

Northumbria Research Link

Citation: Ghassan, Aysar and Bohemia, Erik (2011) Notions of self: Becoming a 'successful' design graduate. In: International Association of Societies of Design Research (IASDR) 4th World Conference on Design Research, 31 October - 4 November 2011, Delft University of Technology, Delft, The Netherlands.

URL:

This version was downloaded from Northumbria Research Link:
<http://nrl.northumbria.ac.uk/id/eprint/12049/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)

////////////////////////////////////

NOTIONS OF SELF: BECOMING A 'SUCCESSFUL' DESIGN GRADUATE

Aysar Ghassan and Erik Bohemia
School of Design, Northumbria University
aysar.ghassan@northumbria.ac.uk and erik@theglobalstudio.eu

ABSTRACT

Higher Education graduates have access to employment in the Knowledge Economy. Data suggests that competition for graduate jobs is currently fierce. Research suggests that understanding theory related to the construction of identities (i.e. 'notions of the self') may aid graduates in becoming employable in the Knowledge Economy. Worryingly however, when compared to other graduates, *design graduates* are at a disadvantage when it comes to finding graduate positions in the knowledge economy. Identities are discursively constructed in relation to others. Consequently, this paper uses results from an international cross-institutional student project to propose that design students may benefit from communicating with students from such settings in order to gauge difference. We conclude by proposing that design students may benefit from understanding the importance of 'notions of the self' as a way to aid employability in the Knowledge Economy.

Keywords: professional design identity, knowledge economy, auto biographical practices

INTRODUCTION

The old adage that 'knowledge is power' certainly applies to the world of professional employment (Brown, Lauder, & Ashton, 2008). The term *knowledge economy* implies 'globally networked' (Lüthi, Thierstein, & Goebel, 2010) providers and vendors of knowledge. Indeed, such trade in knowledge is increasingly important to the global economy (Lüthi, et al., 2010). Furthermore, it has been argued that in developed capitalist economies, the production of knowledge is more important than any physical commodity (Drucker, 1993). The knowledge economy may be of particular

interest to university graduates as these individuals 'are purported to be the 'knowledge workers' of the future and are expected to command high levels of general and specialist knowledge' (Brown, Hesketh, & Williams, 2003:109). The ability to problem-solve is important for such individuals (Brown, Hesketh & Williams, 2002); indeed, as opposed to workers who are not part of this club, graduates are 'given permission to think' in their professional life (Brown, et al., 2003:110).

In its strategy for the 1997 general election, the UK's New Labour Party identified education as being its top priority (Bache, 2003). Upon being voted into government, New Labour promoted increased access to higher education in an attempt to fuel the growth in the knowledge economy. Indeed, its target was to have '50% of all young people having the experience of higher education by 2010.' (The Design Skills Advisory Panel, 2006:26) However, in 2003 researchers predicted that this increase in numbers may lead to an oversupply of graduates in the job market by 2010 (see MacLeod, 2003). This warning appears to have been substantiated, for although the recent global economic downturn may not have been predicted then, the Office for National Statistics (2011) states that by the latter part of 2010, the 'un-employment rate for new graduates was 20%, the highest for 15 years (Paton, 2011). Furthermore, it has been reported that up to 45 graduates might currently be competing for a single graduate position (Paton, 2011). Thus the professional prospects for graduates in the UK are currently uncertain (HESA, 2011). Research in the next section of this paper suggests the situation may be especially difficult for design graduates.

The fact that design degrees are delivered by Higher Education Institutions (HEIs) implies that design graduates are potentially employable as part of the knowledge economy (cf. The Design Skills Advisory

Panel, 2006:30). One of the aims of vocational-oriented academic programmes such as design is to prepare students to become designers. Furthermore, studying has been argued to be one of the ways students are socialised to become 'professional' (e.g. Lave & Wenger, 1991; Loui, 2005; Tonso, 1996; Wenger, 1998). Consequently we suggest that attempts should be made to provide design students with experiences and knowledge which will facilitate their chances of being able to participate meaningfully in the knowledge economy. This paper will attempt to discuss such strategies.

THE FATE OF DESIGN GRADUATES

Although design graduates might not find full time employment as designers (Sands & Worthington, 2007), research suggests that after graduation, some of these individuals do not lose their passion for the subject. Indeed, it has been claimed that up to one third of design graduates (both undergraduate and postgraduate) are involved in part time course-of-study related self-employment within a period of five years after graduation (Aston, 1999). Moreover, Aston (1999:235) states the financial motive of this activity is secondary to maintaining contact with the 'Art and Design world'. However, as we shall see, this interest in the subject does not necessarily translate into well-paid graduate employment (Ball, Pollard, & Stanley, 2010).

