# Rethinking the rationale of open and distance education: a case of the UK Open University

Open and distance education

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Hanmo Jeong

Graduate School of Education, Kyoto University, Kyoto, Japan

### Abstract

**Purpose** – The purpose of this paper is to describe how the introduction of new technologies has affected student support at the United Kingdom Open University (UKOU) particularly focusing on face-to-face tutorials and online tutorials, what this impact implies for open universities and in what direction the innovations toward the sustainability of open universities should proceed.

**Design/methodology/approach** – Research on the historical development of UKOU and a literature review was conducted.

**Findings** – The rationale behind the foundation of UKOU has been to provide higher education to those who have time and physical constraints. There is no doubt that the introduction of advanced technologies has played a significant role in the growth of the university. However, when the university attempted to replace face-to-face tutorials with online tutorials on the basis of its purpose, a number of students and faculty members opposed the decision even though online tutorials fit within its original objective. This paper suggests that face-to-face tutorials have become the essence of the university through the process of identifying the university in the past and the university's identity may need to be distinguished from the rationale.

**Originality/value** – This paper emphasizes the necessity of rethinking the Open and Distance Education rationale and, on the basis of past studies on UKOU, offers a unique perspective about the changes that have taken place at the university.

**Keywords** Open university, Human dimension, Face-to-face tutorial, Online tutorial, Open and distance education rationale

Paper type Research paper

### 1. Introduction

One of the objectives for Open and Distance Education (ODE) has been to provide learners with an opportunity to study regardless of geographical, socio-economic or other constraints, (Moore and Tait, 2002, p. 22), that is, to provide openness with respect to teaching and learning to all potential students. Open universities all over the world are representative ODE institutions and are based on this specific objective. The United Kingdom Open University (UKOU), inter alia, is an ODE institution and is representative of those universities. Since its establishment in 1969, UKOU has contributed to the widening of opportunities in higher education in the UK through the introduction of various technologies in its teaching. Fifty years after being founded, UKOU is now introducing Information and Communication Technology (ICT) to change with the times, a move which is consistent with the ODE rationale and should guarantee more flexible and cost-effective learning. Zimmerman (2016), the secretary of UKOU, described this change as a transition from "a university of the air" to "a

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Asian Association of Open Universities Journal Vol. 13 No. 2, 2018 pp. 169-178 Emerald Publishing Limited 2414-66994 DOI 10.1108/AAOUJ-06-2018-0019 university of the cloud." The former can be interpreted as the university of the past, while the latter can be interpreted as the university of the future. Namely, if "the air" stands for broadcasting that requires students to "attend" at airtime, "the cloud" signifies a network system that contains a vast amount of information and is accessible anytime and anywhere. It is obvious that "a university of the cloud" is more likely to make its objective a reality. Nevertheless, when UKOU attempted to replace face-to-face tutorials with online tutorials, concerns arose with respect to this change.

Through a study on UKOU, this paper describes how the introduction of new technologies have affected student support at UKOU specifically, what this impact implies for open universities more generally and in what direction innovations toward the sustainability of open universities should proceed.

### 2. Technologies and openness

In the 1960s, Harold Wilson, the then Prime Minister, considered radio and TV as a powerful medium of communication, which was too precious to be used solely for entertainment (Daniel, 1995, p. 11). This thought led to the establishment of a new kind of university in 1969, in which students did not have to go to the university and could instead learn at home through radio and TV: UKOU Although most of the teaching and learning at UKOU were supposed to be done remotely, the creation of a regional structure was considered to maintain direct contact with students (Perry, 1977, p. 44). Consequently, regional offices were set up all over the country from the very beginning. These offices have the function of managing Associate Lecturers (ALs), who are charge of teaching students in tutorial classes, assessing their work and providing feedback, securing venues for tutorials and supporting student learning via the phone or (in more recent decades) e-mail. In 2014, the number of regional offices was 13, and then decreased to 6 in 2018.

