Journal of
Teaching and
Education

SUSTAINABLE OPEN EDUCATIONAL RESOURCES (OER) IN HIGHER EDUCATION: A STAKEHOLDER ANALYSIS APPROACH

Shouhong Wang

University of Massachusetts Dartmouth, USA

Hai Wang

Saint Mary's University, Canada

Open educational resources (OER) are growing over the past decade. OER can make educational resources widely available to all students and educators for free. However, OER have not significantly affected on higher education. The financial sustainability of OER is still questionable. This paper argues that the social and political aspects are the determinant of sustainable OER. It proposes a stakeholder analysis framework to lay the foundation for the development of sustainable OER in different social and political systems. The proposed stakeholder analysis framework is applied to two scenarios of social systems: socialism and capitalism. The scenario analysis indicates that, given many stakeholders involved in the movement of OER, sustainable OER can be achieved only when the net force (or collective influence) of all stakeholders is positive for the implementation of OER in the long run.

Keywords: Open Educational Resources (OER), Open access textbook, Higher education, social and political system, Stakeholder analysis, Social movement, Sustainability of OER.

Introduction

Open educational resources (OER) ("MIT OpenCourseWare", 2018; "The William and Flora Hewlett Foundation", 2018) represent an innovative movement in the educational communities and are growing during the past decade. While OER can make educational resources widely available to all students and educators for free, OER have not significantly affected on higher education (Kortemeyer 2013; Allen and Seaman 2014).

Among diverse types of OER, such as books, audio and visual artifacts, lecture series, and articles, open access textbooks are the major OER products that aim to reduce prices of textbooks in higher education. There have been intensive debates in the OER community on the issue of sustainable financial models for OER (Downes 2011). A case study of Flat World Knowledge (Hilton and Wiley 2011) reports financial data of a project of 10 open access textbooks for higher education. The case study does not suggest that the Flat World Knowledge's approach to OER can be financially sustainable, but shows the weak financial performance of the projects of open access textbooks. A few years later, another case study on Flat World Knowledge (Joyner 2013) presents a tale of the termination of open access textbooks at Flat World Knowledge. The issue of financial sustainability of OER has been examined (Annand

2015). To address the problem of OER sustainability, research papers have proposed business models for OER (e.g., Downes 2007; de Langen 2013), but no one has claimed an effective financial sustainability model of OER at this point. More importantly, because the issue of financial sustainability of OER is complicated, involving many factors in all social, political, educational, and economic aspects, any specific financial sustainability model of OER can only be applicable to a certain type of social and political system. On the other hand, OER should be a global movement, and the global OER community needs a holistic analytic approach for sustainable OER.

The academic environment of higher education is significant different from K-12 education or community colleges. Higher education in this study refers to Baccalaureate or higher degree granting institutions. In fact, the challenges for OER in the higher education sector are more severe than that in the K-12 education or community colleges sectors. Dissimilar to the K-12 or community college education, higher education involves diversified disciplines with fast innovations, and promotes research and academic freedom. In addition, there are few consistent codes of ethics related to the issues of textbooks in the higher education sector (Robie, Kidwell, and Kling 2003). The research question of this paper is: how can OER in higher education be sustainable? The methodology used in this study is stakeholder analysis. The rest of this paper is organized as follow. The next section discusses the challenges for OER in the global higher education sector. The subsequent section is a literature review of the stakeholder analysis approach which has primarily been applied to enterprises and government agencies. The literature review is followed by a section that proposes a stakeholder analysis framework for the OER movement. The usefulness of the proposed stakeholder analysis framework for OER is illustrated through examples of analysis of OER under two different scenarios of social and political systems. The final two sections present discussions and conclusions.

Challenges for OER in Higher Education

The challenges for sustainable OER in higher education are raised by three characteristics of higher education: emphasis on research, culture of autonomy, and competitive market of educational resources, as explained below.

Higher education institutions emphasize on basic scientific research instead of teaching

As a knowledge intensive society, higher education institutions are expected to create new knowledge and to develop the next generation of researchers (Mohrman *et al.* 2008). Basic scientific research has been the dominant element in the academic reward systems in higher education (Serow 2000). A balance between the research and teaching components of the faculty role depends on the reward system of the institution. OER are mainly a subject of teaching, especially at the undergraduate level. A challenge for OER in higher education is to achieve some success in preserving or expanding the place of teaching in the reward systems in the higher educational institutions.

