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Screen-printing for Textiles: bridging the skills gap in higher education for industry-ready graduates

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Abstract

This article focuses on the teaching efficacy of screen-printing for Textiles in higher education. The paper discusses the effects of socio-economic challenges and student expectations about their employability after graduation. It compares data retrieved from questionnaires completed by industry professionals, recent graduates and current students, asking whether there is a need for skills based learning in a practical subject, exploring the impact of restricted teaching strategies. By highlighting limitations in learning outcomes that emphasize CAD-Photoshop when teaching repeat patterns, this paper demonstrates the importance of physical and practical elements of screen-printing for professional development.

Keywords

screen-printing, Textiles, action research, industry-ready graduates, skills-based learning

Introduction

Through action research, this research paper undertakes a comparative analysis that draws on data retrieved from questionnaires completed by industry professionals, recent graduates and current students. The questionnaires addressed the industry-ready agenda, which often advocates the need for skills based learning in a practical subject.

This study is directly influenced by feedback received from 3rd year students (specialising in Print) on the BA (Hons) Fashion Textiles course at London College of Fashion. Despite having almost completed a three year degree, many students were apprehensive about their future prospects and raised concerns about entering industry. They were worried about their limited skills and knowledge of 'screen-printing in repeat'. As a result of curricula developments, changes to pedagogic teaching strategies (Barnett, 2004) have altered the traditional structures of embedded practice in screen-printing, with students being taught techniques weighted towards using digital intervention, in this instance CAD-Photoshop, which removes an important, hands-on element of practice from this specialist subject.

The research was prompted by a contrast in teaching efficacy of this technique, which varied across UAL, revealing disparity in structured teaching strategies embedded in screen-printing for textiles. The varied confidence displayed by students who trained at each site, indicated significant differences in the teaching methods applied to screen-printing in repeat. The contrasting levels of practical skills and knowledge attained by students was unparalleled compared to similar courses in this specific area of practice across UAL, provoking the question, 'Are students fully equipped for 'Industry Practice'?

The hypothesis for this paper – advocating that teaching must address the need for skills based learning in a practical subject – is also influenced by alterations in student expectations as a result of socioeconomic changes in the creative economy of higher education. The rise in student fees has led to education being sold as a commodity (Carr and Kemmis, 1986), creating an added pressure to enhance employability, as student focus is increasingly directed towards the end goal of their degree: to transition into industry after graduation.

Rationale

The course handbook for BA (Hons) Fashion Textiles (2011) clearly outlines the framework of the curricula and learning outcomes attained by completion of the course. It states that students will receive instruction about the methodology of screen-printing in repeat. The *Student Handbook 2011: BA (Hons) Fashion Textiles* commits to fulfilling the following statements: 'The programme will equip you the wider professional' (LCF, 2011, p.5). It will, 'enable you to acquire knowledge and skills appropriate within their chosen field of specialist study related to the fashion industries' (p.10) and 'extend and apply your specialist knowledge and understanding; in order to initiate and carry out projects relevant to the fashion and textile design industry' (p.12). It also outlines that in Stage 2 students will receive 'Preparation for industrial placement' and gain an 'understanding of placement and repeat printing (LCF, 2011, p.18).

This description creates a variation between the pedagogic structures (Barnett, 2004) implemented in teaching and learning outcomes. Due to a shift in teaching practice, which used primarily digital procedures, students did not receive an in-depth practical demonstration of how to set up screen-printing in repeat and struggled to recognise the full potential of creating prints in this way. This limited knowledge and understanding generates inconsistencies in students' ability to undertake this traditional technique, with limited awareness of specific tools, equipment and the jargon required to fulfill this task.

