Progress report on the social role of colleges

Notes for a presentation in the social role of colleges speaker series on 16 May 2023.

# Abstract

This reports progress with the project to institutionalise colleges’ social role, by which we mean community colleges and similar types of organisations’ support of social, educational, cultural, and economic development in their local communities and regions.

The roles of colleges have alternatively been considered so multifarious that they cannot discharge any satisfactorily, or so narrowly concentrated on filling employers’ needs that they overlook other important roles. These different conceptions of colleges’ roles vary by time and place.

The paper analyses explorations of colleges’ social role in the seminar series so far, in Australia, Brazil, Canada, Chile, England, Finland, France, Germany, Ireland, Switzerland, and the USA.

The paper proposes that all post secondary organisations including colleges share three roles, although these roles may have different emphases in different organisations and in different programs of different orientations and levels: educational, occupational, and social.

This paper opens with the background to this examination of colleges’ social role, the steps it has taken so far, and the next steps planned. It then reviews how organisations as physical bodies and particularly universities become institutionalised as a sociological idea of norms and expectations. It notes that universities’ roles have become institutionalized as teaching, research and service, and that the service role has been elaborated in different ways. In contrast the idea of the college has not been institutionalised and there is not a shared understanding of colleges’ roles, including their social roles.

The paper proposes that all post secondary organisations including colleges share three roles, although these roles may have different emphases in different organisations and in different programs of different orientations and levels:

Educational, to develop graduates’ and society’s understanding of theoretical, abstract knowledge;

Occupational, to develop graduates’ individual and work groups’ collective productive capacity; and

Social, to advance society, and social justice and inclusion (Moodie and Wheelahan, 2023, pp. 53, 67).

The paper then reviews contributions to the seminar series on colleges’ social role in 11 countries: Australia, Brazil, Canada, Chile, England, Finland, France, Germany, Ireland, Switzerland, and the USA. The paper observes considerable diversity in colleges, and also in their social roles, which may be individual or collective, on campus or in the community.

The paper concludes by observing that clearly much more work is needed to develop a shared understanding of colleges and their social role. It notes these key research questions proposed by Wheelahan (2022):

1. What should college qualifications look like?
2. What can colleges do that universities and schools can’t do?
3. What roles do colleges play in supporting local and regional economic, social and cultural development?
4. How will the work of occupations served by colleges change in 5, 10 and 15 years time? How should qualifications change?
5. How can we support college teachers as ‘dual-professionals’ – industry experts and expert teachers?

# Background

This reports progress with an examination of the social role of colleges led by Leesa Wheelahan, Jakob Kost and me supported by graduate research assistants Dr Amet Su, Ms Erin Anderson, Ms Seo Young Lee, Ms Kelsey Lewis, Dr Mary Overholt, and Ms Yehyeon Yoo. The project has involved literature reviews and country studies of Finland by Ms Lewis, France and the Carnegie Foundation by Dr Overholt, and South Korea by Ms Yoo.

These were followed by a series of speakers on the social role of colleges by:

Professor Leesa Wheelahan: What do colleges do and why do they matter? Thinking about the role of colleges as local actor, 1 June 2022;

Dr Pauline David: Vocational preparation in schools and college in France, 8 June 2022;

Dr Jakob Kost: Universities of applied sciences as actors of regional development? Evidence from the Swiss education system, 22 June 2022;

Dr Maarit H Virolainen: The Finnish UAS: Towards enhancing regional and national collaboration, 15 September 2022;

Dr Debra D Bragg: What research on community college baccalaureates teaches us about systematic inequities in higher education, 4 October 2022;

Dr Silvia Annen: Academisation, hybrid qualifications and skills shortage – competition and complementarity between vocational and higher education in Germany, 27 October 2022;

Professor Gareth Parry: On the roles and relations of further education colleges in England, 10 November 2022;

Mr Cristian Lincovil Belmar and Ms Miski Peralta Rojas: Defying the primacy of the market: the challenge of Chile’s public higher vocational education, 26 January 2023;

Dr Steven Hodge: Eroding the social role of vocational education in Australia, 9 February 2023;

Dr Claudia Schiedeck Soares de Souza: The Federal Institutes: The most recent model for VET in Brazil, 23 February 2023;

Dr Ellen Hazelkorn, Restructuring Irish post-secondary education – 1970s to 2023+, 4 May 2023.

Videos, and slides of most presentations, are on the social role of colleges speaker series web site:

<https://www.oise.utoronto.ca/cihe/events/cihe-speaker-series/social-role-of-colleges/>

The speaker series will be concluded with a progress report for which these notes are the background. Then a double symposium on diversity in the social role of colleges will be presented at the European Conference on Educational Research on 22-25 August 2023. The double symposium will comprise –

Professor Leesa Wheelahan and Dr Gavin Moodie: What do colleges do and why do they matter? Thinking about the role of colleges as local actors and comparing Australia and Canada;

Professor Gareth Parry: On the roles and relations of further education colleges in England;

Dr Maarit Virolainen: The Finnish UAS: Towards enhancing regional and national collaboration;

Dr Pauline David: Vocational routes in France: The difficult articulation between pre-bac and post-bac;

Professor Silvia Annen: Academization, hybrid qualifications and skills shortage – competition and complementarity between vocational and higher education in Germany; and

Professor Stephanie Matseleng Allais: When bureaucracy combines with quasi-privatization: The complexity of institutional forms of vocational colleges in South Africa.

There is also a call for a special issue on the social role of colleges in international perspectives for the *Journal of Vocational Education and Training*. Abstracts of 500 words are due on 2 October 2023

<https://www.tandfonline.com/journals/rjve20>

# The institutionalisation of universities

Streeck and Thelen (2005, p. 9) elaborate institutions as sociological constructs: collectively enforced expectations of the behavior of specified categories of actors or the performance of certain activities. These are distinguished from organisations, such as corporations. But organisations may become institutionalised:

We suggest that organizations come to be regarded as institutions to the extent that their existence and operation become in a specific way publicly guaranteed and privileged, by becoming backed up by societal norms and the enforcement capacities related to them (Streeck & Thelen, 2005, p. 12).

Universities as physical organisations embody the concept or the idea of the university as a sociological institution. The modern institutionalisation of the university has been shaped prominently in different forms by Newman (1852/2008), von Humboldt (1809/1970), Flexner (1930/1968) and Kerr (1963). The sociological institution of the university accords substantial historical and global meaning and standing to ‘categories such as student, professor, university, or graduate, or of topics such as physics or literature’ (Meyer, Ramirez, Frank and Schofer, 2007, p. 187). This is despite universities’ organisational characteristics being ‘quite variable across national boundaries, and sometimes across strata or category within national states’ (Meyer, Ramirez, Frank and Schofer, 2007, p. 195).

The university as institution supports ‘a claim to unified knowledge and authority, rooted in the most universal principles’; it ‘rests on a bed of cultural assumptions involving universalistic values, human empowerment, scientific knowledge, and rationality’ (Meyer, Ramirez, Frank and Schofer, 2007, pp. 199, 203). The roles of universities have been to preserve, transmit, and extend knowledge (Clarice, Hough and Stewart, 1984, p. 24). However, since at least 1961 the roles of universities have been teaching, research, and service (Schultz and Meade, 1989, p. 115; Meier, 2013, p. 4; Centra, 1979; Eble, 1983). These roles are understood to be served by both the organisation and individual academics within them (Terpstra and Honoree, 2009), though universities’ social role emerge from different traditions (Ramirez, 2006, p. 231).

Universities’ service role has also been described as their civic role ([Talloires Network of Engaged Universities](https://talloiresnetwork.tufts.edu/), 2005) and also as their third mission. Compagnucci and Spigarelli (2020, pp. 5-6) argue that ‘the service(s) provided by the university to society, above and beyond teaching and research’ are the third mission of the university which ‘seek(s) to contribute to the social, cultural and economic development of communities’. Barker (2004, pp. 128-132) builds on Boyer’s (1990, 1996) scholarship of engagement to argue that the scholarship of engagement is open to the public, participatory, builds community partnerships, creates public information networks, and develops civic literacy.