The heterogeneous autonomy environment governs higher education

Autonomy is one of the unique characteristics in higher educational institutions across the world (Bentley and Kyvik 2011). The autonomy in higher education can present at the organizational level (Enders *et al.* 2013) as well as the individual level (Hoecht 2006). The autonomy in higher education is to protect academic freedom and to promote self-governance of the academic institutions. Autonomy in higher education has been a complicated issue (Kreysing 2002), and the autonomy in higher education is always controlled by the social and political systems. Given the diversity of social and political systems and the heterogeneous autonomy environment in higher education, a single financial sustainability model of OER is unlikely to be applicable to the global higher education sector. A challenge for OER in higher education is to develop an analytical framework that can be applied to different social and political systems to achieve sustainable OER.

Competitive commercial market of educational resources

In the global free market era, for-profit (or commercial) publishers of educational materials continue to dominate the market of educational materials in higher education. Educational materials are unique merchandise. First, the customers of educational materials are not homogeneous. The ultimate customers of educational materials are students, but educators are the main consumers who determine the adoption of OER. Second, due to the innovations in higher education, educational resources keep rapid updating. Educational materials are perishable, but can also be reused and recycled to a certain degree. Nowadays commercial publishers achieve competitive strategies by making fast revisions (Zinser and Brunswick 2010) to provide quality materials as well as value-added services to both instructors and students while blocking reuse of materials. To compete with commercial publishers, the OER community needs to produce up-to-date quality educational materials with great efficiency.

Stakeholder Analysis Approach – Related Work

This section reviews the literature of the stakeholder analysis approach and summarizes the general process of stakeholder analysis. Stakeholder analysis is the process of identifying the individuals or groups that are likely to affect or be affected by an action (Mitchell 1997; Freeman 2010; Sowden and Office 2011). Stakeholder analysis has been widely applied in government agencies (Weible 2007; Aarons *et al.* 2009) and enterprises (Donaldson and Preston 1995; Fassin and Gosselin 2011) to derive policies and strategies. Since Freeman (1984) initiated stakeholder theory, organizations consider the interests of all parties involved in the organization, so-called stakeholders, for strategic planning and policymaking (Phillips 2003; Friedman and Miles 2006). Stakeholder analysis has been an effective management method in enterprises to accomplish not only higher economic performance, but also sustainability and social responsibility (Nejati *et al.* 2014; Walker and Laplume 2014; Taghian *et al.* 2015). Government agencies are also using the stakeholder analysis method to improve the public policy competencies and to achieve high satisfaction of citizens (Luck *et al.* 2015; Lowther *et al.* 2016).

For enterprises or government agencies, stakeholders could be classified into two types: internal and external. Internal stakeholders are people who are already committed to serving the organization. External stakeholders are people who are impacted by the organization but have no commitment to the organization. Figure 1 illustrates a general model of relationships between the organization and stakeholders for enterprises and government agencies. Typically, this general model is a star network in which all stakeholders are independently connected to the organization which is the central unit of the star network.
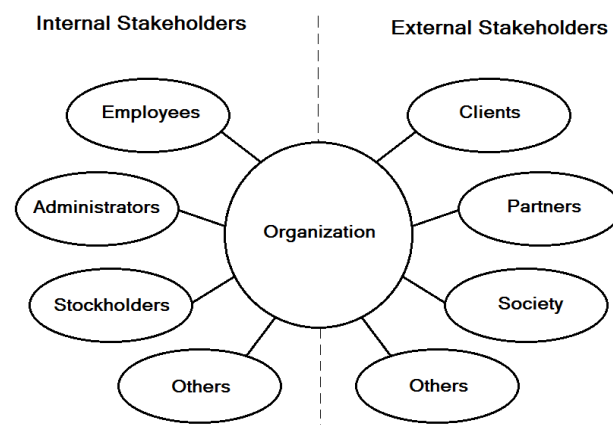

Figure 1. Star Network of Stakeholders of an Enterprises or a Government Agency

Concepts of stakeholder theory and stakeholder analysis have been explained and used by researchers and practitioners in many ways. The stakeholder analysis approach is a general methodology, and stakeholder analysis methods vary depending on the application contexts. There have been countless stakeholder analysis tools available in the literature and on the Internet, and there is no single method of stakeholder analysis that can be perfect for all cases. Nevertheless, the present literature review reveals general steps of stakeholder analysis as follows.

