The labour market outcomes of Australian Creative Arts degree holders

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Abstract

The number of university places in Creative Arts degrees has risen at a much faster rate than for other degree programs. This represents a big increase in investment in Creative Arts education. This is despite the previous evidence that in 2006 for most Creative Arts graduates the degree was not a financially worthwhile investment. Since then a number of important changes have occurred affecting the graduate labour market which might have been expected to make investment in Creative Arts education even less profitable. This paper examines the careers of those having bachelor's degrees in Creative Arts in 2016. In particular the monetary returns from these degrees under a range of assumptions are calculated. The results show that for the average person, the returns to these degrees are positive although the private rate of return compares unfavourably with most alternative degrees. Potential reasons for this turnaround and implications are discussed.

JEL Codes: J23, J26, J44, Z11

Keywords: creative arts, university graduates, career paths, economics of education, human capital, rate of return

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1. Introduction

Daly *et al* (2015) using 2006 Census data on university graduates from a number of disciplines found that for Creative Arts graduates the rate of return for the median income earners was negative implying that the degree was not financially worthwhile. The term Creative Arts encompasses a variety of sub-disciplines ranging from visual arts, drama and music to communications and media studies. Furthermore this latter category has quite diverse areas such as journalism, creative writing, marketing and film production.

Since the Daly *et al* (2015) study a number of important developments have occurred in the graduate labour market including the Global Financial Crisis (GFC) and a big expansion in university places under the 'demand-driven' system. In addition, structural and technological change continue to change the mix of skills in demand (Lewis 2015). In particular the biggest increase in demand for skills has been for interactive skills – the ability to relate to customers, employees and fellow workers (Kelly and Lewis 2010, Lewis 2015). This would be expected to have impacted on the demand for graduates from different disciplines depending on the relative intensity of development of interactive skills.

Australia has established policy priorities around increasing and diversifying higher education participation (Bridgstock and Cunningham 2016). Since 2012, Australia has had a 'demand driven system' of enrolments, which has allowed individual institutions to determine the number of students they enrol in bachelor level courses. However, as Bennett (2019) points out, in terms of the benefits from higher education there has been greater focus on access to higher education than on graduate outcomes. There has also been growing debate over the oversupply of graduates and the increasing precarity of employment among graduates; particularly Creative Arts graduates (Stokes and Wright 2012). Given the relatively high growth rate of the creative innovative industries and growth in the creative workforce (Cunningham 2018) the observed outcomes of Creative Arts degrees—precarious and delayed employment and relatively low salary returns (Ball, Pollard and Stanley 2010; Comunian *et al.* 2010; Cunningham and McCutcheon 2018; Pollard 2013) are incongruous.

While the notion of the intrinsic value of higher education may influence the debate around whether creative degrees lead to 'value for money' (Comunian and Brook 2019; Tomlinson 2018), there has also been growing demand for empirical investigations to analyse both their economic and social value. Empirical examinations, using well-established, including Australian Census data (Bennett 2019), can help us to better understand career building pathways among creative graduates and changes over time in the value of higher education participation.

This paper seeks to provide an update on the economic benefits to the individual of pursuing a university degree in Creative Arts given the changes outlined above. An analysis of the career of an 'average' Australian university graduate in the Creative Arts is provided. Here the emphasis is on the labour market experience and economic returns to Creative Arts graduates with a view to comparing the value of a Creative Arts degree with other university alternative courses. The non-monetary benefits of a Creative Arts degree to individuals and society, which are usually assumed to be positive, are beyond the scope of this paper and not, therefore, included. However, we do think the results have implications for government policy and for university funding.

The analysis relies mainly on the data from the 2016 Census of Population and Housing because it provides unit records on every graduate living in Australia.

Two general approaches have been adopted. First, a profile of Creative Arts graduates is used to describe the labour market outcomes of Creative Arts graduates from age 21 years, usually the youngest age of a graduate, up to age 65 years, assumed to be the usual retirement age. Several labour market indicators such as employment status, income and occupation are used to compose the profile. The second approach is to calculate the private rate of return to a university degree. This is a technique well-known to labour economists but not, generally, familiar to non-economists.