Design graduates belong to a category Comunian et al. (2010) term 'Bohemian Graduates' - individuals who have received tertiary qualifications in subjects such as creative arts, mass communications and music recording. When compared to non-Bohemian graduates, the employment prospects for Bohemian graduates are less promising (Comunian, et al., 2010). For example, it has been reported that male arts graduates' earnings during their lifetime might be less than those who start work upon merely completing high school (Paton, 2010).

Many Bohemian graduates have completed studies in creative subjects. Creativity has been argued to be good for society (Boden, 1999; Sosa & Gero, 2005), for the economy (Ball, et al., 2010; Blair, 1998; Sands & Worthington, 2007) and for an individual's wellbeing (B. J. Fisher & Specht, 1999). However, it is less certain whether studying a creative discipline at university is beneficial in terms of gaining

meaningful graduate employment. Indeed, individuals who have chosen an educational route which focuses on a creative discipline are 'effectively excluded' (Brown, Hesketh, & Williams, 2002:11) from gaining employment in areas requiring certain types of knowledge.

Brennan and McGeevor (cited by Aston, 1999:233) state 'there is nothing intrinsically unemployable about any kind of graduate. But graduates seeking certain kinds of jobs are supported by well-publicised and funded entry routes while others are not.' For example, for medical students, there are clear and well-funded routes of entry into the profession. Indeed, for medical graduates, the rate of unemployment is currently zero (Paton, 2011). Conversely, it can be argued that compared to medical graduates, design graduates do not have similar access to a well-funded route in to the profession (Sands & Worthington, 2007; The Design Skills Advisory Panel, 2006). This may help to account for findings which claim that, within the first year of graduation, individuals possessing creative art and design tertiary qualifications are the least likely of all graduates to be in professional employment; and many of those that do find work find themselves in positions with are low paid, mundane and unsuited to their qualifications (Aston, 1999). Perhaps more worrying are the findings of a large study compiled by the Australian Council for Educational Research (Coates & Edwards, 2009). It concludes that *five years* after graduation, individuals from subject areas which include 'the creative arts...reported the lowest rates of full-time employment.' (Coates & Edwards, 2009:15) Bohemian graduates that do gain professional employment often find themselves in what might be defined a broad church of creative industries (cf. Sands & Worthington, 2008). These include sectors such as the media, advertising as well as design (Comunian, et al., 2010). From 1997 to 2007 there was a rise in employment of 2% per annum in such industries in the UK as opposed to 1% in all other industries (Comunian, et al., 2010). This sign may seem to offer encouragement to design graduates until one reflects upon the fact that non-Bohemian graduates have taken around 60% of these new opportunities (Comunian, et al., 2010). Worryingly, this suggests that Bohemian graduates from

programmes of study which focus on creativity are at a disadvantage when it comes to finding positions in the creative industries. As well as this, it has been shown that when Bohemian graduates are employed in creative occupations, their starting salary is lower than that of non-Bohemian graduates by an average of almost £4000 (Comunian, et al., 2010:400). Moreover, research suggests that 5 years after graduation, creative arts graduates command lower salaries than any other type of graduate (Coates & Edwards, 2009:83).

Therefore, even though design is a profession which is broadening its scope (Norman, 2010) and gaining influence in society (Davey, Wootton, Thomas, Cooper, & Press, 2005), the professional prospects for design graduates are not as positive as those of other graduates (The Design Skills Advisory Panel, 2006). Consequently, moves that may aid employability can be argued to be of particular benefit to design graduates. The importance of such moves may be underscored by the suggestion that visual arts graduates are amongst the least satisfied of all graduates with the university careers service (Coates & Edwards, 2009:49).

Even though employability is subject to the variations of the economic labour market (Brown, Hesketh & Williams 2002), it has moved to become the responsibility of the individual (Cambridge, 2008). As such, being non-employable is akin to an individual not proving their 'capability' in gaining employment (Brown, et al., 2002:9). As self-esteem can be argued to be enhanced from being in employment (see Shamir, 1986) and being successful in one's career can have health benefits (Tiger, 2008), the wellbeing of design graduates may be improved through finding meaningful graduate employment.

