Disciplines in their organisational context

Mapping Australian faculty structures to the ASCED and ANZSRC fields of education and research

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In this study, we investigated the extent to which the national classifications of disciplines reflect the organisational structures of Australia's universities. The names of faculty units of ten universities were mapped onto the fields of education set out in the Australian Standard Classification of Education (ASCED) as well as the fields of research in the Australian and New Zealand Standard Research Classification (ANZSRC). The results show a fair degree of alignment between the faculty structures and both classification schemes, but also reveal much variation in the degree of alignment amongst the universities sampled. Schools and other second-level units are slightly more aligned to ASCED than to ANZSRC. Several units covering more specific fields are not represented in the current ASCED and ANZSRC classifications, though most non-alignment is due to divergent ways of dividing and compounding broader disciplinary areas. The degree of alignment to the research classification has changed little, overall, since the time of ANZSRC's predecessor, the Australian Standard Research Classification.

Keywords: disciplines, classification, ASCED, ANZSRC, organisational structures

Introduction

The idea of the academic discipline is multifaceted. As Sugimoto and Weingart (2015) observe, conceptualisations of discipline encompass both 'cognitive' views, in which disciplines are defined as particular bodies of content, with certain associated epistemologies, and 'social' or 'institutional' views, in which disciplines are considered to be the product of particular social structures, most notably the faculty structures of universities, developed over the past one and a half centuries. On the one hand, the similarity of faculty structures amongst universities, even across countries, points to intrinsic factors contributing to the development of disciplines; on the other, many academics would probably agree that university departments are not always established solely to reflect a nascent theoretical position or the growing popularity of a particular methodology and the way university faculty are departmentalised organisationally is bound to influence, to some extent, academic practices and, ultimately, how disciplines are conceptualised.

The institutional influence on the way academic disciplines are defined, even outside of particular institutions, is exemplified by the two standards covering academic disciplines developed by the Australian Bureau of Statistics: the Australian Standard Classification of Education (ASCED) (Australian Bureau of Statistics, 2001) and the Australian and New Zealand Standard Research Classification (ANZSRC) (Australian Bureau of Statistics, 2008). Both include a disciplinary classification scheme that is used to report on the teaching (in the case of ASCED) and research (in the case of ANZSRC) carried out in Australian universities, and both schemes have been developed with considerable input from the universities themselves, as well as from individuals and groups employed in these universities.

With the various intrinsic and extrinsic factors at play, it can be assumed that disciplines are not static and that disciplinary

classifications will continue to change over time. It can also be assumed that there will continue to be a fair amount of alignment, but by no means perfect alignment, between faculty structures and external disciplinary classifications such as ASCED and ANZSRC. What cannot be assumed, however, is that the amount of alignment between faculty structures and external classifications will remain constant. It could be argued, perhaps, that institutional structures might not keep pace with changes in academic practices and subject matter, though universities tend to change their organisational structures more frequently than government agencies change their disciplinary classifications. Perhaps more importantly, the practice of basing institutional structures on notions of discipline, even in an 'institutional' sense, may be declining. Increasingly, interdisciplinary and transdisciplinary configurations may be aligning better with university interests, depending on how those interests are defined. The increasing emphasis on interdisciplinary research, with governments as well as industry prioritising funding for the solving of 'real world' problems, may be an argument for a move away from discipline-based structures, as may new types of degree program that emphasise student choice and curricular agility.

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This study examines the hypothesis that a decline, as identified by the literature, in the centrality of the concept of discipline in the academy over the past several decades has resulted in a decline in the alignment between faculty structures and disciplinary classifications, at least in the Australian context. It also compares the degree of alignment of Australian faculty structures with the two different classifications, ASCED and ANZSRC, against the hypothesis that ASCED, despite being the older standard, is more aligned to the organisational structures of universities given that these structures tend to be based on teaching more than on research. The ANZSRC scheme is currently being reviewed, and thus it is timely to report on the extent and nature of the alignment between the schemes, as well as the extent of the alignment amongst the faculty structures themselves, across a sample of Australian universities. The study also considers the range of alignment across universities and across different disciplinary areas, identifying organisational units whose names might be candidates for inclusion in revisions to the current schemes, if they are indeed 'fields'. For the purposes of this paper, 'fields' and 'disciplines' are treated as being synonymous.

