to a complex labour process which underpins professional identity, and constitute competencies and skills required for career progression.

Precarious knowledge workers are generally not paid to conduct research of their own or produce publications, yet these activities are central to academic professional identity, the development of disciplinary expertise and scholarship, and career progression. Precarious knowledge workers engage in research and publishing in their own, unpaid time, making an important, albeit undervalued and unrecognised, contribution to the knowledge produced in the sector. While their labour is often structurally invisible within the institutional organisation of the knowledge economy, their unpaid contributions add value to the sector, augmenting the value-creation processes around which institutional reputation, research metrics, funding and enrolments depend.

The survey was designed to capture descriptive data that would assist in understanding the experiences and contributions of academics in precarious employment to knowledge at Australian universities. The research sought to examine the following:

- The characteristics of precarious employment in relation to tenure, work allocation and contractual arrangements
- The impact of precarious employment on professional identity formation and work organisation
- The form of the intellectual labour process in relation to labour time, institutional support and compensation
- The contribution of precarious academics to knowledge in the university sector

A questionnaire consisting of forty-three questions was made available on the Survey Monkey platform. The survey design used a combination of multiple-choice and open-ended questions.
The survey began with two questions to determine that respondents who completed the questionnaire:

(a) Had worked in teaching or research at an Australian university in the previous 24 months
(b) Were currently working, or had previously worked, on casual and/or fixed term contracts

Precarious academic status was determined using a specified time period of 24 months, rather than immediate current employment. This specification was the result of early feedback from respondents who expressed concern that many who routinely undertook casual or fixed-term work may not be on contract at the time of undertaking the survey and would be excluded from completing it. Consequently, this survey uses a broader definition to capture precarious academic professional identity than official workforce data (see the discussion of this in Chapters 1 and 2).

After initial validation, information was gathered regarding the demographic characteristics of survey participants. Respondents then answered questions about higher degree enrolment, duration and contract in casual and/or fixed-term employment, professional identity, work organisation, labour time, research and publication history, and institutional support.

**Data Collection and Analysis**

The survey was made available on Survey Monkey under the title “Insecure Work and Research Outputs in the Australian University Sector”. A weblink to the survey was generated by Survey Monkey and this was shared on my personal research blog, by email, and on Facebook and Twitter. Respondents completed the survey anonymously.

A total of 231 responses were collected between 4 November and 13 November. The total number of valid responses was 152. Not all questions were compulsory. Where the number of respondents for a question was less than 152, the number of respondents is reported.

While aggregate-level characteristics of the survey sample are reported here, survey design does not support drawing broad conclusions about the casual and fixed-term academic workforce from the data. However, these research findings support many general trends reported in other research, as discussed in Chapter 2. By presenting these findings, this report seeks to highlight the prevalence of these general trends among knowledge workers in precarious employment, and contribute to the literature on the impacts of labour insecurity on the university sector and on knowledge production.

The distribution of survey respondents by mode of employment, gender and age group is summarised in Table 3 below.
Key characteristics of the survey sample are as follows:

- **By gender**, the distribution of respondents was 105 female, 41 male and 6 gender non-binary.

- **By age**, 50% (n=76) of respondents were in the 30-39 years age group, with 24.5% between 40-49 years of age and 13% younger than 30. Around 12.5% of the sample were aged 50 and over.

- **By mode of employment**, 81% (n=124) were in insecure work at the time of completing the survey, with 52% (n=80) in casual employment and 29% (n=44) on fixed-term contracts. There were 19% (n=28) in continuing employment, all of whom had previously worked on casual or fixed-term contracts.

- **By level of education**, of the 124 respondents in casual and fixed term work, 65 held a higher degree: 16 Masters, 49 PhD. All those in continuing employment, 24 respondents, held a PhD.

- **By cultural and linguistic background**, 13% of respondents (n=20) identified as being from a non-English speaking, migrant or refugee background. Two respondents identified as being Aboriginal or Torres Strait Islander.

As the survey was designed to be anonymous, and not intended to collect demographic data that would allow matching to the broader casual and fixed-term academic workforce profile, no institutional or disciplinary data was collected.
4 The Results: Experiences of Precarity, Professional Identity, Labour Time and Knowledge Production

The survey findings reflect the experience of precarious employment in the university sector, its impact on professional identity formation and intellectual labour process, labour time and career, and the contribution of precarious workers to knowledge.

Indicators of Precarity

“I’m not valued enough to be given a permanent contract, yet without casual staff the university could not function.”

Participants’ experiences of precarity were reflected in the duration of precarious employment and the range of roles and modes of employment they had worked in. Half of survey respondents had worked in precarious employment for five years or more, with four in five having worked in both contract research and contract teaching. 82% of respondents had worked across two different combinations of role and mode, while 45% had worked across at least three different combinations.

Respondents indicated a variety of reasons for remaining in precarious employment, including the scarcity of continuing roles and financial necessity. These results indicate that contrary to assumptions that temporary academic workers are HDR students or industry-professionals who may teach a class or two, many precariously employed academics work across contracts, modes and roles from year to year.

Role and Mode of Employment

“I think most people see employment and professional identity as entwined. It’s difficult to feel like an academic or researcher without a university appointment.”

Respondents were asked to indicate all types of academic roles they had performed as well as the mode of employment for the role. Multiple responses were available, and respondents had the option to provide further information. The proportional distribution of role and mode of employment for all respondents is shown in Figure 7.
Twenty additional written responses were received (tabled under ‘other’), with the following role and mode combinations recorded:

- Casual research with no pay for writing papers
- Casual library assistant
- Casual or fixed-term administrative assistant
- ‘Cash-in-hand’ research assistant
- Fixed-term teaching and research role
- Marking
- Casual research fellow
- Fixed-term research fellow
- Fixed-term postdoctoral research fellow

The majority of survey respondents had worked across numerous academic roles, with 82% of all respondents indicating that they had performed at least two different combinations of role and mode, and 45% having performed three or more different combinations of role and mode.