Following the USA presidents' declaration on the civic responsibility of higher education (Campus Compact, 2009) the Carnegie Foundation developed an elective community engagement classification of higher education organisations (Saltmarsh and Johnson, 2018, p. 2; 2020, p. 105). The Carnegie Foundation elaborates community engagement thus:

Community engagement describes collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity. The purpose of community engagement is the partnership of college and university knowledge and resources with those of the public and private sectors to enrich scholarship, research, and creative activity; enhance curriculum, teaching, and learning; prepare educated, engaged citizens; strengthen democratic values and civic responsibility; address critical societal issues; and contribute to the public good.

(American Council on Education, 2023a)

The elective classification has been applied by 9 Irish organisations, 16 Canadian organisations including 1 community college, and 9 Australian universities (American Council on Education. (2023b). Of the 357 organisations which have gained the Carnegie community engagement classification 15 have ‘community college’ in their name (Carnegie Foundation for the Advancement of Teaching, 2020).

For completeness we note ‘community service obligation’, which is a distinctively Australian term (Baird, 2001, p. 52), which refers to government services being turned into government business enterprises, whether privatised or retained in government ownership, but which are still expected to maintain at least some non commercial services to meet social objectives (NSW Treasury, 1993, p. 1, cited in Baird, 2001, p. 52).

Australian governments have sought to apply the concept of community service obligations to public institutes of technical and further education (House of Representatives Standing Committee on Education and Employment, 2014), but this has been criticised as being too narrow a conception of colleges’ public value (Zoellner, 2019).

# Colleges

In contrast, colleges are ‘categorically demarcated’ from universities and located closer to production to prepare graduates for specific work roles (Meyer, Ramirez, Frank and Schofer, 2007, pp. 207, 209). Unlike universities, colleges are ‘mainly local organizations justified by specific economic and political functions or shaped by particular historical legacies or power struggles’ (Meyer, Ramirez, Frank and Schofer, 2007, p.210). There is no idea of the college as a sociological institution commonly understood over time and place.

Neither is there a shared understanding of the roles of colleges. Bailey (2002, p. 70) complained that English further education colleges developed in the 20th century without ‘a clear purpose, focus or status’ and Meier (2013, p. 3) observed that ‘There is a history of ambiguity, even confusion, regarding the mission and purposes of the colleges’ of the USA.

Levin (2000, p. 1) analysed discussion of the mission of USA community colleges into three tracks: curricular focus in three domains of academic, vocational, and remedial; individual and community development, individuals’ social and economic mobility, and social stratification and social reproduction; and educational and training roles as a pipeline to baccalaureates, preparation for jobs, ‘and as a place for potential success and failure in society’. To these Levin added the economic role of community colleges.

Some argue that colleges’ roles should be residual, to ‘undertake(s) everything not being taken care of elsewhere’ (Meier, 2013, p. 15). In the UK ‘the further education sector may be described as the “ragbag” into which are deposited courses not provided elsewhere’ (Times Higher Education Supplement, 1973, p. 1), and Parkes (1991, p. 42) described the UK’s further education sector as filling the gaps not filled by alternative sectors. Dennison and Gallagher (1986, p. 142) suggested that the term ‘college’ had become so imprecise in North America as to be almost meaningless.

Some argue that colleges have adopted too many missions in an attempt to ‘be all things to all people’ (Bailey and Averianova, 1998, p. 1), diverting resources from their preferred college mission (Desai, 2012, p. 112). This might be termed the Corinthians critique: ‘To the weak became I as weak, that I might gain the weak: I am made all things to all people, that I might by all means save some’ (Bible, King James version, 1 Corinthians 9:22).

Sometimes colleges seem to have multiple missions because what are presented as separate purposes (Grubb, 2003, p 11) or roles (Meier, 2013, p. 4) are better understood as different activities or programs contributing to the same broad purpose.

Meier (2013, p. 5) notes that ‘Some observers perceive frenetic activity and weak traditions as symptoms of an inadequately realized “institutionalization project” (DiMaggio, 1988)’. This paper seeks to strengthen colleges’ institutionalisation by building on the roles of further education developed over several iterations by our former colleague and friend the late Jim Gallacher (Gallacher, 2011; Gallacher, Ingram and Reeve, 2012; Gallacher & Reeve, 2019).

We propose that all post secondary organisations including colleges share three roles, although these roles may have different emphases in different organisations and in different programs of different orientations and levels:

Educational, to develop graduates’ and society’s understanding of theoretical, abstract knowledge;

Occupational, to develop graduates’ individual and work groups’ collective productive capacity; and

Social, to advance society, and social justice and inclusion (Moodie and Wheelahan, 2023, pp. 53, 67).

While the social role is well established for universities it is less well established for colleges. Indeed, Bailey and Averianova (1998, p. 16) note that:

Cohen and Brawer (1975) stated that the community college is not a house for independently functioning agents of community uplift but a school. “The colleges would do better to accept the idea of no growth and use the time to improve what they have. The repeated calls for a 'new mission' are a debilitating diversion" (p. 164).

Since we were interested in developing an international understanding of the social role of colleges we invited colleagues from 12 countries to reflect on the social role of colleges in their country. We gave colleagues a prompt of 240 words and invited them to present on the social role of colleges, leaving them to interpret ‘colleges’ and ‘social role’ as they considered most informative and relevant for their country.

As Grubb (2003, pp. 1, 5) observed, colleges are ‘are enormously varied, both within countries and among countries’. Some colleges have multiple purposes while others are specialised, and some are closely integrated with universities while others are sharply demarcated from them. Some colleges concentrate on upper level programs such as bachelors and masters, some concentrate on mid level programs such as associate degrees and diplomas, while others concentrate on certificates and other lower level programs (Grubb, 2003, p. 7).

We note some of these differences in the following, as they shape colleges’ social role. However, these organizational differences do not qualify our project to institutionalise the college, for as Meyer, Ramirez, Frank and Schofer (2007, p. 195) observe, the university is strongly institutionalised despite universities’ organisational characteristics being ‘quite variable’.

# Colleges in 12 countries

We start with some contextual information on the countries considered in this study: Australia, Brazil, Canada, Chile, England, Finland, France, Germany, Ireland, South Africa, Switzerland, and the USA (table 1). We note that they are of substantially different sizes and income. They also have substantially different socio economic policies. For example, the governments of France and Finland tax double the proportion of gross domestic product of Chile and Ireland. And some countries (Finland, Ireland, Germany, Canada, Switzerland, Australia, UK) have substantially more equal distribution of income than others (South Africa, Brazil, Chile).

Table 1: Contextual information on the selected countries

| **Country** | **Population 1** | **Gross domestic product (gdp) 2** | **Gdp per capita 3** | **Tax as % of gdp 4** | **Gini index 5** |
| --- | --- | --- | --- | --- | --- |
| Australia | 25.7 million | 1.55 trillion | 60,433 | 28.5 | 34 |
| Brazil | 214.3 million | 1.61 trillion | 7,507 | 31.6 | 50 |
| Canada | 38.3 million | 1.99 trillion | 51,988 | 34.3 | 33 |
| Chile | 19.5 million | 317 billion | 16,265 | 19.4 | 50 |
| Finland | 5.5 million | 297 billion | 53,655 | 41.8 | 20 |
| France | 67.7 million | 2.96 trillion | 43,659 | 45.3 | 33 |
| Germany | 83.2 million | 4.26 trillion | 51,204 | 37.9 | 32 |
| Ireland | 5.0 million | 504 billion | 100,172 | 19.9 | 31 |
| South Africa | 59.4 million | 419 billion | 7,055 | 25.2 | 67 |
| Switzerland | 8.7 million | 800 billion | 91,992 | 27.5 | 33 |
| UK | 67.3 million | 3.13 trillion | 46,510 | 32.1 | 34 |
| USA | 331.9 million | 23.3 trillion | 70,249 | 25.8 | 42 |

Sources

1 World Bank Group Countries and Economies, https://data.worldbank.org/country

2 World Bank Group current US$ Countries and Economies, https://data.worldbank.org/country

3 World Bank Group current US$ Countries and economies, https://data.worldbank.org/country

4 Oecd global revenue statistics database. Total tax revenues, % of gdp, https://www.oecd.org/tax/tax-policy/global-revenue-statistics-database.htm

5 United Nations University World Institute for Development Economics Research. World income inequality database companion dataset (wiidcountry), version 30 June 2022. <https://doi.org/10.35188/UNU-WIDER/WIIDcomp-300622>

Colleges, universities and other organisations that prepare graduates for work are likely to be shaped by the economies for which they prepare graduates. Selected economic indicators (table 2) show that the selected countries have substantially different economies. Ireland’s very high reported exports as a % of gross domestic product is probably due to what Krugman (2016, 2020) calls ‘leprechaun economics’: ‘the distortion of statistics caused by multinational corporations in search of tax havens’.

