9 Aligning University Roles and Strategic Orientations

When Local Mandates and Global Aspirations Meet

Iyad Abualrub and Rómulo Pinheiro

Abstract

Recent policy developments in Norwegian higher education, aiming to nurture world-class environments, have focused on the need to strengthen teaching quality and research excellence. However, higher education institutions (HEIs) are increasingly under pressure to make local contributions ("impacts"), for example, in the form of job creation, technology transfers, local economic developments, and so on, which result in tensions and dilemmas at multiple levels, not least as regards strategic management. This chapter investigates how universities align education and research on the one hand and how they navigate the tensions between local demands and global aspirations on the other. Firstly, we identify such tensions and dilemmas, and secondly, we investigate how they are being handled with regard to strategic planning (including resource allocation) at both the central (university) and sub-unit (faculty) levels. The study adopts a qualitative case study research design and compares developments at two distinct HEIs located in Norway. The findings suggest that relevance and excellence are intertwined dimensions associated with the multiple pressures facing HEIs. These findings provide critical insights into how the strategies and daily practices of actors at different levels within universities address the demands posed by a dynamic and complex environment.

Introduction

Higher education institutions (HEIs) are under increasing pressure to be more globally competitive on the one hand and to address local and regional needs on the other. Over the last decades, increased emphasis on notions such as "knowledge economy" and "knowledge society", especially in developed countries (cf. Taylor et al., 2008; Temple, 2011), has led policymakers and researchers in higher education (HE) to focus more on the societal roles of

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knowledge institutions, from firms to universities. This expectation is particularly salient for HEIs, which are the primary places where societies acquire and deliver knowledge.

Researchers and policymakers alike have strongly recommended that HEIs must continuously work on strengthening their teaching quality and research excellence (Ramirez & Tiplic, 2014). Excellence and relevance have become twin concepts in recent academic discourses and policy initiatives (Perry, 2012; Pinheiro, 2016) and are often used as proxy indicators for global competitiveness and local impact. In other words, contemporary debates on HE are centred on the premise that universities and other types of HEIs have multiple purposes and serve various types of "clients" (cf. Pinheiro, 2015). However, implementing this strategic orientation often creates challenges for HEIs, leading to tensions and dilemmas among HE communities, as pointed out in earlier studies (Benneworth, 2018).

Many of the challenges and tensions that emerge when pressing HEIs to adapt to new policies and changes are connected to the nature of HEIs as organizations and institutions. Firstly, HEIs, particularly traditional universities, are bottom heavy and fragmented or decoupled organizations (Clark, 1983), consisting of diverse internal powers that play a strong role in HEIs' behaviours towards change (Birnbaum, 1988). Such powers include academic tribes with unique cultures and beliefs shaped over time by disciplines and professions that highly influence their views and reactions when faced with changes (Becher & Trowler, 2001). Secondly, autonomy, academic freedom, and democratic participation are widespread internal values and critical for HEIs' existence, survival, and prosperity. If HEIs and their academic tribes feel that these values might be threatened by external changes, including policy shifts, they are likely to resist them (Olsen, 2007).

Given this backdrop, and the overall aim of the edited volume in addressing the mundane or everyday aspects underpinning HEIs' societal roles, this chapter investigates how internal actors (formal leaders) at two distinct HEIs in Norway make sense of recent developments and strategically accommodate (or do not accommodate) external demands for relevance and excellence. The main questions to be investigated are as follows:

- 1. How do actors within HEIs conceive of the notions of excellence and relevance, and to what extent are these related to the core functions of teaching and research?
- 2. What types of strategic efforts do actors within HEIs undertake to address the need to be both excellent and relevant?
- 3. What types of strategic challenges and tensions do actors within HEIs face, and how are they being addressed if at all?

By investigating these questions in a Nordic HE context, this study aims to improve our current understanding of how different types of HEIs and internal actors negotiate the daily (mundane) tensions associated with having to demonstrate their societal value while catering for the imperative to survive and

prosper in an increasingly competitive marketplace or sector. In so doing, our findings are relevant to policymakers, university managers, and social science researchers alike. Prior to presenting the empirical findings, the chapter sheds light on the conceptual and methodological underpinnings of this research. This is followed by a discussion and conclusion, including an exposition of the study's main implications in the context of future research.

