

Challenges and Issues hindering Innovation in UK Universities

Abdulrahman Hariri#1, Paul Roberts*2

#Total Quality Management, King Abdulaziz University

Jeddah, Saudi Arabia

1aaahariri@kau.edu.sa

**Warwick Manufacturing Group, The University of Warwick*

Coventry, United Kingdom

2Paul.Roberts@warwick.ac.uk

Challenges and Issues hindering Innovation in UK Universities

Abstract

Rapid economical, social, and technological changes affecting the whole world did not spare universities as they face a lot of pressures from students and their parents, as they are demanding more value for money. Additionally, the international competition between universities is gaining more momentum. Therefore, many universities around the world are experimenting with and adopting different technologies in an attempt to secure more customers and funds.

Many UK universities have been known worldwide as prestigious research institutes. However, if they remain idle, it is likely that their esteemed positions would begin to fade as time passes by.

The topic of innovation has received quite a lot of attention in recent years, as some innovative companies were able to achieve quite remarkable results by manufacturing innovative products, offering innovative services, and creating new markets.

Little attention has been given to innovation and how universities can leverage innovation. One possible reason for the negligence to do so is the fact that many universities enjoyed their usual stream of students and their continued government fund. However, this is changing as a result of the increase in tuition fees and recent governmental policies led to further reduction in funds.

One important aspect that is almost always connected to innovation is employees' well-being and the work environment. However, as this study demonstrates, there are quite a lot of pressures put on members of staff within UK universities. Hence, unless these pressures and issues are resolved, it is unlikely that any innovation will take place.

Key words:

Innovation, Challenges, Pressures, Higher Education, Staff, Performance, issue

Challenges and Issues hindering Innovation in UK Universities

The United Kingdom's higher education (HE) sector has long faced a number of issues, challenges or difficulties that affects how higher education institutions (HEIs) operate. While it is expected that research and effort should have resolved such problems, nowadays, some of these problems remain current and perhaps, in some cases, they have developed and became more serious (Withers, 2009). The UK House of Commons (2009) noted how issues faced by the Robbins Committee and Sir Don Dearing's committee back in 1997 remain current although some issues have become more complex, while certain circumstances may have changed.

The wide-spread use of university league tables, the increase in tuition fees, and the increasingly competitive environment universities operate within are all causing great pressure on universities to improve and provide real value for money. This however is only part of the big picture; there are many different and sometimes overlapping or conflicting issues and challenges causing more pressure. This paper aims to explore some of these issues and challenges, and more importantly, show how they negatively impact members of staff, reducing their ability to develop, improve what they do, and innovate.

Innovation In Universities

Innovation is an idea, approach, or object that is perceived as new (Rogers, 2003). Within a university context, an innovation could be a new teaching approach or learning environment. However, innovation need not be confined in new things; being innovative also includes using practices or approaches in new contexts, even if they were used elsewhere before.

Universities have been well known to being rigid and slow or resistant to change. However, advancements in telecommunications and information technologies are quickening knowledge generation and acquisition (Hefzallah, 1990). Universities need to change and improve to be able to cope with the needs of the modern knowledge society (Hirsch & Weber, 1999).

Online information sources such as the Khan Academy, YouTube Education, iTunes University have been some of the few early educational initiatives that took advantage of modern technologies that helped reduce costs associated with delivery. Recently, other

organisations, including some top class universities decided to take advantage as well. Hence, in recent years, we have seen the introduction of a number of massive online open courses (MOOCs) or similar initiatives. Examples include Coursera, Udacity, Udemy, edX, and MRUniversity. Hence, as the vice-chancellor of the University of Cambridge warned, universities are faced with a serious threat that would challenge the nature of higher education (Grove, 2013).

To cope with these recent changes and to be visible and competitive, UK universities need to change, improve, and innovate. Nowadays, being innovative is not only necessary to run with the pack, but also to surpass it, especially since being innovative could help satisfy stakeholders, sustain or drive further growth, create jobs, improve the quality of life, and improve the economy (EFQM, 2005).

On the other hand, being idle and not innovating and improving in this fast changing environment has its risks (Tidd, 2011). Some even argue that the inability to anticipate and adapt with new technologies is the main reason behind the failures of some firms (Christensen, 2011). There is certainly a risk that some universities might be swept away as a result of being idle or slowly changing in the face of the innovation wave (Grove, 2013).

