Transparency in Governing Technology Enhanced Learning

Clive Smallman and Peter Ryan

Contents

Abstract

In this chapter, we first explore the growth of information and communication technologies in education, promoting technology enhanced learning (TEL). We appraise the impact of COVID-19 on higher education before exploring the concept of a virtual organization and virtual higher education. We discuss our

C. Smallman (✉)
Kingsford Institute of Higher Education, Sydney, NSW, Australia
e-mail: ceo@kihe.com.au

P. Ryan
Consult Ed, Sydney, NSW, Australia
e-mail: pryan@consulted.biz

M. D. Sankey et al. (eds.), *Technology-Enhanced Learning and the Virtual University*,
University Development and Administration,
https://doi.org/10.1007/978-981-19-9438-8_3-1

collective lived experience in developing and working in a virtual higher education institution (Virtual University). We explore a crucial concept in the governance of any institution, transparency, before turning to a discussion of higher education in a post-COVID world. We conclude with a clear statement of the central roles of transparency, delegations, policy and process, and formal and informal structures in good governance of virtual and conventional HEIs.

Keywords

Technology enhanced learning · Corporate governance · Academic governance · Transparency

Introduction

The development of high-quality higher education curricula usually follows the principle of backward design, moving from learning outcomes, through assessment, on to learning activities and then content. Developing supporting governance structures to sustain technology enhanced learning (TEL) follows similar principles, which are familiar to strategists: vision, mission, objectives, strategy, and execution. *Governance*, the foundation of all effective higher education institutions (HEIs), unifies the two processes.

Governance is complicated in higher education, not least since many academics resent oversight by boards of management with directors or trustees who are not necessarily academically qualified. Notwithstanding this, governance in higher education is complicated because HEIs, even small ones, are relatively complicated because of the many "moving parts" comprising them. Perversely, complicated institutions are rendered still more complex by regulators' requirements to ensure adequate institutional governance.

From early 2020 on, the very foundations of conventional higher education came under challenge. The advent of the prolonged COVID-19 pandemic turned on its head a model that primarily relied on delivering education face-to-face. The need to move education online suddenly became essential, requiring the exploitation of TEL, for which many institutions were ill prepared. Governance processes designed for slow and steady monitoring and quality assurance were suddenly required to move quickly to approve a myriad of changes, specifically around the pivot to learning and assessment online. At the time of writing, it is not yet clear what impact this will have on education quality. However, it seems to us that slow and deliberative higher education governance may be constraining innovation in higher education learning and teaching and is therefore under pressure to adapt.

Technology Enhanced Learning

The introduction of technology enhanced learning (TEL) began in earnest in the early 2000s. An example of this, Teachers for Teachers for Tertiary (T4T4T), was a pilot web-supported professional development program designed specifically for the

use and benefit of New Zealand tertiary education teachers. One of the present authors was involved in developing this virtual community of inquiry (Wenmoth et al. 2004), where experienced tertiary teachers mentored less experienced colleagues in a virtual environment. This project explored the intersection between emerging pedagogies (Wenger 1998) and cutting-edge technology (the project was an early adopter of what became Moodle). The project developed understanding of the impact of online pedagogies and technology on learning. Among a series of findings from the project, the most pertinent in the context of this chapter is

> The T4T4T programme was allowed to develop according to input from participants. This democratic philosophy encouraged mentors in particular to be involved in and committed to the project. (Wenmoth et al. 2004, p. 4)

In other words, program participants were consulted on the structure and conduct of the project, contributing directly to the governance of this early virtual higher education teaching community. Further, more experienced and educated participants were able to assure quality in passing on their knowledge of higher education learning and teaching to less experienced colleagues. They were also not above questioning the approach of the project leader and grant holder, effectively holding them accountable, a central tenet of governance.