The Relevance-Excellence Nexus

The interplay between the roles and functions of HEIs, not least as regards their local obligations and global aspirations, can be assessed in terms of the dichotomous relation between relevance and excellence. Scholars have traditionally considered strategic efforts to increase the relevance and excellence of universities as somewhat mutually exclusive. Within binary HE systems, the characterization (and policy discourses) around teaching or vocationally oriented HEIs versus classic research universities are but one indication of this problematic (cf. Kyvik, 2009). The latter are expected to contribute to global scientific excellence (independently of its direct value for society), whereas the former are seen as having a critical function in transmitting skills and competencies to future (knowledge) workers, as well as providing useful knowledge in the context of problem-solving (Kyvik & Lepori, 2010). Similarly, in the realm of knowledge production, discussions about basic (mode-1) versus applied (mode-2) research point in a similar direction (Gibbons et al., 1994). Basic or blue-sky research efforts, it is often argued, should first and foremost be geared towards scientific excellence, regardless of whether the knowledge generated may (in the long run) be useful to society. In contrast, more applied research initiatives are thought to contribute, first-hand, towards societal relevance by helping to address current problems facing humankind.

Perry and May (2006) propose a novel way of conceiving of the interplay between relevance and excellence against the backdrop of a globalized, knowledge-based economy and society. Their conceptual starting point is that both the interdependence and contextualization of excellence and relevance are rather complex processes to which little scholarly attention has been given. It is argued that a dichotomous relation between these two aspects is unhelpful, since "excellence can be relevant, and relevance can be excellent, regardless of funding sources or disciplinary areas" (Perry & May, 2006, p. 76). That being said, several studies report a considerable degree of structural decoupling (Oliver, 1991) between universities' core activities and tasks (Pinheiro & Young, 2017; Benneworth, 2018), thus making the synergies between relevance and excellence difficult to realize.

In the last couple of years, there has been a concerted effort by governments to devise policy mechanisms that address both excellence and relevance. The EU's Horizon 2020 and the importance attributed to scientific impact are one such manifestation. At the national level, a number of initiatives have been forged with the aim of enhancing the scientific excellence of research groups

based at universities (Geschwind & Pinheiro, 2017), while at the same time ensuring that bridges are built between academics and industry in the context of technology transfer and innovation (Cai et al., 2015). Nevertheless, when it comes to universities' third mission or local mandate, as aligned with the "relevance" imperative or logic, there is a general absence of supportive policy frameworks and incentive structures (Pinheiro & Benneworth, 2018). Moreover, despite an increased emphasis on relevance, universities are increasingly pressured to compete globally, especially in the context of research excellence (Ramirez, 2014; Ramirez et al., 2016; Smeby & Stensaker, 1999).

Method and Cases

We applied a most different systems design and comparative case study approach (Yin, 2009) and selected two Norwegian HEIs according to the binary described earlier, namely a more teaching-centred vocational college ("Alpha") and an established, comprehensive, and research-intensive university ("Beta"). In terms of their normative orientations or preferences, and given their historical trajectories and institutional profiles, one would expect actors within Alpha to be keener to demonstrate their local relevance to society and those at Beta to be more willing to prioritize national and global excellence. That said, at the time of data collection, Alpha was actively working to attain the official status of a full-fledged university, whereas Beta was known for its strong technical profile (hard sciences and engineering) and active engagement with external actors, such as regional and national industry, in the context of technology transfers and innovation. Both organizations operate within relatively large urban contexts alongside other knowledge actors such as firms, stand-alone research centres, governmental agencies, and other types of HEIs. The organizations are embedded in regions that rank highest (domestically) in terms of per capita research and development investments, alongside the presence of knowledge and economic clusters of national and global relevance (food production, health services, construction and real estate, energy, financial services, and so on). Geographically, Alpha is more centrally located than Beta, thus having more access to physical and technological hubs and networks. That said, both regions are characterized as highly dynamic, innovative, and ranking high in terms of absorptive capacity, attracting people with high-level skills and competencies (inflow migration) from other areas, nationally and internationally.