The cohort with the highest proportion of respondents who had been employed in two or more roles/modes were those who are now in continuing work. Responses from those in casual and fixed-term employment were similar. The distribution by current mode of employment was:

- 65 of 80 casual respondents had been employed in two or more roles/modes, and 33 of 80 had been in three or more
- 35 of 44 fixed-term respondents had been employed in two or more roles/modes, and 21 of 44 had been in three or more
- 25 of 28 respondents in continuing employment had been employed in two or more roles/modes, and 15 of 28 had had been in three or more

Around 80% of all respondents had performed both a contract teaching and a contract research role:

- 125 of all respondents had been employed in a casual and/or fixed-term teaching role
- 121 of all respondents had been employed in a casual and/or fixed-term research role

Respondents were asked about their experience of research employment under a Professional, rather than an Academic, Agreement.

- 76 respondents said that they been employed to undertake research under a Professional Award
- 68 of 76 stated that the work they were doing was academic in nature
- 54 of 76 said it had not been explained to them why they had been employed under a Professional Award, 12 respondents said that they had been given an explanation for their employment under a Professional Award, 10 respondents were not sure

**Employment Duration**

“*Friends and family are surprised to hear that I’m still a casual with little prospect of secure employment. Colleagues are used to it!*”

Participants were asked about the length of time they had been in temporary employment. Of all 152 survey respondents:

- 50% had worked on casual or fixed-term contracts for more than five years
- 47% had been in casual or fixed-term employment for one to five years
- 3% had been in casual or fixed-term employment for less than one year
A comparative analysis of duration in temporary employment by participants’ current mode of employment is given in Figure 8. This is the total period in temporary employment differentiated by participants’ current mode of employment. For respondents in continuing work, this is the period of time in temporary employment prior to their current role.

![Figure 8 Duration in temporary employment by current mode of employment](image)

**Reasons for Undertaking Casual/Fixed-term Work**

"Most people must think that I am very incompetent not to be able to get a full-time job, but they don’t understand the impediments I have."

Those in casual and fixed-term employment holding a higher degree were asked about the reason they were in their current mode of employment. This group consisted of 65 of the 124 casual/fixed-term respondents: 39 casual, 26 fixed-term. The reasons for remaining in casual and/or fixed-term employment after completing a higher research degree are summarised in Table 4.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Casual (n=39)</th>
<th>Fixed-term (n=26)</th>
<th>Total (n=65)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I could not find secure employment in my field</td>
<td>23</td>
<td>19</td>
<td>42</td>
<td>65</td>
</tr>
<tr>
<td>Out of financial necessity</td>
<td>24</td>
<td>17</td>
<td>41</td>
<td>63</td>
</tr>
<tr>
<td>To remain in the university sector while looking for a continuing role</td>
<td>27</td>
<td>13</td>
<td>40</td>
<td>62</td>
</tr>
<tr>
<td>To maintain my employment currency for a continuing role</td>
<td>20</td>
<td>15</td>
<td>35</td>
<td>54</td>
</tr>
<tr>
<td>To gain skills and/or experience</td>
<td>33</td>
<td>16</td>
<td>49</td>
<td>75</td>
</tr>
</tbody>
</table>

*Table 4 Reasons for casual and/or fixed-term employment among casual and fixed-term employees with a PhD (multiple responses available)*

45
Work and Professional Identity

“My professional identity is a daily struggle on the basis of my casual employment. I would have a hard time calling myself a researcher without paid employment, but even with it, it is a difficult identity to maintain.”

Precarious academic status was reported by participants. Due to the uncertainty of employment for many respondents, precarious academic status in this survey captures those respondents who had been employed in casual or fixed-term work of an academic nature in the previous 24 months. This broad indicator of precarious academic status is important for understanding how professional identity operates among academic workers in temporary employment.

Early feedback on the survey revealed that determining precarious academic status by current employment alone would exclude those precarious workers whose contracts had recently ended. It also revealed that professional identity for academics in precarious employment is broader than formal employment categories, extending into periods between paid employment.

Survey questions about professional identity demonstrate the ways in which employment arrangements shape individual and collective identification and perceptions of status and role. With one in five respondents including a contractual descriptor in their work title, temporary employment arrangements at universities are impacting the formation of precarious academic identity. Perceptions of self-identity and others’ perceptions also demonstrate the strong correlation between paid employment and professional status.

Professional Identity

“I feel a little uncomfortable saying I’m an academic when I don’t have an ongoing position.”

Participants were asked to describe their professional identity in their own words. Unique descriptors were captured from 152 respondents. Some respondents provided multiple responses or qualified their professional role with additional information related to their mode of employment. While around two thirds of respondents used the work title ‘Academic’ to describe their professional identity, around 20% of respondents added a description of their mode of employment, like casual or sessional, to the label.

The descriptors were grouped into broad categories for analysis. The distribution of professional identity descriptors is represented in Figure 9.

![Figure 9 Professional identity descriptors (number of respondents, multiple responses per participant)](image-url)
Employment and Professional Identity

“I know being a Dr. is well-regarded. I imagine others would be shocked at the disconnect between the status of my title and the reality of how it is remunerated in the academic sector.”

Respondents were asked about the impact of their paid employment on their own and others’ perceptions of their professional identity.

The majority of respondents, 96%, reported that their paid employment had some impact on their own perception of their professional identity. These responses are represented in Figure 10.