Table 2: Selected economic indicators for selected countries

| **Country** | [**Agriculture, forestry, and fishing, value added (% of GDP)**](https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS?view=chart) | [**Industry (including construction), value added (% of GDP)**](https://data.worldbank.org/indicator/NV.IND.TOTL.ZS?view=chart) | [**Manufacturing, value added (% of GDP)**](https://data.worldbank.org/indicator/NV.IND.MANF.ZS?view=chart) | [**Services, value added (% of GDP)**](https://data.worldbank.org/indicator/NV.SRV.TOTL.ZS?view=chart) | [**Exports of goods and services (% of GDP)**](https://data.worldbank.org/indicator/NE.EXP.GNFS.ZS?view=chart) |
| --- | --- | --- | --- | --- | --- |
| Australia | 2.3 | 25.5 | 6 | 65.7 | 22.1 |
| Brazil | 6.9 | 18.9 | 10 | 59.4 | 20.1 |
| Canada | 1.7 | 24.6 | 10 | 66.9 | 30.7 |
| Chile | 3.3 | 31.7 | 9 | 54.6 | 31.9 |
| Finland | 2.3 | 24.6 | 15 | 59.8 | 39.4 |
| France | 1.6 | 16.7 | 9 | 70.3 | 29.4 |
| Germany | 0.9 | 26.7 | 19 | 62.9 | 47.0 |
| Ireland | 1.0 | 37.8 | 35 | 55.4 | 134.4 |
| South Africa | 2.5 | 24.5 | 12 | 63.0 | 31.2 |
| Switzerland | 0.6 | 24.6 | 18 | 71.9 | 71.4 |
| UK | 0.7 | 17.5 | 9 | 71.5 | 27.9 |
| USA | 1.0 | 17.9 | 11 | 77.6 | 10.9 |

Source: World Bank Group. (2023). Indicators. https://data.worldbank.org/indicator?tab=all

As a very partial indication of the educational context to which colleges contribute we examine adults’ highest level of educational attainment (table 3). The data are from the Oecd’s (2022) *Education at a glance*, but much data is missing and some values are unusually high or low, so may not be accurate. Nonetheless, they suggest substantially different levels of educational attainment in the selected countries. Australia, Canada and Ireland have relatively low proportions of adults whose highest educational qualification is below tertiary, and this seems to reflect the contribution of their colleges to post secondary non tertiary and short cycle tertiary education.

Table 3: Percentage of 25 to 64 year olds by highest education level attained for selected countries, 2021

| **Country** | **Below tertiary** | **Post secondary non tertiary** | **Short cycle tertiary** | **Bachelors** | **Masters and above** |
| --- | --- | --- | --- | --- | --- |
| Australia | 44 | 6 | 11 | 28 | 11 |
| Brazil | 79 |  |  | 20 | 1 |
| Canada | 28 | 10 | 26 | 24 | 11 |
| Chile | 69 |  |  | 19 | 2 |
| Finland | 56 | 1 | 8 | 17 | 17 |
| France | 59 | 0 | 14 | 12 | 15 |
| Germany | 56 | 13 | 1 | 18 | 13 |
| Ireland | 31 | 15 | 9 | 29 | 15 |
| South Africa | 84 |  | 8 | 7 | 1 |
| Switzerland | 55 |  |  | 24 | 21 |
| UK | 50 |  | 9 | 26 | 15 |
| USA | 50 |  | 11 | 25 | 14 |
| Oecd | 56 | 6 | 7 | 19 | 15 |

Source: Derived from Oecd (2022, p. 45) Table A1.1. Educational attainment of 25-64 year-olds (2021) Percentage of adults with a given level of education as the highest level attained.

# Colleges studied

Table 4 summarises characteristics of the colleges studied, which are elaborated in the following sections on each country, derived mainly from the slide presentation of each speaker.

Table 4: Summary characteristics of colleges studied

| **Country** | **Name** | **Main purposes of main programs** | **Level of main programs** | **Issues** | **Social role** |
| --- | --- | --- | --- | --- | --- |
| Australia | Technical and Further Education (public); vocational education and training (public and private) | Occupational preparation | Mid (diplomas) and lower (certificates) | Competency based training; marketisation | Crowded out by the dominance of the economic role |
| Brazil | Federal technological institutes | Occupational preparation | Mid: diplomas of 3 years | Over dependence on reduced federal funding. Weak links to work. | Strong orientation to social inclusion and regional development. |
| Canada other than Québec | Colleges | Occupational preparation and university transfer | Mid: associate degrees and diplomas | Colleges roles are under theorised and under institutionalised. The USA’s strong influence is a strength and a weakness. | Colleges are the anchor of their communities and have a strong social role |
| Canada - Québec | Collège d'enseignement général et professionnel | Preparation for university and for occupations | Lower to mid: diplomas | Colleges roles are under theorised and under institutionalised. Loi no 96 seeks to require more use of French. | Colleges are the anchor of their communities and have a strong social role. |
| Chile | Education superior técnica, and educación superior professional no académica | Preparation for occupations | Mid and upper | System heavily privatised and marketised | Shift from human capital to the right to education |
| England | Further education colleges | Preparation for university and for occupations | Mid (diplomas) and lower (A levels) | Colleges are now less a distinctive education and more a delivery organisation, and are now less an alternative route and more a provider of last resort. | Opportunities to collect evidence of colleges’ individual social, community & economic impacts, but fewer sources of evidence of their collective contribution |
| Finland | Ammattikorkeakoulut (AMK) (polytechnics); universities of applied sciences | Development of applied knowledge and occupational preparation | Upper: bachelors and masters | In regions collaboration between higher education organisations has led to mergers. | AMK operate within a landscape of digital, business and innovation ecosystems. |
| France | Instituts universitaires de technologie | Occupational preparation | Mid and upper: Diplôme Universitaire de Technologie of 2 years and Bachelor Universitaire de Technologie of 3 years | Strong academic priority and orientation | Instituts universitaires de technologie are at the intersection of secondary education, higher education, and work. |
| Germany | Hochschulen (universities of applied science) | Development of applied knowledge and occupational preparation | Upper: bachelors and masters | Complementarity of the system is possibly being displaced by overlap and competition between parts of the system, or by academic and vocational education converging | Vocational education remains valued. |
| Ireland | Technological universities | Development of applied knowledge and occupational preparation | Upper: bachelors to PhD | Priority for full time academic studies | Potential for regional role |
| Further education colleges | Occupational preparation; educational development | Lower: certificates | Small and residual | Community education |
| Switzerland | Universities of applied science | Development of applied knowledge and occupational preparation | Upper: bachelors and masters | Educational organisations do not have roles greatly independent of the state in Switzerland’s coordinated market economy | Economic evidence of universities of applied sciences’ contributions to their regions’ innovation and economic development. |
| USA | Community colleges | Development of knowledge and occupational preparation | Mid: associate degrees and diplomas | Social justice goals are compromised by systematic inequities in higher education of privilege, subordination, opportunity, and outcomes. | Opportunities for equity-minded community college baccalaureate policies, programs, and practices. |

# Australia

Australia is a medium sized wealthy country with a low level of tax but a medium distribution of income. Manufacturing has a low contribution to its gross domestic product, and services are a correspondingly high share of gross domestic product. Australian colleges’ contribution is reflected in 6% of adults having their highest level of qualification post-secondary non tertiary, and 11% short cycle tertiary.