In Norway, a traditional binary division emerged (first in the 1960s and then in the 1990s) between different types of publicly funded HEIs. More vocationally oriented university colleges located in more peripheral regions were tasked with catering to the labour market and knowledge needs of their immediate surroundings, while larger and more comprehensive universities were mandated with providing educational training at the national level and knowledge production within the scope of global science and national competitiveness. A nationwide structural reform enacted in the last decade has led to voluntary mergers among providers, resulting in fewer and larger HEIs and a gradual

erosion of the binary system (Pinheiro et al., 2016b). Moreover, all HEIs in Norway are legally mandated to take into account societal engagement as part of their core missions. Nevertheless, changes resulting from structural reforms in tandem with the strategic ambitions of the remaining colleges to become full-fledged universities have led to increasing ambiguity about the interplay between local goals on the one hand and national and global goals on the other.

A total of 10 semi-structured face-to-face interviews were conducted with actors at HEIs at multiple organizational levels, during two site visits in 2016 and 2017. In each case, the interviewed actors included senior academics and administrative leaders at departments and centres linked to three different faculties within the fields of the social sciences and applied sciences/technology. The interviews were recorded on tape, transcribed verbatim, and analysed following discourse analysis and thematic coding.

Findings

The key empirical findings are presented in accordance with the three specific dimensions identified in our research questions.

On the Excellence-Relevance Nexus

When asked what "excellence" in HE means to them, many interviewees pointed immediately to research, emphasizing that excellence in HE means conducting more research; publishing more research articles, especially in well-known international scientific journals; training and recruiting good researchers; writing good funding proposals; and generating funds nationally, regionally, and internationally. Moreover, the term was associated with the establishment of strong cooperation with a wide range of top (research-intensive) universities around the globe, alongside active participation in academic and research networks and conferences. That said, there were contrasting views and perspectives among respondents across the two HEIs and disciplinary fields. While respondents at Beta highlighted the importance of problem-solving and innovation in the context of societal and industrial needs and expectations, the modus operandi within Alpha was characterized by a classic research ethos centred on publications and graduate training, which accords with its strategic ambition to attain full university status.

Over the last 15 years, we have seen more emphasis on excellence in research, striving towards becoming a [full-fledged] university. . . . We need more research and more publications at the international level.

(Alpha, Senior Administrator, Applied Sciences & Technology)

Our university is doing excellent research, trying to solve the questions that the industry doesn't have answers to yet. . . . That's what I mean, if you are really working at these questions, I think you are in the excellence

[camp]. . . . You need to do something that's not just in current research; you need to really take big steps. . . . We want our students to know about the latest research and where the research front is.

(Beta, Senior Administrator, Applied Sciences & Technology)

As regards teaching, respondents mainly focused on teaching methods, pedagogical skills, and how to engage students in learning and advance their skills in critical thinking and innovation. Research was also mentioned here. Many informants stressed that excellence in teaching also means embracing "research-based teaching" and educating students on research methods and skills at an early stage. A gradual move towards socializing students to develop key skills and competencies, alongside basic knowledge within a field, was also highlighted by some.

With regard to that point [excellence in teaching], we are moving towards innovation and entrepreneurship [skills] and more focus on critical thinking. (Alpha, Senior Academic, Applied Sciences & Technology)

When talking about this concept [excellence], we must not forget to teach students the basic skills [in their fields].

(Alpha, Senior Administrator, Applied Sciences)

Turning now to "relevance", we noticed that most of the informants started talking about it while they were still explaining their understanding of the term "excellence". For them, excellence in research also means being relevant. This means that research is conducted on topics relevant to current and potential needs, society's problems and interests, and industries and markets, at both the national and international levels. This was also emphasized in the context of teaching. For example, informants identified relevance in teaching as connecting students with what is going on around them both in their country and abroad, while training them to be skilful and competitive in their majors when they enter the job market. Some also indicated that excellence in HE is about being open to discussion, teaching, researching new fields of knowledge, new ideas, anticipating new challenges and problems, and looking at answers even if they do not look completely relevant to the current needs of society and the market. In addition, some referred to difficulties in clearly identifying the future relevance of knowledge being produced today.

