

Justifying Institutional Investment in OER Development: OERs as Marketing Vehicle

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Abstract

The higher education sector has become increasingly competitive and prospective students are adopting a consumerist approach to institution and programme choice. In response, higher education marketing has become more complex, market-oriented and business-like. Financial sustainability of open education resource (OER) projects is a widespread concern. This paper explores the extent to which a classical product placement framework can be applied to OERs to justify institutional funding in OER projects as a marketing investment. It is argued that OERs designed on this premise can increase cognitive, affective and conative brand outcomes while providing the traditional educational and societal benefits associated with OERs. A series of propositions are presented that may form the basis of a future research agenda.

Keywords

Open Education Resources, Marketing, Sustainability, Institutional Investment, Return on Investment, Research Agenda, Product Placement, Hybrid Messages

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Introduction

Recent research suggested that the higher education sector has become increasingly competitive and that prospective students are adopting a consumerist approach to institution and programme choice (Maringe, 2006; Voss, Gruber & Szmigin, 2007). This is compounded by the increasing awareness of ranking systems and evidences that rankings impact on both student recruitment and institutional reputation (Hazelkorn, 2008). Whilst research on higher education marketing in many respects is at an early stage of conceptualisation, evidence suggests that it is increasingly complex, market-oriented and business-like (Nicolescu, 2009). While the most frequently met type of marketing activity conducted by higher education institutions may be strong promotional and communication for student recruitment (typically through publicity and other institution-controlled promotional material), Nicolescu and others have suggested an increased focus by higher education marketing on the quality of the service including the teaching and the curriculum, research and other services (Nicolescu, 2009; Maringe & Gibbs, 2009).

Much of the higher education marketing literature suggests, and indeed there is a general consensus, that price, promotion (including promotional materials), programme specifics, prominence of academic staff and other additional benefits are important decision-making criteria for prospective students (Ivy, 2008). However much of this literature is based on the reasonable assumption that prospective students do not typically have the opportunity to experience programme content first-hand.

Open education resources can be defined in both wide and narrow terms but there is general consensus that it typically includes courseware, tools, and other media for use in learning and includes the freedom to copy, modify, redistribute as-is or in a modified version (Downes, 2007). Open education resources may include attribution and indeed may be free in a monetary sense, but not necessarily so (Downes, 2007). Financial sustainability as defined by the ability of a project to continue to fund its OER operations, is a significant challenge. Wiley (2007) noted that the projected annual budget for the MIT OCW project from 2007 to 2011 was USD4.3 million. A variety of models for funding OER projects have been suggested including the endowment, membership, donations, conversion, contributor-pay, sponsorship, institutional, governmental, replacement, foundation, segmentation and voluntary support models (Wiley, 2007). In all but three of these models, the motivation for funding OER projects is non-commercial. However, the conversion, segmentation and institutional models assume that by funding OERs, the funding body has the opportunity to derive a directly commercial benefit. In their definition of the conversion model (although made in the context of open source software), Sterne and Herring (2005) specifically identify the conversion of the “consumer of the freebie to a paying customer.” Similarly, Dholakai (as cited by Wiley, 2007) specifically referenced the provision of “value-added” services to OER user segments as a means of funding the OER initiatives. In the Institutional model, while Wiley (2007) cited MIT’s mission as the justification of investment in resources, one might argue that the MIT OCW initiative increases MIT’s brand awareness and attracts consumers of MIT OCW courseware to customers of MIT products and services. In all models, some party subsidises the funding of the OER development, delivery and maintenance.

This paper explores the extent to which a classical product placement framework can be applied to open education resources in order to justify institutional investment in OER projects as a marketing investment while providing the traditional educational and societal benefits associated with OERs. It is argued that OERs designed on this premise can provide prominence to institutional brands and academic staff, exposes curriculum content and has the potential to increase cognitive, affective and conative brand outcomes. The next section introduces the concept of hybrid messages and product or

brand placement. This is followed by a discussion of how classical product placement theory can be applied to OERs. A series of propositions are presented that may form the basis of a future research agenda.