Numerous international and country-specific studies have calculated the rate of return to individual's investment in education. The basic idea is that education not only provides consumption benefits to students, but it is also an investment which involves sacrificing income in the present to raise future income. According to the human capital framework time spent in education has the potential to raise future income by enhancing people's skills and raising their productivity. The return from a degree is compared to the return on non-human assets (usually the interest rate) and the return on other qualifications to assets the value of an investment in a particular course, in this case a Creative Arts degree.

An alternative view, that a degree acts as a screening device to employers rather than an increase in human capital, is also considered in the context of the Creative Arts.

The paper is structured as follows. The next section defines the group of people of interest and provides a profile of Creative Arts graduates. This is followed by a description of the rate of return method adopted and the results obtained by applying the approach to Creative Arts graduates. The paper concludes with a discussion of the results and implications for policy.

2. Profile of Creative Arts graduates

For the purpose of this paper a Creative Arts graduate is defined as someone holding a bachelor's degree in the Australian Standard Classification of Education (ASCED) two-digit field of study 10 – Creative Arts (ABS 2001). Degrees in this field are:

Performing arts

Music Drama and theatre studies Dance Performing arts, n.e.c.

Visual arts and crafts

Fine arts Photography Crafts Jewellery making Floristry Visual arts and crafts, n.e.c.

Graphic and design studies

Graphic arts and design studies Textile design Fashion design Graphic and design studies, n.e.c.

Communication and media studies

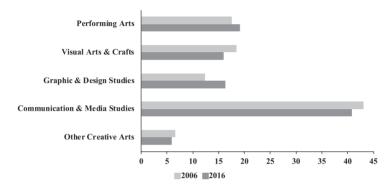
Audio visual studies Journalism Written communication Verbal communication Communication and media studies, n.e.c

Other Creative Arts

Creative Arts, n.e.c.

Figure 1 shows that the largest number (about 40 percent) of students are in Communication and Media studies and the mix of graduates by sub-discipline has not changed greatly over the decade.

Figure 1: Composition of Creative Arts completions by sub-discipline, per cent, 2006 and 2016





In 2016 there were 79,990 domestic students enrolled in and 17,017 students graduating with a bachelor degree in Creative Arts degree. Of these 62.2 per cent were female compared to 59.3 per cent for all graduates (DET 2017). The demand for Creative Arts courses and, hence the number of completions has been growing over time at a rate greater than the number graduating in all degrees – 92 per cent between 2001 and 2016 for Creative Arts compared to 39 per cent for all graduates– the annual growth rate for males was 5.7 per cent compared to 4.4 per cent for females (DET 2017). Students from high SES backgrounds are more likely while students from low SES backgrounds are less likely to be found in Creative Arts courses than in other degrees (DET 2018).

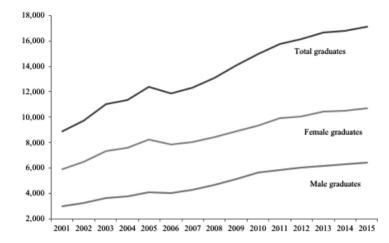


Figure 2: Completions in Creative Arts degrees

Source: Department of Education and Training (2016), uCube, Higher Education Data.

3. Employment status

According to the 2016 Census, 198,533 people of working age (21 to 65 years) held a degree in the Creative Arts. The gender distribution of all those holding a Creative Arts degree is very similar to that of current new graduates [Table1]. Of all Creative Arts graduates, 51.6 per cent were in full-time employment and 28.8 per cent were in part-time employment. 5 per cent unemployed (were not engaged in either full-time or part-time employment), and 14.5 per cent were not in the labour force. Female graduates had a lower rate of full-time employment compared to male graduates, while part-time employment was higher among females than males. 17.6 per cent of female graduates were not in the labour force, which was double the percentage of male graduates.