Relevance and excellence means that you have international competitiveness with others, you have a global awareness of some issues, like climate change, income inequality, and inclusion of people with disabilities. . . . In my opinion, there is too much emphasis here on relevance and too little on excellence because, you know, we have to be relevant for [the surrounding city] and its metropolitan area, which would be relevant for

employers, for the business sector. But there is not that much focus on excellence and quality of research and publications.

(Alpha, Senior Academic, Social Sciences)

Future employers' points of view will probably be more concerned about relevance than excellence. . . . So, I think that the basic foundation is relevance from an industry point of view.

(Alpha, Senior Academic, Applied Sciences & Technology)

I have not defined relevance for this department, but the university has defined it for me, so it concerns certain criteria and mainly focuses on the societal and industrial needs in Norway. However, in research, we follow the criteria from the Norwegian Research Council and the EU Research Council for example, and there you find that excellence is the main standard.

(Beta, Senior Academic, Applied Sciences & Technology)

Some informants emphasized the role of university identity in directing their focus and whether a privileged emphasis should be given to either research or teaching.

We [case HEI] have been initially established for professional [vocational] education; and therefore we often focus on teaching and practical training first. This does not imply that we don't care about research. We do, and we now put more emphasis on it, as we want to be a (fully-fledge) university. It would be good if we could balance between the two: research and teaching. (Alpha, Senior Administrator, Social Sciences)

Our university is a research university, and it is mainly specialized in science and technology. You should, therefore, understand why we tend to focus more on research. Recently, we started paying more attention to teaching and how to improve our professors' teaching skills. The main reason is that due to the mergers we have had with several university colleges, the majority of our students are now BA students, and the majority of our staff is used to focusing on teaching.

(Beta, Senior Administrator, Applied Sciences)

Other informants highlighted the role played by departmental or faculty identity and strategic priorities as key drivers for behaviour. For example, in an interview with one senior academic in applied sciences at Alpha, it was stressed that, historically, the sub-unit has been connected with the domestic health care sector. Research activities and excellence in research are, thus, seen as essential. However, it was emphasized that the department's main task was first and foremost to train students and teach them the best practices and skills required to be a good public servant. The respondent added, "We would therefore be interested in research that can advance our ability to improve our teaching and increase its relevance to society."

Another informant (a senior academic in social sciences at Alpha) was sceptical about being too focused on practical skills at the expense of research and believed that excellence in HE mainly means being excellent in research and conducting more of it. It was explained that, in the field in question (social sciences), "the primary aim is to prepare students to be excellent social workers (professionals) and that this requires conducting intensive and continuous research in the field". Finally, an informant associated with the field of technology at Beta emphasized that

for employers, the core issue is to have highly skilled people who are familiar with the basics and the essence of the knowledge in this field on the one hand and who possess strong analytical and research skills on the other.

(Beta, Senior Academic, Applied Sciences)

Daily Practices and Strategic Ambitions

Organizationally, the interview data revealed a strong focus on providing incentives, promotions, and financial support to academics for conducting and publishing research, as well as attending and organizing conferences with peers. Many informants talked about providing an environment where researchers have more time for research and good-quality labs, technological facilities, welfare services, and so on, in addition to good internships and research and administrative assistants. Informants at the research university (Beta) highlighted these points several times while stating that their organization aims to invest more in them to be more attractive places for researchers and learners. The same was outlined by the university college informants, but they complained that it is often difficult to compete with research universities in generating funds for research and excellence centres and that this can make them less attractive to young, talented researchers. Moreover, it was believed that if, in the near future, they were to become a full-fledged university and focus on issues relevant to the needs of the society and the market, they could increase their competitiveness and thus attract more funding and top researchers.