The intervening years saw experiments with Internet technologies and electronic media in learning and teaching processes, student management, and teaching itself. The results of these projects are now standard: web-based lectures and tutorials (online TEL), learning management systems (LMS) supporting on-campus and online TEL, virtual learning environments (VLE), and from 2008 on, massive open online courses (MOOCs) (Kaplan and Haenlein 2016; Köhler et al. 2021, p. 12). Social media, too, has found its way into higher education (Rowan-Kenyon et al. 2016). Digital media in learning and teaching and integrating information and communication technologies (ICT) are now well-established as TEL. However, in on-campus higher education, technology generally remains an adjunct to, or a mediator of, traditional approaches to teaching, that is, the "sage" very definitely remains on the "stage," a dominant paradigm stretching back to the founding of modern universities.

That noted, up to early 2020, not all academic colleagues had enthusiastically adopted these innovations. For some, this was a matter of advancing professional competence. For others, technology was a means of managing the organization of courses in the wake of the dramatic scaling of student numbers in the last decade. However, acceptance of technology in higher education learning and teaching was, in some ways, limited. There was concern that students would lose communication and personal contact with one another and with faculty, as well as a diminution of skills that are commonly associated with on-campus experiences (Köhler et al. 2021, pp. 13–14). There may be some credence in this given the well-documented potential for social impoverishment of "life on the screen" compared with "life in person" (Turkle 1997, 2005, 2015, 2017). Accordingly, before 2020, the pivotal questions were

> What will the campus of 2025 look like? Which organisational models of e-learning . . . will prevail? (Köhler et al. 2021, p. 14)

Further, technological advancement in TEL was progressing. Developments in artificial intelligence, machine learning, and data science were transforming learning and teaching. Moreover, colleagues from different fields were "flirting" with technology too. In short, the technology was not "standing still." Technology was changing higher education, and not just learning and teaching; administration, too, was shifting gears. Then in March 2020, the World Health Organization (WHO) declared a worldwide pandemic.

The Great Acceleration

> There are decades where nothing happens; and there are weeks where decades happen.
> –Vladimir Ilyich Lenin

The weeks leading up to and immediately following 11 March 2020, the day on which the World Health Organization declared COVID-19 a pandemic, imposed decades-worth of changes in our lives, business, and education (Galloway 2020, p. xvi). Many of us moved our lives online in weeks, and most business and education went virtual (Galloway 2020, p. xviii).

With some worldwide exceptions, many HEIs were passively "tinkering" with virtual offerings. The coronavirus pandemic forced global experimentation with remote teaching. Sadly, however, undergraduate enrollments in the USA dropped from September to November 2020, although online institutions saw an increase (Hanson 2021). In Australia, HEIs suffered hugely from revenue lost from international students prevented from entering the country with little opportunity to make up the revenue gap from the domestic market. At the time of writing, international students are still allowed to study online more than is usually the case and governments worldwide are opening their borders to students and workers desperately needed in key economic sectors. However, enrollments have done little to offset the financial crisis faced by many HEIs and especially public universities with their considerable fixed costs.

In this context, Köhler et al.'s (2021, p. 14) questions are reflected in the need to consider the following issues in the context of virtual universities:

1. Technology enhanced learning and teaching quality.
2. The quality and capacity of information and communications technology infrastructure to support TEL.
3. Changing the mindsets and behaviours (in fully accepting TEL) of significant proportions of faculty and students.

(Govindarajan and Srivastava 2020)

These fall inarguably under the purview of academic governance. How can we support and assure the quality of TEL through governance, especially in the context of virtual higher education?

Virtual Organization Theories

If we take the definition of the Virtual University (and by extension other virtual HEIs) to reflect the following,

> A higher-education institution, or networks of higher-education institutions, responsible for designing, developing and offering courses and programmes in a flexible online environment. It follows much the same organisational structure as a regular university, except that a sophisticated ICT infrastructure replaces the physical campus (Richards 2015)

Further, it is common for conventional HEIs to have a virtual division or be part of a consortium that delivers TEL online.

This definition sits well with the modern organization contingency theory view that organizations, including virtual organizations (VOs), are dynamic, open systems that adapt to changes in their environment (Burns and Stalker 1961; Lawrence and Lorsch 1967; Pennings 1975; Thompson 1967). This is relevant to governance, since regulators require that governing bodies monitor the consequences of adapting to change on the quality of educational programs and the student experience.