Literature review

It has been argued that academic disciplines, in the modern sense, were established as a response by university administrators to a burgeoning academic workforce in the latter part of the nineteenth century (Whitley, 2006). As scholars professionalised and gained status, university departments increasingly operated autonomously and ultimately as 'cartels', with the pathway to departmental employment controlled by the department itself (Turner, 2000). As semi-autonomous units, or 'tribes', they developed power bases that vied for university resources through the winning of academic 'territory', according to the oft-used metaphor (Adams, 1976; Becher, 1989).

On the other hand, university departments justified themselves with reference to external concepts of particular disciplines, and it was no coincidence that different universities established departments based on the same discipline (Turner, 2000). Particular methodologies and theoretical outlooks were advanced by scholarly societies and accrediting bodies, which provided a check on departments but at the same time reinforced their autonomy. Disciplines have both an institutional and epistemological basis (Whitley, 2006). This is why 'academic disciplines' have been conceptualised in a range of ways, or as what Trowler *et al.* (2012) describe as a continuum of approaches: at one end, there is the relativist position, from which disciplines are seen purely as products of particular social environments, primarily in the context of universities; at the other end, there is the 'essentialist' position, from which disciplines are seen to have core bodies of knowledge requiring particular methods of knowledge discovery (research) and dissemination (publication, teaching, etc.). Trowler *et al.* (2012) recommend a middle path, recognising the importance of social context as well as differences in the objects of knowledge (i.e. subjects) that may give rise to intrinsically different epistemologies.

It would appear that the history of the concept of 'discipline' has likewise been affected both by politico-economic and 'scientific' circumstances. The growth of the academic workforce in the nineteenth and twentieth centuries reflected the increasing demand for science, as well as demand for various components of the service sector (law, medicine, teaching, etc.) that were undergoing professionalisation in the same way as the academy. Through the course of the twentieth century, the natural sciences in particular attracted

large amounts of government and industry funding for research; however, increasing amounts of this funding were, and still are, for applied interdisciplinary research, which has to some extent run counter to the concept of disciplines and challenged the priority of disciplinary organisation. Trowler *et al.* (2012) thus contend that disciplinarity is not as strong a force in academe as it once was and the tribes metaphor not so appropriate nor applicable; on the other hand, disciplinarity clearly remains an important concept. It still has a large bearing on university structures and practices; there are still numerous scholarly societies representing the gamut of disciplines and fields; curricula are often still based on discipline, as are many research groupings and research assessment exercises, including 'Excellence in Research for Australia' (Australian Research Council, 2019a). The concept's relationship with interdisciplinarity, however, is increasingly complex and fluid, with more and more environmental factors coming into play (government policy, global economics, higher education trends, and so forth).

The complexity of the relationship between disciplinarity and interdisciplinarity includes the way in which the latter can work for as well as against the former: interdisciplinarity may encroach upon disciplinarity, but it may also be an incubator of new disciplines (Turner, 2000). The ways in which disciplines emerge, evolve and decline are themselves complex, although the literature has often treated them as a given and focused instead on the differences between them and the effects of these differences. Becher (1989), for example, distinguishes between hard and soft, pure and applied, urban and rural disciplines, and reports on how these differences correlate with various cultural characteristics. A more recent instance would be the analysis of research 'engagement' in terms of similar disciplinary dimensions conducted by Doberneck and Schweitzer (2017). However, Whitley (1984) had already pointed out the impact of historical trends on disciplines and the way in which environments shape disciplines. Kuhn's 'paradigms' were not completely autonomous, nor impervious (Kuhn, 1962). Academic fields were located in particular structures, which were the product of broad trends of government policy, the leadership of particular individuals, or technological and economic change, and so on. Whitley (1984) discusses the way in which biotechnology, for instance, has emerged as a new discipline in more recent times, out of the old 'biology' paradigm.