Some informants from the two case institutions talked about encouraging and facilitating cooperation between different researchers from different departments and centres, as well as between researchers and teachers, by promoting and facilitating the establishment of inter- and trans-disciplinary study groups and programmes. These aspects were repeatedly highlighted as significant tools used for advancing the excellence and relevance of teaching. However, many informants acknowledged that these actions are often undertaken within the teaching rather than the research realm. As stated by a senior administrator from social sciences at Beta, "Incentives, promotions, facilities, and projects provided to researchers and for advancing research are far more numerous than those available for improving teaching and teachers' pedagogical skills."

However, some informants, including a senior administrator from applied sciences at Alpha, indicated that there has recently been an increased focus on further developing teaching skills and improving the quality of teaching. Initiatives and programmes such as teaching improvement programmes, yearly awards for best teachers, excellence and departmental and faculty work, and research groups for advancing education with different academic units were mentioned as pointers of the increasing strategic importance of teaching-related tasks.

The strategic ambitions of the two case organizations mainly included (a) research competitiveness at the international level; (b) active involvement in academic and research cooperative groups and projects with national and international HEIs, markets, and research funding organizations; and (c) advancing teaching and pedagogical methods and learning environments. For the university college (Alpha) informants, these ambitions are mainly driven by the collective goal to become a full-fledged university. For the research university (Beta), the primary reason for these ambitions is to enhance its competitive standing in global university rankings.

We are a research university, and research universities compete among themselves – for students, academic resources, funding for research, for better rankings; . . . in order to survive and win we need to be more competitive and always focus on being more excellent and relevant in what we provide.

(Beta, Senior Administrator, Applied Sciences & Technology)

As you may know, we are aiming to become a [full-fledged] university. This means more focus on research and excellent research, but it also should include focusing on teaching, which we are very good at.

(Alpha, Senior Administrator, Social Sciences)

Key Challenges and Tensions

The interview data shed light on two key challenges facing the case HEIs. The first challenge concerns how to measure or assess excellence in teaching. Informants, including administrative leaders and academics in both social and natural sciences, stated that while research excellence can be measured by numbers of publications and citations, excellence in teaching is more difficult to assess. They referred to the limitations associated with relying on students' satisfaction, which is not necessarily connected to excellence in teaching. A common solution mentioned is to combine the surveys on students' satisfaction with teaching with feedback from alumni and their respective employers. However, as indicated by many informants, students' voices and quality assessments have become increasingly important. This has created a tension between academics, who support the aforementioned solution, and central administrative and institutional leaders, who have to abide by governmental regulations to maintain legitimacy and secure needed financial resources.

The second challenge concerns the rapid changes within the HE sector in the context of recent government-led reforms. These changes demand that academic staff fulfil multiple roles and adapt constantly, which is not always easy to accomplish.

Every decade or so, we merge with new institutions, and each has its own culture, identity, workplace norms, and definition of how to be excellent and relevant in HE. Many [academics] focus on teaching, and we have found it hard to push them to conduct more research. We have also found it hard to convince our own research professors to adapt and learn advanced teaching skills from them [other teachers] that they developed over time. . . . We are going to try a new solution: two career tracks: a teaching track and a research track with good incentives for both.

(Beta, Senior Administrator, Applied Sciences)

Everything written in strategies and polices about academic development and enhancing their teaching skills are nice, and many [academics] agree with them; the problem is applying them. Professors who, over the years, have gotten used to teaching in a specific way do not easily accept and adapt to changes. Another issue is that while we want professors to focus on developing their teaching, we also want them to keep doing research. Time and resources are the main challenges here.

(Alpha, Senior Administrator, Applied Science)

In addition, the interviews reveal complaints made by informants, administrators, and academics at both case HEIs about the constant changes in funding policies and research interests by national, regional, and international research and education bodies that HEIs rely on for obtaining research funding. Informants at both case institutions mentioned that part of the solution is to recruit researchers with close relations and contacts with these national and international bodies to better understand the changes that are taking place. Both case institutions were found to encourage their current staff to participate in workshops and conferences focusing on predicting, analysing, and tracing the changes across the HE field, as well as the larger social and economic environment that might impact HEIs.