Student engagement with the textile industry occurs through internships and work placements, an important core component of textile courses. These opportunities facilitate the exchange of core skills and knowledge between education and employment and they often lead to future employment through exposure to networking opportunities with professionals in industry (Ashton, 2010; Morley, 2001). Student feedback from work placements and similar connections with industry practice reveals limitations in the knowledge and ability being attained by students, who raise the question: why are we not taught how to screen-print in repeat? As a practitioner and educator in the discipline of Print, my facilitation of self-directed study sessions highlighted this sense of uncertainty about competencies and basic skills (Ashton, 2010). Is CAD-Photoshop a valuable and relevant learning tool when teaching Print today? The rationale for this case study aims to ascertain whether there is any truth in this theory.

Students' limited practical knowledge is also discussed in feedback retrieved from the questionnaires completed by industry professionals as part of this case study, (see Figure 4). Question 4 asks 'Is Screen-printing still considered as a significant form of production today in Fashion/Textiles?', to which a knowledgeable industry professional replied:

Yes, very much so. Only a very small amount of the world's textile production is done digitally – something like 7% – and screen or roller printing is accountable for the rest. Also digital printing can only give you one type of print – a colour print onto fabric – it can't print fluorescents or metallics, foils or discharge. People like to think digital will kill screen-printing but this is a very short sighted and dangerous view. (anonymous Industry Professional participant)

Responses to questionnaires also described student exposure to the textile industry following graduation from a 3 year degree in Fashion Textiles with a specialism in Print (see Figure 6) also reaffirmed the limitations of the course, indicating that obtaining practical skills and ability in this technique would prove beneficial.

Transitional changes and rises in the cost of education are counterbalanced by a necessity within higher education to ensure students leave with exceptional professionalism as well as the skills and technical knowledge fundamental to industry expectations. Developments in higher education have impacted all areas of learning and teaching in recent years. These rapidly evolving changes create uncertainty about the future direction of teaching, shifting the balance of education from that of a provider of learning and teaching, to a flourishing money making business. In 2012 the rise of tuition fees to £9,000, initiated a transition to consumer-led service, placing greater responsibility on teaching for fulfillment during study. In light of these social and economic changes, students expect more resources, better facilities, sufficient staffing, more teaching and techniques that can be utilised in industry. Lea, Stephenson and Troy (2003) describe how 'inside out' learning is a traditional attitude in classrooms, whereby teachers believe that we know what is best. The reality is that, as directed by students through customer oriented teaching, we must now undertake 'outside in' learning (Lea, Stephenson and Troy, 2003), by engaging with, managing and emphasizing student expectations through student-centred learning (Hanson, 2013).

The case study

In total, 4 research questionnaires were created, aimed at specific groups of people. The first 2 are student groups: on the 'BA Year 3 Fashion Textiles, specialism in Print' and those on 'FDA Year 2 Surface Textiles' (note: both of the above mentioned courses have now been phased out at LCF and replaced by the BA 'Fashion Textiles: Print' course). The final 2 groups included 'Industry Professionals' working in fashion and textiles and 'Recent Graduates' currently practicing in industry. These 4 groupings were selected to investigate the need to implement practical screen-printing techniques into lesson structures.

Students that were, at that time (2015), in their final year on the BA3 Fashion Textiles: specialism in Print, were a priority in this investigation, as I was keen to broaden their knowledge before they graduated. A demonstration was arranged and the practical process was explained through guided instruction, introducing students to the essential jargon and titles of the equipment. By using distinctively contrasting teaching methods during this session, students were encouraged to perform the technique themselves and a large amount of emphasis was placed on peer, transformational and experiential learning. The print work samples produced during the 'demo' became a fundamental tool and learning resource that were made accessible to all students and staff for use during subsequent open-access sessions and taught lessons, acting as examples that demonstrate the different effects produced with different techniques and tools. Feedback was gathered (verbally and through feedback forms) to establish whether the demo was helpful and to understand how confident this current year group felt (see Figures 1 and 2).

Informal feedback from BA3 Fashion Textiles: Print (following the Demo)

The impact of the brief session provoked questions amongst some of the students and the verbal feedback from the demonstration of screen-printing in repeat raised the following remarks:

'They should have shown us this at the beginning, in the first year'.

'Oh my god'.