While many disciplinary changes may simply constitute greater specialisation and represent a finer calibration of disciplines into sub-disciplines, it is widely accepted that disciplinary (and sub-disciplinary) boundaries are often contested, and that 'knowledge maps' are subjective and dynamic, as implied by Becher's tribes and territory metaphor. These 'battles' may result in reconfigurations and different ways of looking at particular subject matter. New fields may also emerge, of course, through the discovery of new areas. As Areekkuzhiyil (2017) discusses, new disciplines tend to be a product of new theoretical or methodological interests on the part of protagonists in one or more existing disciplines, which inevitably modifies the disciplinary landscape in some way or other. Baron (2005) points out, however, that not all new theoretical and methodological areas are promoted to the status of 'discipline', and this is not simply a matter of critical mass or the degree to which disciplines are 'elastic' or not (Marcovich & Shinn, 2011): politics also play a role, given the academic 'real estate' that disciplines are more likely to enjoy. Disciplines are ontological in as much as they focus on a subject matter, as Shepherd (1993) argues, but they are also epistemological in as much as they represent specific methods for studying that subject matter, and social in as much as they are only constructed due to certain socioeconomic conditions. As such, disciplines are subjects, methods and groups. Given the multifaceted nature of the concept of discipline it is perhaps not surprising that it has often been defined as a list of various things. Kelley (1997, p. 1), for example, describes a discipline as

> a characteristic method, specialised terminology, a community of practitioners, a canon of authorities, an agenda of problems to be addressed, and perhaps more formal signs of a professional condition, such as journals, textbooks, courses of study, libraries, rituals, and social gatherings.

One could make a number of additions to this list. For instance, Foucault (1972, p. 224) views the discipline as 'a system of control in the production of discourse'. However, the aim of the study reported in this article is to compare the ways academic disciplines have been viewed that have resulted in the ASCED and ANZSRC classifications with the ways they have been viewed that have resulted in the faculty structures of a sample of Australian universities.

The Australian context

Universities in Australia make much use of standard classifications when reporting on their teaching and research activities to Federal government in order to facilitate comparison and sector-wide analysis. Higher education courses have been described in terms of the ASCED since its introduction in 2001. The standard comprises a classification of the levels of education as well as of the fields of education. It was designed to be consistent, as much as possible, with the International Standard Classification of Education (ISCED), maintained by UNESCO (1997; 2012). Other equivalent classifications exist in other parts of the world, such as the Classification of Instructional Programs (CIP) in North America (National Center for Education Statistics, 2010). As well as for the university and vocational education and

training (VET) sectors, the standard is employed in other government data collection exercises, including the Census of Population and Housing (Australian Bureau of Statistics, 2016).

Meanwhile, universities report on their research activities and outputs in terms of the ANZSRC. It is also used by the Australian Research Council to help administer grant applications. It consists of a classification of fields of research, as well as of 'socio-economic objectives'. There is also a brief taxonomy of type of (research) activity. Published in 2008 by the Australian Bureau of Statistics and Statistics NZ, it replaced (in Australia) the Australian Standard Research Classification (ASRC; Australian Bureau of Statistics, 1993; 1998). The research standard in particular is the product of extensive consultation exercises involving the Australian research and university community, as can be seen in the present review of ANZSRC (Australian Research Council, 2019b).

The data gathered using these standards have been subjected to various secondary analyses, including studies that have investigated the alignment between the content of published research and its authors' departmental affiliations. Haddow (2015) found a significant amount of non-alignment between the two, echoing a previous analysis by Bourke and Butler (1998). However, to the best of the authors' knowledge, there has been no study examining the alignment (or otherwise) between the classifications themselves and departmental structures.

It should be noted that while a push towards interdisciplinary research can be seen in some of the discourse in which the Australian research community has engaged over recent decades, reflecting the global trend, there appears to be no sign of the discipline classifications playing a less important role in the reporting of university business in the immediate future at least: hence the ANZSRC review. Similarly, the recent emergence of 'discipline' as a way of directly organising academics in Australian universities (Harkin & Healy, 2013), as an alternative or supplement to schools and faculties, and as a replacement for departments perhaps, would suggest that its influence on universities and their structures is hardly obsolete.

Methodology

The websites of the thirty-nine Australian universities (Universities Australia, 2019) were examined in order to discern those discipline-based components of their organisational structures where most of their continuing academic staff were primarily located. Where found, formally presented organisational charts were preferred for this purpose, but the webpages covering the relevant units and sub-units were also perused to examine and assess their applicability. Typically, the first-level unit was named a faculty or college, and the second-level unit a school.