Staff and Innovation in Universities

Fundamentally, innovation starts and ends with human beings (Von Stamm & Trifilova, 2011). Innovations are outcomes that may come to be as a result of activities (e.g. research and development) carried out by people. Hence, without people, no innovation will take place.

In order for people to become creative and innovative they need to be set free mentally (Putzier, 2001) and given some space to innovate (Brands & Kleinman, 2010). Organisations that give such space and capture the wisdom of their employees will realise many benefits and improvements. Well-known innovative companies such as Apple, Google, and Facebook know the importance of employees and their satisfaction, offering them a great working environment that fosters and promotes innovation. In contrast, placing staff under much pressure causing significant stress while taking up all their time for routine tasks or activities will eliminate any chance for them to innovate. Innovation does not just happen; it requires a lot of time (Dyer et al., 2011) among other things (e.g. encouragement,

risk-free environment). Results of a study by Rasulzada and Dackert (2009) suggest that employees' wellbeing and perceived organisational creativity and innovation correlates positively. In the same vein, it is suggested that because burnout due to stress and workload influences employees' innovativeness negatively, innovativeness is likely to occur when employees are engaged in their work (Huhtala & Parzefall, 2007).

As is the case with many other activities or efforts requiring some degree of change within organisations, a reward system should be in place to promote and encourage innovation. Currently however, within UK universities, there is no clear relationship between innovation and rewards. Members of staff are promoted and rewarded primarily based on their research output, to help the university in securing funds through the research assessment exercise.

Furthermore, many of the issue discussed above are hindering members of staff's ability to improve, develop, and innovate.

Current state of the UK HE Sector: Issues and Challenges

In order to understand possible reasons that may hinder members of staff's ability to innovate within UK HEIs, this study begins by exploring the issues and challenges currently facing the sector.

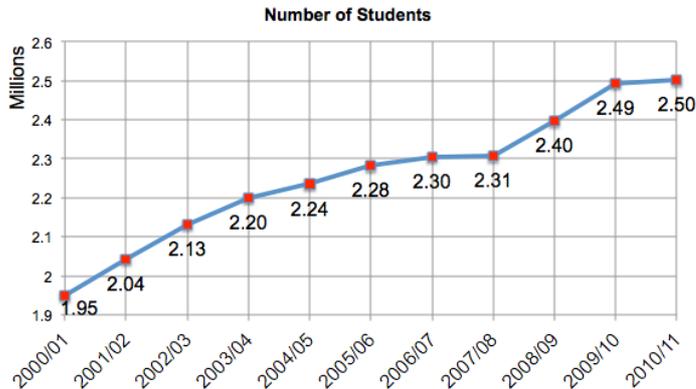
Widening Access

HEIs are pressured to provide increasing numbers of students with access (Neave, 1994; Sorensen, Furst-Bowe, & Moen, 2005) as a result of government's strategy. Since the 1960's Robbins report on HE and its proclamation of the 'Robbins principle' to allow access to higher education from those qualified to pursue them and who wish to do so (THES Editorial, 1996), initiatives concerning HE and its expansion continued.

In England, students' numbers continued to rise from 1.5 million to 1.9 million from 1997 to 2007 (UK House of Commons, 2009). Statistics obtained from the Higher Education Statistics Agency in the UK also show a steady increase in students' numbers in the UK in the period from 2000-2011 as can be seen in the following diagram.

More recently and as a result of recent policy changes related to tuition fees and immigration, many UK universities are suffering from a decline in students' numbers. However, although

such reduction in students' numbers means a reduction in workload, it affected UK universities' budgets badly (See Budget).