1. Identify stakeholders of the organization

For instance,

- Key stakeholders: those have major influence on the organization's action or policy
- Primary stakeholders: those directly affected by the organization's action or policy
- Secondary stakeholders: those indirectly affected by the organization's action or policy.

2. Examine the characteristics of each of the stakeholders regarding the planed strategic action or a new policy

For instance,

- Power (high, medium, low)
- Interest or need (strong, medium, weak)
- Attitude or support (positive, neutral, negative)
- Influence (high, low).

3. Use instruments for stakeholder analysis to derive the organization's strategies or policies

For instance,

- Stakeholders matrix (Mitchell *et al.* 1997)
- Stakeholders' value hierarchy and Key Performance Areas (KPA) (Fletcher *et al.* 2003)
- Stakeholders' value network (Cameron *et al.* 2011)
- Stakeholders' commitment analysis matrix (Benjamin and Levinson 1993).

The literature review has confirmed that stakeholder analysis can be used for enterprises and government agencies to analyze the attitude of stakeholders towards a strategic action or a new policy and to assess the possible reaction of each party regarding to potential changes. However, few research papers on stakeholder analysis for a social movement can be found in the literature.

Applications of the Stakeholder Analysis Approach to OER

OER is a social movement. This section discusses the key differences between a social movement and an enterprise or government agency in the context of shareholder analysis, and proposes a stakeholder analysis framework for OER.

Stakeholder Analysis for Social Movements

A social movement is a network of informal interactions between a plurality of individuals, groups, and organizations, engaged in a political or cultural conflict, on the basis of a shared collective identity (Diani 1992). There have been many theories of social movements in sociology (Kendall 2010), and each of these theories addresses a specific issue of social movements. Applying the stakeholder analysis approach to social movements, the individuals, groups, and organizations involved in a social movement are the stakeholders of the social movement. In comparison with an enterprise or government agency, a social movement has no center that commands a strategy or a new policy. The networked relationships between the stakeholders in a social movement is a mesh network, as illustrated in Figure 2.
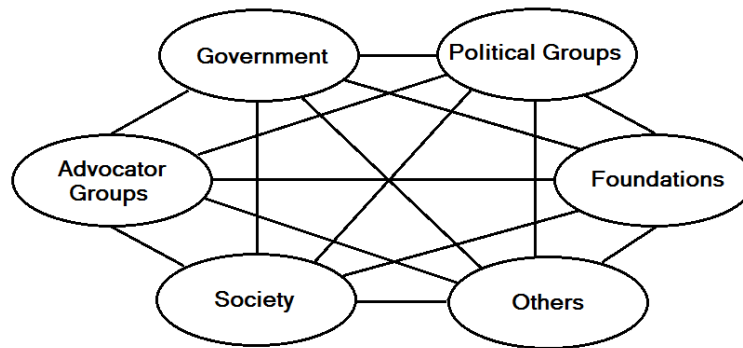
Figure 2. Mesh Network of Stakeholders in a Social Movement

As illustrated in Figure 2, the relationships between the stakeholders in a social movement are highly complex and dynamic. A social movement can have its identity, cause, special interest, and pursued social change (or preservation). However, a social movement may not have collective strategies or policies. Each of the stakeholders in a social movement can have their own strategies or policies to influence the social movement. The purpose of a stakeholder analysis for social movements is to recognize the characteristics of each of the stakeholders towards the social movement and to analyze how each stakeholder's behavior towards the social movement can be influenced by other stakeholders' actions.

As discussed in the last section of literature review, there have been many stakeholder analysis models for enterprises and government agencies. Benjamin and Levinson's stakeholder analysis model (1993) is chosen for this study because this model is easy to transform for social movement analysis. The steps of stakeholder analysis described in (Benjamin and Levinson 1993) can be adapted for stakeholder analysis for social movements as follow.