Discussion and Conclusion

In Norway, recent changes in the domestic HE landscape, in large part driven by government policy (mergers across the board), have resulted in the erosion of the university – non-university institution binary (Kyvik, 2009). As a result, HEIs are now tasked with multiple roles and functions, all competing for scarce resources (time, funding, and people). This, in turn, creates a dilemma for administrators and academics regarding which tasks to prioritize, under what circumstances, and by whom. Another tension facing internal actors

pertains to the fact that excellence and relevance discourses have permeated teaching, research, and engagement agendas within HEIs. However, HEIs also face new competitive pressures, both nationally and globally, and are attempting to address these strategically by developing a distinct institutional profile that, among other aspects, encompasses strategic collaborations with a wide variety of external stakeholders such as other HEIs, regional and national actors across the public and private sectors, and civil society (Pinheiro & Stensaker, 2014).

Berg and Pinheiro (2016) reported that one approach to addressing such conflicting interests, as first suggested by Oliver (1991), involves either decoupling structures or building bridges in the form of embracing hybrid forms of leadership and management that take into consideration specific situations and interests as they manifest themselves on a daily basis. Our data provide evidence of strategic attempts to bridge both teaching and research activities, as well as the logics of (global) excellence and (local) relevance. As pointed out by Perry and May (2006), teaching and research relevance can be excellent and vice versa, thus moving away from the traditional dichotomies associated with functional domains and objectives. That being said, in practice, universities face dilemmas about resource allocation (i.e., people and funding) to key tasks and interest groups. More time spent engaging with external actors comes at the expense of other important activities such as grant writing, publishing, and academic advising. One way in which universities elsewhere have been able to accommodate the various demands of the environment and multiple stakeholders relates to the decoupling of tasks and structures (Oliver, 1991) in the form of separate arrangements for undergraduate and graduate teaching, as well as research, such as dedicated units or centres (Geiger, 2009).

In Northern Europe, the normative commitment towards the teaching and research nexus makes the decoupling strategy impractical. Recent studies from Sweden have revealed that within traditional HEIs, and when faced with competing demands, research agendas often take priority over teaching needs:

While managers seek to secure the participation of senior researchers in education, they often actively prefer to delegate the bulk of teaching activities to less research-active staff. Such strategies seem to reinforce existing patterns of division of labour among academic staff.

(Geschwind & Broström, 2015, p. 60)

Yet the rise of a strategic research agenda across Europe (the Horizon 2020 programme), stressing both research excellence and social impact, implies that Norwegian HEIs need to devise mechanisms to couple these conflicting goals, as well as the diverging and growing expectations of multiple stakeholders (Benneworth & Jongbloed, 2010). One of the ways in which HEIs are doing this is by embracing a "responsible agenda" across the board (Sørensen et al., 2019), for example, by involving regional actors in teaching and research tasks through new forms of mutually beneficial collaborations centred on the cocreation of knowledge (Karlsen, 2007).

Our findings also point to the divide between core functions within HEIs. Excellence is often associated with research and relevance to teaching. Yet recent policy developments focusing on enhancing the research capacity of all HEIs (not only universities), as well as the quality of teaching activities and labour market relevance, have brought to the fore a number of different considerations, thus blurring the traditional distinction between teaching and research on the one hand and "local" and "global" dimensions on the other. HEIs are both locally embedded – that is, regulated by national frameworks and largely funded by the state – and globally oriented, based on scientific networks that span multiple continents and national jurisdictions (Benneworth, 2018). Hence, they need to pay close (strategic) attention to the imperatives of scientific and funding communities alike, both locally and globally.

In conclusion, the findings of this study suggest that, as pointed out by Perry and May (2006) and Perry (2012), relevance and excellence are intertwined dimensions associated with the multiple pressures facing HEIs. Despite different historical trajectories and institutional profiles, HEIs are now exposed to similar and multiple institutional pressures and thus are expected to react accordingly. As they do, they need to come to terms with the internal complexity emanating from the multiplicity of norms, values, knowledge domains, and external stakeholder groups. As all domestic HE systems undergo periods of expansion and contraction (Kyvik, 2009), HEIs the world over face increasing pressures to accommodate a multiplicity of external demands, while having to cope with growing internal complexity and more turbulent technical and institutional environments. One way of accomplishing this is by concentrating resources (economies of scale) and devising more sophisticated internal structures, for example, in the form of mergers between different types of HEIs (Pinheiro et al., 2016b).