The introduction of new technologies has given rise to fundamental changes in the educational system including teaching and learning activities in OU. The media used in ODE can be divided into correspondence tuition, the mass media, personal media, telecommunications and the knowledge media (Daniel, 1995, p. 10). Among these, the mass media, such as radio and TV, is what enabled the establishment of UKOU. However, there were some disadvantages to the mass media as broadcast time was fixed and students were required to "attend" classes at a specific hour. From the 1970s to the mid-1990s, personal media, such as audio or video cassettes, and personal computers, were introduced. These media allowed students to be free from time and physical constraints. Telecommunications, such as telephone and fax, also started to be used for tuition. Then, from the 1990s until today, UKOU introduced the knowledge media, which indicates a combination of telecommunications, television and computing (Daniel, 1995, pp. 116-120). Daniel, the Vice-Chancellor in 1990s, especially took notice of the use of personal computers with internet access. He predicted that by 2004, 95 percent of the students would have internet access (Daniel, 1996a). With the development of the media over the decades. UKOU has continued to grow. In 1971, when the first students were admitted to UKOU, student enrollment was 25,000, which increased to about 70,000 in 1985 and to 150,000 in 1995. The growth continued until 2010, when numbers peaked at 210,000.

The introduction of new technologies has also had an effect on cost-effectiveness (Daniel, 1996a; Bell *et al.*, 2017, p. 99). Following the Second World War, the Conservative Party handed over the reins of power to the Labour Party. Then, the Labour Party promoted several policies in the context of social democracy, such as industrial nationalization and the establishment of the National Health Service. In the same vein, the idea of UKOU was suggested. Unfortunately, only a year after the university was established, the Conservative Party came back into power. Because the foundation of the university was an unwelcome decision for the Conservative Party, which conformed to economic liberalism, the university faced a risk of being shut down. However, when the party attempted to close UKOU, Margaret Thatcher, the then Educational Secretary, ironically insisted on saving UKOU

against her party members' wishes. The reason was that she found the university cost-effective (Daniel, 1996b, p. 70; Weinbren, 2015, p. 12). This historical background describes that one of the significances of UKOU was closely related to its cost-effectiveness, a feature that is connected to the introduction of new technologies.

The teaching and learning at UKOU is becoming more flexible and cost-effective these days. Since 2014, UKOU has gradually introduced the so-called Group Tuition Policy (GTP). Under this policy, the dozens of students that take the same module and the several ALs in charge of that class form a group, the so-called Cluster. One characteristic of the "Cluster" is that it does not take into account students' places of residence. Previously, students participated in face-to-face tutorials based on their place of residence and ALs were equally assigned on the basis of location. Therefore, there was no concept behind students and ALs being artificially grouped into a "Cluster." with students and ALs naturally forming a learning community. On the other hand. since the "Cluster" does not take the place of residence into account, it is difficult for students living in different and more distant regions to participate in face-to-face tutorials. Thus, building a learning community based on the place of residence also has been challenging. Along with this change, in November 2015, the council of UKOU decided to close seven of its regional offices. mainly in England, because the introduction of the GTP reduced the number of residence-based face-to-face tutorials and the rationale for having regional offices was essentially eliminated. As UKOU's branch of the University and College Union tried to advocate for a vote of no confidence with regard to the Vice-Chancellor (resigned on April 13, 2018), the GTP is predicted to be canceled in the future. However, the closure of regional offices already took effect in February 2017 and the number of face-to-face tutorials also continued to decrease meanwhile.

These changes in part have to do with cost-cutting. Since the academic year 2011–2012, the UK government's subsidy for higher education has dropped dramatically, and tuition fees for British universities have increased three- or fourfold. The rise in tuition fees has particularly affected the number of part-time students, which has fallen by approximately 300,000 people in a period of four years since 2011–2012 (Higher Education Statistics Agency, 2016). With the respect to UKOU, 75 percent of all students were part-timers, meaning that the university suffered a heavy blow. Prior to the tuition fee rise, student enrollment in 2010–2011 stood at about 210,000. As of 2014–2015, the number decreased to 140,000 students, dropping by 33 percent. As a consequence, the ODE institution ran a deficit of £16.9m and £10.5m in 2013–2014 and 2014–2015 (Swain, 2015), respectively. In such a situation, it seems appropriate to rethink on the cost-effectiveness of face-to-face tutorials. To keep offering tutorials, it is necessary to pay the rent for the regional offices and venues, as well as the salaries of the staff involved.