Hybrid Messages

While traditional advertising and publicity has obvious benefits, they also have drawbacks. While traditional advertising allows the sponsor to control the message content and format, the perceived source introduces scepticism (Calfee and Ringold, 1988). Conversely, while publicity is unpaid, the sponsor cannot control the message content or format. Hybrid messages are paid attempts to influence audiences for commercial character benefit using communications that project a non-commercial character (Balasubramanian, 1994). As the sponsor is not identified, audiences may not be aware of the commercial influence attempt and therefore may process the content of such communications differently than if the communication was more overtly commercial (Balasubramanian, 1994).

There are a number of different types of hybrid messages. These include product or brand placement, program tie-ins, program length commercials, and masked messages. Product or brand placement is an attempt to influence an audience via the planned and unobtrusive entry of a branded product or service into a media vehicle, typically a television program or movie, but increasingly product placements can be found in a variety of media including videogames and music videos (Calvert, 2008; Lynn & Muzellec, 2010). The placement may be paid for although not necessarily so. For example, Kodak did not pay for its Carousel product to be featured in the television series, 'Mad Men', although other manufacturers paid for placements in the same program. Program tie-ins are quid pro-quo arrangements between advertisers and program sources i.e. in return for advertising, the product is featured in a program (Balasubramanian, 1994). A Program-Length Commercial (or "Infomercial") is a paid product message broadcast to television audiences using a format that resembles a legitimate program in both content and length (Balasubramanian, 1994; Chester & Montgomery, 1988). Masked messages are messages embedded in or on media that feature branded products with deliberate, typically unobvious, commercial intent (Balasubramanian, 1994). Masked messages may be delivered by paid experts or celebrity spokespersons whose legitimacy as experts or celebrities accentuates credibility (Balasubramanian, 1994).

OERs as a Form of Brand Placement: Towards a Future Research Agenda

By placing the funding of OERs within the marketing sphere and linking OER development and dissemination to student recruitment, OER evangelists may attract more funding and institutional support from the upper echelons of HEIs. Viewed as a form of hybrid message, OERs may be attractive marketing vehicles for HEI marketers by emphasising the HEI brand and the quality of the HEI's content and faculty. In many respects, OERs are analogous to product placements in that the HEIs "product" and "brand" is placed in a planned and unobtrusive way within a media vehicle, the OER, in an attempt to influence an audience, i.e. potential future students. While the HEI marketer's

motivation is different than the OER developer, both parties requirements can be satisfied. In fact, the HEI's brand may already be featured and so funding the OER merely recognises the contribution of the OER to increasing HEI brand effects.

Balasubramanian et al (2006) provided a comprehensive synthesis on the literature relation to product or brand placements and how such messages generate audience outcomes (Figure 1). They suggest that audience outcomes can be classified in to three categories – cognition, affect and conation.

Brand Effects

Cognition refers to the impact of brand typicality or incidence, placement recognition, brand salience and placement recall (Balasubramanian, et al, 2006). In the OER context, HEI brand placement in an OER may influence consumer judgements about brand typicality. For example, in the higher education sector, consumer perceptions may be skewed in relation to the HEI's marketplace presence or prominence in a given discipline. This may particularly be the case where a HEI funds a high-demand OER or a large volume of OERs. HEI brand placements may generate both long-term and short-term memory affects typically measured through recognition, salience or recall.

Affect refers to audience brand portrayal rating, identification with the story character or traits, identification with the brand and general brand attitude. While Balasubramanian et al (2006) noted that empathy and emotional identification processes are common in entertainment marketing particularly where characters are paired with placed brands (Deighton, Romer & McQueen, 1989; DeLorme & Reid, 1999, Gould & Gupta, 2006), there is little evidence of such a phenomenon in education. However, it is not unrealistic to think that the learner or consumer may wish to identify with a particular institution, discipline or prominent member of faculty.