(1) Identify the social movement's objective of social change.
(2) Identify the stakeholders involved in the social movement.
(3) For each stakeholder:
    (3.1) recognize its perceived benefits from the social movement,
    (3.2) recognize its perceived resistance against the social movement,
    (3.3) estimate its capacity or power level (e.g., Low, Medium, and High),
    (3.4) estimate its interest level (e.g., -High, -Low, Neutral, Low, High),
    (3.5) analyze its present level of involvement (e.g., -High, -Low, Neutral, Low, High),
    (3.6) analyze possible circumstances (e.g., changes of the social and political system, other stakeholders' actions) that influence the stakeholder to support or oppose the social movement.

The instrument used for stakeholder analysis in this model is stakeholder analysis matrix (Benjamin and Levinson 1993). The next subsection will demonstrate how the OER social movement in the higher education sector can be analyzed by using this stakeholder analysis framework.

The stakeholder analysis framework for OER in higher education

Research (Wang and Wang 2016) has discussed the OER movement in higher education. The objective of the OER movement in higher education is to make educational resources available to all learners and educators for free. The parties involved in the OER movement in higher education include the government, political groups, OER advocator groups, higher education institutions, educators, students, private functions, the society, and commercial publishers. The stakeholders of OER in higher education have complicated relationships, as illustrated in Figure 3.
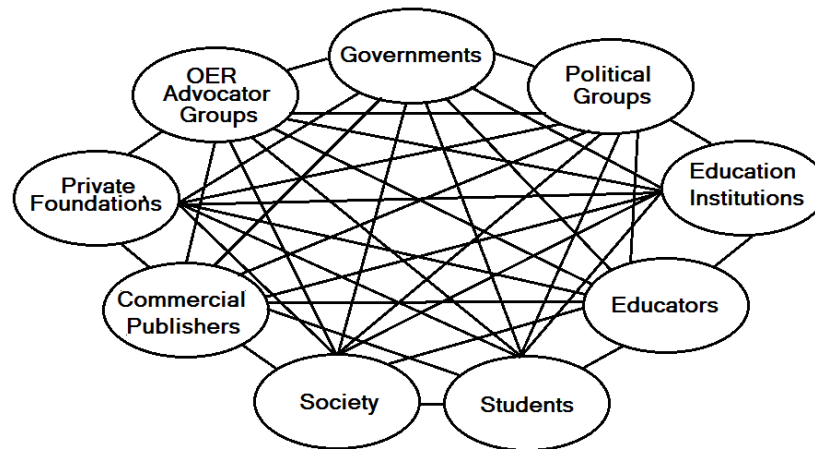
Figure 3. Stakeholders of the OER Movement in Higher Education

Using stakeholder analysis matrix, one can analyze the attitude of each of the stakeholders towards the OER movement based on perceived characteristics of the stakeholder as well as assumptions about the social and political system.

Scenario analysis is a process of analyzing probable future events by considering alternative possible outcomes (Hassani 2016). Scenario analysis does not attempt to predict one exact picture of the future; instead, it presents several alternative future developments. A scenario is a description of a consistent set of factors of the system. In this study, the stakeholders are factors that define how the social and political system influences the OER movement. Scenario analysis can be useful for the OER movement to develop robust strategic plans.

Scenarios of socialism system and capitalism system are applied as examples of scenario analysis for OER movement. Here, socialism is an economic system where everyone in the society equally owns the factors of production, and the ownership is a democratically-elected government (O'Hara 2003). Capitalism is an economic system and ideology based upon private ownership of the means of production and their operation for profit (Zimbalist and Sherman 1984). Table 1 is an example of stakeholder analysis for OER under a scenario of socialism system in which the government have a strong power to influence OER. As illustrated in Table 1, under a scenario of socialism system, the government has a strong power to control the entire social and political system. However, OER may not be a substantial subject on the government's agenda. On the other hand, other stakeholders including OER advocator groups, education institutions, and educators have much less powers to influence the OER movement. Sustainable OER can be achieved only when the government perceive more benefits from OER.