- 49%, 74 of 152, stated that their paid employment always affected how they perceived their own professional identity
- 47%, 71 of 152, stated that their paid employment sometimes affected their perception of their professional identity
- Only 4%, 7 of 152, said that their paid employment did not affect their professional identity

![Figure 10 Effect of paid employment on own perception of professional identity](image)

Forty additional written responses were recorded for this question. A selection of comments is presented below:

- I don’t feel valued for the qualifications and experience that I have
- I’m not valued enough to be given a permanent contract, yet without casual staff the university could not function
- I don’t know my research identity without a title being assigned to me
- I do feel less imposter syndrome because I’m trusted to teach
- Being a casual tutor doesn’t feel legitimate as far as academia goes
- My professional identity is a daily struggle on the basis of my casual employment. I would have a hard time calling myself a researcher without paid employment, but even with it, it is a difficult identity to maintain
- I feel a little uncomfortable saying I’m an academic when I don’t have an ongoing position
I’m from a working-class background. Despite the fact that I have three degrees and have won professional awards, how I perceive my social status is always determined by income. I think most people see employment and professional identity as entwined. It’s also quite difficult to feel like an academic or researcher without a university appointment.

Participants were asked whether paid employment affected others’ perception of their professional identity. The majority of respondents, 95%, reported that their paid employment had some impact on how others perceived their professional status. These responses are represented in Figure 11.

- 33%, 50 of 152, said that their paid employment always impacted others’ perception of their professional identity.
- 62%, 94 of 152, said that their paid employment sometimes impacted others’ perceptions of their professional identity.
- 5%, 8 of 152 said that their paid employment did not affect others’ perception of their professional identity.

Forty additional written responses were recorded for this question. A selection is presented below:

- Most people must think that I am very incompetent not to be able to get a full-time job, but they don’t understand the impediments I have.
- I think I’d get a lot of strange looks if I told people I was a researcher but not being paid to do so, even though this is the case for my own research that’s not linked to my employment.
- This is hard to determine, but I do get the sense that people think of me in certain ways because of my precarious situation.
- Sometimes I am asked when I am going to get a real job.
- The non-permanent character of the work means others consider me less of an academic.
- I suppose I am not considered a true colleague by full-time academics.
- It shapes the way colleagues and students understand my status.
- They’re surprised I publish.
- I’m regularly asked by people within and outside academia about the status of my employment, perhaps because it is so precarious.
Causal staff (academic or otherwise) are not invited to staff meetings and they are treated differently, they are not listed as academic staff on the school website. I felt that others did not perceive me as an academic. Senior academics view me differently when they learn I am convening a course. I know being a Dr. is well-regarded. I imagine others would be shocked at the disconnect between the status of my title and the reality of how it is remunerated in the academic sector. Friends and family are surprised to hear that I’m still a casual with little prospect of secure employment. Colleagues are used to it! I don’t know whether I’ll be a lecturer, tutor, or unemployed next semester.

Labour Time and Employment Outcomes

“Academic outputs don’t fit into budgeted hours.”

Respondents’ experience of working time, both its paid and unpaid components, provides important information about the contribution of precariously employed university workers to the knowledge production process in higher education. More than two thirds of respondents reported working five or more unpaid hours per week to complete tasks for their paid employment. More than 80% of respondents reported that the reason for working unpaid hours was that the requirements of their paid employment did not fit into the hours they were paid for. Of these respondents, 95% reported that this unpaid labour time had some impact on their capacity to pursue their own research. For some respondents, unpaid labour time was a result of the gross underestimation of time spent on marking student work in their pay schedule, or because tasks were added to their weekly schedule. For others, it was because their paid employment did not provide paid time for research and this had to be done outside of paid hours.

Paid and Unpaid Labour Time

“I need to write papers, but these are seen as somewhat outside the job itself. I don’t have to do this, but doubt my career will progress without publications.”

The majority of survey respondents found that they worked at least five unpaid hours per week to complete tasks for their paid employment, with 34%, 52 of 152, reporting working more than 10 unpaid hours per week. Only 28% of respondents were able to complete the requirements of their paid employment within paid hours. These responses are represented in Table 5.

<table>
<thead>
<tr>
<th>Unpaid Labour Hours</th>
<th>n=152</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to complete all the work required of me within my paid hours of employment</td>
<td>42</td>
<td>28</td>
</tr>
<tr>
<td>I work 5-10 unpaid hours per week to complete the requirements of my paid employment</td>
<td>58</td>
<td>38</td>
</tr>
<tr>
<td>I work more than 10 unpaid hours per week to complete the requirements of my paid employment</td>
<td>52</td>
<td>34</td>
</tr>
</tbody>
</table>

Table 5 Average weekly unpaid working hours
Participants were asked to select all the reasons that applied when considering why they worked additional unpaid hours. Responses are given in Figure 12. The majority of respondents, 81%, said they worked unpaid hours because their work requirements did not fit into their paid hours. Around one quarter said they worked extra hours due to tasks being added to their workload.

![Figure 12 Reason for working unpaid hours (number of respondents, multiple responses possible)]

Thirty written responses were recorded for this question. A sample of these is presented below:

- Despite not being appreciated by the institution, I need to do the best by the students so will take the time necessary to provide quality feedback
- Marking hours are grossly underestimated
- In order to get value academically from my job, I need to write papers, but these are seen as somewhat outside the job itself. I don’t have to do this, but doubt my career will progress without publications
- Academic outputs (eg. journal articles, peer review) don’t fit into budgeted hours
- I complete extra tasks in order to maintain good standing with the department, to contribute to my field, to support other researchers, to supervise students, and to write and conduct research on topics of my own interest beyond what I am paid for. Occasionally I am also asked to complete tasks beyond my capacity as I hold multiple casual positions
- In an environment of extensive job precarity and fierce competition for on-going positions, most ECRs will work extra hours to position themselves for the next job
- I work on other people's projects during the week and on spill-over work plus my own research/publications on weekends
- As a casual lecturer I want to know what I am speaking about and provide sound knowledge. This is an activity that can barely be measured in time

Impact of Unpaid Labour Time on Research Capacity

“I would have more time [for research] if I didn’t take the tutoring or RA job, but I need to pay the rent!”