Morgan (2006) summarizes the principles of contingency theory thus:

- Organizations are open systems, needing careful management to satisfy and balance internal needs and to best adapt to environmental circumstances.
- There is no one best way of organizing. The appropriate organizational form depends on the kinds of tasks or environments the organization faces.
- Management must be concerned, above all else, with achieving strategic alignments and good fits with the tasks or environments.
- Different types or specifics of organizations are needed for different kinds of environments.

In short, contingency theory promotes organizations that are decentralized and "flat." How they react to their environment is essential. Burns and Stalker (1961) argue that firms with organic structures are more effective in dynamic economic sectors than those with more mechanistic structures. However, Sine et al. (2006) demonstrate that this does not hold for new ventures in turbulent, emergent, economic sectors. They show that new ventures with higher founding team formalization, specialization, and administrative intensity outperform those with more organic organizational structures. Our experience of VOs certainly accords with that.

Postmodern (process) organization theory analyzes organizations and organizational science as processes performed in linguistic and other practices. Process organization theory views organization as a continuous process of articulating and establishing a stable set of relations and meaning structures (Hernes 2008, 2014; Langley 2007; Langley et al. 2013).

Process organization theory builds out of the work of:

- Whitehead (1929/1978) on process metaphysics
- Latour (1987) on relativizing the social and the becoming of networks
- Luhmann (1978/2018, 1995) on autopoiesis (self-organization) and recursiveness in social systems
- March (1988, 1994; March and Simon 1958, 1993) on decision processes and organization
- Weick (1993, 1995, 2001) on organizing and sensemaking

In process studies of organizing, taking a distinctly temporal view of organizational life shows how actors operate in an ongoing present in which they draw upon their past and project their history as ambitions for the future. Understanding this organizational and individual "becoming" (Tsoukas and Chia 2002) in which technologies, concepts, and social actors take part is crucial for making any type of organizational formation. Thus, a fundamental construct in process studies of organizing is events, which provide force, movement, and continuity to organizational life (Hernes 2014).

The process-orientated dynamism of process organization theory is an excellent match with our experience of VOs, especially the Virtual University.

Theory in Practice: Our Lived Experience of a Virtual HEI

The authors were fundamental in founding the first 100% virtual HEI in Australia. At the time of writing this chapter, the Higher Education Leadership Institute (HELI) remains as founded, a virtual HEI. However, new ownership will see HELI move to on-campus delivery now that international students are permitted to enter Australia once again. That noted, we predict that HELI will retain its strong commitment to its virtual foundations, not least given that HELI delivers a fully online Master of eLearning. For students who choose to study face-to-face, four units are offered only online.

HELI's governance structure is lean, with a five-person corporate governing body and a seven-person academic board. In both, independent members form the majority. In the latter, a HELI graduate represents the student view, and a senior academic represents the perspective of faculty. The academic board is a subcommittee of the corporate governing body and has delegated responsibility for all matters academic. In addition, course advisory and learning and teaching committees support the academic board. Finally, an executive management committee led by a chief executive officer manages day-to-day operations, with academic leadership provided by an executive dean. Decision-making is overwhelmingly by consensus. That noted, there is always space for mutual, rational, restrained, mildly conflictual debate among colleagues.

At HELI, colleagues are geographically distributed across Australia (and sometimes internationally), linked via email, Zoom teleconferencing, and a shared document repository. HELI relies on lateral dynamic relationships to coordinate working from any place. High-quality and frequent communications are essential to

operations, and unambiguous delegations and a policy set developed and refined over many years by HELI's founder (one of the present authors) and colleagues. HELI's organization design is simple. HELI places value on a balance of experience and skill in its academics and professional staff. HELI's online students are geographically dispersed (e.g., one graduate studied from Dubai, UAE).

Looking back at the discussion of organization theory, we see reflections in HELI's story thus far.