'Everything I learnt about repeat, I learnt on my internship'.

'So everything I been doing in repeat has always been going wrong, and if I was told this or someone had showed us...'

'It's kind of common sense.'

Figure 1: BA3 Fashion Textiles: specialism in Print (2015) - demo feedback comments

Out of a cohort of 26, we had an enthusiastic response, with 15 students participating in the demo activity. More than 90% of students agreed that being shown this technique sooner would have improved their learning and teaching experience. Over 60% of students agreed that this technique would help them in design work placements and over 90% of students agreed that the induction had been useful to them (see Figure 2).

HAS THE SCREEN PRINTING IN REPEAT INDUCTION BEEN			WOULD YOU USE THIS TECHNIQUE NOW THAT YOU HAVE BEEN			COULD THIS TECHNIQUE HELP TO DEVELOP YOUR DESIGN			HAS THIS INCREASED YOUR SCREEN PRINT KNOWLEDGE?			WOULD IT HAVE BEEN USEFUL TO BE SHOWN SOONER?			DO YOU HAVE ANY QUESTIONS PLEASE?		
USEFL	UL TO	YOU?	9	SHOWN	1?	PL	ACEME	NT?									
Υ	N	N/A	Υ	N	N/A	Υ	N	N/A	Υ	N	N/A	Υ	N	N/A	Υ	N	N/A
	0	_	11	1	2	9		0	14	0	0	14	0	0	3	8	1

Figure 2: BA3 Fashion Textiles: specialism in Print (2015) – demo feedback form responses.

The set of feedback forms on the demo informed the responses displayed in Figure 2, which measures levels in student satisfaction in relation to student expectation. This data analysis contributed to the next stage of this enquiry; when the Industry Professionals were approached in order to gain insight into opinions from outside higher education. The central question in the Industry Professional questionnaires asked, 'Is it more useful to be able to create repeat patterns in Photoshop than manually by Screen-Printing?'. Industry Professional responses stated that understanding repeat manually provided useful insights that can be transferred into CAD-Photoshop, but that screen-printing is the most popular way of working in both fashion and textiles (see Figure 4).

The demo also informed the student questionnaires. The research questionnaires that were distributed to 2 student groups posed the following question: 'Rate your level of competency in screen-printing 1-10 and why?' (with the score of 10 as the highest). In a cohort of 26 students on BA3 Fashion Textiles: specialism in Print (see Figure 3), 21 students responded, of which 20 rated themselves between 5-9 in screen-printing competency. The FDA2 Surface Textiles students (see Figure 5) had a cohort of 24 students and 16 students responded to the questionnaires, out of which 15 rated themselves between 6-10 for level of competence attained in screen-printing techniques.

In response to feedback from BA3 Fashion Textiles: specialism in Print and FDA2 Surface Textiles students, these findings were disclosed to other members of staff immediately, so that teaching could address students' sense of uncertainty. Changes to lessons were implemented through strategic planning and screens were developed for the next FDA2 lesson by the course tutor. The evidence presented by these responses (Figures 3, 4, 5, 6) reiterates that screen-printing is important when working in industry and that students were not yet fully confident in this technique, an outcome that led to an immediate change in how the students were taught. In 'Learning for an unknown future' (2004), Ronald Barnett outlines that the challenges faced by teachers are unique and suggests that the curriculum and pedagogy often fails to consider the 'unknown future' that makes for adaptive teaching practice. In this case, all teaching staff responded swiftly: the questionnaires proved a helpful means to measure current knowledge so that lesson strategy could react quickly to this unanticipated skills gap.

Discussion

The conversations prompted by these research results led to instant reactions in teaching. It is difficult to comprehend why the subject of screen-printing in repeat had encountered obstacles, particularly when it is such a vital skill in industry. What began as a genuine area of concern created changes in both 'academic teaching' and the 'learning space' (Court, 2001). The findings in *Building the academic team: a report on the contribution of academic-related staff to the delivery of higher education*, compiled by Stephen Court (2001), explains some reasons that may account for staff reaction to these results in our department, one being the segregation between academics and technicians that divides professional development. These factors may have meant that the subject was not taught to the extent required and be reflective of the distinctions between job roles. However, as revealed by the reaction of staff, all practitioners inevitably have one common goal. Teaching is judged by the standards of outputs and achievements of students and not by the title or position of staff members.