Budget

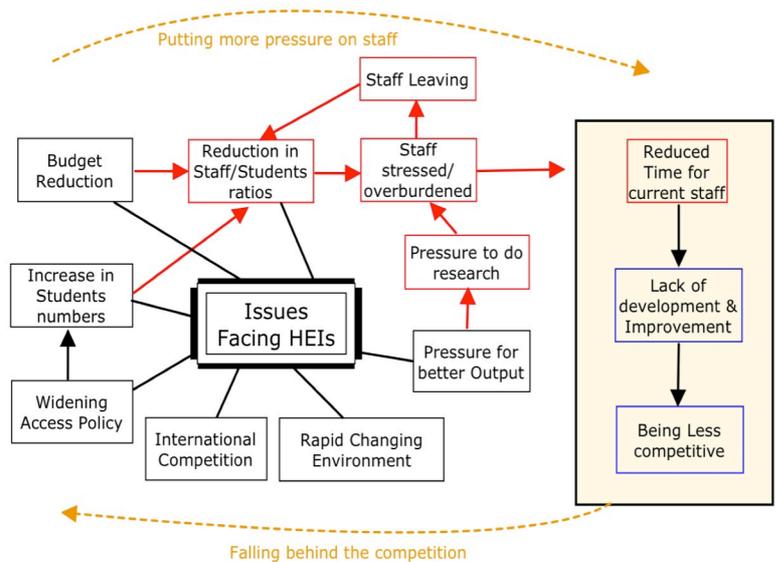
Despite large increases in students' numbers as discussed above, funding units remained low over the past years (Withers, 2009). Benton (2009) reports that there has been a decline in students' funding ratio in the last 20 years.

A more recent report shows that compared to the allocation of £7,809 million in 2009-10, there was a reduction of approximately 6.5% in the allocated budget, resulting in the allocation of £7,291 million in 2010-11 (UK House of Commons, 2010).

The Department for Business Innovation & Skills' 2012 annual grant letter to the Higher Education Funding Council for England shows that teaching funds are being cut and will be cut further in the 2013-14 period. This is also the case for research grants.

Moreover, recent changes to policies and increase in tuition fees led to the reduction of income for many UK universities. Concerned with the global

competition, the Director General of the Russell Group warned that more investment in UK universities is needed especially with the UK public expenditure in higher education being one



of the lowest in the Organisation for Economic Co-operation and Development (O'Brien, 2013).

Staff/Student Ratio

Statistics show that there has been a significant increase in the student/staff ratios, from 8:1 to 20:1 in the period from 1975 to 2004, an increase of nearly 150% (Association of University Teachers, 2005). Up-to-date information with regard to student/staff ratios within individual institutions can be accessed through The Complete University Guide's League table. Student/Staff ratios presented in the league table are based on official statistics and reports published by The Higher Education Statistics Agency (HESA). Exploring student/staff ratios in 2012 for a number of institutions shows that the vast majority of UK higher education institutions presented in the table has a high student/staff ratio, with many institutions having a ratio that is greater than 17:1. A few institutions have even exceeded 25:1.

Rapid Changing Environment

Rapid changes affecting the whole world such as technological, political and economic (e.g. recessions) changes are affecting HEIs as well (Hirsch & Weber, 1999; Seymour, 1993). Globalisation and the revolution of information technology are perhaps two strong forces at work (Hirsch & Weber, 1999). Katteridge et al. (2002) attribute recognition of the importance of knowledge, skill and learning to the fact that countries around the world have become more aware of their role in driving economical and social development, especially after recent advancements in communications and information technologies.

Such advancements have made it possible to transfer information to a wider audience much cheaper and faster, hence exposing universities to both national and international competition, as a result of not being able to continue the monopoly they used to enjoy through dispensing knowledge regionally to students (Hirsch & Weber, 1999).

Seymour (Seymour, 1993) summarises the need for change by saying: "We are kidding ourselves if we believe that educating people for the year 2000 is essentially the same as educating them for the year 1975. Everything has changed, technology, lifestyle and culture. Our educational institutions must change as well." This in turn places more pressure on universities to change and innovate.

Demands for Accountability

HEIs, as a result of increasing tuition fees and demands for accountability (Balzer, 2010; Horine & Hailey, 1995; Seymour & Collett, 1991), are being pressured to prove their worth especially since government agencies, funding bodies, students and their parents want to get good value for their money (Seymour, 1993). The UK government believes students have the right to demand value for money if universities continue to charge the maximum tuition fees.

The Impact on HEIs Staff

Higher education is an industry that relies heavily on labour's capabilities and wellbeing (Kinman et al., 2006; National Committee of Inquiry into Higher Education, 1997). Despite knowing that, staff within HEIs are being pressured, over-burdened and stressed.

The Dearing Report pointed out that the roles of staff would be likely to change in the next 20 years as they undertake different tasks and that the role of faculty will become more pressured (National Committee of Inquiry into Higher Education, 1997). Certainly with the many challenges facing HEIs nowadays, there is much more pressure on staff.