In the next section, we will argue that an understanding of 'notions of the self' is becoming an important element in enabling graduates to gain employment in the wider knowledge economy. As the design profession is part of the knowledge economy we will propose that an understanding of 'notions of the self' with regards this profession may be one method of helping design graduates to become more employable in the design profession.

NOTIONS OF SELF

Art and design graduates have stated that attaining a degree award alone was not enough in aiding them to gain entry into the professional workplace (Aston, 1999). This appears to reflect a wider feeling amongst professional employers that (for applicants) a degree is now a 'given' (Brown, et al., 2002:28). Thus, the search for what might be termed 'professional employability status' in the knowledge economy relies on a 'competition for credentials' (Brown, et al., 2002:20) over and above those denoted in the degree classification. Such credentials include validated training schemes, relevant network contacts and personal qualities. Their allocation does not guarantee employment, but without them one is not eligible to play the employment game (Brown, et al., 2003). We argue that such credential-related activities belong to a set of actions termed 'autobiographical practices' (Miller & Morgan, 1993). A definition of this term is related to the development of a personal identity, one that puts the protagonist in a light which is attuned to the circumstance in which one finds themselves. Thus, autobiographical practices can be utilised when one is asked to 'tell a story about themselves' (Miller & Morgan, 1993:133) to relevant parties.

Of importance, Miller & Morgan, (1993:133) state that autobiographical constructs inform the 'disinterested observer as much about the circumstances under which such practices were deployed as about the individuals being described by such practices'. In the case of the quest for professional employment, practices adopted by the candidate can be said to reflect the culture of the company. Indeed, Brown et al. (2002:28) suggest that in order to increase the chances of gaining employment, graduates should be aware of their prospective 'cultural capital' in relation to the culture of the profession and/or organisation they wish to enter and should translate that in to 'personal capital' (cf. Strickfaden, 2004; Strickfaden & Heylighen, 2010).

Therefore, being versed in autobiographical practices is a skill which should be considered an important one for graduates to possess. As employment rates and earnings for design graduates are low, we argue that acquisition of skills related to

negotiating autobiographical practices could be especially useful to such individuals.

It can be argued that autobiographical practices require the individual to acquire both a sense of personal reflection and a sense for the culture of the company or profession the applicant wishes to enter. Indeed through using such practices, one needs the skills to enact an ‘individualized, reflexive identity’ (Cambridge, 2008:251). Unfortunately, discussion of such activities has been largely ignored within the field of design. A notable exception is Tom Fisher (1997).

‘THE DESIGNER’S SELF’

Coldron and Smith (1999:714) have argued that an aspect of being a professional is the ‘construct[ion] of a suitable identity’. Furthermore, it has been suggested that the construction of a *suitable* professional identity by an individual is not performed in isolation of the profession but is intrinsically linked to the community of practice one associates with (Lave & Wenger, 1991). As such, an individual constructs an identity through ‘negotiating a position’ (Blåka & Filstad, 2007:62) with this community. Within the workplace, a host of factors facilitate the construction of identity. For example, these include the use of attire (Pratt & Rafaeli, 1997) tone of voice, certain gestures, facial expressions or indeed posture (see Ashforth & Humphrey, 1993). Such behaviours expressing values for constructing an identity have been termed ‘signs’ by social scientists (see Ashforth & Humphrey, 1993). The construction of identity is contextual and can be used to differentiate relevant professionals from relevant non-professionals and can be used to signify status within a profession (Coldron & Smith, 1999). Such signs are therefore assessed in relation to the cultural values and norms of the profession. As working individuals, it can be argued that professional designers are not immune from being involved in the creation of *suitable* (our italics) professional identities (T. Fisher, 1997). Indeed, it can be suggested that within the ‘design world’ signs exist and may be used as a method of articulating a designer’s identity to others within the design profession. Such signs include: professional accreditation from professional bodies such as the Chartered Society of Designers or the Industrial

Design Society of America, an individual’s affiliation with cultural design icons and/or sources of influence (Rodgers & Strickfaden, 2003), an individual’s portfolio (e.g. Best, 2009; Coroflot, n.d.; Goldsworthy, 2009) and their style of sketching (Tovey, Porter, & Newman, 2003). These signs may be used to convey a designer’s accreditation, ‘design political persuasions’, experience, skills, flair and contemporaneity. Moreover, it can be proposed that they are examples of reflexive narratives that can be utilised to put an individual designer in the best possible light within a professional cultural context. We propose that such signs are examples of the use of autobiographical practices.