Employment status		Number			Per cent		
		Male	Female	Total	Male	Female	All
Employed	full-time	45,546	56,904	102,450	61.9	45.5	51.6
	part-time	17,094	40,094	57,188	23.2	32.1	28.8
Unemployed		4,052	5,970	10,022	5.5	4.8	5.0
Not in the labour force		6,857	22,016	28,873	9.3	17.6	14.5
Total		73,549	124,984	198,533	100.0	100.0	100.0

Table 1: Employment status of Creative Arts graduates

Source: Census of Population and Housing, 2016, unpublished

Figure 3 shows the labour force status of Creative Arts graduates and other graduates by gender. Of Creative Arts graduates 61.9 per cent of males and 45.5 per cent of females are employed full-time compared to 73.5 per cent and 49.0 per cent, respectively, for other graduates. Therefore, a significantly smaller percentage of Creative Arts graduates are employed full-time than other graduates. While for females, the part-time employment rate is virtually the same for both groups of graduates, about 30 per cent, the rate for males is significantly higher, 23.2 per cent, than that of other graduates, 13.0 per cent. The unemployment rate for Creative Arts graduates is slightly lower than for the graduate labour force as a whole, but for males it is 1.5 percentage points greater for other graduates and 1.2 percentage points for females. There is little difference between the two groups of graduates with respect to the percentage not in the labour force.

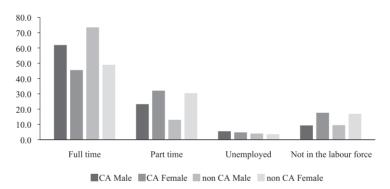


Figure 3: Employment status of Creative Arts and all other graduates, per cent

Source: Census of Population and Housing, 2016, unpublished.

In summary, Creative Arts graduates do not appear to have greatly unfavourable labour market outcomes, in terms of unemployment or not in the labour force. However, the incidence of part-time work is more prevalent among male Creative Arts graduates than for other graduates. This supports the anecdotal view, supported by Throsby and Zednick (2010) for example, that, at least for males, some Creative Arts graduates make use of part-time employment to support their artistic pursuits. However, as will be demonstrated later in the paper the number pursuing arts-related occupations form a minority of Creative Arts graduates.

In summary, the distribution of labour force states is somewhat different to that of other graduates, which may be because of differences in demand for the skills that Creative Arts graduates possess (partly through their degree programs) or supply decisions of those graduates who have somewhat different views of paid work and wish to devote time to less marketable arts-related activities. Whatever the reason, it is evident that some Creative Arts graduates experience more time in non-standard forms of employment and thus may obtain less economic benefits than other graduates.

4. Occupation

Of full-time employed Creative Arts graduates, more than half (52.1 per cent) are engaged in professional occupations, followed by management (17.3 per cent) and clerical and administrative occupations (11.1 per cent) [Table 2]. A much higher rate of full-time employment in clerical and administrative occupations was observed among female graduates (14.4 per cent) than male graduates (6.9 per cent). Female Creative Arts graduates are much less likely to be in professional occupations than other female graduates. This is probably due to the high representation of women in nursing and teaching which also makes the proportion of all male degree holders in professional occupations also less than that of female graduates.

	Creative Arts			Other graduates		
	Male	Female	Total	Male	Female	Total
Professionals	53.7	50.9	52.1	53.7	60.8	56.9
Managers	16.1	18.2	17.3	23.2	15.7	19.8
Clerical/administrative workers	6.9	14.4	11.1	7.4	12.3	9.6
Sales workers	5.3	6.6	6.0	3.3	2.7	3.0
Technicians/trades workers	9.3	3.3	6.0	5.3	1.9	3.8
Community/personal service workers	4.1	4.9	4.6	3.3	5.3	4.2
Labourers	2.4	1.1	1.7	1.8	1.0	1.5
Machinery operators/drivers	2.1	0.4	1.2	2.0	0.3	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

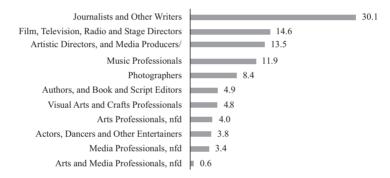
Table 2: Occupation of full-time employed Creative Arts and all graduates, per cent

Source: Census of Population and Housing, 2016, unpublished

In most respects the distribution of Creative Arts graduates by major occupation group is not dissimilar to that of other graduates with the possible exception of those employed in the relatively unskilled sales occupations. Although the percentages employed in sales are twice that of other graduates as a percentage of all degree holders in Creative Arts the numbers are quite small. It can, therefore, be concluded that most Creative Arts graduates are employed in occupations that would be expected of university graduates generally. While it might be thought that Creative Arts graduates are more likely to face mismatch between education and jobs than other graduates, the evidence suggests that Creative Arts degrees equip graduates for many jobs not necessarily directly related to students' main areas of study.