Participants who stated that they worked unpaid hours to complete the requirements of their paid work, 110 respondents (see Table 5), were asked about the extent to which these extra hours impacted their ability to pursue their own research projects or publications. These responses are represented in Figure 13.
55%, 60 of 110, found that unpaid work always impacted their capacity to work on their own projects/publications
40%, 44 of 110, said unpaid work sometimes affected their ability to undertake their own research

![Figure 13 Impact of unpaid labour time on research capacity](image)

Academics in casual and/or fixed-term work were more likely to find that their research and publication capacity was impacted by additional unpaid working hours.

- Of casual and fixed-term academics with a higher degree (65 respondents), 72%, 47 respondents, said that their ability to undertake their own research was impacted by unpaid work
- Of casual and fixed-term academics who had not completed a higher degree (58 respondents), 67%, 39 respondents, stated that their ability to undertake their own research was impacted by unpaid work

**Research, Publications, Outputs**

“*I think [engaging in research] makes for better teaching, and ideally, I can contribute positively to my field.*”

Academics in precarious work make an important contribution to knowledge. As a significant component of this contribution is unrecognised, unpaid, and receives little institutional support, it subsidises the higher education sector by increasing the social stock of knowledge at the expense of the livelihoods of precarious academics. Around two-thirds of respondents contributed publications that counted towards their institution’s research outputs during periods of insecure work. 89% of these respondents were named sole or first author on the publication. However, of respondents in casual and fixed-term employment, only five reported receiving any form of compensation for this.

Survey respondents overwhelmingly reported that pursuing their own research projects and publications was important to them. While career aspirations play an important role in shaping precarious employees’
research goals, more than half of respondents reported being motivated by an interest in the research connected to their professional identity. Institutional pressures and limitations had an impact on the extent to which precariously employed academics were supported to pursue research. Only 34% of casual and 50% of fixed-term respondents had access to research facilities and resources. While lack of encouragement or active discouragement from supervisors or the institution impacted around one quarter of respondents’ ability to pursue research, the majority of respondents reported being constrained by time during periods of paid employment.

Research Contributions and Institutional Support

“Publications are still considered the only real metric for advancement so I must publish.”

The majority of respondents, 96%, 146 of 152 respondents, stated that it was important to them to pursue their own research projects and publications. Further analysis was performed on the results for respondents in casual and fixed-term employment.

- Among those in casual employment, 94%, 75 of 80 respondents, said it was important to pursue their own research projects and publications
- Among those in fixed-term employment, all 44 respondents, said that it was important to them to pursue their own research and publications

However, paid research time, support and access to facilities did not necessarily follow.

- Of those in casual employment, only one respondent reported that they had access to paid time to pursue their own research and publications
- 55% of those in fixed-term employment, 24 of 44, reported having paid time for their own research
- Of survey respondents in casual employment, 34%, 27 of 80, reported that they had support, including in-kind access to facilities and resources, to pursue their own research projects
- For those in fixed-term employment, 50%, 22 of 44, reported having support for their research and publications

These findings are summarised in Figure 14.

![Figure 14 Research value and support among casual and fixed-term academics](image)
Respondents were asked to select all the reasons that research and publications were important to them from a list of multiple options. They were also able to provide additional written responses. The analysis of the data for those in casual and fixed-term employment is presented in Table 6.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Casual</th>
<th>Fixed-term</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>To remain competitive for casual and/or fixed-term work</td>
<td>47</td>
<td>20</td>
<td>67</td>
<td>54</td>
</tr>
<tr>
<td>To be competitive for a continuing role</td>
<td>65</td>
<td>41</td>
<td>106</td>
<td>85</td>
</tr>
<tr>
<td>To be competitive for post-doctoral awards or grants</td>
<td>53</td>
<td>28</td>
<td>81</td>
<td>65</td>
</tr>
<tr>
<td>To pursue my own research interests</td>
<td>46</td>
<td>20</td>
<td>66</td>
<td>53</td>
</tr>
</tbody>
</table>

Table 6 Reasons for maintaining research profile among casual and fixed-term academics (multiple responses available)

While securing future employment and grant opportunities was important, more than half of all casual and fixed-term respondents pursued their own research purely as a contribution to knowledge.

Twenty-nine additional written responses were provided to this question. A selection of these are listed below:

- It’s why I’m an academic. Everything else is just to put food on the table and keep a roof over my head
- Crucial to retaining employment — and joy in the work
- Teaching won’t get me a job in the end. Only publishing will
- Vital for establishing reputation and future career
- The contracts I am on currently are in my field of interest, therefore, in order to continue working in my field I have to pursue my own research and publish wherever possible. Without this, I will not have a coherent track record to secure future funding if I ever get the opportunity
- Publications are still considered the only real metric for advancement so I must publish
- Otherwise I will never get a ‘real’ job
- I’ve just given up, to be honest
- You don’t get work otherwise!
- As a single parent, I need secure work, hence I’ve abandoned research for now. But research is where my heart is
- I view this as absolutely crucial to securing ongoing employment in the future
- I think it makes for better teaching, and ideally, I can contribute positively to my field

Conditions and Limitations

“It is difficult to switch between two jobs, one paid, the other part of my professional academic life.”

Despite the deficiency in research support, 71%, 108 of 152 respondents, said they were encouraged to pursue their own research and produce publications during periods of paid employment. However,
the overwhelming majority, 92%, 141 of 152 respondents, said that their capacity to pursue their own research projects and publications was restricted during periods of paid employment.

Respondents were asked to select all factors restricting their research and publications during periods of paid employment from a list of multiple options. They were also able to provide additional written responses. While time limitations were an overwhelming factor, active and passive discouragement from supervisors, managers and at the institutional level, were also important. Responses are represented in Figure 15.