The pandemic has proven the need for contingency theory in organizations. From a postmodern or process organization theory perspective, HELI's day-to-day operations are certainly informed by collective experiences of the past. This enables an essentially smooth organizational life, which is not to say that HELI does not have its collective moments of truth, as is the case for individual staff. What is readily evident is a constant interrogation of process and policy by colleagues across the years, seeking incremental and stepwise improvement in policy and procedure to secure a more polished future.

Like so many HEIs, HELI is event-driven by meetings of governance bodies, by academic timetables, by regulatory schedules, and not least by international, national, and local events. HELI's familiarity and comfort in working virtually paid dividends as most of Australia lurched into lockdown caused by a surge in COVID-19 cases coupled with poor federal management of the pandemic response.

In summary, over the few years of HELI's existence, meetings of each governance body could be held physically, virtually, and mixed-mode (some participants around a board table, the rest on teleconference). The physical company of colleagues is always enjoyable, even when discussions tend to be challenging; however, purely virtual meetings are equally functional (HELI's course advisory and academic quality committees have never met in person).

Based on our experience, transparency, coupled with a well-specified governance framework, clearly defined delegations, good yet continually improving policy and procedures, and effective meeting chairs are the key to governance in general and the supportive governance of TEL in the context of virtual higher education in particular.

Transparency: The Key to Supportive Governance of Technology Enhanced Learning and Virtual Institutions

Transparency Defined

Transparency is one of the core principles of good corporate governance. In 1997, the United Nations Development Program (UNDP 1997) set out the principles of good governance that, with slight variations, appear in much of the literature and have a universal recognition (Graham et al. 2003). One of these central principles is transparency built on the free flow of information so that stakeholders have the necessary information to understand and monitor the organizations that they are concerned with (UNDP 1997).

Transparency is demonstrated as a willingness by an organization to provide clear information to its stakeholders (AICD 2019); this includes owners (shareholders, trustees, or governments) and other stakeholders, such as students and staff in HEIs.

Transparency has many facets (Fitriani and Muljono 2019), including:

- A willingness to disclose financial performance data that are truthful and accurate
- Openness about the management processes of an organization
- Clarity around decision-making processes
- What an organization plans to do in the future
- The possible risks it may face

Transparency ensures that enough information is provided in easily understandable forms through various media so that stakeholders can have confidence in the decision-making and management processes of an organization.

Transparency As a Problem and a Solution

Transparency applies throughout an organization; however, the culture of transparency is championed, established, and nurtured from the top by the corporate governing body (or statutory governing body) of the organization to filter down through every part of the organization. Therefore, decisions taken from the top-down follow explicit rather than implicit rules and procedures. As a result, information is freely available and directly accessible to those affected by such decisions.

While transparency must be consistently demonstrated and reinforced by leadership, there is the need to balance what is shared with stakeholders. Transparency must not be mistaken for sharing every detail about an organization. Therefore, it is essential to recognize that some information simply will not add value to stakeholders.

In an HEI, rules-based decision-making is apparent when policies affecting students, such as admission, granting of credit, progression, and exclusion, are publicly available, and the rules that govern these processes are clearly set down. Failure to follow those rules when making a decision may result in a student, or potential student, challenging that decision. So that transparency works for both the institution and the student, the rules must be written unambiguously so that the rules are fair to all, and consistent decisions are made based on the evidence provided. If not, appeals to review those decisions are likely to proliferate.

However, regulations-based decision-making leaves little room for discretion in individual cases. As the rules are designed for universal application, they do not always translate well to an individual's particular circumstances. As the rules must be applied consistently and reasonably, there may be little or no opportunity to make a decision that accounts for an individual's circumstances if those circumstances do not fit neatly into the universal paradigm. This, in turn, may entrench socioeconomic disadvantage; however, this can be alleviated with specific programs to address disadvantage, but again, the rules of access must be clear and applied consistently.

As education is seen as one of the key catalysts to break the cycle of disadvantage, special consideration for first nations people and scholarships specifically designed for students from low socioeconomic backgrounds are often provided by HEIs.