A closer examination of Creative Arts graduates in professional occupations [Figure 4] reveals that only 27 per cent are employed in arts-related professional occupations defined according to the ABS standard classification of occupations.¹

Figure 4: Arts and media related occupations of Creative Arts graduates in professional occupations



Source: Census of Population and Housing, 2016, unpublished

Of these 27 per cent of all Creative Arts graduates who are employed in artsrelated occupations, the greatest number (30 per cent of the 27 per cent or 8 percent of all Creative Arts graduates) are employed as journalists or other writers (35 per cent for females and 24 per cent for males). This means that only about 19 per cent of all Creative Arts graduates are employed in other arts related occupations. This is something which needs to be considered by universities when designing curriculums for arts students if the aim of a degree is (partly) to develop skills in demand by the labour market.

The major industries of employment of Creative Arts graduates are professional services, education services and information media and communications [Table 3]. Apart from obvious preponderance of Creative Arts graduates in the last two of these industries the distribution of employment by industry is quite disparate indicating that these graduates are widely spread across the occupational distribution.

	Creative Arts		Other	
	Male	Female	Male	Female
Professional, Scientific/technical Services	17.5	15.5	19.0	10.6
Education and Training	14.2	16.1	12.0	24.0
Information Media/telecommunications	12.9	10.3	2.7	1.4
Retail Trade	8.6	11.2	5.2	4.8
Arts and Recreation Services	8.1	6.5	1.4	1.2
Public Administration and Safety	5.9	6.9	9.3	8.6
Accommodation and Food Services	5.7	5.5	3.5	3.0
Manufacturing	5.2	3.4	5.6	2.4
Construction	3.3	1.5	4.7	1.4
Health Care and Social Assistance	3.2	7.0	11.2	27.6
Administrative and Support Services	3.0	3.3	2.4	2.4
Transport, Postal and Warehousing	2.6	1.4	3.9	1.3
Financial and Insurance Services	2.5	3.1	7.6	4.6
Wholesale Trade	2.5	2.5	3.2	1.7
Other Services	2.3	2.9	2.0	1.8
Rental, Hiring and Real Estate Services	1.3	1.6	1.8	1.2
Agriculture, Forestry and Fishing	0.6	0.6	1.2	0.8
Electricity, Gas, Water and Waste Services	0.5	0.5	1.6	0.6
Mining	0.3	0.3	2.1	0.6

Table 3: Industry of employment, Creative Arts and other graduates, per cent

Source: Census of Population and Housing, 2016, unpublished

Comparing industry of employment by gender, less prominent gender segmentation was observed among Creative Arts graduates than other graduates. For example, the rate of employment in professional services among male graduates (19 per cent) is almost double that of female graduates (10 per cent), whereas there was no significant difference between genders among Creative Arts graduates with 17 per cent for male and 15 per cent for female. Also, the gender segmentation observable for non–Creative Arts graduates is not evident for Creative Arts graduates. For instance, among non-Creative Arts graduates, education and training; and health care and social assistance are highly gender segmented.

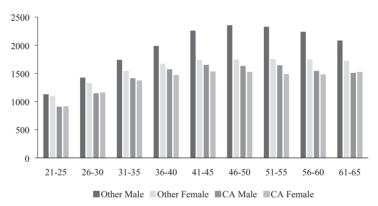
Taken together with the evidence of the occupational distributions noted earlier, what emerges is that the 'non-specific' nature of careers based on a Creative Arts degree mitigates against gender segmentation. This view will be examined later in the paper where we examine salaries of Creative Arts graduates.

5. Earnings

We now turn to the wage outcomes of Creative Arts graduates compared to others. In particular, if the "struggling artist" anecdote is an observable phenomenon then it is necessary to look beyond the labour force status of Creative Arts graduates and to examine their lifetime earnings.