Table 2 is another example of stakeholder analysis for OER under a scenario of capitalism system in which the government has little power to influence OER but private foundations and commercial publishers have strong powers to influence OER. As illustrated in Table 2, under a scenario of capitalism system, the government may not have sufficient interests in OER. On the other hand, commercial publishers are strong competitors that can provide high quality educational resources efficiently to against OER. If the OER advocators groups and the private foundations for OER do not have strong strategies to compete commercial publishers, OER may not be sustainable.

Under the both scenarios, educators seem to have a medium or high power in the OER movement because they are OER producers as well as OER adopters. To make this key stakeholder fully commit to OER, new and serious challenges to OER in the higher education sector emerge as discussed earlier in this paper.

Table 1. An Example of Stakeholder Analysis under a Scenario of Socialism System

OER Objective: To make educational resources available to all learners and educators for free.

Stakeholder	Perceived Benefits	Perceived Resistance	Capacity / Power Level	Interest Level	Present Involve't Level	Attitude				Suggestions
						Resist	Do Not Care	Let It Happen	Make It Sustain	
Government	• More support from students in higher education	• Less tax revenue	High	High	Low		X →		○	• Government is the most influential stakeholder • Government needs to be convinced with more benefits of OER
Political Groups	• More support from young voters		Low	Low	Low			X →	○	• Political groups can influence Government
OER Advocators Groups	• Achieve free OER		Low	High	High				○	• Strong strategies are needed
Education Institutions	• Student retention	• Teaching /learning quality control	Medium	Medium	Low		X →		○	• Education institutions need to be convinced with more benefits
Private Foundations	• High social reputation		Medium	Medium	Low			X →	○	• Strong strategies are needed
Educators		• More workload	Medium	Low	Low		X →		○	• More incentives and rewards are necessary
Students	• Cost saving		Low	High	Low			X →	○	• Strong voice is necessary
Society	• More free education resources		Low	Low	Low		X →	○		• Society has moral support
Commercial Publishers		• Lose market share	Low	Neutral	-Low	X →	○			• Cooperation might be possible (e.g., coordinated by government)

Table 2. An Example of Stakeholder Analysis under a Scenario of Capitalism System

OER Objective: To make educational resources available to all learners and educators for free.

Stakeholder	Perceived Benefits	Perceived Resistance	Capacity / Power Level	Interest Level	Present Involve't Level	Attitude				Suggestions
						Resist	Do Not Care	Let It Happen	Make It Sustain	
Government	• More support from the	• Less tax revenue	Low	Low	Low		X →		○	• Government is not a strong influencing

	education sector								stakeholder
Political Groups	• More support from young voters		Medium	Medium	Low		X→◯		• Political groups can influence government's policies
OER Advocators Groups	• Achieve free OER		Low	High	High		◯		• Strong strategies are necessary
Education Institutions	• Student retention	• Teaching /learning quality control	Medium	Medium	Low		X→◯		• Education institutions need to be convinced with more benefits
Private Foundations	• High social reputation		Medium	Medium	Medium		X→◯		• Strong strategies are needed
Educators		• More workload	High	Low	Low	X	→◯		• More incentives and rewards are necessary
Students	• Cost saving		Low	High	Low		X→◯		• Strong voice is necessary
Society	• More free education resources		Low	Low	Low	X→◯			• Society has moral support
Commercial Publishers		• Lose market share	High	-High	-High	X►◯			• OER must compete with Commercial Publishers

Discussion and Contribution of the Study

The proposed stakeholder analysis framework provides a tool for the stakeholders of OER to develop their own strategies to deal with the OER movement in different social and political systems. This study contributes to OER in two aspects. First, the stakeholder analysis framework can be applied to different social and political systems to systematically investigate how the OER movement can achieve sustainability. While there is no universally applicable financial sustainability model of OER, the stakeholder analysis framework can be used for the government, higher educational institutions, and OER foundations to identify the key factors and to derive their own strategies for sustainable OER. Second, the study suggests that OER advocators and OER foundations play important roles in OER but are not the ultimate determinant of sustainable OER. A project approach without continuing and long-term effort could be useful or necessary for OER initiation, but may not be sufficient for sustainable OER. On the other hand, educators in higher education play the critical roles in developing and adopting OER. The interaction between educators and the open commercial educational resource market and driving forces for educators to develop and adopt OER must be considered in analyzing the OER movement.