In his presentation on eroding the social role of vocational education in Australia Steven Hodge (2023) described Australian post-compulsory education as being a binary structure comprising vocational education and training whose main qualifications are diplomas and certificates, and higher education whose main qualifications are baccalaureates and above.

Australian vocational education and training was formally established as a sector of national policy by the Kangan (1974, p. xxiii) report which identified broad roles for the sector:

The main purpose of education is the betterment and development of individual people and their contribution of the good of the community. Technical and further education should be planned accordingly.

. . . it is important that general education be seen as relevant to vocational purposes and that vocational education in turn becomes more general in its content and methods so that people can be better prepared to adapt themselves to changing conditions and to re-training, as necessary, at any time of their working lives.

This recalls Dewey’s (1914-1915/1977) liberal understanding of vocational education, and has attracted widespread support amongst Australian educators, as Dewey has attracted widespread support amongst educators in the USA and far beyond. Yet like Dewey (Labaree, 2010), Kangan won the educational argument but lost the policy struggle.

Kangan’s vision for Australian technical and further education has been overpowered by what policy makers call in their illiterate phrase the ‘national training reform agenda’. Hodge (2023) traces the origins of this combination of policies to two federal Labor ministers Dawkins and Holding (1987), and indeed federal and state labor governments and organised labour have been prominent in advocating, designing, and implementing these policies.

Hodge (2023) argues that the new policies change the purpose of vocational education to the economic end of ‘national skills formation’ which would ‘ultimately fulfil a social role’. They seek to position ‘industry’ as leader of the vocational education system, though since 2000 this has increasing been understood as just employers, particularly by conservative governments. It adopted competency-based training for the whole system and marketised vocational education, which has increased considerably private for profit provision of vocational education at the expense of public colleges, and has changed the focus of public colleges.

This is illustrated by the explosion in the number of private for profit providers, which are now 83% of all providers of vocational education and training (table 5).

Table 5: Types of providers of vocational education in Australia

| **Type of organisation** | **Number** | **% of all** |
| --- | --- | --- |
| Technical and further education institutes | 24 | 0.6 |
| Other public organisations, mostly schools, mostly very small | 635 | 15.8 |
| Private for profit providers | 3,347 | 83.5% |

Source: Wheelahan (2022)

Industry ‘leadership’ of vocational education in Australia has been as problematic in Australia (Hodge, 2023) as it has been in the UK and elsewhere. Hodge (2023) echoes Wheelahan (2009) and others in arguing that competency based training concentrates on skills that are immediately applicable and narrowly construed. This leads to rapid redundancy of learning, it constrains mobility in work and education, blocks access to ‘powerful knowledge’ (Young, 2009), and limits the agency of educators. Australia’s system of national training packages also has difficulties accommodating local conditions and practices (Hodge, 2023).

Hodge (2023) argues further that the marketisation of vocational education has led to a range of quality problems because it is a powerful incentive for low quality training, it restricts students’ choices, and has led to cuts in government funding. Hodge concludes that the dominance of the economic rationale for vocational education crowds out alternative conceptualisations of vocational education and thus its social role.

# Brazil

Brazil is a very big country, the second biggest included in this study after the USA. It is the fifth biggest in the world in both population and land area, and its gross domestic product is the seventh biggest in the world (Verhine and Dantas, 2019, p. 3).

Brazil has considerable ethnic diversity: 47% Brown (pardo), 43% White, 9.1% Black, 0.58% East Asian, and 0.28 % Indigenous. It has 26 states, a federal district and 5,561 municipalities in 5 regions. It has a tripartite system of government in which national, state and municipal governments have distinct independent powers and responsibilities. The national government coordinates education nationally, establishes national norms and raises finances for education, and accredits higher education. The states are responsible for secondary education and municipalities are responsible for primary education.

Brazil has a middle income which is very unevenly distributed amongst its regions and people. Agriculture is a relatively big part of its economy and services are correspondingly relatively smaller. A relatively high 33% of workers are self employed. If the figures reported in *Education at a glance* (Oecd, 2022, p. 45) are accurate a very high 79% of Brazilians’ highest qualification is below tertiary.

Brazil has 4 types of higher education organisations: universities which teach and conduct research, university centres which concentrate on teaching, colleges which mostly have a single purpose and field, and federal technological institutes.

Table 6: Number of higher education organisations by ownership, Brazil, 2014

| **Organisations** | **Public** | **Private** |
| --- | --- | --- |
| Universities | 111 | 84 |
| University centres | 11 | 136 |
| Colleges | 136 | 1,850 |
| Federal technological institutes | 40 | 0 |

Source: Derived from Verhine and Dantas (2019, p. 9) table 6.1 higher education institutions by type and region for Brazil, 2014

Dr Cláudia Schiedeck Soares de Souza (2023) described the federal technological institutes as a researcher and as the first female rector of the Institute of Rio Grande do Sul. Vocational education and training started in Brazil in 1909 with the creation of 19 apprentice and crafts schools which evolved with the development of the country. In 2008 the Brazilian government created the Federal Network of Professional Education Institutes to offer free education for regions without access to higher and technical education. The institutes now have 652 campuses.

Federal technological institutes are required by their legislation to have 50% of their enrolments in high school technical programs, 20% in teacher training, and 30% in undergraduate and graduate programs. They have a strong orientation towards social inclusion and reducing inequalities, particularly in regions under served by other higher education organisations. Federal technological institutes foster regional development by establishing strong links to their local community and innovation hubs to promote innovation of products, processes and services (Schiedeck Soares de Souza, 2023).

Federal technological institutes depend heavily on the federal government which has cut funding by 50% in 6 years. There are attempts to privatise and marketise the institutes. The institutes have weak links to work and thus do not respond flexibly to work changes. They also overlap with universities (Schiedeck Soares de Souza, 2023).

# Canada other than Québec

Canada and Australia share many similarities. They are very big geographically but with very sparse populations in their northern and central deserts, though while Australia’s desert is hot and dry, Canada’s is frozen. Both are built on the colonial disposition of Indigenous peoples and both continue to have high levels of immigration. Canada and Australia also have similar economic structures.

Canada has very high tertiary education attainment, due mostly to the contributions of its colleges to post secondary non tertiary education which is the highest qualification of 10% of adults, and short cycle tertiary education which is the highest qualification of 26% of adults, the highest in the world with only Japan coming close at 21% (Oecd, 2022, p. 45). This reflects the relatively high quality and standing of Canada’s colleges.

Canada has no federal minister of education and the federal government has much less influence on education including tertiary education than in Australia or the USA. But the federal peer evaluated research granting schemes have two funding streams dedicated to colleges’ community and social innovation.

A marked difference between Australia and Canada is that while Australian tertiary education continues to be strongly influenced by the UK and particularly England, Canada is strongly influenced by its very big, rich and powerful southern neighbour. This is as evident in higher education as in many other areas, with Canada’s colleges in many provinces strongly influenced by USA community colleges.

This is exemplified by the recent development of colleges in Ontario, Canada’s biggest province with 40% of its population. Colleges in Canada’s western provinces of British Columbia, Alberta and elsewhere were modelled on the USA’s vertical relations between colleges and universities: colleges were designed to offer associate degrees to prepare graduates to transfer to universities to complete a 4 year degree. In contrast, Ontario colleges were established to offer diplomas to prepare graduates for direct entry to work, parallel to universities and without an explicit transfer role.

This arrangement is more similar to the parallel systems of continental Europe (Skolnick, 2016). However, until recently Ontario colleges were not authorised to follow the logic of the European model to offer applied baccalaureates, and they are still not authorised to offer masters as have colleges in Finland, Germany and elsewhere on continental Europe. One possible reason is that Ontario is much closer to the USA model than to the continental European model (Skolnick, 2016, p. 47).