Conation refers to audience purchase intention, brand choice or other brand usage behaviour. These outcomes are impacted by execution (setting) factors, which are largely in the control of the sponsor, individual-difference factors which are the personal traits of the consumer and the depth of the placement processing. Purchase intention, in the context of educational marketing, could be measured by programme inquiries, programme applications, programme enrolment or other commercial product or services purchase. Shapiro et al (1997) suggested that incidental brand exposures can increase the likelihood of the exposed brand being included in consideration sets. For less well known HEIs, merely being considered as option for further study may be an acceptable or desirable outcome. Research on the link between brand placement and actual brand usage is at an early stage of conceptualisation however Morton and Friedman (2002) have argued that a set of beliefs about movie placements may be useful predictors of product usage behaviour. In the case of education marketing, it may be possible that HEIs that feature their brand prominently in an OER may establish themselves as being prominent in that area or discipline, regardless of whether this is the case in reality.

Based on Balasubramanian et al's propositions relating to classical product placement, it is proposed that a research agenda could be established investigating variable relationships on HEI brand placement in OERs and effects from said placement. Execution factors, individual-level factors and processing depth are now discussed in this context.

Execution Factors

The execution factors presented by Balasubramanian et al can easily be adapted to the OER context and has significant implications for the design of OERs if funded for a marketing purpose. Firstly, both the opportunity to process the placement and exposure duration are considerable thereby potentially generating greater brand recognition. OERs, and specifically courseware, provide HEIs with the opportunity to place their brand, and indeed HEI faculty and research output, in a continuous display in front of a target segment for a prolonged period of time in the interface or content of the OER. This could even be through an advertisement at the beginning, during or end of an OER. This yields the following adapted propositions based on Balasubramanian et al (2006):

Proposition 1a: *As HEI brand prominence increases, consumers can better differentiate the brand from other OER stimuli, thereby increasing cognitive outcomes.*

Proposition 1b: *As HEI brand exposure duration increases, consumers can better process the brand's appearance or audio mention, thereby increasing cognitive outcomes.*

Proposition 2: *As HEI brand exposure duration increases, consumers can better process the brand's appearance, thereby increasing cognitive outcomes.*

Secondly, HEIs may have the opportunity to impact mood and therefore attitude towards HEI brand placement. This area is complex. Unlike other media such as television or movie, OER-induced mood has not been explored. Does courseware induce a positive or negative mood? Can certain topics or design treatments impact mood? What effect does this have on the HEI brand placement? In classical product placement, research has suggested that the congruency and integration of the placement has an impact on brand effects (Balasubramanian et al, 2004); does this apply to HEI placement too? Therefore:

Proposition 3: *Under positive OER-induced moods, placement outcomes are better than negative OER-induced moods.*

Thirdly, as OERs are typically digital, this facilitates retrospective branding thereby enhancing execution flexibility and removing the risk of funding unpopular, negative-mood inducing and other OERs not suited from HEI brand placement. This may also be attractive to OER developers as it may provide funding with low overhead or implementation costs. By being open, and indeed if free, there are multiple opportunities to deliver the OER through third party repositories giving the HEI further opportunities to process the placement. Based on Balasubramanian et al's (2006) proposition, one might posit:

Proposition 4: *As execution flexibility increases, the impact increases with regards to all message outcomes.*

Fourthly, OERs offer HEIs the opportunity to present the brand in a variety of modes and not just visually but through audio mentions; dual mode placements have been found to produce better recall (Brennan and Babin, 2004; Gupta and Lord, 1998). Fifthly, the HEI has the opportunity to prime the

availability of the OER through traditional advertising and publicity or indeed through existing education programmes. As mentioned briefly, this may include embedded advertising at the beginning, during or end of an OER. However it should be noted that HEI or partisan priming may introduce credibility issues although to what extent this would impact OERs is unknown (Groenendyk & Valentino, 2002). One might therefore posit:

Proposition 5: *Dual or multi-mode HEI brand placements generate better brand recall than single-mode placements.*

Proposition 6a: *Primed OERs produce better cognitive outcomes than non-primed placements.*

Proposition 6b: *Unprimed or third party-primed placements produce better affective outcomes than ad-primed placements.*

Sixthly, the HEI controls the type and amount of brand information presented. Indeed the HEI can choose to provide additional brand information on a telescopic basis within the OER providing greater depth of information than typically possible in traditional advertising. Finally, the HEI has control over the strength of the link between the brand and the specific content, editorial consistency, vehicle and medium. It can decide what content to sponsor, which faculty member to give prominence to and links to programmes etc.

