



Fine arts graduates and innovation

*The art of innovation*¹ is an enquiry into how fine arts graduates contribute to innovation throughout their working lives. Based on a survey of over 500 fine arts graduates from the University of the Arts London since the 1950s, plus a series of extensive one-to-one interviews, the report for the first time shows the different ways in which fine arts graduates support and stimulate innovation.

Previous research by NESTA has explored the ways in which the creative industries can encourage innovation in the wider economy.² This policy briefing argues that fine arts graduates are well adapted to the needs of the knowledge economy, but that there are barriers, including long-standing attitudes and biases, to the contributions they make to innovation. Public policy should act to lower these barriers without compromising the artistic integrity of artists' work.

Fine arts graduates have the skills needed for successful innovation

Successful innovation demands a particular skillset

Successful innovation requires individuals to deploy a combination of technical, cognitive and interpersonal skills, alongside the basic competencies developed by all education.³ Technical skills, being highly subject-specific and integral to a job, are the most obvious requirement. These cover not just traditional science, engineering and technology (SET) qualifications, but also broader subject areas that directly contribute to a person's ability to perform a task – for example, writing skills for media and journalism, or the technical skills needed to make works of art.

Cognitive skills, by contrast, are not subject-specific. They include problem-solving, collaboration, adaptability, risk-taking and creativity. These are the building blocks of thinking, learning and effective doing.⁴

Innovative thinking requires a combination of analysis and interpretation.⁵ Technical skills are needed for good analysis: grounding rational, decision-making when alternative outcomes are well understood and can be clearly defined. Cognitive skills are needed for interpretation, which involves collaborative exploration where possible outcomes are unknown. They are less about solving clearly defined problems than initiating and guiding conversations.

Fine arts graduates have many of the skills needed for wider innovation

The art of innovation finds that, when they describe their own work, fine arts graduates describe a process which is akin to the notion of interpretive innovation, involving collaborators across sectors, industries, and disciplines.⁶ They characterise themselves as brokers across disciplines, taking insights and techniques from one field and translating them creatively into another.⁷

These interpretive skills are central to the creation of new, usable knowledge. The ability to take tacit or implicit knowledge or experiences, for example, and creatively transform them into usable products and services is at the heart of successful innovative firms.⁸

The research also suggests that fine arts graduates are lifelong learners, making use of formal and informal training throughout their working lives, regardless of their occupations.⁹ The capacity for independent learning is linked to artistic education itself. Unstructured time in a studio is central to the UK art school model, and learning is a process of discovery, aided, but not directed, by experts.¹⁰

And they work in uncertain and risky 'markets'

Although they do not typically define their activities as 'innovative', fine arts graduates at work consistently behave and produce

1. Oakley, K., Sperry, B. and Pratt, A. (2008) 'The art of innovation: how fine arts graduates contribute to innovation.' London: NESTA.
2. Higgs, P., Cunningham, S., and Bakhshi, H. (2008) 'Beyond the creative industries: Mapping the creative economy in the UK.' London: NESTA; Bakhshi, H., McVittie, E. and Simmie, J. (2008) 'Creating innovation: Do the creative industries support innovation in the wider economy?' London: NESTA.
3. Csikszentmihalyi, M. (1996) 'Creativity: flow and the psychology of discovery and invention.' New York: HarperCollins Publishers.
4. Bloom, B.S. (1956) 'Taxonomy of Educational Objectives. Handbook I: the Cognitive Domain.' New York: David McKay Co. Inc.
5. Lester, R. and Piore, M. (2004) 'Innovation: The Missing Dimension.' Cambridge, MA: Harvard University Press.
6. Ibid.
7. Oakley, K., Sperry, B. and Pratt, A. (2008) 'The art of innovation: how fine arts graduates contribute to innovation.' London: NESTA. p.32.
8. Nonaka, I. and Takeuchi, H. (1995) 'The knowledge creating company.' Oxford: OUP.
9. Oakley, K., Sperry, B. and Pratt, A. (2008) 'The art of innovation: how fine arts graduates contribute to innovation.' London: NESTA. pp.29-30.
10. Mulvey, J. (2006) 'Inside HE: Art of Freedom.' Newcastle-upon-Tyne: HERO.

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in innovative ways. They work in highly uncertain, inherently risky – although not always commercial – markets where originality is praised and ‘imitation’ often disparaged. Over three-quarters of the fine arts graduates surveyed say they had a strong ‘willingness to change or try new things’.¹¹

The art of innovation shows how markets can act as an important discipline on fine artists’ work, challenging conventional assumptions about artists’ ideas and ways of working.¹² In this way, artists can learn to adapt and shape their work to suit consumer demand and fast-paced shifts in fashion. Responding to markets themselves can therefore in effect stimulate artistic innovation, in a manner analogous to other sectors.