In spite of that, the decision regarding reducing the number of face-to-face tutorials is likely to be natural. The concept of telecommunication has existed since the past and there have been discussions about replacements (Lammie, 1975; Matthews, 1999; Randle, 1999), but they were not enough to completely eliminate face-to-face sessions for many reasons, including the slow communication speed for synchronized online conferencing. Nowadays, with the development of ICT, this particular problem has been resolved almost completely. Unless the whole reason is related to the financial state of the university, it was natural for UKOU to make such a decision, which allowed them to be more "open," substantializing the ODE rationale more effectively and providing students with an opportunity to study regardless of geographical, socio-economic or other constraints. However, the change would be more appropriate for an online learning environment and, therefore, has faced opposition from students, who prefer a "less open" environment for learning.

### 3. Tutorials and openness

Even though face-to-face tutorials have existed from when UKOU first launched, it is no exaggeration to say that the tutorials have been at risk throughout the entire history of

the university. Reductions of face-to-face tutorials have occurred at least four times, including the current one.

Evidence for the first reduction is found in an article entitled "Why there is no future for face to face tuition," which was published in UKOU newspaper *Sesame* in 1975 (Lammie, 1975). As the number of courses had increased from 76 to 145, the average student population for each course decreased. Also, the sites where tutorials were held were spread out all over the country. Inevitably, travel distances especially for tutors increased, so it became difficult to maintain the number of face-to-face tutorials. Besides, the huge difference in enrollment numbers in popular courses and less popular ones was another problem.

In 1984, the number of face-to-face tutorials was reduced due to financial reasons. Margaret Thatcher, by then the Prime Minister, demanded great accountability from universities and cut off government grants for institutions of higher education. At that time, the level of dependence of universities on governmental grants was 80–90 percent, greatly influencing universities including UKOU. Specifically, 76 percent of UKOU students attended more than one tutorial and 80 percent of those who passed their course(s) did so. (Student Research Centre, 1986, p. 16). The impact of the reduction may thus have been huge. In addition, the possibility that the reduction of tutorials offered affects student retention was suggested for the first time. Perry (Taylor, 1980) argued to insist that tutorial cut-backs are likely to result in an increased drop-out rate from foundation courses, with Perry writing in his work OU a personal account by the first Vice-Chancellor that "the class tutorials undoubtedly played a part in the success rate by diminishing the drop-out from foundation course" (p. 113).

Although face-to-face tutorial had seen cut-backs several times, these cuts were basically always in terms of the frequency of the tutorials offered. The thought that face-to-face tutorials could be replaced with something else entirely never occurred in those days, even when they were supplemented with different kinds of student support. It concerned the burden caused by long-distance travel for tutors and students, and not the elimination of the face-to-face tutorials (Lammie, 1975). Also, the Student Research Centre was not able to suggest any other method to replace face-to-face tutorials, even though utilizing more letters and telephone counseling to facilitate students' learning was advised. That is to say, the term "face-to-face tutorial" was considered equivalent with "tutorial" or "tuition."

In 1999, only a few years after the introduction of the internet, the then Vice-Chancellor of the university, suggested the possibility of replacing face-to-face tutorials with online ones. However, articles published in *Sesame*, such as Matthews's "Fears that face-to-face tuition may suffer from move to computers," indicate that students were worried rather than excited about the possible change (Matthews, 1999). It was the first time that face-to-face tutorials were compared with another method of tutorials. One student's view about the pending change, expressed in UKOU newspaper was as follows:

I value tutorial support very highly. To me it is the most important thing in UKOU after the quality of the written material. At its best (and most of my tutors have been very good) a tutorial provides clarification of tricky points in the course, revision and often new slants on the material which adds intellectual excitement. At second and third level tutorials are already very few – just four for several of the courses I have done. On-line support would be no substitute and would be welcome only in addition to the existing provision. I would welcome the ability to e-mail my tutor, both out of consideration for him/her and to enable me to express my query clearly. I would also support the recommendations in the report (*Sesame*, 192). I write this in my 6th UKOU year and in proud possession of a computer (and therefore not a Luddite). (Fielden, 1999)

As indicated at the end of the quote, this student was neither a novice user of technology nor unconditionally opposed a new-type tutorial. Nevertheless, the student's perception toward online tutorials appears to be as a sort of supplementary lesson. This view was not merely a

minority opinion. The then Pro-Vice Chancellor Diana Laurillard was quoted as saying, "[W]henever students are asked which teaching methods they would like more of, face-to-face tutorials always appear at the top of the list" (Matthews, 1999). New technologies, such as personal computers and the internet, were not popularized enough. According to an investigation of UKOU, only 39 percent of students had access to a computer or the internet and students that were older than 44 and female students turned out to be less convinced about the change, leaving the distinct possibility that particularly these students would likely feel alienated (as cited in Matthews, 1999). In addition, the investigation that most students did not only own a computer but have access to the internet may mean students' digital literacy was remarkably lower than those of today.