![Figure 15 Factors restricting research activities during periods of paid employment (multiple responses available)](image)

Twenty-six respondents provided additional information about why their ability to pursue their own research was limited during periods of paid employment. Family responsibilities, particularly caring responsibilities, financial pressures, and limited time were significant constraints for many. Some of the written responses, as well as respondent profile, are listed below:

- I would have more time to do that if I didn’t take the tutoring or RA job, but I need to pay the rent! (fixed-term; in casual and/or fixed-term employment for 5-10 years)
- I cannot afford to fund my own research. (casual; in casual and/or fixed-term employment for 5-10 years)
- I was told recently ‘you shouldn’t have taken on tutoring if you need time to publish’ by a subject coordinator who had heaped 5-10+ hours a week unpaid onto my workload for a teaching job that is only one hour paid. (casual; in casual and/or fixed-term employment for 1-5 years)
- Lack of ‘credibility’ – you are seen as a worker for a particular project rather than a researcher sometimes. However, this is partly about level of seniority as well. Makes it hard to collaborate and especially lead collaborations. (fixed-term; in casual and/or fixed-term for 1-5 years)
- I am unable to secure research funding because of my position, and I don’t have time to apply for research funding. I also have limited motivation to contribute to the school’s research profile beyond my paid employment given that this labour goes unpaid. (casual; in casual and/or fixed-term employment for 1-5 years)
- Family responsibilities (school-age child). (casual; in casual and/or fixed-term employment for 5-10 years)
• Paid work often seems more urgent — don’t find time for my own research. (fixed-term; in casual and/or fixed-term employment for 1-5 years)
• All my hours had to be accounted for on the research project I worked on, so there was no way to work on other projects (including my own research). (fixed-term; in casual and/or fixed-term employment for 5-10 years)
• It is difficult to switch between two jobs, one paid, the other part of my professional academic life. (casual; in casual and/or fixed-term employment for more than 20 years)
• I have supportive supervisors and managers, but there are only so many hours in the day. (fixed-term; in casual and/or fixed-term employment for 1-5 years)

Publications and Outputs

“I cannot afford to fund my own research.”

Survey respondents were asked about research outputs produced during periods of paid employment.

• 60%, 91 of 152 respondents, stated that they had produced publications that were counted towards their institution’s research outputs
• 89% of these respondents, 81 of 91, said that they were sole or first author on the publication
• Only 8 of 91 respondents reported receiving any form of compensation for the publication

Further analysis was performed on the data for casual and fixed-term respondents. These findings are summarised in Table 7.

• 56% of casual and fixed-term respondents, 69 of 124, had produced publications which counted towards their institution’s research outputs
• 48% of casual and fixed-term respondents, 59 of 124, had produced these publications as sole or first author
• Only 4% of casual and fixed-term respondents received compensation for their research contributions
• 29 of 80 casual respondents, 36%, had produced publications during periods of insecure employment as either sole author or first author
• 30 of 44 fixed-term respondents, 68%, had produced publications during periods of insecure employment as either sole author or first author

<table>
<thead>
<tr>
<th></th>
<th>Casual (n=80)</th>
<th>Fixed-term (n=44)</th>
<th>Total (n=124)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publications were counted towards institution’s research outputs</td>
<td>36</td>
<td>33</td>
<td>69</td>
<td>56</td>
</tr>
<tr>
<td>Produced research outputs as sole author or first author</td>
<td>29</td>
<td>30</td>
<td>59</td>
<td>48</td>
</tr>
<tr>
<td>Employee was compensated for the production of the publications</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 7 Research outputs produced by casual and fixed term respondents
5 Discussion

The academic profession and occupational labour market have undergone significant changes in the past three decades. Temporary employment is no longer the domain of ‘academic apprentices’ alone, with many PhD-qualified professionals consigned to year after year of precarious work due to the contraction in continuing roles. Many precarious knowledge workers have been in casual and fixed-term employment for five years or more, with most employed on a contractual basis to teach, or conduct research on a specific funded project.

The survey results indicate the persistence of a number of trends identified in the literature on the precarious knowledge workforce: the incidence of long-term duration in precarious academic employment and a continuum of precarious work arrangements, the interconnection between professional identity formation and intellectual labour process, the impacts of intensification and specialisation on the composition of work and the growth of unpaid labour time, and the unrecognised and undervalued contribution of precarious workers to knowledge production.

“'I don’t feel valued for the qualifications and experience that I have.”

While casual and fixed-term forms of employment in the university sector are often treated separately, the survey findings reveal the presence of a continuum of precarious work, with respondents moving between roles and modes of employment, or holding two or more roles in different modes of employment. Participants’ duration in temporary employment, the range and number of temporary work roles they have held, and their reasons for remaining in temporary work, are important indicators of employment precarity. While longer fixed-term contracts are preferable to shorter casual contracts, neither offers any degree of enduring labour security from which to build a career, nor are precarious knowledge workers in a position to choose one form of temporary employment over another.

Experiences of precarity are reflected in the duration of precarious employment and the range of roles and modes of employment that participants have worked in. For participants in this survey, the proportion in precarious employment for five years or longer was 50%. This is comparable to the four surveys of precarious university workers published between 2004 and 2012 (Strachan et al. 2012; NTEU 2012; Bexley et al. 2011; Junor 2004). Across these four surveys, the median proportion of participants in precarious employment for three years or longer is 46%, with a range of 30% to 62% (see Table 2, Chapter 2 for further details).

