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About me - Furniture designer-maker-educator.

I have been directly involved in the furniture industry for over 20 years. After completing a BA (Hons) Furniture Design and Craftsmanship I initially worked as a bespoke furniture designer, maker and production coordinator before returning to educate the next generation of furniture designers and craftspeople at Rycotewood in Oxford. Rycotewood has an 80-year heritage in delivering furniture education and I was course leader of the BA (Hons) Furniture Design and Make programme for the past nine years — the last such programme to teach furniture craft skills in depth. I particularly enjoy developing industrial partnerships leading to live projects, study trips, work experience, internships, and sponsorship for students. I strongly believe in the need to practice craft skills and that each student must have access to have their own workbench and tools.

In 2018 I joined the Sylva Foundation, working part time, to develop a new role as Head of Wood School — aiming to make furniture craft education available to as broad a range of people as possible by filling in some of the gaps I have observed in formal education. The relationship between Rycotewood and Sylva is strong with graduates being offered a workshop within the Sylva Wood Centre for one year to support them to set up in business. Lessons learnt from this Fellowship will have a positive impact on both organisations.

My observations of the current state of woodworking and furniture education formed the catalyst for my Churchill Fellowship. I chose to focus on undergraduate study and graduate opportunities as that is my area of expertise and this allowed me the opportunity to focus on furniture rather than being forced to look much more holistically at education system. I set out to establish what the perfect furniture making programme would look like. I chose to explore institutions that offer furniture programmes investigating the balance between creative exploration, craft development and business skills. To find best practice examples of industry collaborations and work placements and understand how graduates are supported to become self-employed.





Me teaching hand-skills at the Sylva Wood School Me explaining how to use a spindle-moulder at Rycotewood

Executive Summary

To be awarded the opportunity to 'travel to learn' is such an incredible one! Accomplishing a Churchill Fellowship has been a long-term personal goal, and it allowed me to visit some of the most impressive institutions that offer furniture education in Europe and the USA. Often being camped with them for two to three days, I was able to explore much further than the short introduction and tour you might expect during an open day, giving me a much deeper understanding of how these institutions operate. I was able to reflect on my observations to enquire further and subsequently learn much that will benefit myself personally, my role as a teacher, and wider to furniture education in the UK and beyond. I met incredibly supportive and passionate students and teachers everywhere that I visited, and felt so comfortable in some that I could easily have stayed.

I have long been passionate about making, particularly in the field of furniture design and craft. Having spent the past 14 years teaching at Rycotewood in Oxford, I became passionate about educating the next generation of craftspeople/makers. Over the past 20 years I have observed both the demise of undergraduate level craft programmes in the UK and the significant reduction in children learning craft in schools. Overall, there's been a significant reduction in the opportunities to learn furniture making at all levels. At the same time the furniture industry reports a skills gap and aging population, while craft skills are in very high demand. I set out to explore how furniture education outside the UK supports students in becoming highly-employable craftspeople, or prepares them to enter self-employment on graduation. What can we learn to help plug the gaps?

My proposal was to visit world-renowned undergraduate furniture programmes, investigating demand for furniture craft skills from students/industry, the emphasis placed on craft skill development, and the balance between creative exploration, craft development and business skills. I aimed to establish how industry links are embedded into furniture programmes within higher education, and whether industry work placements are available and successful. Also to look beyond study towards understanding how graduates are supported to become self-employed.

With the benefit of hindsight, travelling with a fixed set of objectives and armed with a detailed series of questions was not necessarily the best approach. I realised quickly during my first visits in the USA that I would be learning far more than I set out to, and that an open mind and flexible approach would lead me in many exciting directions.

I set out hoping to learn about impressive pipelines into higher education, and to see schools teaching making and woodwork leading to high level craft skills on entry. However, I was disappointed to find that in the majority of places I visited the story was the same as for the UK. This has reinforced my desire to influence change in this stage of a young person's development — to increase opportunities to access woodworking, leading to an interest in furniture, as well as the many broad educational benefits making brings!

I expected to observe students exploring their ideas and learning craft skills in their own personal spaces using tools and materials. I imagined well-resourced workshops and hoped to learn from best practice in teaching. I was not disappointed, learning a great deal more about cultural relationships with crafts, differing levels of government funding, the diversity of applicants and attitudes to excellence.

A frequent criticism of arts education is that graduates leave without the skills and support necessary to set up their own business. I was aware of incubator opportunities and Fellowships available to graduates and arranged visits to investigate what lessons could be brought back to support our graduates. I was disappointed to find only a limited number of exemplars of best practice that I can now share, however I have learnt some lessons and can perhaps place a higher value on the few that do exist.

This process of observational and qualitative research, as well as the opportunity to be more reflective, away from the day-to-day pressures of work, has led me to make conclusions about the future of furniture craft education in the UK that I believe are also relevant more widely across the arts and crafts sector.





All Malmstens students have impressive personal workspaces Fellesverkstedet in Oslo provide workshops that can be accessed by graduates of KHIO



How can we inspire the next generation to engage with tools and materials when screens are so seductive?

My recommendations

- 1. The reinvigoration of crafts in formal education.
- 2. To put craft back into craft, design and technology!
- 3. To revive furniture studies at vocational and higher level study with an emphasis on making.
- 4. To establish a national standard of excellence for furniture craftsmanship.
- 5. To train inspirational and technically-knowledgeable woodwork teachers to inspire the next generation.
- 6. To develop international networks with like-minded institutions.
- 7. To establish sustainable opportunities, both in and outside of the university sector, for graduates and others wanting to set up in business.

8. My specific recommendations to generate excellence in furniture education are:

- The necessity for each student to have their own workbench, hand-tools and the time to practice using them.
- The development of skills through projects of increasing complexity free from the additional challenge of design.
- Trust from teachers and institutions as well as the assessment of risk by the individual to enable students to have increased time and space in wood machining workshops (without the need for constant supervision).
- To make professional workshop practice compulsory and rigorous to enhance individual responsibility and employability, including subjects such as machine maintenance, lean manufacturing, and cleanliness.
- To foster the next generation of woodwork and furniture educators through assistantships and mentoring. To ensure that we do not find ourselves in a position where we cannot find teachers with the necessary skills.
- To maintain libraries as valuable resources for students and graduates. It is not always appropriate to make learning online.
- Make collaborative learning a key component in programme design:
 - To develop successful, mutually-beneficial partnerships with industry to include live projects, work placements and sponsorship;
 - To create an international network of furniture craft exchange opportunities for students, teachers and whole groups.
- To foster learning across disciplines and materials by establishing assignment briefs that bring students together to learn together and from each other.