The situation is different now. In 2014, the year that UKOU initiated the GTP, the penetration rate of computers in the UK had reached 85 percent, compared to 32 percent in 1999 (Statista, 2018b). The penetration rate of internet access had grown to 91.6 percent (Statista, 2018c). Internet speed had drastically increased by about 535 times (Ofcom, 2015, p. 9; Statista, 2018a), allowing students to communicate with tutors and other students at a much greater ease even through video conferencing with high-quality video and audio. Furthermore, the ownership rate of mobile computing devices such as smartphones and tablet PCs has marked a steep growth over recent years (Ofcom, 2017, p. 10). Based on these data, it can be inferred that students' perceptions of online tutorials have become more positive. The decision for the latest reduction was made in this status quo.

However, there have been constant debates about changes within and outside the university. The University College Union conducted a signature-seeking campaign against the closure of the regional offices, which involved approximately 7,000 people (confirmed on April 19, 2016, now closed). Mass media, including the BBC, the Guardian and Times Higher Education, also provided thorough coverage of the changes, possibly because they were related to labor issues. For example, approximately 500 staff lost their employment because of the shutdown of regional offices (Sellgren, 2015). The redundancies included employees that had played an essential role in offering face-to-face tutorials, such as AL Services staff (mainly responsible for securing venues for face-to-face tutorials) and Staff Tutors (responsible for managing ALs). Moreover, there was one more consequence effected by the change. It also constituted a change of the form of the university. In an interview, Tony Coughlan, a tutor who worked at the Bristol Regional Office, described the change as follows:

There was an excitement and sense of being part of a learning community. It was thrilling and really motivating. You don't get that so much online. There is a sense when you are part of a community that you aren't alone. If you are feeling a bit wobbly and thinking of throwing in the towel, you see lots of other people in the same position and it helps you carry on. (Swain, 2015)

Coughlan found that when students felt a sense of being a part of a learning community, it resulted in motivating and sustaining their learning. In his opinion, this sense could be obtained from a learning environment that allowed students to meet face-to-face more so than online. Technology has played an important role in realizing the ethos of ODE. By introducing new technologies, students could enjoy the benefits of a more flexible learning environment and lower tuition fees, which stayed at the same level or at least increased more slowly than fees at regular universities. However, Coughlan questioned whether the quality of learning would be the same. For him, the most developed technology in ODE could create a gap between an ideal and a learning effect when trying to replace the face-to-face learning environment.

A survey of students' attitudes about face-to-face tutorials and online tutorials was conducted, targeting students who had studied in a range of undergraduate modules held in October 2012, excluding language courses, in which the requirement for synchronous voice

interaction is specialized (Goodfellow, 2014). Of the number of students contacted, 626 of 3,910 responded. As the number of respondents is small compared with the number of students enrolled at the university, generalizing the results is difficult. However, Goodfellow (2014) may be worth citing as it is among the few publicly available surveys on students' attitudes toward tutorials in UKOU. One of the key findings is as follow:

More students agreed with the other proposed benefits of face-to-face tutorials than agreed with the other proposed benefits of online tutorials. There are indications that online tutorials are not perceived to deliver the benefits of engagement in discussion about course topics, understanding how to get good marks in TMAs, getting to know other students, and encouragement to keep going, to the same degree that face-to-face tutorials do. (Goodfellow, 2014)

The above quote describes that more students still expect and feel that face-to-face tutorials are more advantageous to them. In addition, other elements like "getting to know other students" or "encouragement to keep going" seem to underpin what Coughlan argued. However, it should be noted that most students, as Goodfellow also observed, found online tutorials also helpful as much as face-to-face tutorials are – the difference is not seen as considerable (86 percent vs 92 percent). Also, it turned out that there were still a few students who could not attend any of face-to-face tutorials due to lack of time, tutorial schedule and its location. The percentage of these students were 11, 9 and 13 percent (duplicates allowed). What is certain is that the provision of online tutorials appeals to students who cannot afford to attend face-to-face tutorials and students who are still unable to attend those tutorials because of geographical and time constraints are not few in number. In this respect, online tutorials appear to be OU like, based on the ODE rationale.