Artists’ own consumption of art is an important dimension of their market awareness, providing them with a context for the market in which they operate. Even among graduates who work solely in the fine arts, there are few who work on a totally autonomous basis.¹³

But there are barriers to the contribution that fine artists make to innovation in the wider economy

The majority of fine arts graduates work in the arts as their primary occupation...

Around 60 per cent of fine arts graduates surveyed in *The art of innovation* work in the cultural and creative industries.¹⁴ Some of this reflects a conscious effort by the graduates to remain as ‘artists’ within the cultural industries.¹⁵ But it also reflects the rapid growth of these sectors over the last 50 years.¹⁶ There has been a broadening of cultural activities, with new technologies allowing the diversification of existing forms of art, and the creation of entirely new cultural products, such as videogames.

...despite the large number of creative workers employed elsewhere

Culture is becoming a more important part of production in general – cultural ideas and images are now integral to products, from running shoes to shopping centres.¹⁷

Previous NESTA research shows that there are more creative professionals working outside the creative industries than inside. Some 54 per cent of specialist creative workers are employed in non-creative sectors.¹⁸

And employers have identified a need for non-technical skills

A training in fine arts provides the skills that are of widespread value in a knowledge-driven economy. Employers are now reporting greater shortages in problem-solving, communication skills and teamworking than in basic literacy.¹⁹ When asked, UK businesses name ‘creativity and innovation’ as the most important skill, quality or aptitude that they would expect graduates to need in ten years’ time.²⁰

Likewise, human resources managers name communications, creativity and innovation as significantly more important than numeracy and literacy when recruiting new graduates.²¹ These aptitudes are essential for graduates to make effective use of their technical skills inside organisations.

Links to creative industries stimulate innovation

Other NESTA research documents possible innovation benefits for businesses that are buying in creative goods and services.²² In particular, firms with stronger business-to-business links with creative businesses appear to be more likely to introduce product innovations. If the typical firm in the UK economy spends twice as much as it does on creative products – 6 per cent as opposed to 3 per cent of its own output – it is 25 per cent more likely to introduce a product innovation.

However, the contribution of fine arts graduates to the rest of the economy is greater than the primary occupations data suggest

Although most fine arts graduates list their primary occupation as within the arts and cultural industries, nearly 40 per cent of survey respondents hold a second job. Of these, around three in five hold a second job outside the cultural industries in education, health care, and other service sectors.²³

As a result, fine arts graduates are likely to be adept at switching between employment in different sectors, and adroit at shifting their skills into new kinds of work. It is telling that very few arts graduates interviewed in *The art of innovation* had worked solely in fine arts throughout their careers.²⁴

Businesses are often unaware of the value of the wider skills developed by a fine arts education

However, some graduates perceive a lack of awareness among employers about the particular skills fine arts graduates can bring to

11. Ibid. p.25.

12. Ibid. p.27.

13. Bain, A. (2005) *Constructing an Artistic Identity*. ‘Work, Employment and Society.’ 19(1), pp. 25–46.

14. Oakley, K., Sperry, B. and Pratt, A. (2008) ‘The art of innovation: how fine arts graduates contribute to innovation.’ London: NESTA. p.22.

15. Throsby, D. and Hollister, H. (2003) ‘Don’t Give Up Your Day Job: an economic study of professional artists in Australia.’ Sydney: Australia Council.

16. Andari R., Bakhshi, H., Hutton, W., O’Keefe, A. and Schneider, P. (2007) ‘Staying Ahead: the economic performance of the UK’s creative industries.’ London: The Work Foundation.

17. Lash, S. and Urry, C. (1993) ‘Economies of Sign and Space.’ London: Sage Publications.

18. Higgs, P., Cunningham, S. and Bakhshi, H. (2008) ‘Beyond the creative industries: Mapping the creative economy in the UK.’ London: NESTA.

19. Learning and Skills Council (2006) ‘National Employers Skills Survey 2005.’ London: LSC.

20. Gillinson, S. and O’Leary, D. (2006) ‘How to reconnect young people and organisations.’ Based on GfK NOP polling carried out for Demos. When asked: ‘Which do you believe to be the most important skill, quality or aptitude for potential graduate employees to have in ten years’ time?’, 24 per cent answered ‘creativity and innovation’.

21. Ibid. p.38.

22. Bakhshi, H., McVittie, E. and Simmie, J. (2008) ‘Creating Innovation: do the creative industries support innovation in the wider economy?’ London: NESTA.

23. Oakley, K., Sperry, B. and Pratt, A. (2008) ‘The art of innovation: how fine arts graduates contribute to innovation.’ London: NESTA. p.23.