Finally, when it comes to the regional roles of HEIs (Pinheiro et al., 2012; Benneworth, 2018), this study demonstrates that traditional conceptions focusing on the dichotomy between global excellence and local relevance are, as first suggested by Perry (2012), rather outdated. In an integrated global economy - where all regions and the actors composing them (firms, universities, local governments, communities, and so on) are exposed to a multitude of local and global events, as well as hegemonic actors and their respective strategic interests (e.g., funders and supranational bodies such as the EU, OECD, and Word Bank) - HEIs' ability to respond rests, to a great degree, on their capacity to first host and, secondly, creatively bridge a multiplicity of tasks, norms, and logics. In so doing, they enhance the growing repository of skills, knowledge, and competencies that are needed to simultaneously address local, regional, national, and global imperatives in ways that foster both their distinct sense of identity and their resilience or adaptability to changing circumstances (for a recent discussion, consult Pinheiro et al., in 2022).

References

- Becher, T., & Trowler, P. (2001). Academic tribes and territories: Intellectual enquiry and the culture of disciplines. Buckingham: Society for Research into Higher Education & Open University Press.
- Benneworth, P. (2018). Universities and Regional Economic Development: Engaging with the Periphery. London: Taylor & Francis.
- Benneworth, P., & Jongbloed, B. (2010). Who matters to universities? A stakeholder perspective on humanities, arts and social sciences valorisation. *Higher Education*, 59(5), 567–588.
- Berg, L., & Pinheiro, R. (2016). Handling different institutional logics in the public sector: Comparing management in Norwegian universities and hospitals. In R. Pinheiro, F. Ramirez, K. Vrabæk, & L. Geschwind (Eds.), Towards a comparative institutionalism: Forms, dynamics and logics across health care and higher education fields (pp. 145–168). Bingley: Emerald
- Birnbaum, R. (1988). How colleges work: The cybernetics of academic organization and leadership. San Francisco: Jossey-Bass.
- Cai, Y., Zhang, H., & Pinheiro, R. (2015). Institutionalisation of technology transfer organisations in Chinese universities. European Journal of Higher Education, 5(3), 297–315.
- Clark, B. R. (1983). The higher education system: Academic organization in cross-national perspective. Los Angeles, CA: University of California Press.
- Geiger, R. L. (2009). Research & relevant knowledge: American research universities since World War II. Piscataway, NJ: Transaction Publishers.
- Geschwind, L., & Broström, A. (2015). Managing the teaching research nexus: Ideals and practice in research-oriented universities. *Higher Education Research & Development*, 34(1), 60–73.
- Geschwind, L., & Pinheiro, R. M. (2017). Raising the summit or flattening the agora? The elitist turn in science policy in Northern Europe. *Journal of Baltic Studies*, 48(4), 513–528.
- Gibbons, M., Nowotny, H., Schwartzman, S., Scott, P., & Trow, M. (1994). The new production of knowledge: the dynamics of science and research in contemporary societies., London: Sage.
- Karlsen, J. (2007). The regional role of the university: A study of knowledge creation in the agora between Agder University College and regional actors in Agder. Trondheim: NTNU.
- Kyvik, S. (2009). The dynamics of change in higher education: Expansion and contraction in an organisational field. Dordrecht: Springer.
- Kyvik, S., & Lepori, B. (2010). Research in the non-university higher education sector in Europe. Dordrecht: Springer.
- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16(1), 145–179.
- Olsen, J. P. (2007). The institutional dynamics of the European university. In P. Maassen, & J. P. Olsen (Eds.), *University dynamics and European integration* (pp. 25–54). Dordrecht: Springer.
- Perry, B. (2012). Excellence, relevance and the construction of regional science policy: Science frictions and fictions in the North West of England. In R. Pinheiro, P. Benneworth, & G. A. Jones (Eds.), *Universities and regional development: A critical assessment of tensions and contradictions* (pp. 105–123). Milton Park and New York: Routledge.
- Perry, B., & May, T. (2006). Excellence, relevance and the university: The "missing middle" in socio-economic engagement. *Journal of Higher Education in Africa*, 4(3), 69–92.
- Pinheiro, R. (2015). The role of internal and external stakeholders. In S. Schwartzman, R. Pinheiro, & P. Pillay (Eds.), Higher education in the BRICS countries: Investigating the pact between higher education and society (pp. 43–57). Dordrecht: Springer.