Proposition 7a: *Increasing brand information in an OER is likely to increase cognitive outcomes.*

Proposition 7b: *Increasing brand information in an OER is likely to decrease both affective and conative outcomes.*

Proposition 8a: *The stronger the association between the HEI brand and the content, the higher the elaboration of the HEI brand within the OER, which thereby increases cognitive outcomes.*

Proposition 8b: *The stronger the positive (negative) association between the HEI brand and the content within the OER, the higher (lower) the affective outcomes.*

Individual-level Variables

Individual-level variables are largely outside the control of the education marketer or OER developer. Research has found that the Von Restorff effect may influence the recall of product placements (Wallace, 1965; Balasubramanian, 1994); less familiar brands may attract greater attention and produce superior cognitive outcomes (Nelson, 2002; Balasubramanian, 2006). However research also suggests that familiar brands facilitate identification with elements in programs. In the OER context, HEI brands, prominent faculty or alumni may facilitate such familiarity. Perceived fit is also recognised as an important factor on brand effects (Russell, 2002). Put simply, if a brand seems out of place, it may yield a higher level of recall but not necessarily higher levels of affective outcomes. This may occur where a HEI or member of faculty develops an OER in an area which is not their known area of subject domain expertise. The following adapted propositions based on Balasubramanian et al (2006):

Proposition 9a: *Unfamiliar HEI brands are more likely to increase cognitive outcomes than familiar HEI brands.*

Proposition 9b: *Unfamiliar faculty are more likely to increase cognitive outcomes than familiar faculty.*

Proposition 9c: *Audiences are less (more) likely to use unfamiliar (familiar) HEI brands for inferences about content than familiar brands.*

Proposition 9d: *Audiences are less (more) likely to use unfamiliar (familiar) faculty for inferences about content than familiar faculty.*

Proposition 10a: *In general, incongruent HEI brand placements produce higher cognitive outcomes than congruent ones.*

Proposition 10b: *In general, congruent placements yield higher affective outcomes than incongruent placements.*

Skepticism towards advertising has impacted attitudes towards ads and placements (Gupta, Balasubramanian and Klassen, 2000). In some instances, placements have been viewed as even more controversial than mere advertising and sponsors have been accused of “stealth advertising”. The OER movement is largely non-commercial, overt commercial placements may be viewed negatively. As such the following adapted propositions based on Balasubramanian et al (2006):

Proposition 11: *Skepticism towards advertising will not impact affective outcomes of HEI brand placement in OERs.*

Proposition 12: *The higher the attitude towards placements, the higher the affective outcomes towards the HEI brand.*

Bhatnagar, Aksoy and Malkoc (2004) found evidence that viewer involvement with a program’s content influences the effectiveness of *embedded* placements; this may not be the case with advertising *accompanying* programs featuring placements. As learners are typically highly involved with the learning material in an OER and the educational motivation may be strong (or else they simply would not complete or use the OER), this offers substantial optimism for education marketers. Research has also suggested that many viewers use placed brands to validate their existing identity and purchasing patterns or indeed enact a desired identity (Delorme & Reid, 1999; Kleine, Kleine & Kernan, 1993). It is not unreasonable to foresee a situation whereby certain OER consumers might be attracted by the prestige of certain brands e.g. MIT. the following adapted propositions based on Balasubramanian et al (2006):

Proposition 13a: *As a consumer’s involvement with OERs increases (decreases), cognitive outcomes increase (decrease).*

Proposition 13b: *The higher the engagement in an OER, the higher the message outcomes for HEI brand placements in the OER.*

Proposition 13c: *Motivation to process brands for self-presentational purposes influences cognitive outcomes for HEI brand placements.*

Depth of Processing

Balasubramanian et al's model assumes that execution- and individual-level variables influence viewer processing of a given placement; in this case the learner processing of the HEI brand (Balasubramanian et al, 2006). For Balasubramanian et al, processing depth refers to the level of conscious processing of brand information. For example, does the brand merely appear in the background? Is it present visually, in audio or in multimedia? Is the brand central or peripheral to content? As such, the following propositions based on Balasubramanian et al (2006) are presented:

***Proposition 14a:** Unconscious processing of HEI brand placements relates to implicit memory and enhances affective and conative outcomes more than cognitive outcomes.*

***Proposition 14b:** Conscious processing of HEI brand placements (e.g. continuous reference of the HEI brand within the content of the OER) relates to explicit memory and enhances cognitive outcomes more than affective or conative outcomes.*

Summary and Conclusions

This paper illustrated how hybrid message and product (brand) placement concepts could be applied to open education resources by HEI brands and be used to justify investment by HEIs in OER development on marketing grounds. HEI brand placement in OERs raises several issues for OER developers not least the impact on content design. This paper focuses on the placement of HEI brands however could easily be applied to other third party sponsors including commercial sponsors. Despite substantial literature on product placement in marketing literature, there is very little related to education marketing or the use of OERs as a placement vehicle. This paper suggests that Balasubramanian et al's Integrative Framework for Product Placement could be adapted to form the basis of a model for future research on HEI brand placement in OERs and offers some propositions that may form the basis of a future research agenda.

Figures

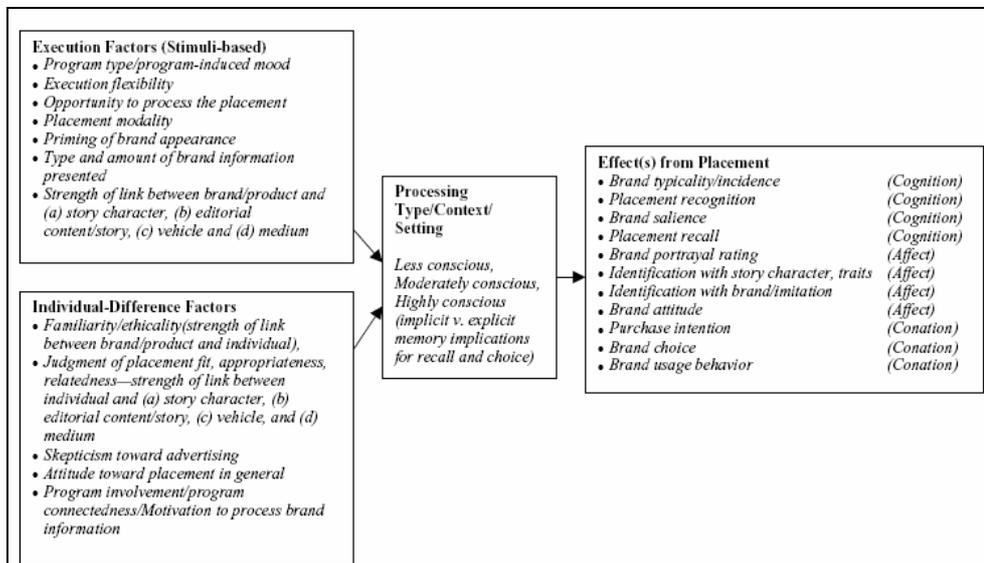


Figure 1 - Integrative Framework for Product Placement (Balasubramanian et al, 2006)