For participants in this survey, four in five had worked in both contract research and contract teaching. 82% of respondents had worked across two different combinations of role and mode, while 45% had worked across at least three different combinations. Respondents indicated a variety of reasons for remaining in precarious employment, including the scarcity of continuing roles and financial necessity. These results show that a significant number of precarious knowledge workers are employed across contracts, modes, and roles from year to year because they are unable to secure continuing employment.
Holding multiple roles in different modes of employment is an indicator of broader job insecurity. It suggests that precarious knowledge workers are unable to find employment based on their skills, expertise, and experience, and are excluded from upward mobility in work status and income (Tweedie 2013; Standing 2011; Junor 2004). Alongside job insecurity, precarious knowledge workers face significant levels of employment insecurity, which leaves them particularly vulnerable to losing work at any time without compensation, and income insecurity, since continuing work cannot be guaranteed and income is often given to extreme fluctuations (Standing 2011; Junor 2004). Added to this are representational insecurity, with precarious knowledge workers excluded in workplace decisions, and prevented from exercising their collective power in the labour market, and labour market insecurity, given the scant number of vacancies for continuing roles (Campbell & Burgess 2018; Standing 2011).

**Professional Identity and Work Process**

“As a casual lecturer I want to know what I am speaking about and provide sound knowledge. This is an activity that can barely be measured in time.”

Precarious work arrangements are reshaping individual and collective identification among knowledge workers, to the extent that it is possible to speak of an emerging professional identity that is defined by the experience of precarious employment. One in five survey respondents used a contractual descriptor like “casual” or “sessional” to describe their work title, and many reported unease in describing their professional identity. Respondent comments indicated that some participants were uncomfortable with the use of the label “academic” as a professional identifier without a continuing role, while others saw a strong correlation between income and professional status.

Professional identity among survey respondents was well developed, with 52% of casual and fixed-term respondents holding higher degrees, and many continuing to identify with their occupational roles outside of periods of paid employment. However, this identity is undermined by the precarious nature of employment and influenced by paid work and its duration. Many respondents spoke of a struggle around their professional identity due to the nature of their employment, and others reported feeling undervalued and out of place. Employment status also impacted how participants felt they were perceived by others, with some respondents describing feelings of status anxiety and imposter syndrome. Respondents reported being perceived as less qualified, less competent, less of a colleague, and ‘less of an academic’ due to the nature of their employment, and being treated differently by continuing academic staff. Job insecurity was seen by some respondents as creating a ‘disconnect’ between their professional identity and their paid employment, particularly as a result of future uncertainty. One respondent stated: “I don’t know whether I’ll be a lecturer, a tutor, or unemployed next semester”.

Participants’ construction of professional identity also influenced how they understood unpaid labour time, whether unpaid hours as part of their paid employment, or time spent on research and publications that was not recognised or paid by their institution. The majority of respondents found that they were required to do at least 5 hours of unpaid work to meet their paid work requirements. The reasons given reflected ethical and altruistic dimensions of professional formation, including wanting to do the right thing by students, and ensuring that their knowledge base was sound, with one participant reflecting that this “is an activity that can barely be measured in time”. More than half of respondents reported being motivated to undertake research due to scholarly interest, as much as career prospects, with one commenting: “It’s why I’m an academic. Everything else is just to put food on the table and keep a roof over my head”.

The survey results demonstrate a correlation between professional identity formation and intellectual labour process. Among precarious knowledge workers, this is demonstrated in the prevalence of unpaid labour
time, and participation in scholarship and research beyond their employment requirements. Despite being employed on specific and prescribed task-to-time units, precarious knowledge workers continue to perceive of this work as part of a broader intellectual labour process that informs their professional identity. The same is true of participants’ perceptions of research and publications, which many continue to produce despite the lack of support, recognition, and compensation. Higher education institutions exploit participants’ professional commitment and career aspirations, extracting unpaid labour time and adding value to the knowledge economy in the process.

While the academic role has been reorganised into the inadequately remunerated task-to-time units that precarious knowledge workers are employed to undertake, these tasks remain attached to a broader labour process and a professional identity that is socially structured, occupationally defined, and determined by discipline and field. The imposition of artificial temporal limits on elements of this labour process leads to precarious knowledge workers undertaking unpaid labour to complete the inadequately remunerated tasks to a professional standard. A similar pattern determines the production of research outputs among precarious knowledge workers. While research has been separated from paid work allocations for teaching, it remains central to professional identity formation and the development of expert disciplinary knowledge. Precarious knowledge workers often undertake research in a wholly unpaid capacity. Their contributions are generally unrecognised and undervalued, despite adding value to the institution’s research rankings and the knowledge economy.

**The Composition of Work and Unpaid Labour Time**

“I complete extra tasks in order to maintain good standing with the department, to contribute to my field, to support other researchers, to supervise students, and to write and conduct research on topics of my own interest beyond what I am paid for.”

The fragmentation of continuing academic employment has led to previously complex job profiles being reorganised into discrete task units which are allocated to precarious workers on temporary contracts. However, precarious knowledge workers routinely spend more time completing paid work than the hours they are actually paid, with 72% of survey respondents indicating they do more than five hours of unpaid work per week. Although the tasks that precarious knowledge workers are paid for have been detached from their job profiles, they remain attached to their complex and more time-intensive labour processes. For example, preparing for a lecture or tutorial requires a level of knowledge and expertise on a topic that cannot be achieved in the one hour which tutors are nominally paid.

Other forms of work, particularly those connected to developing a research portfolio, producing publications, and maintaining scholarship of a discipline or field, are generally considered outside the scope of casual and fixed-term appointments. Yet these activities remain central to the intellectual labour process of academic work, and a critical component of professional identity formation. They are also significant determinants of career progression and expertise, which must be routinely demonstrated in the process of applying for any continuing role. This is reflected by the high proportion of respondents, 85%, who viewed producing publications as necessary for securing continuing employment. It is also evident in the sentiments expressed in the comments, for example, “publications are still considered the only real metric for advancement” and “otherwise I will never get a ‘real’ job.”