Professional workshop practice was very evident at RIT A community sauna and outdoor kitchen – an Incredible international collaborative project at Stenebyskolan

The catalyst for my Fellowship

I am passionate about furniture and I feel incredibly fortunate for the opportunities within my education that have firstly engaged my interest and subsequently fostered it to become my career. I was lucky enough to study woodwork at school, this was not the norm at this time as the curriculum had already lost the craft from CDT (craft, design and technology) to become Design and Technology. However my school still had teachers who believed in making and luckily the workshop with benches and tools had not been removed - therefore in both my GCSE and A-level I was encouraged to make furniture in wood. The hours spent in after-school clubs and lunch times to make my ideas a reality really took hold and I went on to study furniture design and craft at university in High Wycombe. This was within a fully functioning furniture department with excellent staff and resources — we all had our own benches and tools and were expected to develop as craftspeople by learning through making.

I also recognise that other individuals also played an important part in my development, I am fortunate that my parents understood the value of working with our hands and encouraged me to pursue my passion. Originally both were nurses by profession so I was not brought up by artisans or artists, but they were makers. I saw things being made and repaired, knitting/sewing clothes, organic vegetables being grown at the allotment, and my dad planting over 300 trees in his own domestic woodland to provide both fuel and materials to make with.

On graduation my first employer gave me access to a well-equipped workshop to make my own work in the evenings and weekends. This was not an experience shared by all of my peers. I spent five years working very hard on my craft both as my job but also as my hobby.

Unfortunately, the education system for creative subjects has changed over that time — you could argue that it has been under attack! Will children and students ever again have access to the same experiences and opportunities the formal education system afforded me?

Schools are under pressure and many have placed more emphasis on academic subjects, the practical assessment has been so significantly reduced that teachers are often unable to provide a focussed experience in a single material. Frequently chisels and hand planes have been replaced with laser cutters and 3d printers — cleaner and safer for large classes to all have a go. I am not advocating that we go into reverse, more that we value both digital and hand. This is compounded by the significant reduction in schools offering design and technology as a subject at both GCSE and A-level. (Pooley & Rowell 2016)

Higher education has certainly not been immune to change, and the same challenges have meant a significant reductions in opportunities. This has been felt right across the craft sector with Ceramics as a single subject almost wiped out completely and most institutions merging all crafts into single programme - this can only lead to less specialisation and opportunity to develop technical skills. Whilst there are 15 institutions offering undergraduate courses with furniture in the title, mostly it is grouped with product design (sometimes in 3D crafts) - many of these are excellent programmes, but the emphasis is on design and prototyping rather than craftsmanship. As far as I am aware, there is only one programme left where every student has their own workbench, tools and training to fully access to wood machines.

I am very aware of the reduction in skills and knowledge on entry to higher education, and believe that this can be traced back even further than secondary education. Do primary school teachers have the confidence, knowledge and resources to allow children to access woodwork? Whilst there has been a significant increase in the amount of schools offering a forest school experience, I question whether this is being built on within the classroom? My daughter is 11 and has just moved onto secondary school - I am not confident she will actually pick up a piece of wood during her time there, let alone be given the opportunity to feel how a sharp tool cuts through wood.

Further education is possibly the sector under most pressure, and as a result both the number of colleges which offer furniture craft and student numbers have diminished. This is true of apprenticeships as well. Evening classes under the 'learning for leisure' banner are often bursting at the seams, but the longer full-time courses are not overwhelmed with applications. With employers desperate for skilled furniture makers we must, as a minimum, maintain and develop those that remain. Part of the challenge in closely linking education and the job market is that craft businesses are spread widely over the UK and not centred in any particular region, compelling local colleges to look nationally.

A frequent criticism of higher education is that graduates are not fully prepared for the world of work, and that typically they are left to fend for themselves when they leave. I believe that setting up a workshop on graduation requires a unique set of circumstances — in my experience access to funding, a workshop space and previous work experiences — often all come together. It is inexpensive to give someone an equipped office space to work from, but a fully functioning workshop is something very different. There are examples of business incubation and craftsperson/artist in residence schemes in operation, but they are not widespread.

My Fellowship

My observations on the current state of woodworking and furniture education formed the catalyst for my research trip. I chose to focus on undergraduate study and graduate opportunities as these are my areas of expertise, and such an approach has allowed me to focus on furniture as an independent subject rather than being required to look much more holistically at our education system. I set out to ask two principal questions:

- 1. How do undergraduate furniture programmes develop skilful craftspeople?
- 2. How do institutions create a bridge between education and professional life?

I set out to investigate how higher education institutions support the development of craft skills in the subject of furniture, focussing on three fundamentals: workshop experience; creative exploration; and, exposure to industry. I hoped that the Fellowship would provide me with the opportunity to develop a unique awareness of international developments in furniture education. Allowing me to establish proposals to enhance programme development in the UK to improve graduate employability and close the gap between education and professional life. I was determined to find opportunities to share good practice around employability and work-related study across the sector, along with the potential for staff and student knowledge exchange with programmes internationally. By examining incubator opportunities for graduates I hoped to learn how we can establish similar sustainable schemes here in the UK.





Hand-cut marquetry showing craftsmanship at Letterfrack Students on the cabinet-making programme at Malmstens develop impressive hand-skills



Well organised and impeccably clean workshops at Bergen University demonstrate a very high level of professionalism

I set out to meet the following objectives;

To identify the key characteristics of excellence in furniture craft education within world-renowned institutions, to inform my personal development as an educator and designer-maker in the subject of furniture.

To build international networks and explore opportunities for collaboration e.g. staff/student exchange and sharing of best practice, to establish opportunities for myself, my programme, and others in the UK.

To improve the employability of UK furniture craft students by examining how the development of craft skills, the balance of craft, design and business and the integration of industry collaboration might inform developments to curriculum in my programme and others in the UK.