Increase in Workload

Increases in student/staff ratios due to widening access policy combined with funding cuts has led to increased workload and stresses on academics. Academic staff within HEIs are experiencing growing commitments especially with larger groups and are being pressured to research and publish while also having to find time for students' support (National Committee of Inquiry into Higher Education, 1997). It is similar to how Davis (2003) puts it: lecturers are being "pulled in many directions" as they have to become effective lecturers, successful researchers and supporters for students with few resources in most cases. Demotivated, overburdened and stressed members of staff are being pressured to maintain the level and quality of their own work (Brown et al., 1997).

In general, respondents to a number of studies (Kinman et al., 2006; Kinman & Jones, 2003; Lea & Callaghan, 2008) noted that demands of their jobs increased significantly.

Increases in students' numbers throughout the past years and the reduction of budgets has

forced HEIs to operate with what it has, placing more pressure on staff to do more while maintaining the quality and reducing the costs of the education provided.

Stress and Dissatisfaction

25 per cent of respondents to a survey reported that having too much work with little time was the reason for stress (National Committee of Inquiry into Higher Education, 1997). Another study of almost 800 academics revealed a significant increase in job stress and demands and a decline in job satisfaction (Kinman & Jones 2003). A number of similar studies on stress were also discussed by the authors. In a follow-up by Kinman et al. (2006), findings of two studies carried out in 1998 and 2004 were compared. Findings show little change in the level of stressors throughout the six years period while high levels of psychological distress found in the 1998 study remain and continue to surpass those of similar groups and the population generally. In the same vein, a survey of over 2136 workers working in four UK HEIs showed that generally, employees were dissatisfied and report being stressed at work (Edwards et al., 2009). Perhaps being stressed is the root cause for employees' dissatisfaction as it has been associated with job dissatisfaction and high turnover among other things (Kinman & Jones, 2003).

Conflicting Demands

The pressure to produce quality research impacts on the proportion of time lecturers dedicate for teaching activities. On top of that, since larger numbers of students were allowed to enrol as a result of the widening access policy, activities associated with teaching (e.g. marking and support) require much more time, something the relatively few lecturers do not have anymore which causes more pressure (Lea & Callaghan, 2008).

This increase in workload has led some staff to dedicate much more time to teaching or administrative activities, thereby reducing their research output (Lea & Callaghan, 2008), opposing the pressure for quality research cascaded from HEI to its staff, which in turn, could render the HEI less competitive and impact on its ability to secure funding.

Based on the above, it can be seen that staff within UK HEIs are not only being pressured, but **some of these pressures are in conflict**, causing more pressure and stress, and arguably, affecting how staff perform and ultimately, reducing any chance for innovation to take place.

The following diagram illustrates the issues facing UK HEIs.

DISCUSSION

With the rapid and extreme social, political, economic and technological changes around the world in recent years, it is clear that curriculum and teaching methods adopted and used in the past are, in many cases, outdated or in need of re-thinking.

Educational systems are facing difficulties in coping with the needs of our rapid changing technological society (Dooley, 1999). Online information sources such as the Khan Academy (Over 2700 videos), You Tube, iTunes and many more information sources are generating and sharing knowledge and experiences from key experts, professionals, educators and others every day free of charge. On the other hand however, curriculums taught in many educational institutions around the world are still rigid and outdated.

The free and easy accessibility of such and other information is without a doubt placing a huge pressure on educational institutions to improve, not only because students are able to interact and choose the educational institution they want between hundreds, if not thousands, of those available on the internet, but in addition, because the availability of the vast amount of information on the internet is threatening the position educational institutions used to hold as fountains of knowledge. Hence, possibly, leading to the undervaluing of such institutions unless they can prove that what they offer justifies what is paid (e.g. tuition fees, government support, etc...).

There is a clear need to restructure the rigid teaching approaches and processes embraced at many universities, to be able to cope with the needs of the knowledge society by being able to transmit plenty of useful knowledge (Hirsch & Weber, 1999). Otherwise, some of the traditional approaches and systems used in HEIs for decades may become absolute in light of new, more innovative and effective ones adopted and used elsewhere (e.g. by competitors). Universities ignoring or unaware of these changes and challenges are likely to lose their position or even perish as students will seek more innovative and better alternatives meeting their always-changing expectations. And when it comes to choices, there are many alternatives. The increase of tuition fees, although seemed a clear win, it did not come without its own problems. Students, parents, and others are demanding and expecting more value for

money and they have the right to do so.