Usually, units and sub-units had their own websites, with pages that listed staff members and so on. Units were deemed discipline-based, or partially so, if part of their formally presented name represented, or could be considered to represent, one or more fields of study. Universities generally had two levels of discipline-based unit, according to their websites, but few had a clearly identifiable third level and even fewer one that consistently applied. Third-level units rarely appeared on organisational charts and rarely had their own websites with lists of staff. Sometimes, however, a staff page of a second-level site would divide staff by 'discipline group' or 'department'. In such cases a sub-unit was inferred and noted, but far more commonly, teaching 'areas' or 'research areas' were presented without an obvious organisational role. For the most part, these were more likely to represent areas of the curriculum or research foci, rather than groups of employees with a reporting line, and as such were discounted, as were 'centres' and the like that were part of the structure but whose members were mostly primarily located elsewhere (e.g. in a school). It should be noted that the primary purpose of the university websites consulted for this study appears to be marketing, i.e., to attract new students to the university. Gathering information about organisational units from these websites was still possible, but they should not be considered completely reliable sources.

For practical reasons, it was decided to draw on a sample of ten universities, consisting of those whose websites, at the time of inspection in September 2019, were deemed to indicate their university's faculty structures most clearly. As they included representatives from all the major groupings (Australian Technology Network, Group of Eight, Innovative Research Universities Australia, Regional Universities Network) and from most of the states and territories, the sample was considered reasonably representative of the population. The ten universities were: Australian Catholic University (ACU), Charles Sturt University (CSU), Griffith University, La Trobe University, RMIT University (RMIT), University of Newcastle, University of New South Wales (UNSW), University of Tasmania, University of Technology, Sydney (UTS), and University of Western Australia (UWA).

The field of study elements of the names of the units and sub-units for each of the ten universities were extracted and listed as a taxonomy (one for each university) on Excel spreadsheets. In a few cases, universities included multiple units with the same field of study in their names, distinguished in some other way, e.g. by location or educational level. These duplicates were merged in the taxonomy. In all cases encountered by the authors a unit's name included a disciplinary element.

The fields of study in the taxonomies were then coded twice, first using the ASCED fields of education codes and

Table 1. Alignment of organisational units and ASCED codes

	Mapped (n)	*Did not map (n)*	*Alignment (%)*
University of Technology Sydney	24	8	75.0
University of Western Australia	15	5	75.0
University of New South Wales	26	10	72.2
Australian Catholic University	6	3	66.7
RMIT University	10	5	66.7
Griffith University	13	10	56.5
University of Newcastle	9	7	56.3
University of Tasmania	7	7	50.0
Charles Sturt University	9	14	39.1
La Trobe University	4	9	30.8
Total	**123**	**78**	**61.2**

then ANZSRC fields of research codes. Both standards comprise three levels of field codes: the best matching code was used, regardless of level. If the element in the taxonomy was considered to semantically cover more than half of the concept represented by a code, as indicated by its component sub-codes (in the case of first and second level codes), but not significantly more than the code, then this code was recorded as the appropriate choice. On the other hand, if the element represented the meaning of more than one code at the same level, but not more than half of a code at a higher level, then a code for 'no match' was recorded. Similarly, if more than one first-level code or less than half of a third-level code was applicable, or no code at all was applicable, a 'no match' was recorded. Interpretation of the name elements was based on corresponding descriptions or indications found on the unit's webpages, where applicable. Interpretation of the codes was based on the scheme's other codes, sub-codes and references, where applicable. The coding was initially carried out by the two authors in parallel, so that inter-coder reliability could be measured; agreement was achieved in over 85 per cent of cases.

The percentage of elements in each university's taxonomy that matched a code was then calculated. Those elements that did not match were analysed, as were the codes applied, using a broad, independent classification, namely Wikipedia's 'List of academic fields' (https://en.wikipedia.org/wiki/List_of_academic_fields). For a longitudinal comparison, 2007 and 2009 versions of the websites of the universities in the sample were examined by means of the Internet Archive's Wayback Machine (https://archive.org/web). These years were chosen as they were the years before and after the existing ANZSRC classification was introduced; 2007 thus mirrored 2019 in that they both mark the end of an iteration of the national research classification, with a revision of the ANZSRC standard scheduled for publication in 2020. As a 2007 version of the Griffith University website was not found, the units for this university across all three years were excluded from the analysis.