To examine how live projects and collaboration with industry are successfully embedded into furniture programmes, to inform how such opportunities can be replicated in the UK.

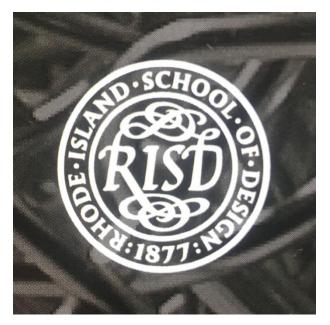
To examine best practice in the provision of selfemployment/incubator opportunities available to graduates, to assist the development of sustainable and successful schemes in the UK.

Where did I travel?

My Fellowship began as a desk-based investigation exploring institutions across Europe and North America to find those that offer furniture programmes of high quality. I chose to focus on countries that I believe have a positive cultural association and support of craft as well as appropriate furniture heritage/industry.

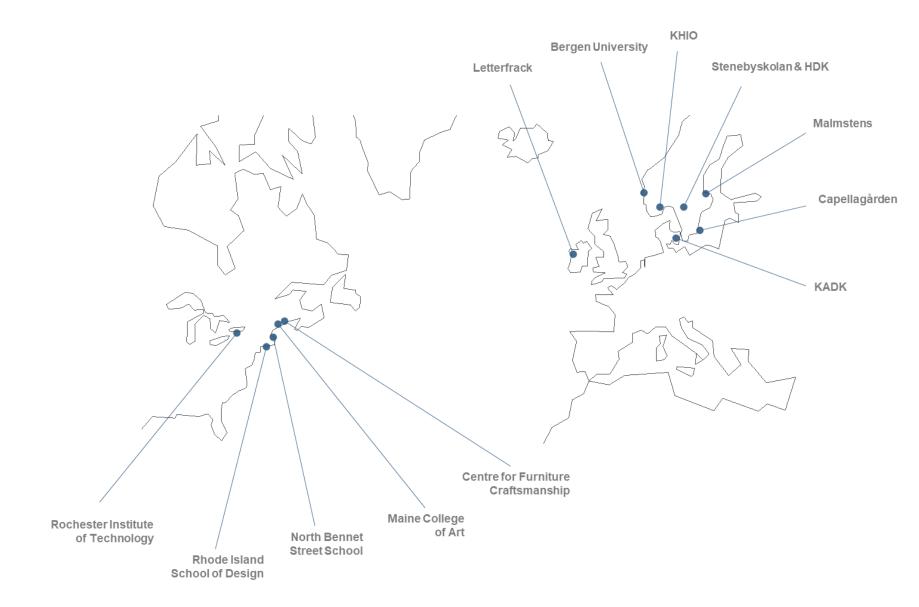
The rich legacy of the 'Studio Furniture' movement in the USA, with an emphasis on one-of-a-kind furniture, is very apparent on the east coast. Exhibiting furniture designer-makers from organisations such as the Furniture Society and the New Hampshire Furniture Masters are evidence of a continued tradition in the region that has grown out of successful programmes at the School of American Crafts — Rochester Institute of Technology and Rhode Island School of Design (Ward, 2014). Both of these institutions continue to deliver both underand post-graduate furniture studies, and formed the core of my visit. The Centre for Furniture Craftsmanship in Maine has developed a reputation for excellence under the direction of Peter Korn (himself a 'Studio Furniture' maker) offering an intensive hands-on experience in a not-for-profit environment (Korn, 2015). This along with a two year intensive programme at North Bennet Street School in Boston provided a valuable comparison to the university sector.

The heritage of furniture design and craftsmanship in Scandinavian countries is well-known through the mid-century work of Danish designers such as Arne Jacobsen, Finn Juhl, and Hans Wegner. The less well-known yet equally important Swedish furniture designer, Carl Malmsten, established a number of schools across Sweden to provide skilled craftspeople to make his furniture. I visited two contrasting schools that emphasise making, Malmstens based in Stockholm with incredible links to industry and Capellagården located more rurally, described as a 'creative monastery'. Carl Malmsten also influenced





Internationally renowned Rhode Island School of Design Workshop buildings at the Centre for Furniture Craftsmanship



the renowned Stenebyskolan, also in Sweden, that offers a broad range of furniture craft programmes at different levels from preparatory studies to Masters level. The furniture programmes (under- and post-graduate) in Copenhagen and the Norwegian art schools in Oslo and Bergen perhaps lean more towards design than craft, but still have excellent workshops and reputations for quality, as well as support opportunities for students on graduation.

I was also aware of the impressive work at Letterfrack in Ireland through its connections with Rycotewood, whose staff were instrumental in supporting the school in Connemara over twenty five years ago. The opportunity to visit an institution in a country with a very similar culture to the UK was a useful contrast.

I arranged my itinerary so that I was able to spend two to three days in each location, allowing me to spend time with staff, students and when possible graduates. This was complemented with visits to meet employers and alumni in their workshops as well as shared incubator spaces. For further details of each visit please see the appendix: Research visits where they are described and illustrated in detail.

Rochester Institute of Technology (RIT), USA Centre for Furniture Craftsmanship (CFC), USA Maine College of Art (MECA), USA North Bennet Street School (NBSS), USA Rhode Island School of Design (RISD), USA

Letterfrack, Galway-Mayo Institute of Technology, Republic of Ireland Royal Danish Academy of the Arts (KADK), Denmark Capellagården, Sweden Malmstens, Linkoping University, Sweden Stenebyskolan and HDK-Steneby, Gothenburg University, Sweden Oslo National Academy of the Arts (KHIO), Norway Bergen University, Norway





The 'creative monastery' - Capellagården Industry standard workshops at Letterfrack



Spacious workshops at CFC. Students studying on the intensive programme have their own bench and access to a dedicated wood-machine-workshop.

The development of skilful furniture craftspeople

The importance of a high quality workshop experience

I have long-promoted the theory that for successful teaching of furniture craft skills every student should have their own workbench, hand-tools and regular access to machinery workshops. Teaching craft skills to small groups, with these vital resources, is very expensive in terms of space and investment; in the UK many institutions offering this type of experience have either closed or significantly changed their content (sometimes being forced to merge with other specialisms). Workshop-based training has been under severe economic pressure for many years and it is very hard to imagine these universities and colleges making a dramatic U-turn to reinstate them. Whilst I observed similar challenges during my travels, I did witness many very impressive workshops where students had access to their own bench, tools and access to high quality machines. These workshops set the benchmark for the experience necessary to learn and practice furniture craftsmanship.