Canadian colleges including in Québec are part of a strong public system; they are highly trusted, and there is considerable confidence in their qualifications which have a rich curriculum. They have an explicit role in applied research which is supported federally. Canadian colleges outside Québec are funded publicly to offer applied baccalaureates.

Colleges are thus the anchor of their communities and have a strong social role, though this is under theorised and under institutionalised (Wheelahan, 2022).

# Canadian province of Québec

Québec’s approach is distinctive in North America and probably the world, though Singapore is similarly distinctive. Québec secondary education is of 11 years’ duration, one year shorter than many other systems. Québec school leavers who wish to undertake postsecondary education proceed to a *collège d'enseignement général et professionnel*(cégep, general and vocational college). Students who want to proceed to university undertake an academic *diplôme d'études collégiales* (DCS, diploma of college studies) of two years’ duration. Students who want to prepare directly for work complete a technical *diplôme d'études collégiales* of three years.

In common with around 60 jurisdictions (Johanson, 2009, p. 11) including the UK, Québec seeks to compensate for employers’ under investment in their own employees’ development by imposing a training levy ([Revenu Québec](https://www.revenuquebec.ca/fr/politiques-et-consignes-dutilisation/dispositions-de-protection-des-droits-de-propriete-intellectuelle/), n.d.). However, the effectiveness of Québec’s training levy has been questioned (Gagnon and Smith, 2013; Dostie, 2015) and the Fédération des cégeps has argued for the government to narrow the type of eligible training to encourage employers to source more of their training from formal education providers such as cégeps, universities and school boards (Presse Canadienne, 2017).

As in the rest of Canada, Québec’s cégeps are part of a strong public system; they are highly trusted, and there is considerable confidence in their qualifications which have a rich curriculum. They have an explicit role in applied research which is supported federally. They thus have a strong social role.

In 2022 Québec adopted loi no 96 Loi sur la langue officielle et commune du Québec, le français, bill 96 An Act respecting French, the official and common language of Québec. This limits enrolments in English language cégeps, requires all cégeps students to take at least three 45-hour courses in French, and requires all students other than those exempted to pass a French exam to graduate.

# Chile

Lincovil Belmar (2023) presented this illustration of Chile’s formal education system, from (Unesco, 2022, p. 10) (figure 1).

Figure 1: Chile’s formal education system



(Unesco, 2022, p. 10)

After completing lower secondary education pupils proceed to academically oriented (cientifico-humanista) upper secondary education and 29% proceed to upper vocational education (tecnicoprofessional) (Unevoc, 2018, p. 3; Zancajo and Valiente, 2019, p. 583). Of the students who proceed to tertiary education 29% enroll in short cycle tertiary education (education superior técnica, technical training centres), and the rest enrol in educación superior professional no académica (professional institutes of 3 years’ duration), and universities.

Lincovil Belmar (2023) reported that Chile has one of the most marketized and segregated education systems in the world. Compulsory education is provided by public schools, subsidised private schools and fully private schools. Schools are funded by the number of pupils they attract.

Chile’s higher education has a strong institutional hierarchy and a growing presence of private institutions, particularly in higher vocational education, where private institutions enroll more than 95% of students (Lincovil Belmar, 2023).

However, in their analysis of changes in Chile policy on technical and vocational education and training from 2006 to 2008 Zancajo and Valiente (2019) observe a shift from human capital to the right to education, a change also observed by Lincovil Belmar (2023) who also describes this a change from employability to substantive freedom. But Lincovil Belmar (2023) cautions that progressive policies have not yet become deeply embedded in Chile’s structures, culture and practices, and that Chile’s constitutional and political future remains highly contested and uncertain.

# England

Most international comparative statistics are by sovereign country, so the tables report figures for the UK, of which England is 84%, Scotland 8.2%, Wales 4.6% and Northern Ireland is 2.8% (Office for National Statistics, 2022). However, since many arrangements and particularly education are devolved to countries and differ markedly by country, most of the discussion is of England. Where UK is used the implication is that the observation applies to the whole sovereign country.

Further education in England has long been understood residually, as ‘any study taken after the age of 16 that is not part of higher education (that is, not taken as part of an undergraduate or post-graduate degree)’ (Snelson and Deyes, 2016, p. 22). This and England’s rich history of further education generates a complex diversity of further education colleges.

Parry (2022) started by identifying a college as any organization which offers further education which is neither a school, university nor training organisation. England thus has three education sectors for students aged 16 and above: schools which teach younger pupils as well as those aged 16 to 18, further education colleges for students 16 years and older, and higher education for students aged 18 and over.

Parry (2022) identified three types of further education colleges, for which he emphasised an equity role:

1. 161 general further education colleges/college groups

multi-purpose, multi-level, mixed-mode, all-age

bigger than schools, smaller than universities

**disproportionate share of disadvantaged + second chance students**

lower level of public funding + generally lower standing

social, community, economic roles

1. 74 sixth form colleges

These typically are for pupils aged 16 to 19 who typically study for advanced school-level qualifications such as [A Levels](https://en.wikipedia.org/wiki/GCE_Advanced_Level), the senior certificate qualifying graduates for entry to university; qualifications awarded by the [Business and Technology Education Council](https://en.wikipedia.org/wiki/Business_and_Technology_Education_Council) (BTEC), the [International Baccalaureate Diploma](https://en.wikipedia.org/wiki/International_Baccalaureate_Diploma), and school-level qualifications such as [General Certificate of Secondary Education](https://en.wikipedia.org/wiki/General_Certificate_of_Secondary_Education) (GCSE) examinations.

1. 23 specialist and designated institutions

Specialist colleges are for pupils with learning difficulties and designated institutions provide adult education.

While further education colleges are formally independent they are regulated centrally.

There are 9 levels of qualification in England, Wales and Northern Ireland (Gov.UK, no date), of which further education colleges offer all levels except for level 8 doctorate, level 7 masters, and degree apprenticeships at level 6 which are offered by employers (Parry, 2020, table 7.

Table 7: Qualifications in England, Wales and Northern Ireland by level and whether offered by further education colleges

| **Level** | **Qualification (offered by further education colleges)** |
| --- | --- |
| 8 | Doctorate |
| 7 | Master’s degree |
| 6 | Bachelor’s degree + degree apprenticeship |
| 5 | Higher national diploma (HND), foundation degree + higher apprenticeship |
| 4 | Higher national certificate (HNC) + higher apprenticeship |
| 3 | A level, applied general, Technical level, access + advanced apprenticeship |
| 2 | GCSE, functional skills, English for speakers of other languages (ESOL) + intermediate apprenticeship |
| 1 | First certificate, essential skills, ESOL |
| Entry | Skills for life |

Source: Parry (2022)

This is Parry’s (2022) depiction of the substantial changes of further education from vocational colleges coordinated by municipal governments before the 1980s to being incorporated as largely independent bodies to compete in markets constructed by the national government after the 1990 (figure 1)s:

Figure 1: Further education from a system to a sector

|  | **Before 1980s** |  | **After 1990s** |
| --- | --- | --- | --- |
| **Mission** | vocational | → | Plural |
| **Governance** | municipal | → | Independent |
| **Organisation** | stratified | → | Segmented |
| **Policy** | coordination | → | Competition |
| **Credo** | alternative | → | Responsive |

(Parry, 2020)

Parry (2022) argued that further education colleges have boundary overlaps:

with schools for year 12 students, tho colleges have a remediation role for school-leavers with weak or fail grades, and for 14-16 compulsory age (‘high needs’) students;

with (modern) universities for preparatory programs and sub baccalaureate qualifications. A handful of colleges have their own authority to award baccalaureates, but most depend on universities for validation and sub contracting;

with private providers with who colleges compete for Competition with for-profit providers for apprenticeship training, bespoke education + training, undergraduate qualifications (mostly in London), and professional qualifications; and

with community provider for adult and community education.