It has been argued that professional identities are in a constant state of change (Coldron & Smith, 1999). Therefore, to construct meaningful identities, individuals must keep ‘on track’ in order to be aware of contemporary prerogatives and ‘signs’. Thus, the acquisition and accumulation of certain credentials is no longer deemed merely necessary in the push for gaining promotion when employed, but also concerns ‘keeping fit’ and indeed ‘maintaining one’s employability’ (Brown, et al., 2002:24). Consequently, we propose that in the quest for ‘employability status’ in the modern knowledge economy, an understanding of autobiographical practises may be beneficial to design graduates.

EXPLORATORY PROJECT

As a means of identifying issues related to autobiographical practices, this paper focuses on a project conducted between design undergraduates enrolled on programmes situated within an English post-1992 university and student cohorts from six other internationally-based HEIs.

PROJECT

The theme of this international project was ‘gift-giving’.¹ The idea for the theme was inspired by the anthropologist Marcel Mauss’ classic book ‘The Gift’ (Mauss, 1950, 1990). Close to 250 students participated in this project. The project aimed to encourage students to explore various questions

¹ More information about the project is available at http://theglobalstudio.eu/global_studio_projects_gift.htm

related to intercultural communication and design.

Such issues included:

- How do relationships form between people?
- How do bonds form between people of different cultures?
- Should cultural differences be bridged or should they be celebrated?
- What strategies might be employed in order to encourage relationships?
- What are the material effects of Design?

Organisation

Participating students from each university were divided into groups. Each group was paired with a group from one of the other participating universities. Within each group, students were divided into small teams and each team was allocated a small team from within the corresponding group in the relevant university with which to collaborate. This project incorporated cross-institutional peer learning activities. Contact between these student teams was conducted exclusively through ICTs. Through exchange of information with their counterparts, each team of students was required to develop and prepare a final presentation which was to focus on creating a narrative depicting the scenario related to an outcome addressing issues given in the brief. This presentation was to be delivered through using ICTs. This presentation was delivered to collaborating teams, relevant peers and project lecturers. The theme of the project and requirements for the presentation were set by the authors of this paper. The discussion will focus on student feedback provided by one group of students from the English HEI. This group comprised of 5 teams paired with collaborators in an HEI located in Asia. Both sets of students are potential employees in the global knowledge economy. This project incorporated co-assessment activities, for example, the students were asked to comment on the following points with regards their own performance and that of their collaborators:

- The perception of how the final presentations went.
- How well / badly the narration of projects was conducted in the final presentations.

- The style of narrative used in the animations / videos / storyboards.
- The use of computer applications.
- How well / badly any language barrier was bridged.
- Students' perception of the sense of professionalism.

It is important to note that in the vast majority of cases, both sets of students were 'home' students in their respective countries. Thus, through this project, the authors' aim was for students to negotiate the inherent differences (e.g. those related to identity) between them and their collaborators. Identities are discursively shaped (Harman & McDowell, 2011); furthermore, it is suggested that processes linked to 'becoming the self' are facilitated through 'defining others' (Holliday, Hyde, & Kullman, 2004:156). Consequently, we suggest this international project provided a means of comparison for students in international locations (Bohemia & Ghassan, 2011). The data collected from the students at the English HEI at the end of this project is used to illustrate how an understanding of 'notions of the self' is utilised to greater effect by the students from the Asian HEI.

RESULTS

In this section we will be providing examples of student feedback which relate to how they felt they performed in comparison to their counterparts. These perceptions of performance will be interpreted as manifestations of professional identity which have been discussed earlier in this paper. For a successful outcome, this project required students to be engaged in problem-solving. It has been argued that problem-solving is an important skill a professional designer should have (Norman, 2010; University of The Arts, 2008). In terms of the final presentation, one problem to negotiate was the creation of a narrative which would be presented through ICTs. The majority of students from the English HEI stated that their collaborators in the Asian HEI better encapsulate the 'intended' narrative. For example, students from the English HEI stated:

'What we can take from our collaborators is how understandable and impacting their work was. The use of a pure narrative gave the[ir] presentation instant direction.'

'...they were able to communicate the idea in a more than comprehensive way for us... in their presentations they focused much more on the narrative...'

As has been stated previously, the vast majority of both groups were 'home' students in their respective nations. Thus, another problem to overcome during the final presentation was the language barrier. The majority of students from the English HEI stated that their collaborators had bridged this barrier more effectively:

'The use of video presentations uploaded to youtube really helped to breakdown the language barriers and thoroughly explained their individual projects.'

'...the students were not required to talk to help explain the project.'