Every student should have a personal space to work

All of the programmes that I visited with a craft emphasis provided students with a personal space and bench, typically within a spacious workshop. At Capellagården, Stenebyskolan, RIT, NBSS and CFC students often have their own hand tools (otherwise they were able to use the schools collection of quality tools) and have a workbench located with their peers. Each of these institutions provided access to a programme-specific wood-machine workshop that are in most cases the highest quality machines available.

At Malmstens each cabinet making student was additionally provided with a trolley to move their materials and a pair of trestles to build on. They were all afforded enough space to spread out and work on large projects unhampered by one another. Their machinery workshop is attached to the bench workshop and is available seven days a week. The level of oversight in all of the workshops by a teacher or technician was minimal, unlike the UK where I am more familiar with it being a necessity. Once trained, students were allowed to freely access these resources to practice their skills with the safeguards of minimum numbers in place (a minimum of three students). The independence gained from this arrangement is exceptional and the ability to organise time more realistically is much closer to life after graduation. I felt that students in all of these institutions have the opportunity to become more employable as craftspeople by taking advantage of the freedom to practise. The argument against free access always relates to health and safety concerns and the potential for severe injury, however when questioned staff in these institutions stated that they had a good track record. Perhaps there is more to learn about how something similar could be instigated in the UK. Student numbers on programme will certainly impact on this and in all of the institutions mentioned above maximum numbers were under thirty, whereas the similar provision at Rycotewood is approximately fifty.

In pursuit of excellence in the development of furniture craft skills I believe that

every student must have their own workbench, hand tools, the space to work and the time to practice using them. Can Institutions revisit wood machine workshop risk-assessments to enable students to have increased time and space (without the need for constant supervision).



A personal place to work – a bench should be available to every individual studying on a furniture craft programme

Should students be taught how to change circular saw blades?

Not only do these institutions provide high quality resources with considerable access, many train the students in the maintenance of them. I was surprised, but very pleased to see students at RIT, Capellagården, Malmstens and Stenebyskolan all taking responsibility for both the day-to-day up-keep of the machines and the cleanliness of the workshops. In each institution a thorough induction set the standards and provided the maintenance skills, but after that students became responsible for a machine, changing tooling and daily/weekly maintenance checks. By rotation each student will eventually work on all of the machines; these are essential professional practice skills for a craftsperson. This level of personal and shared accountability was wonderful to see; it was obvious that students worked together (often with an expert available if necessary) to keep the workshop spaces clean, tidy and ready for work. There is certainly the potential to build in higher levels of professional workshop practice on UK programmes to improve employability and self-sufficiency.

To prepare furniture craft graduates better for professional life I believe that

institutions must foster personal responsibility and employability by making professional workshop practice compulsory and rigorous, including subjects such as machine maintenance, lean manufacturing and workplace cleanliness.





Weekly circular saw blade cleaning at RIT Students at Malmstens keep the workshops in pristine condition

The development of practical skills and knowledge benefits designers and makers alike.

Skill building through sequentially more complex projects is common to all programmes I visited. NBSS, CFC and Letterfrack all have a curriculum that is honed to develop craft skills through pre-designed projects with only limited or without any creative input; at Malmstens and Capellagården students are also encouraged to engage with advanced skills through replica making. Striking the right balance is essential to ensure students can develop technical knowledge and problem solving skills to work increasingly independently. If the aim is to produce highly-skilful makers working on some projects without the additional burden of creative input is advisable. I also believe that access to the same depth of technical understanding is highly relevant to furniture designers and again at Malmstens I witnessed a depth of understanding and ability to production plan in the design students that is unmatched by any other programme.

Frequently a wood machining project is used within machine workshop inductions to demonstrate safe working practices and a variety of techniques. The depth of training typically varies according to the design/craft balance of a programme. However it was notable at Malmstens that both designers and cabinet makers all made the same induction tool tray together. Likewise at Letterfrack, the first year of making education is the same for all students with everyone making a frame, box and chair whether they are studying BSc Teacher Education or Furniture Design and Manufacture. A good example of workshop induction was evident at KHIO where design students collaboratively made workshop resources (tool cabinets, trestles). Similarly this was apparent at Capellagarden where I found that students made wall cabinets mounted around the workshops used to store tools and equipment. Working on a realistic outcome gives a sense of achievement and better understanding of quality. The importance of skill building and of making using hand and machine is just as relevant to designers as it is makers.

When designing or updating a furniture programme I believe

it is essential that students are given a focussed opportunity to develop craft skills through projects of increasing complexity, free from the additional challenge of design.







Variations of a tool tray – a wood-machining project at Malmstens that both designers and cabinet-making students are expected to make





Sean Breen guiding the next generation of woodwork teachers at Letterfrack

Peter Korn leading a design-crit in the fellowship workshop at CFC

Where will the next generation of furniture craft teachers come from?

There are many facets to supporting the growth and development of an individual's craft skills including programme design, workshop access, bench space, and professional workshop practice. However the quality of the teachers and establishment of a quality standard are also very important. As the number of programmes that focus on craft skills reduces will this impact negatively on the next generation of educators? Several institutions I visited only recruited teaching staff from within whilst others supported graduates to become teachers through assistantships and adjunct teaching roles.

How are graduates and alumni encouraged to become craft teachers?

At RIT I was struck by the number of students who were employed to work alongside the teachers as assistants and in some cases to deliver elective classes. They were recruited from both the undergraduate and postgraduate cohorts, with the experience providing confidence to the individuals and yielding wider benefits to the whole community, especially when teachers were unavailable. Providing assistant teaching opportunities was also evident at CFC, where graduates and fellows are often employed alongside experienced teachers in a support role. Peter Korn strongly believes in the importance of them and stated that he preferred to observe someone working alongside him in the classroom before they progressed to a lead role. I feel that there is much to gain from these roles, with students benefiting from additional support and guidance and the individual having the opportunity to develop their teaching whilst learning from someone experienced. Teaching requires many skills over and above subject knowledge especially communication and empathy, and opportunities to explore an individual's compatibility with this would be very helpful.