Several important features are noticeable, particularly that Creative Arts graduates earn less at all ages than other graduates [Figure 5]. What is more, the differences in income increase with age. Given that these are incomes of only those employed full-time, differences in income must be due to differences in wages and salaries, not hours worked or labour force status. The value of human capital, both acquired through education and through experience, is clearly less for Creative Arts than for other graduates.

Figure 5: Median income per week, by gender and age, creative artists and other graduates, \$ per week (full-time)



Source: Census of Population and Housing, 2016, unpublished

Differences in the gender wage gap are evident for the two cohorts of graduates. There is a gender wage gap for both sets of graduates but the income differences between men and women is more pronounced for other graduates than for Creative Arts graduates. The gender wage gap for non-Creative Arts graduates increases with age but does not for Creative Arts graduates. In fact, for graduates in Creative Arts in the youngest and oldest age groups women earn a small premium over men.

Goldin (2014, 2015) regards the reasons for differences in pay according to gender in the labour market relate mainly to the way in which work is structured. In her view where substitutability between workers is greater, it would be expected that differences in male and female pay would be less The relatively small gender wage gap among Creative Arts graduates is indicative of the largely general nature of their skills which makes them male and female workers easily substitutable between tasks.

6. Rate of return to a Creative Arts degree

Here we use a familiar human capital approach to examine the economic benefits over a graduate's career, namely rate of return analysis. It is not intended here to explain in detail the method of rate of return analysis since this is readily accessible elsewhere (see, for instance, Daly *et al.* 2015, Lewis *et al.* 2004), but basically it treats investment in human capital (education) in the same way as an investment in physical capital. Whereas education provides consumption benefits to students, and it could be argued that this is particularly so in the Creative Arts, it is also an investment which involves sacrificing income and incurring other costs in the present to raise future income. We consider here only the financial costs and benefits of a degree. These (actual and opportunity) costs of a university education are taken as the individual's investment in education and the returns to this investment are the additional income earned by the individual over their lifetime, over and above what the individual would earn if they only had schooling up to Year 12. The rate of return is calculated in the same way as the return from an investment in a physical or financial asset such as the rate of interest.

According to the human capital framework, time spent in education has the potential to raise future income by enhancing people's skills and raising their productivity. An alternative interpretation of the higher earnings of the more educated is derived from the screening hypothesis which argues that formal education does not actually alter an individual's productivity but acts as a screening device used by employers to select workers. However, it has been argued that for many artists a university education is a particularly poor screening measure (see for instance Benhamou 2016) since a university qualification matters less than artistic talent which can be better evaluated through other means. Again, however, it is necessary to point out that few Creative Arts graduates are employed in arts related occupations and are employed in a wide variety of occupations and industries so perhaps a Creative Arts degree is a good screening device for the more generalist jobs they do.

While it difficult to distinguish between the competing explanations, what is important is that on average people with higher levels of education earn more than those with lower levels of education across a wide range of countries and time periods. From an individual's point of view, the evidence strongly suggests that investing in education is worthwhile (see for instance Daly *et al.* 2015 for the evidence for Australia).

It has been claimed that education also benefits society as a whole which and this has been discussed at length in the literature (see, for instance Daly *et al* 2015). For instance, it has been argued that a more highly educated workforce contributes to a more informed and tolerant society (Lewis *et al*. 2010). It would be expected that this argument would be particularly strong for creative artists. Recent research in Australia (Kassenboehmer *et al*. 2018) found that university education significantly increased agreeableness and extraversion in students from disadvantaged backgrounds, and this was not related to specific degrees or teacher quality. They maintain that agreeability and extraversion are linked to marketability of graduates. However, it was pointed out earlier that Creative Arts students are disproportionately from higher SES backgrounds than other students.

Increased levels of education can lead to credentialism and, where there is an excess supply of graduates, the creation of a group with unsatisfied expectations about their position in the job market. In the case of creative artists credentialism may be particularly rife given that typically arts courses used to be the domain of colleges and drama schools which have now been brought into the university sector. It may be questionable as to whether being a creative artist really requires a university degree. On the other hand, as the occupational distributions above demonstrate, few persons possessing a Creative Arts degree are employed in a related occupation. Therefore, a university degree which typically contains units in a wider range of subjects and skills attainment than suggested by the degree's major, may be appropriate for a world of work where demands are continually changing.