This research created challenges that are connected to these working relationships and staff titles. However, it was utilised as an opportunity to develop communication and language with peers (Pondy, 1967). Various types of conflict can be triggered by a series of events and Louis Pondy identifies five types of organisational conflict, with the following headings: 'latent conflict'; 'perceived conflict'; 'felt conflict'; 'manifest conflict'; and 'conflict aftermath' (Pondy, 1967, p296-320). If conflict is felt, but was not intentional, this can be signified as perceived conflict, a situation this case study reveals due to the conflict between screen-printing's importance and its practical application in teaching. The definitions of conflict, whether deliberate or perceived, are relative to the actions that create the effects of felt conflict. In an environment such as the university, with contrasting personalities, cultures and levels of professional identity, it is possible for shared spaces to become compressed and these dynamics can create concerns and conflict between what is taught and what students expect and require.

Paulo Friere's book, *Pedagogy of the Oppressed* (1996) outlines situations that are linked to the circumstances of conflict revealed by this research. Freire indicates that the oppressor and the oppressed are often in conflict, as neither of them regards the other's role as that of an individual and instead bases it on their own set of understandings. This conflict is connected to our abilities and knowledge of what we do and we perceive to be acceptable in terms of each other's behaviour. The book reveals the main reasons for the behaviour of the oppressor result from a specific set of personal ideals and beliefs and a necessity to control the oppressed. This observation was particularly insightful when analysing the research results. I questioned whether the misinterpretation of my proposal - and the uncertainty of any effects that it would

have on the National Student Survey - could have been avoided and what they had truly stemmed from. Was it purely, as Freire suggests, the need for control and empowerment?

As educators it is crucial that we remind ourselves of the purpose of our role, at all levels. Staff aim to provide students with excellence in teaching and meaningful learning experiences. We benefit from identifying the changes that are an intrinsic aspect of creating a solid core for each subject discipline. By taking into account the importance of team focus, and balanced by the fact that the extra demo developed samples that could be used as learning and teaching resources for students and tutors alike, this process resulted in shared learning and teaching resources (Freire, 1996).

Conclusion

The purpose of this paper was to highlight and indicate the need for screen-printing in repeat to be demonstrated and taught practically to enhance teaching efficiency in a practical subject. This approach contrasts with the use of paper based formations, with an emphasis on digital technology (CAD-Photoshop). In a world driven by digital technologies, where technological inventions are a necessity, they are changing the face of the textile industry and Print is rapidly evolving. The challenges faced by academic staff present a fascinating picture, revealing the important connection between education and industry.

There were two important points to consider when evaluating how industry and education are interconnected and the drive towards skills based learning for industry ready graduates. Firstly, learning and teaching always exist in the here and now: knowledge is based on what is considered to be significant to our existence today. Secondly, whilst it was not possible to develop a full picture of Print teaching in the future, it is essential to understand the full extent of current possibilities, and ensure that students are adequately equipped so 'A human flourishing here is precisely that of living effectively amid uncertainty' (Barnett, 2004, p.257).

The intention of this study was to evaluate the delivery of screen-printing in the methodologies and strategies of teaching and learning. The paper addressed the complexities of both student needs and industry expectations, and the ways these inform how we facilitate and deliver necessary improvements to teaching by measuring student expectation in the discipline of Print and the specific technique of screen-printing in repeat. This case study represents an effort to elevate current student knowledge and encourage student skills.

Feedback received from this study indicated the importance of uniting CAD-Photoshop and digital training with the practicality of screen-printing in teaching structures. Practical learning demonstrates the hands-on physicality important to this specialist subject and profession. Digital intervention supports these lessons, and the combination of both breaks away from the established structures used in the past whilst forming collaborative working relationships, both peer-to-peer and between teaching staff and industry professionals.