How should institutions balance continuity and change when employing craft teachers?

At Letterfrack and NBSS, almost all of the craft teachers were themselves graduates of the institution. A preference for teaching staff who were closely associated with the programme was also apparent at Malmstens and Capellagården. Continuity of the culture of a learning community is beneficial and recruitment from within secures this, although perhaps it can become closed off to alternative learning philosophies or methodologies. NBSS felt very fixed in its outlook, solely focussing on 18th and 19th century furniture designs, and would benefit from external input to liven up the programme. Letterfrack was also heavily biased towards graduates on the teaching team, however I was fortunate to spend time with new teacher Sean Breen who was not an alumni of the institution. It was already obvious that he had brought in new ways of thinking that complimented and enhanced the learning experience. Recruiting skilled craft teachers is very challenging in the UK, but I would advocate that a combination of internal progression and external influence would be ideal.

Where has school woodwork gone?

Ireland was the only country I visited that still has a strong element of making on the school curriculum, as other countries I visited all seemed to have placed more importance on traditional academic learning between the ages of 14 and 19. Woodwork and technical drawing are still included in the Irish leavers' certificate in the subject Construction. Letterfrack recognises the need for skilled teachers, and twenty years ago established a programme for teacher training that shares the same common craft training as its other undergraduate programmes in Furniture Wood Technology, and Furniture Design and Make. This high level of craft skill development makes these graduate teachers highly employable and they have also become excellent marketers of the school to their own students. Not only does Letterfrack benefit from a pipeline of students with basic technical skills, but it has created a process for developing the next generation of furniture educators.

To be an excellent teacher requires a combination of skills, not just the technical knowledge and experience, but to have the ability to communicate effectively, to share information and provide empathetic support of individuals learning. Very soon we may well find ourselves in a position where we cannot find teachers with the necessary skills. Can we foster the next generation of woodwork and furniture educators through assistantships and mentoring, much like at RIT and CFC? I believe

it is essential that we train inspirational and technically knowledgeable woodwork teachers to inspire the next generation.

A national standard of excellence

The approach of students, learning as apprentices from a master craftsperson practicing their craft within the workshop, is a traditional one. Furniture craft education in Sweden still reflects on the master and apprentice relationship within education, and students at Capellagården and Malmstens were working on a Gesäll (roughly translated as 'journeyman') piece when I visited. The Gesäll piece represents all of the individual's craft skill development through an aspiration for excellence. I was particularly impressed that it transcended academic levels of study and was considered relevant today by teachers, and especially by students.

What can we learn from the Gesäll - the pursuit of craft excellence?

The assessment for a Gesäll is separate to the academic qualification being studied and is made by professionals from industry on behalf of the Swedish Crafts Council. A specific set of technical skills should be practised within the object and it is expected that careful time planning is prepared and submitted along with technical drawings before the making commences. Whilst all of the pieces I observed were designed for the project, it is also possible to make a replica that meets the same criteria — the judgements are about excellence in craft. The pieces were all made to the very highest levels of craftsmanship I have seen, in and outside education. When asked, the students were fully aware that this level of excellence was not necessarily going to be used every day in their working life, but the self-fulfilment of craft excellence was still rewarding and important to them. They recognised the protection the sheltered educational environment afforded them and that it was not a commercial approach to making. In the UK, we do not have a national standard of craft that can be used to reward excellence to the same level. Student awards by the Furniture Makers Company and the cabinet-making Skill-Build are competitions offered to students, but neither really match up with the excellence in craftsmanship aspired to, and met with, the Gesäll. I would advocate an award for excellence in the UK that is also applicable to students both inside and out formal education.

Would a national standard of craft excellence be inspiring for the next generation and set a benchmark of quality? I believe that it would be advantageous to

establish a national standard of excellence for furniture craftsmanship that is managed outside the education system.



An award winning cabinet by a student at Malmstens that has met the Gesäll standards for excellence



A prototype bench made in response to a live brief at Letterfrack to fit out the college refectory. Staff and students at Letterfrack use industrial CNC equipment to manufacture live projects in-house

The bridge between education and professional life

Bringing learning to life: Collaborations and live projects

Live projects bring learning to life, and while educators do their best to develop a realistic assignment, working in partnership with a designer/manufacturer/client in a professional manner is an unbeatable approach. They are crucial to bridging the gap between education and professional life on graduation, helping to prepare graduates for the 'real world'. Collaborations often rely on goodwill and support from individuals and industry, and proximity to them can make a difference. I observed amazing local, national, and international collaborations in some institutions, however some programmes were unable to offer any live projects.

What can we learn from Swedish universities collaborative projects with industry?

Malmstens is in the envious position of often being able to select who it works with, and its longstanding connections with the Swedish design industry and location in Stockholm are very helpful. 'Design in Pine' is their most recent collaboration with Swedish Wood (the trade association representing the Swedish sawmill industry) and a Chinese furniture manufacturer; asking students to design and prototype for the Chinese domestic market. International travel, communication via translators/drawings, and using email/Skype when face-to-face communication was impossible, are amazing learning experiences that go well beyond the classroom. The output was excellent, and the partnership with Swedish Wood afforded the students the opportunity to exhibit at the Salone del mobile in Milan. These experiences are certainly preparing graduates for life after study.

A 'Design and Industry' project to investigate the circular economy at HDK-Steneby gave students the opportunity to work in collaboration with a company who are investigating new materials made from recycled textiles. Students collaborated with separate companies who recycle clothing/textiles, CNC manufacture moulds, and press/form textiles. The deadline was fixed as the outcomes were being exhibited at the Stockholm Furniture Fair and inevitably challenges ensued, including everyday issues such as components being delivered late which had to be overcome. Looking outwards beyond the security of the educational environment, increases pressures and provides great learning through problem solving as well as the benefits that come from the success in networking, marketing, and the feeling of personal accomplishment.





Design and Industry project at Stenebyskolan using recycled textile waste. Moulded panels were pressed with industry partners on a collaborative project





Students at Malmstens are having professional photographs taken of their prototypes in preparation for their exhibition at the Salone del mobile, Milan. This project is an ongoing collaboration with Swedish Wood.