Australia, like most countries, subsidises public universities. There is, therefore, an opportunity cost associated with the use of these public funds. While the social rate of return (which attempts to incorporate these external effects) is frequently discussed in the literature, there are a relatively small number of studies that have attempted to quantify it.

In estimating the returns to higher education, no account is taken of the effect of unmeasured characteristics such as natural ability, motivation and family background on outcomes.

The results presented here are based on cross sectional data from the 2016 Census and are, therefore, an estimate of the expected average rate of return to investment in a Creative Arts bachelor's degree if the earnings differentials between high school and university graduates observed in 2016 were to continue over the course of a graduate's working life. The current incomes of graduates of different ages therefore are assumed to provide a useful guide to inform such a decision. so perhaps a Creative Arts degree is a good screening device for the more generalist jobs they do

The following discussion outlines the assumptions made in this paper. The data used for the earnings calculations are from the 2016 Census of Population. For comparison, the same calculations are done for all first degree holders.

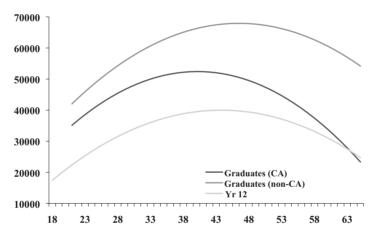
A simple regression relating median income to age and age squared was estimated to provide a smooth series for median incomes at each age for degree holders and for those with only up to Year 12 education. Net incomes were then calculated using the 2016/17 income taxation rates.

In the first modelling exercise incomes are the medians for all people with a given qualification in an age category and all labour market states are included; full and part-time employed, unemployed and not in the labour force. They, therefore, reflect the different employment outcomes for graduates compared with Year 12 completers and males compared with females as well as any income differences that exist due to differences in labour force status. The population of graduates is split into male and female since research shows returns to degrees are often quite different for females compared to males (Daly *et al.* 2015). In a second exercise only those in full-time employment were considered.

It is assumed that all students work part-time during their studies. In keeping with Daly *et al.* (2015), the estimate of hours worked is taken from a survey by McInnes and Hartley (2000) which found students work an average of 15 hours a week and earn \$18 an hour over a year. Adjusting this to 2016 prices yields an estimate of \$16,146 per year before tax.

All students are assumed to choose to finance their university course fees though the HECS-HELP loan scheme and repay debts according to the minimum payments Australian Tax Office schedule as they earn after completion of their study. Students are assumed to bear \$1980 in costs for books, materials etc. This is based on a 2006 estimate by the then Australian Vice Chancellors Committee (AVCC 2007) adjusted to 2016 prices.

Figure 7a: Median annual income, Creative Arts, other degrees and year 12 graduates by age, \$ per year (females)



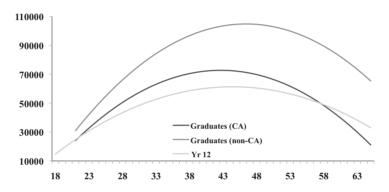
Source: Authors' estimates derived from Census of Population and Housing, 2016, unpublished.

Turning now to gender differences in earnings but including all graduates, irrespective of labour force status, Figures 7a and 7b show the age earnings profiles for, respectively females and males.

The difference in earnings of Creative Arts graduates and other university graduates compared to year 12 school leavers is much greater when only female graduates are considered Figure 7a). This is partly due to the relatively low earnings of women with only Year 12 level education – the benefits of university education are greater for women than for male graduates. The rate of return for female Creative Arts graduates is estimated to be 11 per cent, but still below that of other female graduates, 15 per cent.

Turning to males, from all labour force states, Figure 7b shows that the earnings of Creative Arts university graduates, although greater than the earnings of Year 12 graduates, at least under age 58 years, are well below those of graduates with other degrees. This is reflected in the rate of return for Creative Arts degrees, estimated to be 5 per cent compared to 15 per cent for other university graduates.

Figure 7b: Median annual income, Creative Arts degrees, other degrees and year 12 graduates by age, \$ per year (males)



Source: Authors' estimates derived from Census of Population and Housing, 2016, unpublished.