Transparency of financial performance data to a broad range of stakeholders, including governments, owners, students, and staff, is typical in a public institution or listed company but not common in private enterprises. Published financial data may reassure stakeholders that an institution is financially strong and viable for the longer term. For example, staff may feel more secure in their employment, students may be reassured that their course will be delivered in full, and owners will be relieved that they will not be required to provide further capital. Alternatively, the financial data may show that an institution is in poor financial health, which may negatively impact staff considering leaving, students deciding not to enroll or transfer to other institutions, negative regulatory consequences, or even public humiliation.

Transparency can be a double-edged sword, balancing the need for what stakeholders would like to see against the information they are prepared to disclose, especially in individual data collection (Hood 2007). For example, an institution's staff would expect that their academic profiles, qualifications, and scholarship would be publicly available, but not their performance appraisals, pay rate, or disciplinary matters. Likewise, students would not be comfortable with having their results or personal details made available publicly. For example, displaying personally identifiable information publicly (for example, on a website) may provide a combination of what might otherwise appear as innocuous data to provide a basis for identity theft. Therefore, the right balance must be struck between the conflicting principles of organizational transparency and an individual's right to privacy.

Transparency and Institutional Behavior

According to Jeremy Bentham (1748–1832), the more closely we are watched, the better we behave. However, transparency is not a panacea for wrong-doing or harmful behavior. On the contrary, it may create behavioral problems in an organization, such as creating a blaming culture, increasing distrust, increasing cheating, and sparking resistance (De Cremer 2016).

Blame avoidance is often said to underlie much institutional behavior in practice (Hood 2007) as the principle of transparency as part of good governance collides with the propensity of human nature for blame avoidance and negativity bias. This may manifest itself in an institution-wide imperative to avoid risk, which may, in turn, stifle innovation and creativity as many people are most creative when they are not being observed or monitored. Organizations may be prepared to trade off good outcomes to limit negative ones. Individuals may tend to avoid blame for adverse effects rather than claim the credit for good ones.

The concept that too much transparency can increase distrust or breed suspicion at first appears paradoxical (De Cremer 2016). However, the constant monitoring of individuals and processes in the name of transparency can sometimes create a feeling

of mistrust. The open sharing of information on individual performance and pay levels often invoked to promote trust and collective responsibility can backfire as staff earnings is a highly controversial dimension of transparency (Birkinshaw and Cable 2017). According to Hofmann and Strobel (2020), transparency of administrative processes and performance in teaching and research may not only increase staff satisfaction with their working environment, but conversely it may also increase their intent to leave.

While the availability of information through transparency may facilitate holacracy through decentralized management and decision-making, it also dilutes the power of leadership. Rather than enhancing the decision-making process, it may lead to endless meetings and a vague decision-making authority where important decisions become hamstrung and delayed.

Transparency and Technology

The ongoing digital transformation of organizations allows digital technologies to provide the means to track organizational processes and performance in real time so that there is increasing availability and visibility of performance data to both internal and external stakeholders (Hofmann and Strobel 2020).

One of the first uses of technology to provide information to the public was through websites published on the worldwide web. HEIs offered a conduit for the instant sharing of crucial information with students and prospective students, notably the policies and course information relevant to their admission and their ongoing participation in the study. From the point of view of immediacy, this was a significant improvement in the provision of preenrollment information through the postal service. Constantly improving and complex technology has allowed virtually all interactions with students and prospective students to occur electronically and in real time. However, the use of technology is no guarantee that electronic communications have been received, with the term "lost in the mail" being replaced with "lost in the ether or the cloud" or "my internet connection is not so good."

Increased technology may be a catalyst for increased negative bias as the ramifications of adverse events and stories travel wide and fast in a digital world. Social media provides a powerful platform for people to raise concerns about an organization that might otherwise be hidden. However, because of the limited curation of social media platforms, the truth of some of the issues raised and claims made may remain unchallenged. This has led to organizations carefully "listening" to social media to determine what is being said about a brand, individual, or product through different social and online channels. Negative comments are analyzed, and, where found valid, corrective action can be taken. Alternatively, where statements are believed to be false or unfounded, organizations can put the other side of the case to balance the communication and ameliorate any negative impact.