## 4. "A real university" and openness

The question of whether UKOU is "a real university" seems to have been asked frequently. Keegan and Rumble (1982, pp. 246-247) determined that the university is recognized as a genuine university on the following grounds: credit transfer between the university and conventional universities is available and the chief executive officer of UKOU is a member of the national committee of the head of universities in the country. However, UKOU underwent a process to identify itself as a new type of university that had never existed before.

In 1986, the Student Research Centre attempted to demonstrate the importance of face-to-face tutorials in terms of the human dimension, i.e. students being directly in touch with the university, or making personal contact with its staff and other students and not feeling alienated from the university. One of the reasons why the human dimension was regarded as important was to convince people that even a different, new kind of university was equal to conventional ones. In the 1960s, higher education was still the exclusive realm of the elite and had only just started to be become more popular. When UKOU was founded, there was no university that utilized the same teaching methods and/or accepted students without any requirements in the way that UKOU did. These features became a target of criticism as the validity of the establishment was questioned (Brittain, 1969; Rumble and Keegan, 1982, p. 216), requiring UKOU to demonstrate that, though being a novel type of university, it was nevertheless equal to "real universities."

One of representative examples that reveals the efforts made was the decision to adopt the regalia and ceremonials of existing universities in spite of opposition from those who believed these trappings should be swept away (Perry, 1977, p. 47). However, as for the educational process, UKOU could not copy any of the existing universities as its own teaching methods and students' learning processes constituted an experiment distinct from what all other academic institutions were doing. The OU had to find its own way to be "a real university." As a result, researchers on UKOU concluded that "students' sense of being a member of 'a real university' (not a correspondence college), which makes personal contact

with them in a variety of ways, is not just an enjoyable by-product of the educational process but intrinsic to it" (Student Research Centre 1986, p. 14). Face-to-face tutorials and summer schools can be cited as examples for achieving this, as they offered, in addition to their educational purposes, an experience of learning at "a real university" to students. Perry (1977, p. 117) argued that the subject matter studied during a summer school does not necessarily need to be directly related to and be integrated with the subject material of the rest of the course taken but that students' physical presence is most important. Providing face-to-face tutorials had not been planned from the beginning. The university found that hiring high-quality tutors in all regions was possible and then changed its policy to offer such tutorials over and above correspondence tuition as a form of remedial education (Perry 1977, p. 112). Perry described the change as follows:

Thus the very size of the foundation [tutorial] classes was allowed to erode the principle of relying solely upon teaching at a distance. It was erosion that was welcomed by students and part-time staff alike, and by a large number of the full-time academic staff. (p. 113)

It is worth noting that the change ended up highlighting the significance of physical presence even though the university was established as a higher education institution with precisely the opposite premise: distance learning. This dual-mode structure can be seen as the result of the compromise with "a real university." The process of establishing the structure is not merely to imitate traditional universities, but a way to identify a new type of university in itself.

Nowadays most forms of student support, including tutorials, have become technically possible and the old system is now being replaced. As Goodfellow (2014) noted, both types of tutorials had high satisfaction rating from students. However, there was the only consideration on how to be more "open," while the consideration on what identifies a university has been insufficient. Students and faculty members of UKOU not welcoming the replacement of face-to-face tutorials with online tutorials, as described in earlier literature (Lammie, 1975; Fielden, 1999; Matthews, 1999; Randle, 1999; Swain, 2015) may be a signal of opposition to the change of the nature of UKOU. Kerr (2001) suggested that there have been three different types of universities in history so far: the academic cloister (e.g. University of Oxford), the research organism (e.g. University of Berlin), and the city of intellect (e.g. University of California). None of those types are defined as a university teaching and recruiting students the same way as UKOU. In addition, Fallis (2007, p. 219) insisted that the university has always been a "place." That is, the physical presence of an academic institution has historically been the inherent essence of what constitutes a university. It is important to note that none of these qualities are in inadequate to illustrate what UKOU is. The process of defining what the university is still in progress.