Findings

The number of second-level units identified for analysis ranged from 9 (ACU) to 36 (UNSW). The degree to which they aligned with the ASCED field codes is set out in Table 1. Most organisational units of most universities in the sample mapped to an ASCED code, but those universities (UTS and UWA) with greatest alignment (i.e. with the highest proportion of units that mapped) only reached the three-quarter level, while CSU and La Trobe's structures coincided with the ASCED scheme in only 39.1 per cent and 30.8 per cent of cases respectively. Thus, while there is clearly a considerable degree of alignment between the disciplinary basis of schools and other second-level units and the ASCED disciplinary classification, there is also a significant degree of non-alignment. The range of alignment, from 75 per

Table 2. Alignment of organisational units and ANZSRC codes

	Mapped (n)	*Did not map (n)*	*Alignment (%)*
University of Technology Sydney	22	10	68.8
Australian Catholic University	6	3	66.7
RMIT University	10	5	66.7
University of Western Australia	12	8	60.0
University of New South Wales	21	15	58.3
University of Newcastle	7	9	43.8
Charles Sturt University	9	14	43.5
Griffith University	10	13	43.5
University of Tasmania	6	8	42.9
La Trobe University	5	8	38.5
Total	**109**	**92**	**54.2**

Table 3. Fields of units not mapped to ASCED codes

Compound fields	*N*	*Broader unitary fields*	*N*	*Narrower fields*	*N*
Humanities	6	Humanities	3	Applied systems biology	1
Social sciences	4	Social sciences	3	Aviation	1
Natural sciences	4	Natural sciences	6	Cancer medicine	1
Formal sciences	4	Formal sciences	0	Genetic counselling	1
Professional and applied sciences	28	Professional and applied sciences	12	Health policy	1
				Indigenous Australian studies	1
				Islamic studies & civilisation	1
				Orthoptics	1
				Rural health	2
Total	**46**		**22**		**10**

cent down to 30.8 per cent is quite surprising. No obvious explanation has been devised for this large range. The number of units does not appear to be a significant factor, nor the age of the university, nor its grouping. The number and nature of the faculty restructures at the various universities might be a major factor, but confirmation or rejection of this supposition requires further investigation. It should be emphasised that alignment with ASCED (or with ANSRC for that matter) tells us nothing about the quality or value of the teaching (or research) of a university's units, only about a university's organisation.

The degree to which the sample university units aligned with the ANZSRC codes is set out in Table 2. As the ASCED and ANZSRC schemes are quite similar, it is not surprising that there is a strong degree of correlation (Spearman's rank correlation coefficient = 0.85) between the universities' relative alignment to the two classifications. In the case of the ANZSRC scheme, UTS, ACU and RMIT were most closely aligned with two-thirds of units mapped to a code, and La Trobe again was the least aligned at 38.5 per cent. Only half of the ten universities had a majority of their units aligned with the research classification, while the range of overlap was also smaller than with the ASCED scheme. It is hypothesised that the weaker alignment is due to the tendency of faculty structures in Australia to be based more on teaching than on research.

The disciplinary elements of the names of the second-level units that did not map to the two schemes were analysed, as set out in Tables 3 and 4. Compound fields (e.g. Computing and Mathematics) and the broader unitary fields (e.g. Allied Health) were categorised according to the six disciplinary groupings in Wikipedia's 'List of academic fields'. The narrower fields, featuring more at the third-level of the ASCED and ANZSRC classifications, if at all, are listed verbatim. A few terms occurred multiple times in the compounds, and a few broader unitary terms likewise occurred two or three times, but there was, in summary, a wide range of terms representing a wide range of fields and disciplines not aligned to ASCED and ANZSRC. Given their preponderance, compounding was likely a major factor in this non-alignment, probably in some cases the product of organisational mergers. Some of the narrower fields may be candidates for new or revised entries in the schemes, although none of them featured in more than one university structure (at least not at the second level). It should be noted that the full population of universities might well yield four times as many of these narrower fields, which would represent a quite significant number.