As a result of this study's findings changes to teaching have now been implemented in the newly revalidated BA (Hons) Fashion Textiles: Print course at LCF. The integration of this feedback into the new course, which revealed that more practical experience in screen-printing was needed, confirms the importance of imbedding a practical demonstration in to the current lesson structure. New students will benefit from these changes. The new course has involved curriculum intervention, but these changes to lesson plans have highlighted other limitations in resources arising from the size of studios, availability of tools and teaching staff. It is not, as yet, possible for this particular technique to be experienced by all students in their lesson,

suggesting that the opportunity to develop this skill must be fostered through collaborative projects.

References

- Ashton, D. (2010) 'Productive passions and everyday pedagogies: exploring the industry-ready agenda in higher education', *Art, Design and Communication in Higher Education*, 9(1), pp. 41-56, http://dx.doi.org/10.1386/adch.9.1.41_1.
- Barnett, R. (2004) 'Learning for an unknown future', *Higher Education Research and Development*, 23(3), pp. 247-260, http://dx.doi.org/10.1080/0729436042000235382.
- Bell, J. (2005) *Doing your research project: a guide for first-time researchers in Education, Health and Social Science*. 5th edn. Maidenhead: Open University Press.
- Belsey, C. (2002) *Poststructuralism: a very short introduction*. New York: Oxford University Press.
- Burbules, N. and C Berk, R. (1999) 'Critical thinking and critical pedagogy: relations, differences, and limits' in Popkewitz, T.S. and Fendler, L. (eds.) *Critical theories in education: changing terrains of knowledge and politics (social theory, education and cultural change)*. New York: Routledge. pp. 1-17.
- Carr, W. and Kemmis, S. (1986) *Becoming critical: education knowledge and action research*. London: Routledge.
- Court, S. (2001) Building the academic team: a report on the contribution of academic-related staff to the delivery of higher education. Available at: https://www.ucu.org.uk/media/pdf/h/j/academicteam.pdf (Accessed: 22 June 2016).
- Ferreira, L.M. and Devine, D. (2012) 'Theatre of the oppressed as rhizome: acting for the rights of indigenous peoples today', *Latin America Perspectives*, 39(2), pp. 11-26, http://dx.doi.org/10.1177/0094582X11427888.
- Freire, P. (1996) *Pedagogy of the oppressed*. Translated by M. Bergman Ramos. London: Penguin.
- Hanson, J. (2013) 'Educational developers as researchers: the contribution of insider research to enhancing understanding of role, identity and practice', *Innovations in Education and Teaching International*, 50(4), pp. 388-398, http://dx.doi.org/10.1080/14703297.2013.806220.
- Kumari, K. (2015) *Screen-printing in repeat demo*. Available at: http://www.youtube.com/watch?v=DtZxh4JSrBY (Accessed: 22 June 2016).
- Laidlaw, M. (1996) How can I create my own living educational theory as I offer you an account of my educational development?. PhD thesis. University of Bath. Available at: http://www.actionresearch.net/living/moira2.shtml (Accessed: 22 June 2016).