In the cases above, everyone is included in the rate of return estimates no matter how much they work or even if they do not work at all. Unemployment or a greater incidence of part-time work may significantly affect the returns to a degree. Also, many (perhaps most) women leave the labour force for periods of time to look after children. The profiles earlier in the paper illustrated that many women are working part-time or not in the labour force. For males, the incidence of part-time employment is greater for Creative Arts graduates than for other university graduates.

Therefore, it is interesting to control for this by selecting only those working full-time. In the scenario considered here both the university graduates group and the comparator group (Year 12 graduates) only include those working full-time.

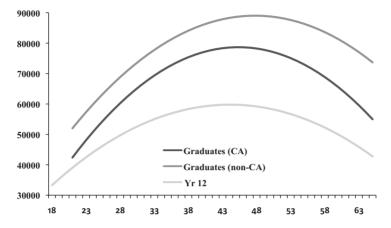


Figure 8a: Median annual income of females working full-time, Creative Arts, other degrees and year 12 graduates by age, \$ per year.

Source: Authors' estimates derived from Census of Population and Housing, 2016, unpublished.

Figure 8a shows the age earnings profiles as before but for only females working full-time. Because only those employed full-time are included the rates of return reflect only differences in salaries (returns to human capital) rather than employment status. Clearly, the gap between Creative Arts graduates and other graduates, although still fairly wide, narrows considerably when only those working full-time are considered.

The rate of return falls slightly, from 11 per cent to 9 per cent, as does the rate of return for other university graduates, from 15 per cent to 13 per cent. The reason for the fall in rate of return is that women who only have year 12 qualifications have higher percentage increases through working full-time than university graduates.

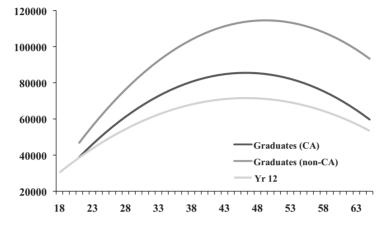


Figure 8b: Median annual income of males working full-time, Creative Arts, other degrees and year 12 graduates by age, \$ per year.

Source: Authors' estimates derived from Census of Population and Housing, 2016, unpublished.

Figure 8b shows the age earnings profiles for males working full-time. The earnings gap between Creative Arts and other graduates is widened, but the earnings gap between Creative Arts and Year 12 graduates is also widened. The rate of return to a Creative Arts degree for males working full-time is estimated to be 7 per cent, higher than the 5 per cent for all male Creative Arts graduates. The rate of return compares unfavourably with other degrees which have an estimated rate of return of 14 per cent for those working full-time and for those included in the case of all males.

It is interesting to compare the estimated rates of return for Creative Arts in this paper with estimates for previous years. Daly *et al.* (2015), using similar methodology to that of this paper estimated the rate of return to Creative Arts (and a range of other degree) using data from the 2006 Census. They found that the rate of return was negative – from a financial viewpoint students would have been better off not going to university and getting a job. Similar conclusions were reached by Lewis and Lee (2019) using 2011 data.

The above results suggest that a Creative Arts degree provides a 'generalist' degree which provides skills for a range of occupations with reasonable financial returns, though not as high as for most other degrees. By comparison, it is interesting to compare a Creative Arts degree with the degree which probably most matches it as a generalist degree, namely, Humanities.

Table 4: Selected labour market measures of the median graduate, 2016.

Rate of return		
	Male	Female
Creative Arts	5%	9%
Humanities	4%	6%
All Bachelors	13%	13%
Unemployment rate	·	
	Male	Female
Creative Arts	1.3%	1.3%
Humanities	0.5%	0.8%
All Bachelors	0.7%	1.0%
Employed in professional	or managerial professio	ons
	Male	Female

	Male	Female
Creative Arts	60.9%	54.2%
Humanities	72.1%	54.1%
All Bachelors	81.4%	68.8%

Source: Corliss, Daly and Lewis (2019)

Note: These estimates of rate of return are for what the authors call the 'base case' assumptions in their report and differ somewhat from the assumptions in this paper.