However, unpaid labour time also impacted the capacity of precarious knowledge workers to engage in research, with 77% of respondents indicating that they had no time to pursue research due to the requirements of their paid work, and 55% stating they had no time for research due to the unpaid labour time associated with their paid employment. One respondent who had been in casual and fixed-term employment for more than five years commented, “I would have more time to do that if I didn’t take the tutoring or RA job, but I need to pay the rent!” Another respondent noted the conflicting expectations to publish while performing significant
amounts of unpaid labour: “I was told recently ‘you shouldn’t have taken on tutoring if you need time to publish’ by a subject coordinator who had heaped 5-10+ hours a week unpaid onto my workload for a teaching job that is only one hour paid”.

The combination of unpaid labour time and pressure to publish has resulted in one commonly reported pattern among precarious knowledge workers: completing paid work in the course of a standard working day/week and working on research and publications on weeknights or the weekend. The prevalence of this pattern of work among tenured academics means it is often dismissed as a feature of the academic professional role. Academics in continuing roles have the financial security and promotion prospects of an established career path, however, while precariously employed academics undertaking this working time pattern have no such guarantees. Yet in a sector where highly sought continuing roles are few and far between, publications that precariously employed academics complete, often in their own unpaid time, are still the most commonly used selection criteria for continuing roles.

Responses to unrealistic expectations and pressures also manifest in other ways, with some precarious knowledge workers finding they are simply unable to engage in research due to the combination of paid employment and associated unpaid labour time. This is a significant impediment facing precarious knowledge workers who have family and caring commitments, or other health, social, or financial constraints that prevent them from being able to develop a research portfolio in their own time. One respondent commented: “I cannot afford to fund my own research”, and another, “It is difficult to switch between two jobs, one paid, the other part of my professional academic life”. Participants with family responsibilities or with large workloads noted the impediments to pursuing a research profile given the limitations on time. One respondent stated that as a single mother with a two- and a half-hour round trip commute, she was very time poor. Another commented: “I have supportive supervisors and managers, but there are only so many hours in the day”.

Precarious Workers and Knowledge Production

“I think I’d get a lot of strange looks if I told people I was a researcher but not being paid to do so, even though this is the case for my own research.”

Knowledge workers in precarious employment subsidise higher education through research outputs produced in unpaid labour time, adding value to the sector and the knowledge economy while enduring low job quality, labour insecurity, and social and economic precarity. As noted earlier, publications produced by precarious knowledge workers, even if they are wholly unpaid, must be included in the institution’s publication count if they are deemed an eligible researcher for reporting purposes. For 2015-2016, the Excellence in Research for Australia (ERA) exercise reveals that 9% (n=6257) of staff who contributed outputs to Australia’s research capacity were casual employees (ARC 2016). Of survey respondents in casual and fixed-term employment, more than half indicated that they had produced publications that were counted towards their institution’s publication count, while receiving little support and generally no compensation.

Precarious knowledge workers are not formally expected to contribute to research, yet their motivations and engagement with research strongly correlates to their engagement with the intellectual labour process underpinning professional identity formation, and their career aspirations. Despite the importance of pursuing research for 96% of respondents, only 24 fixed-term respondents and one casual respondent had access to paid research time. Additional comments provided further context about access to paid research time. One respondent commented: “I’m not contracted to do that” another said, “Only after everything else is done”, while a third stated that research and publications were not formally included in their work contract but were expected. Other elements of institutional support were also lacking, with only 50% of fixed-term staff and 34% of casual staff having access to resources to pursue research. For casual staff, this sometimes included workspace access, but more often it was limited to access to library resources and journal subscriptions. One
respondent commented that they had minimal in-kind support, but that the research centre they were affiliated with were “good at publicising work”.

Beyond the institutional barriers, lack of time was the second greatest impediment with 77% of respondents noting that their research activities were restricted during periods of paid employment. One respondent commented, “Paid work often seems more urgent — I don’t find time for my own research”. Around 20% of respondents also faced some form of discouragement from supervisors, managers or their institution. One indirect form of discouragement occurred when early career researchers employed on funded projects were not allocated paid time to develop their own research portfolio: “All my hours have to be accounted for on the research project I work on, so there is no way to work on other projects, including my own research.” Others reported feeling unmotivated due to their employment arrangements: “I am unable to secure research funding because of my position, and I don’t have time to apply for research funding. I also have limited motivation to contribute to the school’s research profile beyond my paid employment given that this labour goes unpaid”.

Despite these barriers, around two in three fixed-term employees, and one in three casuals, had produced publications as sole or first author during periods of precarious employment. Yet, only five of 124 respondents in casual or fixed-term employment had received any form of compensation. In relation to this question, one casual respondent joked, “Haha, that actually exists!”. Several respondents commented that compensation had never been mentioned to them, and one stated that no compensation was offered but it was expected that their publications would be counted towards their institution’s outputs. Another pattern of work reported in the comments relates to precarious knowledge workers who collaborate with continuing staff. While not all fields produce collaborative research, in areas where this is the dominant mode of publication, precarious knowledge workers were at times invited to collaborate on a project or publication with continuing staff members without receiving pay or compensation for their involvement.
6 Conclusion

“I don’t know whether I’ll be a lecturer, tutor, or unemployed next semester.”

Precarious work is the product of policy decisions and employment arrangements that shift the risks created by living and working in a market society from employers to employees. While precarious employment is not defined by divergence from the Standard Employment Relationship (SER) alone, it shares many of the characteristics of non-standard wage work, including limited or uncertain duration, a lack of regulatory protections, limited control of working conditions, and low or variable income (Kalleberg 2018; Campbell & Burgess 2018; Campbell & Price 2016; Standing 2011; Vosko 2010; Vosko et al. 2009; Rodgers 1989). Precarious employment lacks multiple dimensions of labour security, creating instability in the lives of workers and uncertainty about the future.