As described earlier, transparency does not mean that all information is available to all stakeholders. Certain information is limited to specific groups as dissemination to a broader population is not deemed to be in either the public or the organization's

interest. However, the increased use of online technologies provides a conduit for intrusion into institutional systems by hackers exposing private information to the public. Not only are there regulatory and legal reasons to protect an institution's data proactively, but an institution's reputation also depends on it.

Transparency and a Little Structure Go a Long Way

Transparency (allowing for our previously noted reservations) and a little structure go a long way to assuring quality; this is no more so than in the spatially dispersed and isolated world of virtual higher education.

Supporting Technology Enhanced Learning in Higher Education in a COVID Normal

Where Are We?

Based on our observations of the sector drawn from conversations we have had in international webinars on TEL before and during the pandemic, it seems to us that many institutions are at the "end of the beginning." They have made a start but are unsure of where to go, and investment seems limited. This is where supportive governance (institutional and academic) must step in, providing leadership based on an understanding of what TEL, both online and on-campus, requires. Crucially, we must be better able to demonstrate the return on investment in TEL in business cases that match the quality of those that support massive investment in buildings. Furthermore, the principle of accountability in governance means that academic boards must demand that the learning analytics TEL renders more available are utilized as a means of assuring quality of learning.

Then there is the question of changing mindsets and behaviors. It is fair to say that many HEIs of all types have a poor record of investing in the professional development of academics (e.g., a conference here, a training course on data analysis there). Most academics seem happy. Yet, it seems to us that HEIs worldwide continue to dodge an inconvenient truth: *that most academic staff are not trained teachers*, and certainly not trained to teach utilizing TEL. The qualification for an academic role in most institutions is a doctorate in the broad discipline that an academic teaches. To our knowledge, no institution demands their academics be trained teachers (except for education faculties). Most seem satisfied with a short course on fundamentals of university teaching. Instead of educating academics to teach using TEL, institutions instead employ instructional design teams, most of which are inadequately staffed for the volume of work they face (especially now). The challenge we see is that institutions need both: academics who are properly trained TEL teachers supported by instructional design teams.

It seems that some institutions willingly pour billions into buildings and regulators demand bureaucratic quality inspection. Both seem to be missing the point: The

future of higher education is aligned to TEL, and few academics are properly equipped for this. Moreover, if they were so equipped, quality would be better assured, mindsets would change, and so would behaviors. Where academics go, so too do students.

Where might this start from? Institutional and academic governance systems should insist on and support these requirements. Comparing the return on capital investment against investment in people and TEL systems is the starting point. The regulator has a role to: insist that academics be properly trained in teaching and TEL.

So, are we all doomed? Thomas Frey, an eminent futurist at the Da Vinci Institute, has been predicting the demise of many lesser conventional universities for years now. He has consistently forecast a massive move online for all but the most elite (Weller 2016). Galloway (2020, p. 141) agrees, predicting a "death march" of HEIs:

> A semester of online education and reduced attendance will kill hundreds of schools. A year [or more] without the in-person experience, and the pricing power it brings, could drive 10 to 30% of universities out of existence

We do not share their grim forecasts but only on the proviso that HEIs, regulators, and members of institutional and academic governance bodies push for change to advance the adoption of TEL and properly educate and train the academics using it.

The Road Ahead

A profound change in higher education has long been predicted (Christensen et al. 2011a, b). COVID-19 has accelerated the initiation of change.

Technology sits at the heart of the developing transformation. Until recently, faculty and management have resisted this. The truth is that only a few in the sector are learning rapidly and are positioned well to accelerate the adoption and diffusion of learning technologies (Galloway 2020, pp. 142–143).

Most try to replicate the in-class experience, failing to engage with students and losing them in the process. HELI's experience is that engagement both synchronous and asynchronous is key, built on carefully considered design and development that exploits TEL delivered by first-class teachers, supported by transparent academic governance.