Conclusion

This study discusses the challenges for sustainable OER. OER are influenced by many social and political factors, and there is no simple model for financially sustainable OER. This paper proposes a stakeholder analysis framework for the OER community to understand the complicated nature of the OER

movement. The application of the stakeholder analysis framework is illustrated under two scenarios of social and political systems. This study concludes that many stakeholders are involved in OER, and thus the OER movement is highly dynamic. Sustainable OER can be achieved only when the net force (or collective influence) of all stakeholders involved in OER is positive for the implementation OER in the long run. Future studies such as case studies of successful OER will produce valuable data to test and to improve the proposed stakeholder analysis framework for OER.

References

1. Allen, I. E. and Seaman, J., Opening the curriculum: Open Educational Resources in U.S. higher education, 2014. Babson Survey Research Group.

   http://www.onlinelearningsurvey.com/reports/openingthecurriculum2014.pdf [accessed May 4, 2018].

2. Aarons, G. A., Wells, R. S., Zagursky, K., Fettes, D. L., and Palinkas, L. A., Implementing evidence-based practice in community mental health agencies: a multiple stakeholder analysis, *American Journal of Public Health*, 99(11), 2009, 2087-2095.

3. Annand, D., Developing a sustainable financial model in higher education for open educational resources, *International Review of Research in Open and Distributed Learning*, 16(5), 2015, 1-14.

4. Benjamin, R. I. and Levinson, E., A framework for managing IT-enabled change, *MIT Sloan Management Review*, 34(4), 1993, 23-33.

5. Bentley, P. J. and Kyvik, S., Academic work from a comparative perspective: a survey of faculty working time across 13 countries, *Higher Education*, 63, 2012, 529–547.

6. Cameron, B. G., Seher, T., and Crawley, E. F., Goals for space exploration based on stakeholder value network considerations, *Acta Astronautica*, 68(11-12), 2011, 2088–2097.

7. de Langen, F. H. T., Strategies for sustainable business models for Open Educational Resources, *The International Review of Research in Open and Distance Learning*, 14(2), 2013,

   http://www.irrodl.org/index.php/irrodl/article/view/1533/2485 [accessed May 5, 2018].

8. Diani, M., The concept of social movement, *The Sociological Review*, 40(1), 1992, 1-25. doi: 10.1111/j.1467-954X.1992.tb02943.x

9. Donaldson, T. and Preston, L. E., The stakeholder theory of the corporation: concepts, evidence, and implications, *The Academy of Management Review*, 20(1), 1995, 65-91.

10. Downes, S., Models for sustainable open educational resources, *Interdisciplinary Journal of Knowledge and Learning Objects*, 3, 2007, 29-44.

11. Downes, S., The OER debate, In full, May 8, 2011, *Half an Hour*,

    http://halfanhour.blogspot.com/2011/05/oer-debate-in-full.html [accessed May 4, 2018].

12. Enders, J., de Boer, H., and Weyer, E., Regulatory autonomy and performance: the reform of higher education re-visited, *Higher Education*, 65, 2013, 5-23.

13. Fassin, Y. and Gosselin, D., The collapse of a European bank in the financial crisis: an analysis from stakeholder and ethical perspectives, *Journal of Business Ethics,* 102(2), 2011, 169-191.

14. Fletcher, A., Guthrie, J., Steane, P., Roos, G., and Pike, S., Mapping stakeholder perceptions for a third sector organization, *Journal of Intellectual Capital*, 4(4), 2003, 505-527.

15. Friedman, A. L. and Miles, S., *Stakeholders: Theory and Practice*, Oxford University Press, Cambridge, UK, 2006.

16. Freeman, R. E., *Strategic Management: A Stakeholder Approach*, Pitman Series in Business and Public Policy, Boston, MA, 1984.

17. Freeman, R. E., *Strategic Management: A Stakeholder Approach*, Cambridge University Press, Cambridge, UK, 2010.

18. Hassani, B., *Scenario Analysis in Risk Management*, Springer, Switzerland, 2016.

19. Hilton, J. L. III. and Wiley, D., Open access textbooks and financial sustainability: A case study on Flat World Knowledge, *The International Review of Research in Open and Distributed Learning*, 12(5), 2011, 18-26. http://www.irrodl.org/index.php/irrodl/issue/view/47 [accessed May 5, 2018].