24. Ibid. p.23.

non-arts businesses.²⁵ The language used by businesses can impose a barrier to exploiting the full potential of the interpretive innovation that fine artists excel in.²⁶

Policy can lower the barriers to crossover and reinforce the impact that fine artists have on the wider economy and society

Art schools only partly prepare fine arts graduates for their work in the wider labour market

Art schools maintain an ethos and commitment to a classical art education, incorporating substantial (though perhaps diminishing) focus on technical skills, and the development of creative thinking in an environment characterised by relatively infrequent tutor-student contact and significant student-led learning. These are the traditional strengths of the UK art school education, and they build the capacity to think independently, make decisions, network and take risks that support the impetus to innovate.

This pedagogic model provides the base for the range of skills and aptitudes that fine artists require, and, as we have discussed, is of potentially significant broader value in the knowledge economy. But few specialist art schools provide courses designed to prepare fine artists for the wider economy, although there is clear evidence that most fine artists will – at some point in their lives – work outside the arts.

But education institutions must respect fine arts graduates' motivations for studying fine art

An awareness of business and of the wider value of their cognitive skills would give art students more self-confidence in seeking work outside traditional arts occupations, and better prepare them for the labour market. A forum of 50 academics, the Group for Learning in Art and Design (GLAD), has recently called for greater business learning and interdisciplinarity in art-school education.²⁷

However, giving fine arts students an awareness of business is one thing, but teaching them to become business people is another: any reforms to the art education syllabus must respect the motivations and aspirations of art students. Research has found a strong suspicion of formal 'business' education amongst art students, who regard it

as promoting commercial gain at the expense of other values.²⁸

Art schools should encourage work-related learning in non-arts and cultural sectors

Work-related learning (WRL) can both provide students with a broader range of skills on graduation, and help employers gain a better understanding of the skillset graduates can bring to a workplace.²⁹ Whilst some colleges currently offer some WRL and work experience opportunities, such schemes should be broadened. Art schools should encourage their students to undertake an imaginative range of WRL, outside of the 'traditional' cultural and arts sectors.

Fine arts graduates' skills deserve wider recognition from skills bodies

The skills of fine arts graduates are of growing importance to the UK economy, where transferable skills and aptitudes for teamworking, creativity and independent learning are vital to knowledge-intensive activities. But the rhetoric of skills bodies sometimes suggests that there is an 'oversupply' of arts graduates relative to business skills.

Policymakers and funding providers in the higher education (HE) sector should ensure that the skills of fine arts graduates and the training that a fine arts education provides are properly recognised across the HE system, and that general business, management and entrepreneurial training is not inappropriately privileged.

We must preserve the best of the traditional UK art school in an age of mass higher education – one that stimulates exploration, independence of working and a nature of enquiry

The expansion of HE has allowed thousands more students to participate in academic life, gaining vital skills and experience. A modern, knowledge-based economy requires a highly-educated workforce, but the desire to broaden participation and improve skills through expanding HE places should not be allowed to compromise the quality of education in art schools.

Reforms to art school education, such as those proposed here, should retain the best features of the old system – unstructured studio time and easy access to tutors and technicians – whilst serving the needs of the wider labour market. Art schools and colleges should, for example, consider building greater use of

25. Ibid. p.41.

26. Lester, R. and Piore, M. (2004) 'Innovation: The Missing Dimension.' Cambridge, MA: Harvard University Press. p.33-34.

27. The Guardian (2008) 'Art and design degrees "need overhaul".' 26 August 2008.

28. HEA and NESTA (2007) 'Creating Entrepreneurship: Entrepreneurship Education for the Creative Industries.' London: HEA and NESTA.

29. Crowley, T. and Rolfe, H. (2008) 'Delivering work-related learning for an innovation nation.' London: NESTA.

distance-based and electronic learning into their courses as potential means to deliver this goal.

Policy should recognise the complexities of artists' careers and the need for artists to maintain their identities as artists

Policies to stimulate the contribution of fine artists to innovation in the wider economy are in a nascent stage. But they must recognise the complexity of fine arts graduates' career experiences. Fine arts graduates typically work in several sectors and occupations over the course of their working lives – often at the same time – and enter into periods of employment and self-employment at different career points.

Policymakers must also recognise the reluctance of fine arts graduates to take up occupations where they cannot identify themselves as artists, and the possibility that employers – and skills agencies – place insufficient weight on their cognitive skills.

Making effective use of their skills for innovation will require flexibility in the implementation and delivery of public policy, and a sensitivity to artists' own perceptions of their work.

NESTA is the National Endowment for Science, Technology and the Arts – a unique body with a mission to make the UK more innovative. We invest in early-stage companies, inform and shape policy, and deliver practical programmes that inspire others to solve the big challenges of the future.

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