- Lea, S.J., Stephenson, D. and Troy, J. (2003) 'Higher education students' attitudes to student-centred learning: beyond 'educational bulimia?', *Studies in Higher Education*, 28(3), pp. 321-334, http://dx.doi.org/10.1080/03075070309293.
- McNiff, J. (2002) Action research for professional development: concise advice for new action researchers. 3rd edn. Available at: http://www.jeanmcniff.com/ar-booklet.asp (Accessed: 22 June 2016).
- Morley, L (2001) 'Producing new workers: quality, equality and employability in higher education', *Quality in Higher Education*, 7(2), pp. 131-138, http://dx.doi.org/10.1080/13538320120060024.
- Nixon, J. (1996) 'Professional identity and the restructuring of higher education', *Studies in Higher Education*, 21(1), pp. 5-16, http://dx.doi.org/10.1080/03075079612331381417.
- O' Locker, K. (1997) *University of Wisconsin-Madison Writing Center Writer's Handbook*. Available at: http://writing.wisc.edu/Handbook/presentations_abstracts.html (Accessed: 22 June 2016).
- Orr, L. and Shreeve, A. (eds.) (2002) *Art, Design & Communication in Higher Education*, 13(2). Available from: http://www.intellectbooks.co.uk/journals/view-issue,id=2807/ (Accessed: 22 June 2016).
- University of Oxford (2016) *Oxford Learning Institute: evaluating your teaching.* Available at: https://www.learning.ox.ac.uk/support/teaching/resources/evaluate/ (Accessed: 22 June 2016).
- Pondy, L.R. (1967) 'Organizational conflict: concepts and models', *Administrative Science Quarterly*, 12(2), pp. 296-320, http://dx.doi.org/10.2307/2391553.
- West, P.W.A. (2006) 'Conflict in higher education and its resolution', *Trends in the management of human resources in higher education conference*. OECD Headquarters, Paris, 25-26 August. Available from: https://www.oecd.org/edu/imhe/35322860.pdf (Accessed: 22 June 2016).

Biography

Kavita Kumari is a specialist print and dye technician at LCF and also works as an associated tutor for Artscom. Since graduating from Central Saint Martins, BA (Hons) Textiles for Print, she has worked as a freelance fashion-print designer (Calvin Klein, New York), shown in independent and collaborative exhibitions, and created commissioned for Jujus, Village Underground, corporate events and New Designers. Kavita is a Fellow of the Higher Education Academy.

Appendices

Question 1: How useful was your lesson for screen-printing in repeat?

- 1. No, because I do not work in repeat
- 2. I don't really remember having an intense lesson in repeats. Although we should have!
- 3. ---
- 4. If I remember rightly, we only had one lesson focusing on repeat pattern, which I found rather...
- 5. I never had one and if I did I can't remember so not very. I learnt at Internship
- 6. I haven't had a lesson in Screen-Printing in repeat (well from what I remember)
- 7. Repeat lesson Yes Good but then using it in Screen-Printing was not taught
- 8. Useful
- 9. Not much I already a lot about repeat via Photoshop
- 10. Didn't have the lesson but it would be useful
- 11. Very useful
- 12. Very useful
- 13. Could use more guidance for repeat Printing, as we did not receive official lessons, just help from technicians.
- 14. Not very 7/10
- 15. It's not that important because after knowing one Screen-Print I can repeat by myself
- 16. It was interesting to learn about different Screen-Printing repeats they are really useful for the project
- 17. Sometimes the information is a lot repeat help us better remember the rule
- 18. Practice more, and let me in good control with the techniques and find my own pathway
- 19. A really useful lesson so that you can show you how to repeat in your portfolio
- 20. I don't remember it I don't think we've done one...awkward _
- 21. Good
- 22. We had a very basic intro. I hardly understand/ know how to do a proper/good repeat especially in CADs

Question 2: Do you think it is important for you to learn how to Screen-Print in Repeat?

- 1. Not really
- 2. Of course not every Print in fashion is placement. Learning repeats is difficult and I only learnt at my internship
- 3. Yes
- 4. Yes I think it is very important to learn how to Screen-Print in Repeat
- 5. Yes obviously not everything in the fashion world is a placement print. It would be like a pie with no filling if that was the case
- 6. Yes
- 7. Yes for industry and Print knowledge
- 8. Very important
- 9. Yes because industry use repeat patterns all the time
- 10. Yes definitely gives a lot more options for printing
- 11. Very Important
- 12. I don't like repeat patterns
- 13. Yes! Especially required skills for Print students
- 14. Yes!
- 15. Tell some tips, that's fine. Doesn't need spend to much on it
- 16. Print is all about repeating. That's what I normally do
- 17.I think so. Sometimes learn one technique, technician doing it is easy, but when student

doing their own one will make mistake

- 18. It good, I can consider the layer, colour and fabric
- 19. Yes because the industry expects your knowledge in it
- 20. YES, embarrassment in industry
- 21. Yes
- 22. Yes. Anyway, it'll be always relevant

Question 3: Would you like to have a workshop for screen-printing in repeat?