Parry (2022) reported that the government is developing two alternatives in post-16 education, in types of education:

‘academic’ track = A level to undergraduate degree, and a

‘technical’ (alternative) route = T level to higher technical education by way of ‘college-based’ courses + apprenticeships; and

in rationales for policy:

human capital, and

social - social (‘one nation’) + regional (‘levelling up’).

Parry (2022) argued that colleges’ social role was limited by their being less a different or distinctive education and more a delivery organisation, and by their now being less an alternative route and more a provider of last resort.

Parry (2022) argued that colleges’ individual, social, community and economic impacts could be developed from official statistics on participation, performance, progression; birth cohort studies of social mobility (birth cohort); linked administrative data on labour market outcomes; qualitative and quantitative studies of wider benefits of learning; and college ethnographies and case studies. But there is no obvious source of information to describe and evaluate colleges’ collective contribution.

# Finland

Finland established vocational schools from the early to the mid 19th century. Urbanisation, population growth, new emerging occupational fields consequent upon shifts in production, and the emergence of the welfare state led Finland to legislate in 1958 to require all municipalities of more than 20,000 inhabitants to have a vocational school and smaller municipalities to reserve study places for their youngsters at these schools (Virolainen, 2022).

Finland restructured its occupational education from the 1990s to 2000 when the former vocational colleges were developed to form ammattikorkeakoulut (AMK) as the other pillar of the higher education system parallel to the traditional research universities. (It is this development which was not undertaken by Ontario.) The translation of ammattikorkeakoulu into English was contested in Finland, as the translation of Fachhochschule into English was contested in German. In both countries the ministry of education preferred ‘polytechnic’ but eventually ‘university of applied science’ prevailed (Virolainen, 2022).

Approximately 55% of pupils who complete basic school education proceed to academic or general upper secondary education and about 40% proceed to initial, further and specialist vocational education offered by vocational institutes. From there students may proceed to one of 13 research universities, or to one of 24 ammattikorkeakoulut which offer baccalaureates and masters (Virolainen, 2022).

Some 80% of students commencing a baccalaureate at a research university have an academic matriculation, 8% have a vocational senior secondary qualification, and 12% have prior tertiary study. Around 45% of students commencing a baccalaureate full time at an ammattikorkeakoulu have an academic matriculation, 45% have a vocational senior secondary qualification, and 5% have prior tertiary study (Virolainen, 2022).

(Virolainen, 2022) reported regional collaboration between higher education organisations which has resulted in mergers in Lapland, Tampere, Lahti region, and the University of Eastern Finland. Virolainen et al. (2022) argued that ammattikorkeakoulut operate within digital, business and innovation ecosystems which increase collaboration between regional actors, which Virolainen (2022) argued is part of an international trend of collaboration between higher vocational education and training, research, and enterprises.

# France

David (2022) reported the organisations offering qualifications in France by UNESCO Institute for Statistics’ (2012) international standard classification of education 2011 (table 8).

Table 8: French educational organisations and qualifications by Isced level

| **Level** | **Description** | **Organisation** | **Qualification** |
| --- | --- | --- | --- |
| 6 | Bachelor’s or equivalent | Université | Licence professionnelle |
| 5 | Short cycle tertiary | IUT – Institut Universitaire Technologique | DUT |
| STS – Section de Technicien Supérieur | BTS |
| 4 | Post secondary non tertiary |  |  |
| 3 | Upper secondary | Lycée professionnel | CAP, BP, MC, CS, Bac pro |
| Lycée technologique | bac techno |
| CFA - Centre de formation d’apprenti | all |
| 2 | Lower secondary | Collège | Brevet des collèges |

Source: David, 2022

David (2022) reported that in France education is compulsory until age 16 and thereafter pupils have 3 options:

general high school for 3 years which prepares pupils for the general baccalaureate which qualifies them to proceed to longer higher education studies;

technological high school for 3 years which prepares pupils for the technological baccalaureate which qualifies them to pursue higher technological studies (BTS, DUT, vocational bachelor);

vocational high school for 2 or 3 years which prepares pupils for the vocational baccalaureate or CAP students for entry to the labour market or to continue their studies in short higher education (BTS, DUT).

David (2022) reported that in France the academic and social educational priorities are: general or academic, technological, and vocational, and that the vocational track is dominated by academic conventions. The main shapers of the vocational track are the Ministry of National Education, the Ministry of Labour, and the social partners – representatives of employers and trade unions.

The vocational track has three levels:

Level 6: Bachelor Universitaire de Technologie (BUT) of 3 years since 2022

Level 5: BTS > STS (hosted in general or technological high schools); DUT/ BUT > IUT

Brevet de Technicien Supérieur (BTS) of 2 years and terminal

Diplôme Universitaire de Technologie (DUT) of 2 years and terminal

Level 3: vocational high school, production school or apprenticeship centre

Certificat d’aptitude professionnelle (CAP) of 2 years

Mention complémentaire (MC) 1 year after CAP

Certificat de spécialisation (CS) administered by the Ministry of Agriculture of 1 year afterCAP, bac or BTS

Titre professionnel administered by the Ministry of Labour of approximately 1 year

Brevet professionnel (BP) of 2 years after CAP

Bac professionnel of 3 years

Bac technologique of 3 years

The proportion of pupils entering vocational high schools has fallen from almost 27% in 2005 to 22.7% in 2020, few of whom are girls (David, 2022). Some 56% of apprenticeships are in production and 44% in services. Some 30% are at levels 6, 7 or 8; 22% at level 5, 20% at level 4, and 29% are at level 3.

Instituts universitaires de technologie were founded in 1966 outside universities at the intersection of secondary education, higher education, and work. They were the start of university level technical education. They offer the Diplôme Universitaire de Technologie of two years and since 2022 the Bachelor Universitaire de Technologie of three years. They teach theoretical and practical knowledge in projects and internships.

Some 57% of Institut universitaires de technologie students are in services and 43% in production. Some 63% of their students enter with a baccalauréat general and 33.6% with a baccalauréat technologique.

# Germany

In Germany there are five options for secondary schooling after year 10:

1. Gymnasium (grammar school) which prepares pupils for the Abitur which qualifies them for university;
2. Berufsoberschule (vocational high school);
3. Fachoberschule (technical college);
4. Berufsfachschule (vocational school)
5. Berufsschule (duales system der Berufsausbildung) professional school for the dual system of training.

The most prominent destinations after school are an apprenticeship (Duale Ausbildung dual education system) which is the destination of about 40% of school leavers, Universitäten or traditional research universities, and Hochschulen, universities of applied science. Since 2007 the proportion of students following the academic route has increased by 40% and those proceeding to apprenticeships have fallen by 16% (Annen, 2022).

Germany exemplifies the coordinated market economies of northern Europe (Hall and Soskice, 2001) in which advanced skills formation is coordinated by the federal government, the Länder or state governments, and the social partners of employer organisations and unions (Streeck, et al., 1987). This arrangement is challenged by complementarity being displaced by overlap and competition between parts of the system, or by academic and vocational education converging (Annen, 2022).

Tensions between competition and complementarity arise between academic and vocational qualifications at the bachelor level and possibly also at the masters level, and between routes to middle management. This challenges vocational education, and while vocational education remains valued, there are signals that the academically qualified have faster moving careers.

# Ireland

Ireland has 8 universities, 5 technological universities and 2 institutes of technology, 11 other publicly funded colleges, about 20 private colleges, and 190 further education and training colleges (PLCcourses.ie., n.d.) coordinated by 16 educational and training boards. Some 67% of school leavers proceed to higher education and 21% to further education and training (Hazelkorn, 2023).

Traditional universities enroll 56% of university level students while technological universities and institutes of technology enroll the balance of 44% of university level students. The technological universities and institutes of technology offer from baccalaureates to PhDs. They were formed from successive waves of amalgamations, originating with regional technical colleges which were established from 1966 (Steering Committee on Technical Education (N. W. Mulcahy, chair, 1967). These colleges were not formed from existing organisations, and indeed their establishment was delayed because ‘Both existing vocational schools and more particularly existing secondary schools were unhappy with the notion that new well-resourced regional technical schools would cream off significant numbers of senior-cycle pupils thus depressing their own enrolments’ (Clancy, 2008, p. 125).