20. Hoecht, J., Quality assurance in UK higher education: Issues of trust, control, professional autonomy and accountability, *Higher Education*, 51, 2006, 541-563.

21. Joyner, A. Case study: Flat World Knowledge, http://www.inc.com/magazine/201302/april-joyner/case-study-iffy-business-models.html, Feb 4, 2013 [accessed May 3, 2018].

22. Kendall, D., *Sociology in Our Times*, 10th ed., Wadsworth Publishing, 2010, Boston, MA.

23. Kortemeyer, G., Ten years later: Why Open Educational Resources have not noticeably affected higher education, and why we should care, *EDUCAUSE Review*, Feb. 26, 2013,

    http://www.educause.edu/ero/article/ten-years-later-why-open-educational-resources-have-not-noticeably-affected-higher-education-and-why-we-should-ca [accessed May 4, 2018].

24. Kreysing, M., Autonomy, accountability, and organizational complexity in higher education: the Goettingen model of university reform, *Journal of Educational Administration*, 40(6), 2002, 552-560.

25. Lowther, M., Digennaro, S., Borgogni, A., and Lowther, A. P., Exploring and establishing a framework for effective governance in European grassroots sports organisations, *Journal of Applied Sport Management*, 8(1), 2016, 80-104.

26. Luck, J., Yoon, J., Bernell, S., Tynan, M., Alvarado, C. S. *et al.*, The oregon public health policy institute: building competencies for public health practice, *American Journal of Public Health*, 105(8), 2015, 1537-1543.

27. Mitchell, R. K., Agle, B. R., and Wood, D. J., Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts, *Academy of Management Review*, 22(4), 1997, 853-888.

28. Mohrman, K., Ma, W. and Baker, D. The research university in transition: the emerging global model, *Higher Education Policy*, 21(1), 2008, 5-27.

29. Nejati, M., Amran, A., and Hazlina Ahmad, N., Examining stakeholders' influence on environmental responsibility of micro, small and medium-sized enterprises and its outcomes, *Management Decision*, 52(10), 2014, 2043-2021.

30. O'Hara, P. *Encyclopedia of Political Economy*, Volume 2. Routledge, Abingdon-on-Thames, UK, 2003.

31. Phillips, R., *Stakeholder Theory and Organizational Ethics*. Berrett-Koehler Publishers, Oakland, CA, 2003.

32. Robie, C., Kidwell, R. E. Jr, and Kling, J. A., The ethics of professorial book selling: Morality, money and "black market" books, *Journal of Business Ethics*, 47(2), 2003, 61-76.

33. Serow, R. C., Research and teaching at a research university, *Higher Education*, 40(4), 2000, 449-463.

34. Sowden, R. and Office, C., *Managing Successful Programmes*, 4th ed., Stationery Office, London, UK, 2011.

35. Taghian, M., D'Souza, C., and Polonsky, M., A stakeholder approach to corporate social responsibility, reputation and business performance, *Social Responsibility Journal*, 11(2), 2015, 340-363.

36. Walker, K. and Laplume, A., Sustainability fellowships: the potential for collective stakeholder influence, *European Business Review*, 26(2), 2014, 149-168.

37. Wang, S. and Wang, H., A strategy of open educational resources (OER) to reduce textbook prices for higher education, *Journal of Teaching and Education*, 5(2), 2016, 243–250.

38. Weible, C. M., An advocacy coalition framework approach to stakeholder analysis: understanding the political context of California marine protected area policy, *Journal of Public Administration Research and Theory*, 17(1), 2007, 95-117.

39. Zimbalist, A. and Sherman, H. J. *Comparing Economic Systems: A Political-Economic Approach.* Academic Press. Cambridge, MA, 1984.

40. Zinser, B. and Brunswick, G., Introductory business textbook revision cycles: are they getting shorter? *American Journal of Business Education*, 3(12), 2010, 41-47.

41. MIT OpenCourseWare, http://ocw.mit.edu/donate/why-donate/ [accessed May 4, 2018].

42. The William and Flora Hewlett Foundation,

    http://www.hewlett.org/programs/education/open-educational-resources [accessed May 4, 2018].