Current learning management systems are crude with reference to other technologies. They are little more than indexed repositories for information of different types. They are brought to life by the careful curation of educators. A massive technology change is not far off as venture capital deployed into higher education takes root and flourishes (Galloway 2020, pp. 142–143).

It is not simply the educational functionality and flexibility of technology that will accelerate its uptake. When properly implemented, it delivers to HEIs an opportunity to scale that those outside of the elite crave, and

> Tech creates scale, and scale increases both access (social good) and revenue (necessary fuel). (Galloway 2020, p. 145)

The best time to start thinking about the move to virtual higher education was 20 years ago. The next best time is now. Now is the time to think about how the campus is utilized, how we can best integrate TEL into the virtual higher education toolbox, and how we can use it to expand the notion of the higher education experience.

Academic governance must assuredly support technology enhanced learning and teaching quality and the quality and capacity of information and communications technology infrastructure to support TEL. Further, academic leaders must consciously lead a collective movement toward changing the mindsets and behaviors (in fully accepting TEL) of significant proportions of faculty and students. The starting point for that is requiring that faculty properly train as teachers in the context of TEL.

Conclusion: Governing the Virtual Higher Education Institution

We find ourselves looking at a paradox between virtual organization theory and the practice of governance. Virtual organization theory calls for transparency and flexibility enabled by technology. The practice of governance cries "caution," especially around the release of information. As we scale, challenges will arise.

As we have indicated previously, our answer to these challenges remains controlled transparency, well-defined governance frameworks, and clear delegations, coupled with good policy and productive processes in a formal structure that simultaneously operates informally. The quality of people leading governance also matter enormously.

References

AICD. 2019. *Not-for-profit governance principles*. Australian Institute of Company Directors.

Birkinshaw, J., and D. Cable. 2017. The dark side of transparency. *McKinsey Quarterly* 1–7.

Burns, T., and G.M. Stalker. 1961. *The management of innovation*. Tavistock.

Christensen, C.M., M.B. Horn, L. Caldera, and L. Soares. 2011a. *Disrupting college. How disruptive innovation can deliver quality and affordability to postsecondary education*. Centre for American Progress.

Christensen, C.M., M.B. Horn, and W. Johnson. 2011b. *Disrupting class: How disruptive innovation will change the way the world learns*. 2nd (Kindle) ed. McGraw Hill.

De Cremer, D. 2016. When transparency backfires, and how to prevent it. *Harvard Business Review, Digital article*. https://hbr.org/2016/07/when-transparency-backfires-and-how-to-prevent-it

Fitriani, S., and H. Muljono. 2019. Beyond good governance: An ultimate key success for higher education quality. *Journal of Education, Teaching, and Learning* 4 (1): 210–216. https://doi.org/10.26737/jetl.v4i1.321.

Galloway, S. 2020. *Post corona: From crisis to opportunity*. Bantam Press.

Govindarajan, V., and A. Srivastava. 2020. What the shift to virtual learning could mean for the future of higher ed. *Harvard Business Review*. Govindarajan and Srivastava is an electronic article from the HBD log dated March 31 2020.