Corliss, Daly and Lewis (2019) have produced a range of measures of labour market 'match' for a number of degrees. Table 4 presents three of these – rate of return, unemployment rate, and occupation of employment as a percentage of employment of all graduates from their respective discipline. The results in Table 4 are for the 'median' graduate in the earnings distribution.

The rate of return to a Creative Arts degree is comparable, if somewhat higher, than for Humanities but much lower than for other degrees. Nevertheless, the rate of return for both 'generalist' degrees is still higher than the long-term interest rate, making the degrees a worthwhile investment for the 'median' student.

Creative Arts graduates, both male and female, have higher unemployment rates than other graduates which would contribute to lower median earnings. Humanities graduates have somewhat lower unemployment rates than other graduates but do better than Creative Arts graduates. The third indicator of market match in Table 4 is the percentage employed in professional or managerial occupations. Generally, a university education should equip graduates for these broad occupation categories – as opposed to alternatives such as trades, labouring and sales occupations. Here there are quite distinct differences between graduates with the two generalist degrees and other degrees. Creative Arts and Humanities graduates have much lower percentages employed in occupations which might be regarded as 'appropriate' to their degree. This is particularly the case for Creative Arts graduates and, within this discipline, males. The mismatch between education and occupation could be a major reason for the lower rates of return.

Despite the lower rates of return, in the light of previous work and the results for 2016 in this paper, there appears to have been a remarkable change in fortunes for (most) graduates in Creative Arts. This is particularly interesting given the huge expansion in university places in Creative Arts degrees identified in this paper. The implication is that there has been an increased demand for the skills these graduates possess, but this is a topic for future research. Nevertheless, it may indicate that the fundamental changes in skills demand brought about by structural and technological change (Lewis *et al.* 2010) has created a favourable market for the skills that Creative Arts graduates possess. Further analysis of this is warranted, not least by Arts faculties themselves, if curriculum design etc is to be harnessed to this growing demand.

7. Conclusion

The career outcomes of Creative Arts graduates are not too different from other degree holders with respect to unemployment and labour force participation. They are to be found in a great variety of occupations and industries. The evidence that Creative Arts graduates are to a great extent not employed in arts-related jobs implies that a Creative Arts degree is largely a 'generalist' degree equipping graduates with a range of skills fitted to the labour market. There is evidence of mismatch for some graduates in that they are less likely to be found in professional or managerial occupations. The rate of return to a Creative Arts degree for most is lower than for other degrees, which implies that a Creative Arts degree does not provide individuals with as large monetary benefits as degrees in other subjects. The rate of return is similar or better than for another generalist degree, Humanities. However, the estimated rates of return are positive and certainly greater than the rate of interest. Considering students for whom a Creative Arts degree represents both an enjoyable experience (consumption good) and a low but reasonable financial return, the degree may well be regarded as a good investment for students. Since not everyone chooses a degree which has a high rate of return and most of the degrees require similar skill sets for entry, it is clear that people choose their degree and subsequent career on the basis of a set of qualities, only one of which is pay.

It has been argued (see, for example Throsby and Zednick 2010) that university education adds little to 'arts' human capital. It does, however, provide access to 'non-arts' jobs which allow individuals to pursue their arts interests. The results suggest that for many people a Creative Arts degree represents a consumption good rather than an investment in human capital with over half of students funded totally by government since they do not repay HECS-HELPS debts. It is not the intention here to comment on the desirability of this, but Creative Arts degrees education could be thought of as a large subsidy to the arts. The case for public funding of Creative Arts degrees relies on the argument that the arts have considerable external benefits to society as a whole, but this is beyond the scope of this paper.

Interestingly, it has been argued that increased university funding of arts education might make Creative Arts graduates worse off (Towse, 2006). Increasing the supply of graduates entering low paying occupations would be expected to further reduce their pay and employment prospects. However, the results suggest that in a period of big increases in Creative Arts graduates the rewards to these degrees increased. This is likely due to the fact that few of these graduates are in arts-related occupations but have a range of skills which are growing in demand as structural and technological change continue to transform the Australian labour market.

It is worth noting that the Creative Arts group consists of a diverse range of sub-disciplines whose graduates may have quite different labour market outcomes than those of the group as a whole. The study of these sub-disciplines is worthy of study but beyond the scope of this paper.

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