On the other hand the majority of students at the English HEI commented that their own presentations were not well formulated – as indicated for example by this student: *'We relied [too] heavily on our own explanation to present the idea'*. Another student said that *'explaining my concepts was at times difficult which indicated it was too much/too complicated'*.

Feedback from the students at the English HEI suggested that the problem-solving skills shown by their collaborators had presented an opportunity to reflect on their own strategies:

'It seemed like they understood the importance of clarity to a story better than we did.'

'In comparison to ours, we approached it in a very linear and complex method with some over-intricate slides.'

The final presentation required students to deploy ICT skills in order to create and present their proposals. We propose that in this contemporary era of design (Bohemia & Ghassan, 2011; Bohemia & Harman, 2008) ICT skills can be argued to be (along with those already mentioned earlier in this paper) a 'sign' of professional designer identity. Feedback from the majority of students at the English HEI suggests that their collaborators deployed better use of ICT skills:

'Overall i think [they] made better use of [digital] animation and video.'

'[They] used videos to flash or videos to explain their products which are much more effective.'

Feedback from the students at the English HEI suggests that the ICT skills shown by their collaborators had presented an opportunity for many of these students to reflect on their own strategies. For example one of the students stated: *'it has convinced me to start creating presentations in Flash to give a smoother feel to the presentation.'*

Throughout their feedback on their collaborators' presentations, students from the English institution included descriptors such as *'strong'*, *'effective'*, *'thorough'*, *'well-polished'*, *'clean'* and *'neat'*. We argue that in the modernist idiom, these terms pertain to universally desirable design qualities. Modernist design (and modernist notions in design) (Lindinger, 1990; Rams, 2003; Spitz, 2002; Valtonen, 2006; Woodham, 1997) still dominate conceptions of what may be termed 'positive traits' in the design discipline (Buckley, 1986; Havenhand, 2004; Leslie & Reimer, 2003). Consequently, it is likely that the students from the English HEI will be aware that modernist notions 'equate to good notions in design' (see Michl, 2007).

Students from the English institution also used terms such as *'themed'* and *'well-collaborated'* to describe the presentations from their collaborators at the Asian HEI. Linked to this, one student also stated their collaborators had *'portrayed a sense of brand'*. Literature suggests the development of branding is important in design (Borja de Mozota, 2003). Thus,

these terms can be linked with what students based at the English HEI may understand as being ‘signs’ of professionalism. Indeed, students stated:

‘...as a class they came across as very professional and serious.’

‘...the quality of the work made the presentation very professional.’

‘The[ir] presentation was very professional and concise.’

‘[They] always had a theme... in all their work which they followed through the final presentation.’

DISCUSSION

The above feedback shows that the students from the English HEI believed that their counterparts from the Asian institution fared better in the final presentation. We will move on to posit how the feedback from students may be analysed in relation to the theory already presented in this paper. It can be argued that the students from the Asian HEI solved more problems related to the final presentation than their counterparts in the English HEI. As indicated previously, problem-solving is important in design practice (Norman, 2010; University of The Arts, 2008). More broadly, problem-solving is an aspect of the knowledge economy (Brown, et al., 2003). As such it can be argued that overall the students from the Asian HEI can be perceived as potentially being better would-be professionals, both in terms of *being a designer* and in the wider knowledge economy as they made more beneficial use of their aforementioned ‘permission to think’ (Brown, et al., 2003:8) round a problem.

As had been stated, the project organisation necessitated students focusing on creating a narrative, deliverable through ICTs, which would explain their concept as fully as possible. These requirements were set by lecturers. Feedback from students suggests that teams from the Asian HEI responded to this requirement better than their counterparts in the English HEI. Thus, it can be argued that the students from the Asian HEI were

able to effectively reflect on the ‘cultural requirements’ - those requirements specific to the project and set by lecturers.

We propose that these students used ‘signs’ (see Ashforth & Humphrey, 1993) which can be associated with the professional characteristics of designers. These signs included, for example, the successful use of narrative, the deployment of contemporary ICT skills, concentrating on (for example) ‘cleanliness’ and ‘effectiveness’ as well as providing a focus on branding. We propose that for these students, the use of such signs contributed to the effective construction of a ‘reflexive identity’ (Cambridge, 2008:251) which, in turn, told ‘a story about themselves’ (Miller & Morgan, 1993:133). In this case, these stories were perceived as being positive. Thus it can be argued that these students made better use of autobiographic processes.