Table 4. Fields of units not mapped to ANZSRC codes

Compound fields	*N*	*Broader fields*	*N*	*Narrower fields*	*N*
Humanities	7	Humanities	6	Applied systems biology	1
Social sciences	3	Social sciences	3	Aviation	1
Natural sciences	6	Natural sciences	6	Indigenous Australian studies	1
Formal sciences	1	Formal sciences	1	Orthoptics	1
Professional and applied sciences	38	Professional and applied sciences	14	Rural health	2
				Speech pathology	1
Total	**55**		**30**		*7*

The distribution of the fields of units that were not mapped to ASCED codes was then compared with that of the fields of units that were mapped. Using the basic Wikipedia taxonomy, it was found that the non-mapped fields are reasonably representative of the disciplinary spectrum, though the professional and applied fields fit relatively better into the scheme than did the four 'basic' disciplinary groupings. This may reflect pressures applied by professional accrediting bodies and the increasing demand for universities to focus on job-ready education. In any case, the figures in Table 5 demonstrate the preponderance of

Table 5. Fields of units mapped and not mapped to ASCED codes

	Mapped fields (n)	*Mapped fields (%)*	*Non-mapped fields (n)*	*Non-mapped fields (%)*
Humanities	10	8.1	11	14.1
Social sciences	11	8.9	7	9.0
Natural sciences	5	4.1	10	12.8
Formal sciences	6	4.9	4	5.1
Professional and applied sciences	91	74.0	46	59.0
Total	**123**	**100.0**	**78**	**100.0**

professional fields in modern academe, with those related to health especially prevalent.

It was interesting to note that certain fields varied considerably across the universities in terms of their superordinate unit's named disciplinary area. Thus, although the field itself may have been aligned to the national codes, their disciplinary location was often not aligned. Notable cases include Psychology (located organisationally under Health, Medicine, Social Sciences, etc.); Criminology (located under Social Sciences, Law and Justice, etc.); specific allied health fields that were sometimes located under Medicine, other times Health Sciences; and likewise various discipline areas that were sometimes under Social Sciences and other times under the Humanities, Arts, and so on.

Finally, the second-level units from 2007 and 2009 were mapped to the ASRC and ANZSRC classifications respectively. Excluding the mapping for Griffith University (due to a lack of access to its 2007 website), the overall degrees of alignment in all three years – 2007, 2009 and 2019 – are shown in Table 6. Although most of the universities' structures changed over the period, resulting in a shrinking total number of second-level units, the overall degree of alignment with the corresponding national research classification remained about the same (i.e. a little over half).

Table 6. Fields of units mapped and not mapped across time

Year	*Mapped (n)*	*Did not map (n)*	*Total*	*Alignment (%)*
2007	115	88	203	56.7
2009	107	95	202	53.0
2019	99	79	178	55.6

Discussion

University structures change slowly and they don't necessarily change to keep up with changes in disciplines generally; they usually change for various reasons pertaining to their university's individual circumstances. These might reflect broader disciplinary trends, but they might reflect counter-trends, or simply a realignment to another configuration of established disciplinary classifications. Likewise, disciplines change slowly. Many fields and disciplines reflected in university structures today were established many decades ago. New fields do emerge, due to new subject matter, new methodologies, or for socioeconomic reasons, but typically take decades to establish themselves to the extent that they commonly constitute university departments. Individual universities have many options when it comes to organisational structure: even the largest universities can only split their academic workforce into a relatively small number of units. As each university's academic workforce and socioeconomic circumstances is different, their choice of units will likewise vary. Only after a long period of time could an emerging field hope to have become institutionalised across many universities.

Our findings suggest that second-level academic units in Australian universities take on a wide range of disciplinary guises, about half of which coincide with the standard classifications. One of the reasons for the shortfall is that any single classification of disciplines, standard or otherwise, will omit many alternatives, one or more of which may suit the circumstances of individual universities better, at a given time. There are many different ways that the disciplinary landscape can be divided. For instance, Accounting might be combined with Banking and Finance in one classification but stand on its own in another.

However, the large variance amongst the ten sampled universities in degree of alignment with the standard classifications is noteworthy and merits further investigation. It does not appear to be simply a question of size, with smaller universities having more need to group academics into units combining multiple fields. Other circumstances that might lead to a workforce with less orthodox disciplinary aspects may be at play, or perhaps a greater willingness to 'break the mould' organisationally, which might mean different disciplines or less of an emphasis on discipline.

Finally, the organisational choices made by Australian universities as a whole does not appear to have resulted in less alignment with the standard research classification over the past decade. As the classification is partly the product of these choices, this might be considered unsurprising. However, it does suggest that this association, between university structure and discipline, is still strong, at least in Australia. It might be that the power of disciplinarity is diminishing more broadly, but as an organising principle for universities, it remains very much alive.

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