Graham, J., A. Bruce, and T. Plumptre. 2003. *Principles for good governance in the 21st century*. Vol. 15. Institute On Governance.
Hanson, M. 2021. Online education statistics. www.education.org, accessed 19 July 2021.
Hernes, T. 2008. *Understanding organisation as process: Theory for a tangled world*. Routledge.
———. 2014. *A process theory of organisation*. Oxford University Press.
Hofmann, Y.E., and M. Strobel. 2020. Transparency goes a long way: Information transparency and its effect on job satisfaction and turnover intentions of the professoriate. *Journal of Business Economics* 90 (5–6): 713–732. https://doi.org/10.1007/s11573-020-00984-0.
Hood, C. 2007. What happens when transparency meets blame-avoidance? *Public Management Review* 9 (2): 191–210. https://doi.org/10.1080/14719030701340275.
Kaplan, A.M., and M. Haenlein. 2016. Higher education and the digital revolution: About MOOCs, SPOCs, social media, and the Cookie Monster. *Business Horizons* 59 (4): 441–450.
Köhler, T., C. Lattemann, and J. Neumann. 2021. Organising academia online. In *E-science: Open, social and virtual technology for research collaboration*, ed. C. Koschtial, T. Köhler, and C. Felden, 11–28. Springer International Publishing. https://doi.org/10.1007/978-3-030-66262-2_2.
Langley, A. 2007. Process thinking in strategic organisation. *Strategic Organisation* 5 (3): 271–282.
Langley, A., A.H. Van de Ven, C. Smallman, and H. Tsoukas. 2013. Process studies of change in organisation and management: Unveiling temporality, activity and flow. *Academy of Management Journal* 56 (2): 1–13.
Latour, B. 1987. *Science in action*. Harvard University Press.
Lawrence, P.R., and J.W. Lorsch. 1967. *Organisation and environment: Managing differentiation and integration*. Harvard University Press.
Luhmann, N. 1978/2018. *Organisation and decision*. Cambridge University Press.
———. 1995. *Social systems*. Stanford University Press.
March, J.G. 1988. *Decisions and organisations*. Basil Blackwell.
———. 1994. *A primer on decision making: How decisions happen*. Free Press.
March, J.G., and H.A. Simon. 1958. *Organisations*. Wiley.
———. 1993. *Organisations*. 2nd ed. Blackwell.
Morgan, G. 2006. *Images of organisation*. 2nd ed. Sage Publications.
Pennings, J.M. 1975. The relevance of the structural-contingency model for organisational effectiveness. *Administrative Science Quarterly* 20 (3): 393–410.
Richards, G. 2015. *A guide to virtual universities for policy-makers*. The Commonwealth of Learning. Available from: http://oasis.col.org/handle/11599/1723
Rowan-Kenyon, H.T., A.M. Martínez Alemán, K. Gin, B. Blakeley, A. Gismondi, J. Lewis, A. McCready, D. Zepp, and S. Knight. 2016. Social media in higher education. *ASHE Higher Education Report* 42 (5): 7–128. https://doi.org/10.1002/aehe.20103.
Sine, W.D., M. Hitoshi, and D. Kirsch. 2006. Revisiting Burns and Stalker: Formal structure and new venture performance in emerging economic sectors. *Academy of Management Journal* 49: 121–132.
Thompson, J.D. 1967. *Organisations in action: Social science bases of administrative theory*. McGraw-Hill.
Tsoukas, H., and R. Chia. 2002. On organisational becoming – Rethinking organisational change. *Organisation Science* 13: 567–582.
Turkle, S. 1997. *Life on the screen: Identity in the age of the internet*. Simon & Shuster.
———. 2005. *The second self: Computers and the human Spirit*. 20th Anniversary ed. MIT Press.
———. 2015. *Reclaiming conversation: The power of talk in a digital age*. Penguin.
———. 2017. *Alone together: Why we expect more from technology and less from each other*. 3rd ed. Basic Books.
UNDP. 1997. *Governance for sustainable human development–A UNDP policy document*. United Nations Development Programme.

Weick, K.E. 1993. Sensemaking in organisations: Small structures with large consequences. In *Social psychology in organisations: Advances in theory and research*, ed. J.K. Murnigham. Prentice-Hall.

———. 1995. *Sensemaking in organisations*. Sage Publications.

———. 2001. *Making sense of the organisation*. Blackwell.

Weller, C. 2016. A top futurist predicts the largest internet company of 2030 will be an online school. *Business Insider Australia*.

Wenger, E. 1998. *Communities of practice: Learning, meaning, and identity*. Cambridge University Press.

Wenmoth, D., H. Gilmore, and A. Trewern 2004. *Towards a professional community of inquiry*. A report to the Ministry of Education on the T4T4T pilot. Core Education Limited.

Whitehead, A.N. 1929/1978. *Process and reality*. Cambridge University Press.