Consequently, in an argument analogous to that presented by Brown et al. (2003) earlier in this paper, we propose that the students from the Asian HEI made better use of their cultural capital and effectively translated it into personal capital. As such, it can be argued that these students may be ‘more ready’ for the challenges of finding meaningful graduate employment in the contemporary knowledge economy. We can state that they are more involved in the ‘processes of becoming’ a successful design graduate.

CONCLUSION

There is currently heightened competition for graduates wishing to enter the professions of the knowledge economy. This situation is amplified for design graduates as they are less likely to gain stable profession employment than virtually any other type of graduate. When they do gain professional employment they are paid less than non-Bohemian graduates.

We recognise that professional cultural values and norms are important in developing a professional identity amongst individuals. We also recognise that an understanding of the cultural values of an employer can increase the chances of gaining employment for a graduate. We agree with Norman (2010) that design students should be introduced to knowledge of discourse related to the social sciences. He states that this is necessary as the remit

for professional designers is widening to include tackling complex social issues. We would like to add that such knowledge may also help to facilitate design graduates in developing an understanding of 'notions of the self'. These in turn may then enable these individuals to become versed in the use of autobiographical practices. We propose that such knowledge may help design graduates to improve their chances of gaining meaningful professional employment in the knowledge economy. We also propose that working with counterparts from different institutions provides design students with an opportunity to reflect on their own identities in relation to that of 'others'. We suggest this activity enabled students to define themselves as upcoming 'designers' through the act of defining other upcoming 'designers' (see Holliday, et al., 2004). Thus, the use of differences between students from different institutions may be beneficial in promoting an understanding of 'notions of the self'. We suggest that more studies should be conducted into testing the value of 'notions of the self' with regards design graduates and employability in the knowledge economy.

ACKNOWLEDGEMENTS

The authors would like to thank participating staff and students from the collaborating universities and our external partners. They would like also to thank staff from LTech and IT services at Northumbria University who kindly provided technical support for this project.

REFERENCES

- Ashforth, B. E., & Humphrey, R. H. (1993). Emotional Labor in Service Roles: The Influence of Identity. *Academy of Management Review*, 18(1), 88-115.
- Aston, J. (1999). Ambitions and Destinations: the Careers and Retrospective Views of Art and Design Graduates and Postgraduates. *The International Journal of Art & Design Education*, 18(2), 231-240. doi: 10.1111/1468-5949.00179
- Bache, I. (2003). Governing through Governance: Education Policy Control under New Labour. *Political Studies*, 51(2), 300-314. doi: 10.1111/1467-9248.00425
- Ball, L., Pollard, E., & Stanley, N. (2010). Creative Graduates Creative Futures (pp. 222). Brighton, UK: The Creative Graduates Creative Futures Higher Education partnership and the Institute for Employment Studies.
- Best, J. (2009, 21 August). Guest Post: A portfolio doesn't speak for itself Retrieved 20 January, 2011, from http://www.coroflot.com/creativeseeds/2009/08/guest_post_a_portfolio_doesnt.asp
- Blair, T. (1998). Foreword by the Prime Minister: Our Competitive Future building the knowledge driven economy (pp. 6). London.
- Blåka, G., & Filstad, C. (2007). How Does a Newcomer Construct Identity? A Socio-Cultural Approach to Workplace Learning. *International Journal of Lifelong Education*, 26(1), 59-73. doi: 10.1080/02601370601151406
- Boden, M. A. (1999). Computer models of creativity. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 351-372). New York, NY, US: Cambridge University Press.
- Bohemia, E., & Ghassan, A. (2011). Internationalisation from Home a Global Collaborative Project Base Learning. In K. Fernstrom & C. Tsolakidis (Eds.), *ICICTE 2011* (pp. 317-322). Rhodes, Greece.
- Bohemia, E., & Harman, K. (2008). Globalization and Product Design Education: The Global Studio. *Design Management Journal*, 3(2), 53-68. doi: 10.1111/j.1948-7177.2008.tb00014.x
- Borja de Mozota, B. (2003). *Design Management: Using Design to Build Brand Value and Corporate Innovation*. New York: Allworth Press.
- Brown, P., Hesketh, A., & Williams, S. (2002). Employability in a Knowledge-Driven Economy. *Working Paper Series*, 38. Retrieved from Publications & Working Papers website: <http://www.cardiff.ac.uk/socsi/research/publications/workingpapers/paper-26.html>
- Brown, P., Hesketh, A., & Williams, S. (2003). Employability in a Knowledge-Driven Economy. *Journal of Education and Work*, 16(2), 107-126. doi: 10.1080/1363908032000070648
- Brown, P., Lauder, H., & Ashton, D. (2008). Education, globalisation and the knowledge economy (pp. 23): Teaching and Learning Research Programme and Teaching and Learning Research Programme.
- Buckley, C. (1986). Made in Patriarchy: Toward a Feminist Analysis of Women and Design. *Design Issues*, 3(2), 3-14.
- Cambridge, D. (2008). Layering networked and symphonic selves: A critical role for e-portfolios in employability through integrative learning. *Campus-Wide Information Systems*, 25(4), 244-262. doi: 10.1108/10650740810900685
- Coates, H., & Edwards, D. (2009). The 2008 Graduate Pathways Survey: Graduates' education and employment outcomes five years after completion of a bachelor degree at an Australian university *Higher Education Research: Department of Education, Employment and Workplace Relations (DEEWR)*.
- Coldron, J., & Smith, R. (1999). Active location in teachers' construction of their professional identities. *Journal of Curriculum Studies*, 31(6), 711-726.
- Comunian, R., Faggian, A., & Li, Q. C. (2010). Unrewarded careers in the creative class: The strange case of bohemian graduates. *Regional Science*, 89(2), 389-401. doi: 10.1111/j.1435-5957.2010.00281.x
- Coroflot. (n.d.). Design Portfolio Tips Retrieved 20 January, 2011, from http://www.coroflot.com/public/help_portfolio_tips.asp
- Davey, C. L., Wootton, A., Thomas, A., Cooper, R., & Press, M. (2005). *Design for the surreal world? A new model of socially responsible design*. Paper presented at the EAD06, Hochschule für Künste Bremen, Germany. <http://ead.verhaag.net/>
- Drucker, P. F. (1993). *Post-Capitalist Society*. New York, NY: HarperBusiness.
- Fisher, B. J., & Specht, D. K. (1999). Successful Aging And Creativity In Later Life *Journal of Aging Studies*, 13(4), 457-472 doi: 10.1016/S0890-4065(99)00021-3