This reflects a similar process in England and Australia. England and Australia separated the strongest colleges with the most high-level students to form a separate higher education sector of polytechnics in England, Wales and Northern Ireland from 1965 and of colleges of advanced education in Australia from 1967. This ‘separate but equal’ sector of higher education was incorporated within the university sector with the dismantling of the binary divide in 1989 in Australia and 1992 in England. This decapitated the college sector, and depressed capacity for colleges to develop higher vocational programs since they had been incorporated within the university sector.

Technological universities and institutes of technology have a potential regional role, but while there are signs of regional assemblies playing a bigger role, regionalism is as yet weakly developed as the national parliament is the mainstay of decision-making (Hazelkorn, 2023).

Further education and training colleges enrolled about 33,000 students in community education in 2019, almost 90% in social inclusion and thematic learning courses. About half were 55 years or older and around 40% were enrolled in lower level certificates (Dulee-Kinsolving and Guerin, 2022, pp. 2-4, 8).

Further education and training colleges are small, enrolling from 300 to 1,300 students in mostly lower level certificates. They are almost invisible in official reports. They are barely mentioned in a substantial review of further education and training in Ireland (McGuinness, Bergin, Kelly, McCoy, Smyth, Whelan and Banks, 2014), and are not mentioned in the coordinating agency’s standard annual statistical report on further education and training (Dulee-Kinsolving and Guerin, 2020). The coordinating agency’s report on the further education and training system refers to the 16 education and training boards, not the colleges they coordinate (SOLAS, no date).

Ireland is like the UK, Australia and other countries in having remarkably deep divides between colleges and universities: they have separate policies, legislation, governance, curriculum, quality assurance and financing. Policies on vocational and higher education barely mention the other sector, which develop mostly independently of each other. However, recently the Minister for Further and Higher Education, Research, Innovation and Science has proposed a unified tertiary system for learning, skills and knowledge (Harris, 2022). The policy is mostly about establishing pathways and links between the sectors and establishing some joint projects, and gives rather less attention to reducing distinctions between the sectors.

# Switzerland

Post compulsory education in Switzerland comprises baccalaureate schools, specialist schools, and the apprenticeship system comprising host companies, vocational schools and branch courses (Kost, 2022). Some 77% of the graduates of upper secondary baccalaureates proceed to traditional universities, 52% of graduates of federal vocational baccalaureates proceed to universities of applied science, 50% of graduates of specialist baccalaureates proceed to universities of applied science, and 28% proceed to universities of teacher education (Kost, 2022).

Post secondary education comprises traditional research universities, federal institutes, universities of teacher education, and universities of applied science. The federal institutes ETH Zurich and the École polytechnique fédérale de Lausanne were founded in the middle of the 19th century modelled on France’s [grandes école](https://en.wikipedia.org/wiki/Grande_%C3%A9cole)s. Only traditional universities award doctorates; the other organisations offer bachelors and masters. In addition, professional education institutions and federal examining bodies award the federal diploma of higher education and the advanced federal diploma of higher education (Kost, 2022) to recognize expert practice.

Universities of applied science offer mainly baccalaureates and also some masters that develop advanced knowledge and prepare graduates for an occupation. In 2020 they graduated 14,000 bachelor’s and 3,500 masters. Some 32% of bachelor and masters graduates were in business, management and services, 17% in engineering and information technology, 12.5% in health, and 12% in the creative arts (Kost, 2022).

Article 9 of the Bundesgesetz über die Fachhochschulen (federal law on the universities of applied sciences) provides that ‘The universities of applied sciences conduct applied research and development and thus ensure the connection to science and practice. They integrate the research results into teaching’. The government’s applied research grants often require an industry partner (Kost, 2022).

Kost (2022) reported figures from the Swiss Coordination Centre for Research in Education (2018, p. 174) on full time equivalent academic staff allocation of time, by type of university (table 9) which report that universities allocate around 7% of their time to providing services.

Table 9: Full time equivalent academic staff allocation of time, by type of university

| **Activity** | **Traditional universities** | **Universities of applied science** | **Universities of teacher education** |
| --- | --- | --- | --- |
| Teaching coursework | 25% | 55% | 60% |
| Research and research training | 10% | 0% | 0% |
| Research and development | 55% | 35% | 17% |
| Continuing education and training | 3% | 7% | 15% |
| Services | 7% | 3% | 8% |
| **Total** | **100%** | **100%** | **100%** |

Source: the Swiss Coordination Centre for Research in Education (SKBF) (2018, p. 174), cited by Kost (2022)

This contrasts with the formula repeated commonly in Anglo-USA universities that tenured academics (should) spend on average 40% of their time teaching, 40% of their time in research, and 20% of their time in service, which often includes serving on university committees, coordinating programs, and other maintenance of the university’s internal organisation and operations. However, most Anglo-USA universities have large numbers of non tenured academics engaged mostly on contracts of one year or less for mostly teaching or mostly research, so the total full time equivalent academic time devoted to service is rather lower than 20%.

Kost and Salihovic (forthcoming) found that university of applied sciences’ roles in regional development are analysed only economically, and almost always consider only science, technology, engineering and mathematics. However, these studies find that companies in regions that host a university of applied sciences have much higher proportions of research and development staff, file more patents, and have higher profits in high technology regions with big labour markets.

Kost (2022) argued that the social role of colleges is incongruous in Switzerland because:

Switzerland has a (social) market economy that is coordinated at national and regional levels by governments and by their social partners (business and labour organisations) (Hall & Soskice, 2001);

educational organisations are highly regulated, being de facto state monopolies;

credentials are the only outcomes of educational organisations valued in Switzerland;

educational reporting measuring efficiency, effectiveness, or inequities in education focuses almost exclusively on credentials (SKBF, 2018).

Perhaps in coordinated market economies a social role of colleges would be established more by governments and the social partners, and perhaps this may involve municipalities.

Kost (2022) proposes that the role of universities of applied science in society would be better described by Fend’s (2008) structural functionalist theory which argues that the main purposes of the education system and its actors is social reproduction and innovation.

# USA

Bragg, D. (2022) cites Dougherty’s (2002, p. 116) description of USA community colleges, emphasizing key passages:

Community colleges are public subbaccalaureate postsecondary institutions with a comprehensive mission of providing academic, vocational, remedial, and continuing education. They are distinguished from other subbaccalaureate institutions such as private junior colleges, public and private vocational-technical or trade schools and two-year university branches… [by] the role they play in providing college access, postsecondary vocational training, and community development...

However, Bragg (2022) notes that community colleges are very diverse. She cites the American Association of Community Colleges’ (2022) 11 types of organisations based on their control, but colleges are equally diverse in size, level of funding, student demographics, balance of enrolments in transfer and occupational programs, fields of study, and many other characteristics.

Bragg (2022) cites Floyd and Skolnik’s (2019, p. 104) summary of the evolution of community colleges baccalaureates, again highlighting a key passage:

The idea of the community college baccalaureate (CCB) degree emerged to provide greater opportunity for individuals to advance their education and to meet national and local needs for a more highly educated workforce. The early CCBs were designed to meet local and specific applied workforce needs, an earmark of the vast majority of those offered now. Beginning slowly, but gaining momentum over the past two decades, the CCB movement has found its footing.

Some 25 out of the USA’s 50 states now authorize at least one public community college to award a baccalaureate, and 13 of these states authorize all their public community colleges to confer baccalaureates. There are now 145 public community colleges and 46 private colleges approved to confer baccalaureates. Some 40% of 34 tribal colleges and USA territories award baccalaureates.

Bragg (2022) notes these rationales for state authorization of community college baccalaureates, drawn from Floyd and Skolnik (2019 and Skolnik (2022), highlighting a key role:

‘unmet workforce needs’;

changing student demographics;

geographic need – ‘education deserts’;

higher education system history and governance;

policy forces and politics (champion);

acknowledged inequities.