Bibliographic references

- Balasubramanian, S. (1994). "Beyond advertising and publicity: hybrid messages and public policy issues," *Journal of Advertising*, 23 (December), 29-46.
- Balasubramanian, S.K., Karrh, J.A., and Patwardhan, H. (2006). "Audience response to product placements: an integrative framework and future research agenda," *Journal of Advertising*, 35, (3), 115-141.
- Bhatnagar, N., Aksoy, L. and Malkoc, S.A. (2004). "Embedding brands within media content: the Impact of message, media, and consumer characteristics on placement efficiency," in *The Psychology of Entertainment Media*, L. J. Shrum, ed., Mahwah, NJ: Lawrence Erlbaum, 99-116.
- Brennan, I. and Babin, L.A. (2004). "Brand placement recognition: the influence of presentation mode and brand familiarity," *Journal of Promotion Management*, 10 (1/2), 185-202.
- Calfee, J.E. and Ringold, D.J. (1988). "Consumer skepticism and advertising regulation: what do the polls show?," *Advances in Consumer Research*, Michael J. Houston, ed., 15, 244-248.
- Calvert, S.L. (2008). "Children as consumers: advertising and marketing," *The Future of Children*, 18(1), Children and Electronic Media (Spring, 2008), 205-234.
- Deighton, J., Romer, D. and McQueen, J. (1989). "Using drama to persuade," *Journal of Consumer Research*, 16 (December), 335-343.
- DeLorme, D.E. and Reid, L.N. (1999). "Moviegoers' experiences and interpretations of brands in films revisited," *Journal of Advertising*, 28 (2), 71-95.
- Downes, S. (2007). "Models for sustainable open educational resources," *Interdisciplinary Journal of Knowledge and Learning Objects*, 3, Retrieved on September 10, 2010 from <http://ijello.org/Volume3/IJKLOv3p029-044Downes.pdf>.
- Groenendyk, E.W. and Valentino N.A. (2002). "Of dark clouds and silver linings: effects of exposure to issue versus candidate advertising on persuasion, information retention, and issue salience," *Communication Research*, 29 (3), 295-319.
- Gupta, P.B., and Lord, K.R. (1998). "Product placement in movies: the effect of prominence and mode on audience recall," *Journal of Current Issues and Research in Advertising*, 20 (1), 47-59.
- Gupta, P.B., Balasubramanian, S.K. and Klassen, M. (2000). "Viewers' evaluations of product placements in movies: public policy Issues and managerial implications," *Journal of Current Issues and Research in Advertising*, 22 (2), 41-52.
- Hazelkorn, E. (2008). "Learning to live with league tables and ranking: the experience of institutional leaders," *Higher Education Policy* (2008) 21, 193-215.
- Ivy, J. (2008). "A new higher education marketing mix: the 7Ps for MBA marketing", *International Journal of Educational Management*, 22(4), 288 - 299.
- Kleine, R.E., Kleine, S.S. and Kernan, J.B. (1993). "Mundane consumption and the self: a social-identity perspective," *Journal of Consumer Psychology*, 2 (3), 209-235.
- Lynn, T. and Muzellec, L., (2010). "Hypervideo-based product placement: extending the research agenda", *Proceedings of the 13th Annual Conference of the Irish Academy of Management*, Cork Institute of Technology, Cork, Ireland, 1 - 3 September 2010.
- Maringe, F. (2006). "University and course choice: implications for positioning, recruitment and marketing", *International Journal of Educational Management*, 20(6), pp.466 - 479.
- Maringe, F. and Gibbs, P. (2008). "Marketing higher education: theory and practice," *Open University Press*. McGraw-Hill Education. England.

- Nelson, Michelle R. (2002). "Recall of brand placements in computer/video games," *Journal of Advertising Research*, 42 (March/April), 80–92.
- Nicolescu, L. (2009). "Applying marketing to higher education: scope and limits," *Management & Marketing*, 4(2), 33-44.
- Russell, C.A. (1998). "Toward a framework of product placement: theoretical propositions," in *Advances in Consumer Research*, vol. 25, Joseph W. Alba and J. Wesley Hutchinson, eds., Provo, UT: Association for Consumer Research, 357–362.
- Shapiro, S., MacInnis, D.J. and Heckler, S.E. (1997). "The effects of incidental ad exposure on the formation of consideration sets," *Journal of Consumer Research*, 24 (1), 94–104.
- Sterne, P. & Herring, N. (2005). "*LinuxWorld: the conversion model*," Linux World. Retrieved on September 10, 2010 from <http://de.sys-con.com/read/158863.htm>.
- Voss, R., Gruber, T. and Szmigin, I. (2007). "Service quality in higher education: the role of student expectations," *Journal of Business Research*, 60(9), 949-959.
- Wallace, W.P. (1965). "Review of the historical, empirical, and theoretical status of the Von Restorff phenomenon," *Psychological Bulletin*, 63 (6), 410–424.
- Wiley, D. (2006). "On the sustainability of open educational resource initiatives in higher education," *Paper commissioned by the OECD's Centre for Educational Research and Innovation (CERI)*. Retrieved on September 10, 2010 from <http://www.oecd.org/edu/oer>.

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