The growth of precarious employment in the higher education sector has been a feature of workforce change in the past three decades (NTEU 2018b, 2016; Ryan et al. 2017; May et al. 2013; Ryan et al. 2013; Brown et al. 2006). While the available data does not enable a definitive assessment of the scale of precarity in the sector, it indicates that as continuing appointments have declined, casual and fixed-term arrangements have grown and now constitute close to two thirds of non-managerial employment in the sector (NTEU 2018b, 2016; WGEA 2018; May et al. 2013). Previous studies of the precarious knowledge workforce provide important insights into the characteristics, experiences, and contributions of this segment of the workforce (May 2014; Strachan et al. 2012; Bexley et al. 2011; Brown et al. 2006; Junor 2004; McInness 1999).

The present study contributes to existing research on precarious work by considering how particular kinds of workers are positioned as precarious in relation to an occupational labour market, career path, and life course. The study reflects on existing data and survey results to consider the connection between precarious employment, professional identity formation, intellectual labour process, and knowledge production. It is concerned with how particular forms of employment in higher education have become productive of occupational norms, labour processes, and professional identities that are shaped by precarity.

Drawing on the results of the “Insecure Work and Research Outputs” survey conducted in 2018, the report examined professional identity formation, intellectual labour process, and contributions to research among precarious knowledge workers in light of the segmentation of the academic labour market and the fragmentation of academic work. The findings demonstrate the importance of professional identity formation among precarious knowledge workers, and the impact of precarious employment on identity, labour, and research. Professional identity is fragmented by employment insecurity and qualified by a range of markers related to role, function, and discipline. In many cases, those engaged in temporary knowledge work understand their identity as contingent on their paid employment. Paid employment plays a validating role in terms of professional status, but often undermines future career prospects and professional identity as a result of its uncertainty, and by extracting unpaid labour time.

Opportunities to pursue research and publications for those in casual and fixed-term employment is often constrained by a combination of factors arising from the nature of their employment, particularly the lack of paid research time. Unpaid labour time related to paid
employment negatively impacts their capacity to pursue publications that could contribute towards securing future employment or funding. Precarious knowledge workers contribute to research and knowledge production in an unpaid capacity. While the contributions of precarious workers to knowledge accrue benefits to the sector and its institutions, labour insecurity undermines professional identity formation, career progression, and creates social and economic precarity for the workforce.

The survey results illustrate that while employment arrangements for precarious knowledge workers are temporary and uncertain, the intellectual labour process that underpins professional formation remains socially structured, occupationally specific, and bound by discipline and field. The allocation of work is determined by budgetary considerations external to the work itself, while the organisation of work is shaped by a labour process attached to a professional formation. Consequently, both professional identity and the temporality of the work process extend beyond formal paid employment. Given the limited time allocated to tasks in contracts of employment and the limited duration of these contracts, this means that precarious academics work beyond the compensation they receive to meet the requirements of the tasks they perform.

This is particularly the case for the production of research outputs which precarious knowledge workers are generally not paid to undertake. Since the production of knowledge and its dissemination remain central to academic professional identity, disciplinary expertise and career progression, precarious knowledge workers engage in research and publishing in an unpaid capacity. These activities add value to the knowledge economy by extracting unpaid labour time, consequently subsidising institutional and sector economies and adding to the social stock of knowledge. The entrenchment of precarious work arrangements renders precarious knowledge workers invisible and vulnerable in an institutional setting that erases their unpaid labour time, experience, expertise, and contributions. Over time, undermining the conditions of the knowledge workforce jeopardises the production of knowledge and its social value.

The survey results support many of the findings of published research on the precarious knowledge workforce. The findings highlight characteristics of employment, labour time, professional formation and contributions to knowledge, and demonstrate that:

- precarious employment in higher education operates on a continuum
- duration in precarious work and combinations of work roles and modes of employment are indicators of precarity
- the intellectual labour process of academic work is socially structured, occupationally specific, and bound by discipline and field
- precarious employment is impacting professional identity and the labour process of knowledge work
- the intellectual labour process of academic work shapes, and is shaped by, professional identity
- precarious workers make an important contribution to knowledge
- unpaid labour time impacts knowledge workers negatively and subsidises the production of knowledge
- precarious employment is unsustainable and undermines the reproduction of the knowledge workforce and the production of knowledge

Knowledge is a multi-dimensional, inter-generational, social resource. Its future production and sustainability are inseparable from the working conditions of the knowledge workforce. The growth of precarious work in the university sector has manifested in working conditions that have adverse impacts on knowledge workers, fragmenting professional identity, disrupting career progression, and negatively impacting life course by creating social and economic insecurity. The disruptions wrought by the COVID-19 pandemic have intensified these trends, and led to significant job losses, particularly among precarious workers. The challenge at this moment of great uncertainty is to guarantee labour security and career paths for all knowledge workers. Only then, can we ensure that the conditions for knowledge production, and its future sustainability, are in place.
References


Appendix 1

Quantitative and Qualitative Resources

This is not intended as an exhaustive list, but an overview of the quantitative and qualitative data about casualisation, insecure work, and early career academics in Australian higher education. Only key reports, theses, or discussion papers from individual projects have been included here.


National Tertiary Education Union (NTEU) (2012). *Casual Teaching and Research Staff Survey 2012: Summary of Key Results*. South Melbourne, Australia: NTEU.


**Appendix 2**

**List of Universities Included in the Analysis of WGEA Public Data**

<table>
<thead>
<tr>
<th>State</th>
<th>Universities</th>
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<tr>
<td></td>
<td>Southern Cross University, The University Of New England, The University Of</td>
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<td></td>
<td>New South Wales, University Of Sydney, The University Of New South Wales,</td>
</tr>
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<td>University Of Technology Sydney, University of Wollongong, Western Sydney</td>
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<td></td>
<td>University of Technology, University Of Melbourne, University Of Divinity</td>
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