- Fisher, T. (1997). The Designer's Self-Identity - Myths of Creativity and the Management of Teams. *Creativity and Innovation Management*, 6(1), 10-18.
- Goldsworthy, R. (2009, 28 October). Industrial Design Portfolio Advice: Back to Basics Retrieved 20 January, 2011, from <http://designdroplets.com/articles/portfolio-advice-back-basics/>
- Harman, K., & McDowell, L. (2011). Assessment talk in Design: the multiple purposes of assessment in HE. *Teaching in Higher Education*, 16(1), 41–52. doi: 10.1080/13562517.2010.507309
- Havenhand, L. K. (2004). A View from the Margin: Interior Design *Design Issues*, 20(4), 32-42.
- HESA. (2011, August). Destinations of Leavers from Higher Education Institutions Longitudinal Survey 2006/07 Introduction Retrieved 1 September, 2011, from www.hesa.ac.uk/pr165
- Holliday, A., Hyde, M., & Kullman, J. (2004). *Inter-Cultural Communication: An Advanced Resource Book*. Oxon: Routledge.
- Lave, J., & Wenger, E. (1991). *Situated learning: legitimate peripheral participation*. New York: Cambridge University Press.
- Leslie, D., & Reimer, S. (2003). Gender, modern design, and home consumption. *Environment and Planning D: Society and Space*, 21(3), 293-316. doi: 10.1068/d337
- Lindinger, H. (Ed.). (1990). *Ulm Design: The Morality of Objects*. Cambridge, Massachusetts: The MIT Press.
- Loui, M. C. (2005). Ethics and the Development of Professional Identities of Engineering Students. *Journal of Engineering Education*, 94(4), 283-309.
- Lüthi, S., Thierstein, A., & Goebel, V. (2010). Intra-firm and extra-firm linkages in the knowledge economy: the case of the emerging mega-city region of Munich. *Global Networks*, 10(1), 114-137. doi: 10.1111/j.1471-0374.2010.00277.x
- MacLeod, D. (2003, 16 September). Crying out for graduates?, *The Guardian* Retrieved from <http://www.guardian.co.uk/education/2003/sep/16/accesstouniv-ersity.highereducation>
- Mauss, M. (1950, 1990). *The Gift* (W. D. Halls, Trans.). Suffolk, UK: Routledge.
- Michl, J. (2007, 10 July 2010). A case against the modernist regime in design education Retrieved 10 June, 2011, from <http://janmichl.com/eng.apartheid.html>
- Miller, N., & Morgan, D. (1993). Called to Account: The CV as an Autobiographical Practice. *Sociology*, 27(1), 133-143. doi: 10.1177/003803859302700113
- Norman, D. (2010, 20 Jan 2011). Why Design Education Must Change. *Core77* Retrieved 20 Jan, 2011, from http://www.core77.com/blog/columns/why_design_education_must_change_17993.asp
- Paton, G. (2010, 18 October). Men with poor arts degrees 'worse off after graduating', *Telegraph*. Retrieved from <http://www.telegraph.co.uk/education/educationnews/8071394/Men-with-poor-arts-degrees-worse-off-after-graduating.html>
- Paton, G. (2011, 26 January). Graduate unemployment hits 15 year high, *Telegraph*. Retrieved from <http://www.telegraph.co.uk/education/educationnews/8283862/Graduate-unemployment-hits-15-year-high.html>
- Pratt, M. G., & Rafaeli, A. (1997). Organizational dress as a symbol of multilayered social identities. *Academy of Management Journal*, 40(4), 862-898.