Based on what was discussed above, it is quite a challenge to offer more value for money and stay ahead of the competition (or at least with the competition), while in fact, UK HEIs' staffs are overburdened, stressed and dissatisfied. Some are even quitting their jobs, putting more pressure on the very few staffs available, affecting their ability to develop and improve what they offer, due to the lack of time and the many conflicting demands among other things.

In order to become competitive and stay ahead of the competition, UK HEIs need to continuously think about possible ways to innovate and offer better services (e.g. education, services and support) to students than that achieved by their competitors.

Innovation can take place when employees are pressure-free and are encouraged to take risks, innovate and try new things.

Keeping in mind the importance of people for innovation to take place, this study aimed to explore the current state of the UK higher education sector and whether there are issues impacting staffs' ability to innovate and develop current approaches.

This review makes it clear that many of the issues facing HEIs are in fact impacting staffs. It is not unusual to find that stress, psychological distress and job dissatisfaction among other things continue on similar levels compared to previous years or have even increased as funding continues to reduce and students' numbers have kept increasing.

To become more innovative, there is a need first to understand and tackle the issues affecting staff. The consequence of not doing so will be to maintain the cycle of decline.

References

- Association of University Teachers. (2005). *Packing them in- The student-to-staff ratio in UK Higher education. Statistics*. Retrieved from http://www.ucu.org.uk/media/pdf/c/j/ssr_packingthem.pdf
- Balzer, W. K. (2010). *Lean Higher Education: increasing the value and performance of university processes*. New York: Productivity Press.
- Benton, M. (2009). The state of the sector: an audit. In K. Withers (Ed.), *First class? : challenges and opportunities for the UK's university sector*. London: Institute for Public Policy Research.

- Brands, R. F., & Kleinman, M. J. (2010). *Robert's Rules of Innovation*. Hoboken: John Wiley & Sons, Inc. Retrieved from http://www.viu.ebib.com/EBLWeb/patron?target=patron&extendedid=P_487641_0&
- Brown, S., Race, P., & Smith, B. (1997). *500 TIPS for Quality Enhancement in Universities and Colleges*. London; Stirling, VA: Kogan Page.
- Christensen, C. M. (2011). *The Innovator's Dilemma: the revolutionary book that will change the way you do business*. New York: Harper Business.
- Davis, M. (2003). Barriers to Reflective Practice: The Changing Nature of Higher Education. *Active Learning in Higher Education*, 4(3), 243–255. doi:10.1177/14697874030043004
- Dooley, K. E. (1999). Towards a Holistic Model for the Diffusion of Educational Technologies: An Integrative Review of Educational Innovation Studies. *Educational Technology & Society*, 2(4). Retrieved from http://www.ifets.info/journals/2_4/kim_dooley.html
- Dyer, J., Gregersen, H., & Christensen, C. M. (2011). *The innovator's DNA : mastering the five skills of disruptive innovators*. Boston, Mass.: Harvard Business Press.
- Edwards, J. a., Van Laar, D., Easton, S., & Kinman, G. (2009). The Work-related Quality of Life Scale for Higher Education Employees. *Quality in Higher Education*, 15(3), 207–219. doi:10.1080/13538320903343057
- EFQM. (2005). *The EFQM framework for innovation : measuring and improving your ability to innovate*. Brussels: EFQM.
- Grove, J. (2013, January). V-c warns of massive threat posed by Moocs. *Times Higher Education*.
- Hefzallah, I. M. (1990). *The New learning and telecommunications technologies : their potential applications in education*. Springfield, Ill., U.S.A.: C.C. Thomas.
- Hirsch, W. Z., & Weber, L. E. (1999). *Challenges Facing Higher Education at the Millennium*. (W. Z. Hirsch & L. E. Weber, Eds.)*World*. Phoenix, Arizona: The Oryx Press.
- Horine, J. E., & Hailey, W. A. (1995). Challenges to successful quality management implementation in higher education institutions. *Innovative Higher Education*, 20(1), 7–17. doi:10.1007/BF01228324