It was notable that the programmes in the USA did not typically have a live project embedded within their structure, staff explained that the vast distances involved, and location of domestic furniture manufacturing in the southern states, meant that it was difficult to link with manufacturers. There was however a positive exception at MECA where Adam Rogers has established a partnership with Chilton Furniture in a 'Design for Industry' project. Students were asked to design a complimentary coffee and side table that reflected the company's design aesthetic. Adam stated his belief that the supplementary skills gained in a live project were critical to his students development, to support their transition into life beyond study. Teaching staff in all of the institutions echoed this, but also honestly reflected on the significantly increased workload in this type of project. Can sharing of best practice help in some way to manage this challenge? In my experience not only is it beneficial to the students, but it is also stimulating and valuable to the teachers.

Working on a live commission

Commissioning a bespoke piece of furniture from students requires a generosity of spirit and confidence that a high quality outcome will be achieved. Success in securing such projects is often built on a track record of positive results and support from the institution. Students at Letterfrack have produced bespoke furniture for the President of Ireland and public seating for the National Museum of Ireland.(McGarry & O'Donovan 2018) I did not witness live projects of this nature in many other institutions I visited, however there were instances of students working on more modest commissions alongside study at NBSS. All programmes I visited have the capacity to work on live briefs generated from within their institution, and again Letterfrack demonstrated several successful examples. These included reception furniture and a current project to collaboratively manufacture new tables and benches for the refectory. To go beyond a prototype adds another dimension to a project and if managed well everyone can gain from them.

How do furniture programmes collaborate internationally?

The masters in Furniture and Object at KADK has several live projects fully integrated within the programme structure. Working internationally with manufacturers in Africa or Asia has been very positive and provides students with a better understanding of the internationalisation of the industry. Other regular partnerships include live project briefs with Hay, and a Danish plywood manufacturer. These projects rely on financial support from the companies, and in some cases from the university or government agencies supporting cultural exchange.

A very different international project was run as a summer course at Stenebyskolan/HDK Steneby, with internal furniture students working alongside landscape architecture students from University of the Arts Philadelphia. The eight week course responded to a project brief from the municipality and feedback from the local community to design and manufacture an outdoor kitchen and sauna. Two buildings were installed in public space providing a shared space for the community to use. This project will be repeated in summer 2019 with another space and community-focussed brief in development. This is a remarkable project, however without a combination of both funding from the municipality and the expertise and international links of lead tutor, Luka Jelusic, it would not have been possible. The international element combining travel and collaboration adds a substantial benefit to all participants. There is certainly interest from staff and students alike at most of the institutions I visited for international collaborative projects, and perhaps there is an opportunity for an international network to be developed with the participants of this Fellowship.

European institutions place an emphasis on collaborative learning, and I found many excellent case studies of different types of collaborative activity. Partnerships with industry are mutually beneficial, and live projects can lead to further opportunities including sponsorship, work placements and employment. This Fellowship highlights the small number of undergraduate furniture craft programmes both in the UK and abroad. I believe there is the potential to create an international network of furniture programmes with exchange opportunities for both students and teachers with future opportunities for collaboration. I believe

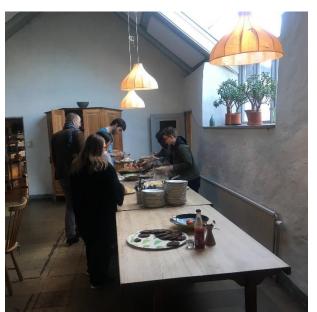
collaborative learning is an essential component in programme design and should be built in not just added on.

Collaborative peer learning, both within a programme and more widely within an institution, was evident in many of the places I visited, and certainly an aspiration of most leaders I met. Some examples are embedded into the programme structure and others occur more informally. The location of an institution, either rural or city-based, has a great impact, as does the breadth of specialisms/workshops/programmes on offer. The scale of an institution can both constrain and provide opportunity, and the layout of the buildings can also have an impact on how informal collaborations can grow.

The benefits of working together in a creative community

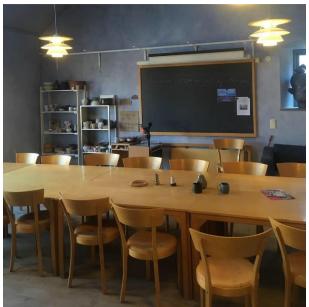
The remoteness of Capellagården, Stenebyskolan, and Letterfrack meant that students were fully engaged in their study, and with less distractions collaborative working was very successful. At Capellagården, described to me as being a 'creative monastery', a live project to batch-produce objects for retail in small groups, produced very effective outcomes. Collaboration was enhanced further in one particular product by partnering with textile students who developed the printed pattern for a tray. Living in close proximity, eating and working together can have positive and negative implications, however the opportunity to be immersed in creativity, meeting daily to eat and drink coffee, from a unique handmade coffee cup (made by the ceramics students), felt great. The creation of a positive culture and successful community was evident in all three institutions, I am sure this also extends to the alumni.

The three undergraduate furniture programmes at Malmstens showed impressive collaborative working. I observed several examples of how an upholsterer acts as the client of a designer in the development of a chair, and subsequently engaged the skills of a cabinet maker in making a wooden frame to be covered. A parity of respect between designer and crafts-person was obvious. In a separate project, designers and cabinet-makers worked together successfully to design, plan and manufacture a small craft object for the school to present as gifts. Previous examples were quite complex to make, using hand and machine tools, illustrating the depth of knowledge they gained by working together. Again there was certainly no evidence of any hierarchy between the students and evidence of considerable professional practice in readiness for the world beyond education.









There are many spaces provided for the students at Capellagården to meet and drink coffee together. The furniture, textiles and ceramics programmes all have their own.



Students at HDK-Steneby studying on the BA and MA Woodoriented-furniture programme are all in the luxurious position of having their own studio space and individual workbench.

The importance of access to workshops and the design of a creative institution.