- 1. No thank you
- 2. Yes this would be extremely helpful, how can we go into industry without knowing this?
- 3. Yes
- 4. Yes but it may be too late
- 5. Yes
- 6. Yes
- 7. Yes, then the whole day to practice the process
- 8. Yes
- 9. Not really
- 10. Yes, I wish we had lessons on making repeats
- 11. Yes
- 12. No
- 13. Yes. Need to be more confident with this
- 14. Yes
- 15. Not really
- 16. Yes, would be really helpful
- 17. Yes, this is good for creative
- 18. Half and half! I have learnt more different kind of skills
- 19. Yes, I think it would be useful if you are planning on going into Screen-Printing
- 20. Yes
- 21. Yes
- 22. Yes

Figure 3: BA3 Fashion: Textiles specialism in Print (2015) – questionnaire feedback

Question 1: In contrast to Digital Printing, how popular do you feel Screen Printing is in Industry today?

- 1. Very.
- 2. Designing in-house digital is much quicker, however a lot of retailers purchase digital prints and then mills produce designs in screen-print at the production stage.
- 3. In general, not as popular, although I would put this down to the fact digital printing is much cheaper and more accessible than screen-printing. Even though people would probably like to choose screen over digital because there's so many more options with screen, you can never under-estimate how much price will influence people's design decisions in the end.

Question 2: What are the basic requirements in Industry expected from a recent graduate with a specialism in Textiles: Fashion Print (Screen Printing)?

- 1. Knowledge of repeat and various printing techniques other than just digital.
- 2. Strong drawing ability, very commercial, can translate trends and themes, good eye for colour, good general knowledge of the industry.
- 3. Knowledge of how to take a initial design through every stage to get it to a final screen printed length. Art work prep, screen prep, screen exposure and setting up a correct repeat. Printing multiple colour and technique prints. Printing a full colour repeat length.

Knowledge of colour mixing and theory as well as fabrics.

In education, emphasis needs to be taken away from the final design of a piece and put back on learning screen printing as a craft, so that the student can use the knowledge of all the different techniques involved to create great design. Like a fashion student should learn pattern cutting in order to be able to strengthen their design skills.

Question 3: Is it more useful to be able to create repeat patterns in Photoshop than manually by Screen Printing?

- 1. Important to understand that it is possible to create repeats by hand before relying on Photoshop.
- 2. Photoshop! Factories and Mills produce their own silk-screens for printing using your Photoshop layers.
- 3. Yes, although knowledge of the traditional way of preparing a repeat for screen is good to know. Photoshop and other computer applications are standard throughout the industry. Screen-printing should use as much modern technology as possible, there is no need to keep it anchored in the past by the insistence on using out of date techniques.

Question 4: How important is it for graduates to have the ability to Screen Print in Repeat?

- 1. Essential
- 2. In our studio it is not a needed skill, as we only design on computers. We are never asked if we have screen printed designs as most clients know that 'digital' is the way we move in industry is moving atm.
- 3. Whether they want to go into the industry as a textile printer or designer it is very important.

Question 5: Is Screen Printing still considered as a significant form of production today in Fashion/Textiles?

- 1. Yes.
- 2. At the Factory/Mill stage, but not the initial design stage.
- 3. Yes, very much so. Only a very small amount of the world's textile production is done digitally something like 7% and screen or roller printing is accountable for the rest. Also digital printing can only give you one type of print a colour print onto fabric, it can't print fluorescents or metallics, foils or discharge. People like to think digital will kill screen-printing but this is a very shortsighted and dangerous view.

Figure 4: Industry Professionals questionnaire feedback (2014)

Question 1: How useful was the lesson in Screen-Printing in Repeat?