- Huhtala, H., & Parzefall, M.-R. (2007). A Review of Employee Well-Being and Innovativeness: An Opportunity for a Mutual Benefit. *Creativity and Innovation Management*, 16(3), 299–306. doi:10.1111/j.1467-8691.2007.00442.x
- Ketteridge, S., Marshall, S., & Fry, H. (2002). *The effective academic: a handbook for enhanced academic practice*. London; Sterling, VA: Kogan Page ; Stylus Pub.
- Kinman, G., & Jones, F. (2003). Quality in Higher Education ' Running Up the Down Escalator ': Stressors and strains in UK academics ' Running Up the Down Escalator ': stressors and strains in UK academics. *Quality in Higher Education*, (October 2011), 37–41. doi:10.1080/1353832032000085430
- Kinman, G., Jones, F., & Kinman, R. (2006). The Well-being of the UK Academy, 1998–2004. *Quality in Higher Education*, 12(1), 15–27. doi:10.1080/13538320600685081
- Lea, S. J., & Callaghan, L. (2008). Lecturers on teaching within the “supercomplexity” of Higher Education. *Higher Education*, 55(2), 171–187. doi:10.1007/s10734-006-9041-5
- National Committee of Inquiry into Higher Education. (1997). *Higher education in the learning society (The Dearing Report)*. London: The National Committee of Inquiry into Higher Education. Retrieved from <http://www.leeds.ac.uk/educol/ncihe/>
- Neave, G. (1994). The Politics of Quality: Developments in Higher Education in Western Europe 1992-1994. *European Journal of Education*, 29(2), 115–134. Retrieved from <http://0-search.ebscohost.com.pugwash.lib.warwick.ac.uk/login.aspx?direct=true&db=ehh&AN=9511065307&site=ehost-live>
- O'Brien, L. (2013, March). Higher education groups call for more funding after British universities suffer in rankings. *The Independent*. Retrieved from <http://www.independent.co.uk/news/education/education-news/higher-education-groups-call-for-more-funding-after-british-universities-suffer-in-rankings-8520094.html>
- Putzier, J. (2001). Recipe for innovation. *Executive Excellence*, 28(7), 12–13.
- Rasulzada, F., & Dackert, I. (2009). Organizational Creativity and Innovation in Relation to Psychological Well-Being and Organizational Factors. *Creativity Research Journal*, 21(2-3), 191–198. doi:10.1080/10400410902855283
- Rogers, E. M. (2003). *Diffusion of innovations*. New York: Free Press.
- Seymour, D. T. (1993). *On Q : causing quality in higher education*. Phoenix, Ariz.: Oryx Press.

- Seymour, D. T., & Collett, C. (1991). *Total Quality Management in Higher Education: A Critical Assessment (Report No. 91-01)*. Methuen, Massachusetts. Retrieved from <http://www.worldcat.org/oclc/25003721>
- Sorensen, C. W., Furst-Bowe, J. A., & Moen, D. M. (2005). *Quality and performance excellence in higher education : Baldrige on campus*. Bolton, Mass.: Anker Pub. Retrieved from <http://www.worldcat.org/oclc/56590951>
- THES Editorial. (1996, March 8). Cut off at the pass. *Times Higher Education*. Retrieved from <http://www.timeshighereducation.co.uk/story.asp?storyCode=92689§ioncode=26>
- Tidd, J. (2011). The Future of Innovation is the Basis for Social and Economic Change. In B. Von Stamm & A. Trifilova (Eds.), *The Future of Innovation*. Farnham: Gower.
- UK House of Commons. (2009). *Students and Universities, Eleventh Report of Session 2008-09. Science*. London. Retrieved from www.publications.parliament.uk/pa/cm/cmdius.htm#reports
- UK House of Commons. (2010). *The impact of spending cuts on science and scientific research, Sixth Report of Session 2009-10. Technology*. London. Retrieved from <http://www.publications.parliament.uk/pa/cm200910/cmselect/cmsctech/335/33502.htm>
- Von Stamm, B., & Trifilova, A. (2011). *The Future of Innovation*. Farnham: Gower.
- Withers, K. (2009). *First class? : challenges and opportunities for the UK's university sector*. (K. Withers, Ed.). London: Institute for Public Policy Research.