Bragg (2022) cited the Community College Baccalaureate Association’s (no date) belief that community college baccalaureates, again highlighting key roles:

are a gateway to advanced career opportunities and economic mobility;

allow students who desire to pursue a baccalaureate degree to do so in a way that is accessible and affordable;

are a structural evolution of higher education that provide access to groups not historically well served or represented in higher education;

provide a culturally and socially-inclusive environment that fosters a student’s growth and honors their personal stories;

are connected to the community’s workforce needs and work in partnership to achieve economic development goals;

ensure that access and opportunity to programs is grounded in social justice and equity; and

support and protect the vibrancy of our communities.

However, Bragg (2022) argued that the highlighted goals of community college baccalaureates are compromised by systematic inequities in higher education of privilege, subordination, opportunity, and outcomes.

Privilege

Gives higher prestige to liberal arts and research

Segregates organisations and student populations

Lower funding of colleges with highest Black, Brown and low-income students

Selective admissions and placement sort students, but money matters most!

More $ and resources = higher completion rates

*Subordination*

Transfer bureaucracies unevenly endorse and apply rules

There are widely different transfer experiences by student, campus, programs (liberal arts, STEM, occupational) and degree type

There are inequities in transfer by race, income and age

*Opportunity*

Deficit framing of career and technical education continues despite shift to occupational and professional majors

About half transfer students major in occupational and professional majors, including terminal applied associate degrees

Applied associate degree transfer may be growing for racially minoritised populations but result in lower baccalaureate completion

‘Career pathways’ focus on microcredentials (short-term, non-credit) but not degrees

*Outcomes*

Declining enrollments accelerated during COVID

Existing community college baccalaureates remained strong but may be declining

New community college baccalaureates on horizon

Generally promising outcomes for community college baccalaureates on:

• Enrollment of underserved populations (CCB relative to associates)

• Completion of baccalaureate degrees (on par with transfer bacc)

• Employment and earnings for baccalaureate (vs associate)

• Employment and early earnings for CCB compared to university baccalaureate

BUT lagging outcomes for Latinx students and women

Still no studies of community or economic impact

Bragg (2022) concludes

Privilege

Higher education upholds and perpetuates inequities in access, experience and outcomes for underserved students

Subordination

Transfer bureaucracy advantages white privileged students while disadvantaging racially minoritized, low-income and older students

Opportunity

Higher education, including community colleges perpetuate barriers to transfer and baccalaureate completion by race, income and age

Outcomes

Promising results on completion, employment and earnings but equity gaps Latinx students and women.

Bragg (2022) foreshadowed the next step to examine and develop equity-minded community college baccalaureate policies, programs, and practices, and what higher education systems should do to improve and move forward.

# Sectors

We have noted that contributors identified as ‘colleges’ in their country very different types of organisations. In particular, ‘colleges’ in Australia, Brazil, Canada, England and the USA typically offer mid level qualifications such as associate and foundation degrees, and diplomas. In addition, colleges in some of these countries also offer lower level certificates, and English further education colleges also offer the senior secondary certificate, A levels. In contrast, ‘colleges’ in Finland, Germany and Switzerland offer mostly upper level bachelors and masters degrees. France’s ‘colleges’ offer both mid level diplomas and upper level bachelors.

Ireland highlights these differences by describing two types of ‘colleges’. Further education and training colleges have antecedents to the late 19th century, but they offer only lower level certificates. Irish ‘colleges’ also may include technological universities which offer mostly upper level qualifications similar to Finish, German and Swiss colleges. But if both Ireland’s technological universities and its further education and training colleges are included in the analysis, might Finland, Germany and Switzerland also have lower level colleges that are of a similar level to Ireland’s further education and training colleges?

For example, Germany’s tertiary education does not include the very important contribution of apprenticeships to the formation of skills because they are not considered ‘tertiary’. So, for example, Germany and similar countries do not consider vocational schools – *Berufsschulen –* in its discussion of vocational colleges. Neither does Germany seem to have organisations devoted to offering short cycle tertiary education.

# ‘Social role’

There are many understandings of ‘social role’ discussed by contributors and in the literature, some of which are enumerated below. These are offered as examples of colleges’ social roles rather than distinct types, since there is considerable overlap between them.

*Equity*

Perhaps the most widely adopted social role of colleges and education generally is to promote equity, both for individuals and for groups, both on campus and in the community. This was described explicitly by Bragg (2022), Parry (2022) and Wheelahan (2022) and implied by others. Often it is advanced as a responsibility of colleges not identified separately as a social role but incorporated within colleges’ core education and occupational development.

*Service learning*

Closely related is service-learning or community-engaged learning in which students undertake community projects as part of their educational program. It is prominent in the USA where it is defined as ‘a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities for reflection designed to achieve desired learning outcomes’ (Jacoby, 1996, 2014, cited by Montana State University Center for Faculty Excellence, no date).

*Education extension services*

What might be called education extensions services includes extra curricula activities on campus for students, and adult and community education offered on campus and in the community. Libraries contribute strongly to education extensions services. Also important though perhaps under developed are organisations’ digital repositories of their publications which are open to the public.

*Work extensions services*

By extension, work extension services includes helping students or members of the community improve their work or likelihood of gaining rewarding work. An interesting potential contribution of colleges to developing their communities’ capacity for rewarding work is to foster skills ecosystems which improve links between the development of the workforce and the development of the individual and collective capacities of organisations and businesses (Buchanan, 2006).

*Cultural enrichment*

Colleges enrich and develop the culture of their students and general community with exhibitions and performances on campus and in the community.

*Community development or engagement*

Colleges have long developed communities’ capacity to achieve common goals both in formal programs and by contributing directly to their communities. Farnell et al. (2020, p. 6) understand community engagement very broadly and to be specific to context: ‘context-specific: engagement activities depend significantly on the type of institution’. This has been understood very broadly and attracted renewed scholarly interest as developing ‘Social capital – broadly, social networks, the reciprocities that arise from them, and the value of these for achieving mutual goals’ (Schuller, Baron and Field, 2000, p. 1).

*Local and regional development*

Post secondary education institutions also often have roles in local and regional development, which is commonly understood economically though of course it is much broader.

# Conclusion

This paper has given the background to the project seeking to examine and develop colleges’ social role. It noted that while universities as physical organisations embody the concept or the idea of the university as a sociological institution, there is no such institutionalisation of the idea of the college. The paper noted that while universities’ roles have been to preserve, transmit, and extend knowledge, since at least the middle of the 20th century universities’ roles have been understood as teaching, research, and service. These roles are understood to be served by both the organisation and individual academics within them.

There is not as much consensus on colleges’ roles. We argued that all post secondary organisations including colleges share three roles, although these roles may have different emphases in different organisations and in different programs of different orientations and levels:

Educational, to develop graduates’ and society’s understanding of theoretical, abstract knowledge;

Occupational, to develop graduates’ individual and work groups’ collective productive capacity; and

Social, to advance society, and social justice and inclusion (Moodie and Wheelahan, 2023, pp. 53, 67).

While the social role is well established for universities, it is less well established for colleges. Since we were interested in developing an international understanding of the social role of colleges we invited colleagues from 12 countries to reflect on the social role of colleges in their country. We left contributors to interpret ‘colleges’ and ‘social role’ as they considered most informative and relevant for their country. The paper summarised the contributions on the social role of colleges in Australia, Brazil, Canada, England, Finland, France, Germany, Ireland, Switzerland, and the USA.

The paper then elaborated from the contributions and from the literature what a social role might include for post secondary organisations. Clearly much more work is needed to develop a shared understanding of colleges and their social role. Wheelahan (2022) proposed these key research questions:

1. What should college qualifications look like?
2. What can colleges do that universities and schools can’t do?
3. What roles do colleges play in supporting local and regional economic, social and cultural development?
4. How will the work of occupations served by colleges change in 5, 10 and 15 years time? How should qualifications change?
5. How can we support college teachers as ‘dual-professionals’ – industry experts and expert teachers?

Gavin Moodie

12 May 2023

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