### 5. Conclusion

Today, high-speed internet and high-performance network devices such as computers, smartphones and tablet PCs, are used widely. Considering this fact, introducing more online tutorials and diminishing face-to-face tutorials is likely to be effective in terms of realizing the ODE rationale behind. Furthermore, technological advances could also help improve its financial status through the growth of the number of students. Online tutorials have more advantages for realizing the objective of UKOU. According to a study on students' attitude toward face-to-face tutorials and online tutorials, the satisfaction ratings were almost the same for both (86 vs 92 percent). From this perspective, it can be argued that the reduction of face-to-face tutorials contributes to the essential mission of the university. However, when UKOU decided to introduce more online tutorials and thus reduce the number of face-to-face tutorials, those opposed to the change argued that face-to-face tutorials provide an important sense of being part of a learning community. In other words, students and tutors are worried about UKOU becoming a "university of the cloud." This means that the issue

requires a consideration from a different point of view, rather than considering it as merely a controversy over face-to-face vs online. The introduction of face-to-face tutorials was not originally planned. It only came about when UKOU found that hiring high-quality tutors in all regions was possible and then adopted those as remedial education. Later, the university found that direct contact with students, such as through face-to-face tutorials, constituted one of the most important methods to strengthen human connections to give students a sense of being a member of a "real university." Ultimately, the university introduced a dual-mode system, going against the original ODE rationale, and this system transformed into what UKOU is now. This system also forms a fundamental idea of open universities. This can be seen as a process of creating the identity of a new type of university. The question which is posed by the current issue between face-to-face vs online is not only about comparing the effectiveness between two modes of education, but also about how open universities define themselves going forward.

Raggatt (1993) was concerned about UKOU having to compete with an increasing number of universities that utilize distance education modes. Indeed, the ODE market is no longer unique to open universities (Garrett, 2016, p. 41; Tait, 2018, pp. 15-16). As more competitors have been emerging, e.g., in the form of Open Educational Resources, Massive Open Online Courses (MOOCs) as well as distance learning courses being now also offered at traditional universities, the long-term sustainability of open universities has been questioned. MOOCs provide a particular threat. Although students cannot obtain a full degree with these courses, they can acquire certificates, digital badges, MicroMasters and/or Nanodegrees. All of these take a comparably short time to acquire, yet give proof of their holders' specific skills, meaning they can be used advantageously for employment. Such certifications will especially appeal to those already working and seeking continuous education. Sebastian Thrun, the founder of Udacity, one of the biggest MOOC platforms, claims that due to these different educational models only ten higher education institutions will exist in 50 years' time (The Economist, 2012). The time to think what values open universities must have in order to be able to survive in the future seems to be getting closer.

### References

- Bell, S., Douce, C., Caeiro, S., Teixeira, A., Martín-Aranda, R. and Otto, D. (2017), "Sustainability and distance learning: a diverse European experience?", Open Learning: The Journal of Open, Distance and e-Learning, Routledge, Vol. 32 No. 2, pp. 96-102, doi: 10.1080/02680513.2017. 1319638.
- Brittain, V. (1969), "Television universities: the lesson from America", *The Times*, May 17, p. 9, available at: http://find.galegroup.com/ttda/infomark.do?&source=gale&prodId=TTDA&userGroupName=kyotodai&tabID=T003&docPage=article&searchType=AdvancedSearchForm&docId=CS152531121&type=multipage&contentSet=LTO&version=1.0 (accessed March 20, 2019).
- Daniel, J. (1995), "The mega-universities and the knowledge media: implications of new technologies for large distance teaching universities", Concordia University, available at: https://spectrum.library.concordia.ca/132/ (accessed March 21, 2018).
- Daniel, J. (1996a), "Implementing a technology strategy for a mega-university: The INSTILL project", in McBeath, C. and Atkinson, R. (Eds), Proceedings of the Third International Interactive Multimedia Symposium. Perth, Western, January 21-25, pp. 95-98, available at: http://ascilite.org/archived-journals/aset/confs/iims/1996/iims/96-conts.html (accessed March 21, 2019).
- Daniel, J. (1996b), Mega-Universities and Knowledge Media: Technology Strategies for Higher Education, Kogan Page, London.
- Fallis, G. (2007), Multiversities, Ideas, and Democracy, University of Toronto Press, Toronto, Buffalo and London.
- Fielden, M. (1999), "On-line support no substitute", Sesame, October/November, p. 2.