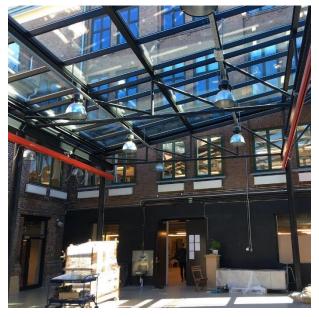
Programmes that focussed more heavily on furniture design had impressive studios (RISD, KHIO, KADK, and Bergen). Each student had an individual space and staff encouraged a studio culture to develop. When a programme was craft focussed (RIT, CFC, NBSS, Capellagården, Malmstens) each student had access to their own bench space within a workshop. I felt that these students were sharing ideas and working collectively, as a result of their environment. Rather than being divided up into small individual booths, like the studios often were, the feel of these workshops was much more open; both informal collaboration and peer-to-peer support were evident. Do workshops hold an advantage over design studios? To have both a dedicated personal studio and a workshop space is very expensive, and often a compromise has to be made with preference given to one or the other. HDK-Steneby and final-year students at RISD are an exception as students still have access to both.

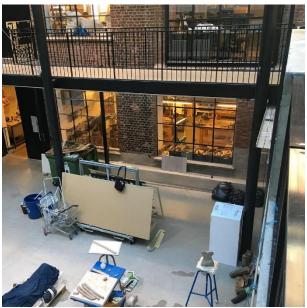
The Norwegian institutions, KHIO and Bergen University, both have incredible workshop resources and an aspiration for informal cross curricular collaboration, however both institutions are in transition and I felt that neither have yet reached their full potential. KHIO has created remarkable workshops that felt very accessible when I stood in the central atrium, whereas studio spaces were hidden away. Theoretically students can access all workshops, however with a diverse range of programmes all having preferential access to their own workshops it is not always easy to move freely between them. With an emphasis on design, it may be beneficial for studios to become as open as the workshops. Bergen University has recently moved into a brand-new building with open plan floors dedicated to studio spaces. They are very flexible spaces that can be re-configured easily, but I observed that

programmes, and in some cases individuals, built walls to divide the spaces. Students complained about how the studios had been divided and we discussed the need for both open-plan and private spaces. The potential for both institutions is vast and I am sure that over time they will find a balance within the interior spaces which will encourage cross programme collaboration.

Observing some excellent examples of peer learning between subject specialisms made me reflect on my experiences in the UK. Whilst it is often promoted as best practice to avoid working in silos, it can be challenging to put into practice. I believe that it is certainly worth the extra effort and believe that

we should foster learning across disciplines and material specialisms by establishing assignment briefs that bring students together to learn collectively and from each other.





Incredible open plan workshops can encourage interdisciplinary collaboration at KHIO – the most impressive multi material workshops I found

Opportunities for craftspeople on graduation

Many students I met explained their aspiration to be self-employed, to run their own workshop-based business working as a designer and maker. During my Fellowship, I was particularly interested in observing how programmes support students' craft skill development, but for those wanting to move into self-employment this is only one of many skills required to be successful. Some programmes have integrated business studies or elective/optional activities outside the normal content that aim to address this, but most do not provide incubator or sheltered workshop opportunities on graduation. In my experience, it has become increasingly challenging to set up a furniture-making workshop on graduation in the UK, and this was echoed in both the USA and Europe. There are notable exceptions, some graduates do go on and establish themselves, but often the individuals have access to funding and/or workshop space. Incubation, fellowship, and cooperative opportunities all seem to fall outside the formal education system, and whilst they are recommended by the institutions I visited, they could be better supported and potentially integrated.

The Centre for Furniture Craftsmanship fellowship programme

The notable exception within an institution was the fellowship programme at CFC. A well-equipped workshop has been made available free of charge with capacity for up to six graduates (graduates from CFC, NBSS, RISD have all been resident) or professional designer-makers to work on a project for between one month and one year. CFC is a not-for-profit organisation and providing this opportunity is part of its charitable aims, while also bringing considerable benefit to the whole institution. The experience of the fellows can vary considerably and, although it does attract highly skilled international craftspeople, getting a good balance and maintaining a group of four to six is necessary to maintain a forward momentum. The benefit of working within a sheltered environment with a small group is very helpful in making the step between education and self-employment, but there are challenges in funding accommodation and materials.

The importance of location

At Letterfrack there is the potential and willingness to develop an incubator space, but when I asked the graduating cohort of designer-makers only one expressed any interest, but they had reservations. The rural location, being four hours' drive from Dublin, was unattractive to young graduates and considered too far from potential markets for bespoke work. The location of NBSS in central Boston makes it perfect to reach an affluent audience for skilled craft work, however the school does not have space to set up an incubator within its buildings. RISD is located between

Boston and New York with easy access to both, but again they do not have an incubator workshop. The location of any business start-up space is very important, with rural locations offering less-expensive accommodation, but typically being a distance away from retail opportunities. This was echoed in Sweden at the rurally-located Stenebyskolan and Capellagården.

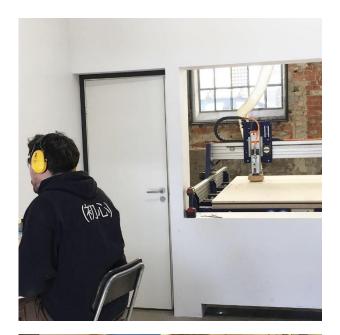
Cooperative workshops in the USA

In the USA I was able to visit four cooperative workshops, all set up initially by graduates of furniture programmes that I visited. They all follow a common structure, with a shared wood-machine workshop that is accessible to all after induction, and individual spaces within an open plan bench workshop. Very clear delineation of the spaces was evident, and an expectation of a high level of professionalism. The Charlestown Coop in Boston was set up by graduates of NBSS, it supports eighteen spaces and has a manager who also looks after the shared machinery. It provides an affordable space with seven days a week access, and it was evident that some recent graduates were able to successfully make the transition from education to selfemployment. A shared online portal for students and alumni of NBSS is used to post enquiries and commissions, it was successful in linking graduates to work collectively on projects, and lead them towards financially-viable work. A cooperative space has many benefits to a graduate, including keeping start-up costs low and being part of a community, where they can share ideas/resources and continue to learn. Although some workshops in the UK offer an individual bench for rent, and Sylva Foundation has a hot-benching scheme, I am unaware of any other cooperative furniture focussed environments for a designer-maker to start out. There has been a growing pace and enthusiasm for maker-spaces that focus on digital making over the past ten years; perhaps they should also cater for more hands on traditional crafts too?





Charlestown Cooperative workshops in Boston were representative of several shared workshop spaces I found in the USA. All with well equipped machine-workshops and individual bench spaces.