- Pinheiro, R. (2016a). Assessing change in higher education from the perspective of excellence versus relevance. In N. Cloete, L. Goedegebuure, Å. Gornitzka, J. Jungblut, & B. Stensaker (Eds.), Pathways through higher education research: A festschrift in honour of Peter Maassen (pp. 37–40). Oslo: University of Oslo.
- Pinheiro, R., & Benneworth, P. (2018). Regional roles of higher education. In J. C. Shin & P. Teixeira (Eds.), *Encyclopedia of international higher education systems and institutions* (pp. 1–8). Dordrecht: Springer.
- Pinheiro, R., Benneworth, P., & Jones, G. A. (2012). Understanding regions and the institutionalization of universities. In R. Pinheiro, P. Benneworth, & G. A. Jones (Eds.), *Universities and regional development: An assessment of tensions and contradictions* (pp. 11–32). London and New York: Routledge.
- Pinheiro, R., Charles, D., & Jones, G. (2016a). Equity, institutional diversity and regional development: A cross-country comparison. *Higher Education*, 72(3), 307–322.
- Pinheiro, R. Frigotto, L., & Young, M. (Eds.). (2022). Towards resilient organizations and societies: A cross-sectoral and multi-disciplinary perspective. Cham: Springer Nature.
- Pinheiro, R., Geschwind, L., & Aarevaara, T. (2016b). A world full of mergers: The Nordic countries in a global context. In R. Pinheiro, L. Geschwind, & T. Aarevaara (Eds.), Mergers in higher education: The experience from Northern Europe (pp. 3–25). Dordrecht: Springer.
- Pinheiro, R., & Stensaker, B. (2014). Strategic actor-hood and internal transformation: The rise of the quadruple-helix university? In J. Brankovik, M. Klemencik, P. Lazetic, & P. Zgaga (Eds.), Global challenges, local responses in higher education. The contemporary issues in national and comparative perspective (pp. 171–189). Rotterdam: Sense.
- Pinheiro, R., & Young, M. (2017). The university as an adaptive resilient organization: A complex systems perspective. In J. Huisman & M. Tight (Eds.), *Theory and method in higher education research* (pp. 119–136). Bingley: Emerald.
- Ramirez, F. O. (2014). Accounting for excellence: Transforming universities into organizational actors. In L. Portnoi, V. Rust, & S. Bagely (Eds.), *Higher education, policy, and the global competition phenomenon* (pp. 43–58). Basingstoke: Palgrave.
- Ramirez, F. O., Byrkjeflot, H., & Pinheiro, R. (2016). Higher education and health organizational fields in the age of "world class" and "best practices". In R. Pinheiro, L. Geschwind, F. Ramirez, & K. Vrangbæk (Eds.), Towards a comparative institutionalism: Forms, dynamics and logics across health care and higher education fields (pp. 35–57). Bingley: Emerald.
- Ramirez, F. O., & Tiplic, D. (2014). In pursuit of excellence? Discursive patterns in European higher education research, *Higher Education*, 67(4), 439–455.
- Smeby, J.-C., & Stensaker, B. (1999). National quality assessment systems in the Nordic countries: Developing a balance between external and internal needs? *Higher Education Policy*, 12(1), 3–14.
- Sørensen, M. P., Geschwind, L., Kekäle, J., & Pinheiro, R. (2019). The responsible university: Exploring the Nordic context and beyond. Cham: Springer Nature.
- Taylor, J., Ferreira, J., Machado, M., & Santiago, R. (2008). Non-university higher education in Europe. Springer.
- Temple, P. (2011). Universities in the knowledge economy: Higher education organisation and global change. London and New York: Taylor & Francis.
- Yin, R. K. (2009). Case study research: Design and methods. London: Sage Publications.