- 1. Yes
- 2. Very useful
- 3. Quite helpful, slightly confusing & took up an entire Print Session
- 4. 8
- 5. Very useful. Really good to know
- 6. 5 (it's quite easy to understand, don't even need to use a lesson to teach us)
- 7. It was very useful I think it would have been better shown to us before the end of term as we're all trying to rush to get finished for hand in.
- 8. Very useful!
- 9. I have attended the paper, Repeat demo but not the actual, Repeat Screen Printing Demo
- 10. It really useful for to do the garment
- 11. Quite useful

- 12. OK
- 13. Very much needed
- 14. Very, for future knowledge
- 15. Absent for practical but have done the paper repeating technique
- 16. Good

Question 2: As a Printer do you think it is important for you to learn how to Screen Print in Repeat?

- 1. Yes
- 2. Yes I do
- 3. Yes
- 4. Yes
- 5. Very important
- 6. yes, because the fashion industry was very into repeat pattern
- 7. Very important
- 8. Yes! Helps develop your design in to a larger scale
- 9 Yes, Very
- 10. Yes
- 11. Yes
- 12. Yes
- 13. Making repeats is one of the most important thing in screen printing to Print on bigger fabrics with continuing
- 14. Yes, Very important
- 15. Yes
- 16. Yes

Question 3: What would you like to learn before you go into industry?

- 1. Nothing I can think of extra
- 2. More about actual fabrics & Fibres & there processes
- 3. How to make garments properly & pattern cutting
- 4. ---
- 5. How things are done in factories & Production
- 6. 3D Printing
- 7. More about Digital Print, Maybe a lesson or two on using Photoshop for Print
- 8. How to properly master the Flock! ©
- 9. Not sure yet...
- 10. Pattern Cutting
- 11. Pattern Cutting
- 12. At moment all good
- 13. Digital Printing
- 14. Professional standard of Devore
- 15. More Photoshop & Repeat technique
- 16. Batik with wax

Figure 5: FDA2 Surface Textiles (2015) - questionnaire feedback

Question 1: How prepared for Industry were you when you graduated?

- 1. After I graduated, I was 60% ready for industry. I applied for many roles in the Fashion Industry' but was always told I do not hold enough experience.
- 2. Not very.
- 3. I didn't really feel that prepared for industry at all after I graduated despite all my internships.
- 4. For Textile screen-printing I was very prepared, however more of digital and repeat printing could have been explored.
- 5. Technically and visually I developed many skills in all aspects of art and design. But I think our college could develop us more on business side of the fashion and textile industry as well. I think it is very important to design visually appealing conceptual garments or fabrics but what is our market? How the pricing should be? What the industry is seeking for? We could be more educated on this part as well as the design bit as well.
- 6. Very prepared.
- 7. I was not prepared for the industry at all not because I did not know anything but because I was unable to find a job. During our studies we were not given in-depth details to what the industry would be like for print/fashion graduates and how it differs from university life. There was not enough information given to students on what job paths there are for print graduates and how jobs like freelance would benefit us.

Question 2: Have you encountered any obstacles with your ability or skill set within your specialist subject of Screen Printing?

- 1. Not being able to afford the specialist equipment needed to expose a screen e.g. exposure unit, binding and screens. Lack of space to get creative with my ideas- working in a confined space is not easy.
- 2. Difficult to afford space and machinery after leaving Uni.
- 3. Not really.
- 4. No.
- 5. Not really, But I have to admit that the information I inhaled through the course has helped me to widen my horizon. But I am so much skilled because I continued my journey of learning and improving my skills after graduation as well.
- 6. No.
- 7. I definitely would recommend the course to everyone as I really enjoyed the course so much. The best part of my course was the path I choose which was print. It was a fantastic three years and print was the best part of my studies I really wish we had the chance to spend more time in the print room to experiment and learn more techniques and produce more samples.

Figure 6: Recent Graduates (graduated 2013) - selected questionnaire feedback