- Garrett, R. (2016), "The State of Open Universities in the commonwealth: a perspective on performance, competition and innovation", Burnaby, available at: http://oasis.col.org/handle/11599/2048 (accessed March 20, 2019).
- Goodfellow, R. (2014), "Students' attitudes to face-to-face and online (Elluminate) tutorials: 2012J tutorials survey", report on findings, Internal the Open University report, Unpublished.
- Higher Education Statistics Agency (2016), "Higher education student enrolments and qualifications obtained at higher education providers in the United Kingdom 2015/16", available at: www.hesa. ac.uk/news/12-01-2017/sfr242-student-enrolments-and-qualifications (accessed March 20, 2019).
- Keegan, D. and Rumble, G. (1982), "The DTUs: an appraisal", in Rumble, G. and Harry, K. (Eds), The Distance Teaching Universities, Croom Helm, London and Canberra, pp. 225-249.
- Kerr, C. (2001), The Uses of the University, 5th ed. Cambridge, Harvard University Press, Massachusetts and London.
- Lammie, G. (1975), "Why there is no future for face-to-face tuition", Sesame, June/July, p. 11.
- Matthews, J. (1999), "Fears that face-to-face tuition may suffer from move to computers", *Sesame*, August/September, p. 3.
- Moore, M. and Tait, A. (Eds) (2002), Open and Distance Learning: Trends, Policy and Strategy Considerations, UNESCO, Paris.
- Ofcom (2015), "UK fixed-line broadband performance: the performance of fixed-line broadband delivered to UK residential consumers", London, available at: https://ofcom.org.uk/research-and-data/telecoms-research/broadband-research/broadband-speeds (accessed March 20, 2019).
- Ofcom (2017), "Communications market report", London, available at: https://ofcom.org.uk/research-and-data/multi-sector-research/cmr (accessed March 20, 2019).
- Perry, W. (1977), The Open University: History and Evaluation of a Dynamic Innovation in Higher Education, Jossey-Bass Pub, Washington, San Francisco, CA.
- Raggatt, P. (1993), "Post-fordism and distance education a flexible strategy for change", Open Learning: The Journal of Open, Distance and e-Learning, Vol. 8 No. 1, pp. 21-31, doi: 10.1080/0268051930080104.
- Randle, P. (1999), "Keep our face-to-face tutorials", Sesame, October/November, p. 2.
- Rumble, G. and Keegan, D. (1982), "General characteristics of the distance teaching universities", in Rumble, G. and Harry, K. (Eds), *The Distance Teaching Universities*, Croom Helm, London and Canberra, pp. 204-224.
- Sellgren, K. (2015), "Open University plans to axe seven regional centres", BBC News, available at: www.bbc.com/news/education-34256699 (accessed March 21, 2019).
- Statista (2018a), "Average internet connection speed in the United Kingdom (UK) from 3rd quarter 2007 to 1st quarter 2017 (in kbps)", available at: www.statista.com/statistics/475965/internet-connection-speed-in-the-uk/ (accessed March 20, 2019).
- Statista (2018b), "Percentage of households with home computers in the United Kingdom (UK) from 1985 to 2017", available at: www.statista.com/statistics/289191/household-penetration-of-home-computers-in-the-uk/ (accessed June 1, 2018).
- Statista (2018c), "UK internet penetration: percentage of population using the internet in the United Kingdom from 2000 to 2016", available at: www.statista.com/statistics/468663/uk-internet-penetration/(accessed March 20, 2019).
- Student Research Centre (1986), "The human dimension in open university study", Open Learning: The Journal of Open, Distance and e-Learning, Vol. 1 No. 2, pp. 14-20, doi: 10.1080/0268051860010204.
- Swain, H. (2015), "This change will be the end of the Open University as we know it", The Guardian, October 20, available at: www.theguardian.com/education/2015/oct/20/open-university-strike-ou-regional-centres-moocs (accessed March 20, 2019).
- Tait, A. (2018), "Open Universities: the next phase", Asian Association of Open Universities Journal, Vol. 13 No. 1, pp. 13-23, doi: 10.1108/AAOUJ-12-2017-0040.

# AAOUJ 13,2

Taylor, A. (1980), "Tutorial cut-backs likely to increase the drop-out rate", Sesame, December, p. 2.
The Economist (2012) "Learning new lessons" December 22, available at: https://economist.com/international/2012/12/22/learning-new-lessons (accessed March 20, 2019).

Weinbren, D. (2015), *The Open University A history*, Manchester University Press, Manchester. Zimmerman, K. (2016), "Leadership and innovation for the future of online and distance education", *EduXChange 2016 International Conference*, *Shanghai* Open University, November 7.

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### Corresponding author

Hanmo Jeong can be contacted at: jeong.hanmo.65m@kyoto-u.jp