- Rams, D. (2003). Dieter Rams, "Omit the Unimportant". In C. Gorman (Ed.), *The Industrial Design Reader* (pp. 208-211). New York, NY: Allworth Press.
- Rodgers, P. A., & Strickfaden, M. (2003). *The culture of design: a critical analysis of contemporary designers' identities*. Paper presented at the Design Wisdom: 5th European Academy of Design Conference, Universitat de Barcelona, Spain. <http://www.ub.edu/5ead/PDF/13/RodgersStrickfaden.pdf>
- Sands, J., & Worthington, D. (2007). High-level skills for higher value (pp. 72). London: Design Skills Advisory Panel and UK Design Industry Skills Development Plan.
- Sands, J., & Worthington, D. (2008). Design Blueprint *High-level skills for higher value* (pp. 58). London: Design Skills Advisory Panel and UK Design Industry Skills Development Plan.
- Shamir, B. (1986). Self-Esteem and the Psychological Impact of Unemployment. *Social Psychology Quarterly* 41(1), 61-71.
- Sosa, R., & Gero, J. S. (2005). A computational study of creativity in design: The role of society. *Artificial Intelligence for Engineering Design, Analysis, and Manufacturing*, 19, 229-244 doi: 10.1017/S089006040505016X
- Spitz, R. (2002). *HFG ULM: The View behind the Foreground* (I. JKlavina, Trans.). Stuttgart, Germany: Edition Alex Menges.
- Strickfaden, M. (2004, May 18-21). *Tin Tin, Topographical Map and Whiskey: The 'Cultural Capital' of Design Students*. Paper presented at the International Design Conference - Design 2004, Dubrovnik.
- Strickfaden, M., & Heylighen, A. (2010). Cultural Capital: A Thesaurus 121 for Teaching Design. *International Journal of Art & Design Education*, 22(2), 121-133. doi: 10.1111/j.1476-8070.2010.01653.x
- The Design Skills Advisory Panel. (2006). Design a New Design Industry: Design Skills Consultation (pp. 124). London, UK: Creative & Cultural Skills and the Design Council.
- The Office for National Statistics. (2011, 26 January). Graduates in the Labour Market: Unemployed graduates double Retrieved 14 April, 2011, from <http://www.statistics.gov.uk/cci/nugget.asp?id=1162>
- Tiger, L. (2008). *The Pursuit of Pleasure*. New Brunswick, New Jersey: Transaction Publishers.
- Tonso, K. L. (1996). Student Learning and Gender. *Journal of Engineering Education*, 85(2), 143-150.
- Tovey, M., Porter, S., & Newman, R. (2003). Sketching, concept development and automotive design. *Design Studies*, 24, 135-153. doi: 10.1016/S0142-694X(02)00035-2
- University of The Arts. (2008, 22 August). Plan for radical shake-up of arts education revealed Retrieved 14 January, 2011, from <http://www.arts.ac.uk/news/45603.htm>
- Valtonen, A. (2006). *Back and Forth with Ethics in Product Development: A history of ethical responsibility as a design driver in Europe*. Paper presented at the Opening the Black Box: Moral Foundations of Management Knowledge, Cergy Pontoise, France.
- Wenger, E. (1998). *Communities of Practice: Learning, Meaning, and Identity*. New York, NY: Cambridge University Press.
- Woodham, J. M. (1997). *Twentieth-Century Design*. Oxford: Oxford University Press.