CNC routers are in high demand at the Fellesverkstedet maker-space in Oslo

Aldea is a maker-space with a well equipped wood workshop in Bergen that attracts students from Bergen University.

Norwegian shared workshops/maker-spaces

In both Oslo and Bergen I visited shared workshops (Fellesverkstedet and Aldea respectively) that are used by graduates of furniture programmes from the same cities. The spaces are independent of the universities, and offer space at reduced rates through funding from the Norwegian Arts Council. Whilst they both had very impressive resources including digital equipment (CNC routers with skilled technicians), they feel more like a maker-space where time can be booked in a particular workshop or on a specific machine to produce components. Users are frequently in and out, heading back to their own workshops. The vision and aims of both organisations is not the same as the cooperatives, but they could provide a very useful opportunity to graduates without the means to purchase expensive machinery.

The RISD careers department

Networking with alumni and industry is essential in developing opportunities as a graduate. RISD has a very well organised careers department that engages alumni from across all of its arts provision. The reputation of the university is international and this makes a considerable difference in both recruiting students and on graduation. Careers events, portfolio review, and international exhibitions are organised to support the student's transition. Opportunities for work placement with alumni can provide a spring board on graduation into professional life. This positive and supportive relationship with the alumni of a programme or school was evident in supporting graduates in most of my visits, and should be encouraged and maintained in the future.

The opportunities for graduates is very mixed in all of the countries that I visited. Institutions and programmes do provide some support, but as one group of students leaves another joins, leaving limited time and resources to provide practical support for the graduates. The most significant barriers are the significant costs of workshop space, access to the necessary equipment, and possibly the location. I believe

we should establish sustainable opportunities, both in and outside of the university sector, for graduates and others wanting to set up in business.

We can use existing models of cooperative workshops, with shared resources and hot-benching, to create accessible and affordable workspaces. By developing fellowships and craftsperson-in-residence schemes within universities and beyond in shared spaces, we can develop support mechanisms for a much wider benefit including networking and collaboration.

All of the institutions I visited have an outstanding reputation for excellence in their particular field of furniture education. Furniture craft programmes in particular faced similar issues including reduced applications, lower skills on entry, and a sense of isolation within their own countries. I believe that even though these programmes are outstanding, they are under increasing pressure from education systems that aspire to less contact time, higher student numbers, a movement towards design over craft education, and the merging of crafts into combined programmes. I believe that international cooperation, dialogue/exchange between staff and students, may help to overcome this isolation. The idea of working together in an international community was certainly well-received by programme leaders and students who I met. I believe that

UK institutions should look internationally to build networks that will benefit themselves, staff, students and the industry as a whole.

Conclusion: the future of furniture craft education

In the context of undergraduate furniture craft education, my conclusions reflect on three stages of progression through our formal education system: (1) the pipeline into advanced level furniture craft programmes (schools); (2) how to develop and maintain advanced level craft programmes to the highest possible standard, and; (3) how to support graduates stepping out into the world.

Pipeline into advanced furniture craft education

I was hopeful that I would return with stories of excellent school woodwork opportunities where children were inspired to study furniture craft at a higher level, however I was sadly disappointed. Of the countries that I visited, only Ireland has managed to maintain provision for making (woodwork) at school, whereas other countries have, like the UK, moved towards more academic study between the ages of fourteen and nineteen.

I learnt that in Sweden 'Sloyd' (roughly translated as handicrafts) is still compulsorily taught in primary schools and is gender neutral. The cultural relationship in Scandinavian countries with wood as a construction material is evident. Perhaps these form the catalyst for young people studying craft and design. Thinking through making, by handling materials and working them with tools, has many broad educational benefits and engendering this in all of our children of primary school age is highly valuable.

I believe we should;

Reinvigorate crafts education in schools, perhaps by building on the growing forest school movement in primary schools to give young people opportunities to handle tools and materials, aiming to sow the seeds for future involvement in craft.

Put craft back into design and technology, with secondary school children provided with the opportunity to demonstrate practical skills in GCSE and A-level studies, through substantial coursework and be rewarded for them. Craft should be promoted to ensure that skills are not devalued compared to academic subjects, to provide the inspiration for careers as makers, technicians, craftspeople, and artists.

The highest standards of furniture craft education

Selecting world-renowned institutions and furniture programmes to visit assured me that I would learn much about high standards of teaching and learning. I expected to see students learning in well-resourced professional workshops in their own personal spaces with bench, hand-tools and regular access to industrial machinery. I was not expecting to see the levels of independence and responsibility afforded to students, or the standards of excellence achieved in the Swedish Gesåll projects. International opportunities to enhance the learning experience through student and staff exchange as well as closer collaboration could help maintain standards.

Observing the decline in programmes that emphasise furniture craft skills in both further and higher education, perhaps maintaining what we have still in place, would be the first stage of a process of re-establishing our furniture craft education. Recognising the incredible input by a small number of specialist teachers and identifying how we can create a pipeline to educate and encourage future woodwork (schools) and furniture craft (higher level) teachers.

I believe we should:

Revive furniture studies at vocational and higher level study with an emphasis on making. Building on the remaining centres of excellence we should re-establish opportunities to learn advanced craft skills that can lead to employment.

Train inspirational and technically knowledgeable woodwork teachers to inspire the next generation. To value the combination of skills required to be an excellent craft teacher with the ability to share information and support the learning of practical skills and knowledge. To foster the next generation of woodwork and furniture educators through assistantships and mentoring. To ensure that we do not find ourselves in a position where we cannot find teachers with the necessary skills.

Establish a national standard of excellence for furniture craftsmanship that is managed outside the education system. Much like the Gesäll observed in Sweden.





Students at Stenebyskolan have access to excellent resources whether studying on a pre-degree, undergraduate or postgraduate programme.

Develop international networks with like-minded institutions for the benefit of staff, students and the UK furniture industry.

Develop programmes that meet the following requirements for excellence;

- Every student to have their own workbench, hand tools and the time to practice using them.
- Craft skills development through projects of increasing complexity free from the additional challenge of design.
- Risk assessment by institutions and individuals to enable students to have increased time and space in wood machining workshops (without the need for constant supervision).
- Enhance individual responsibility and employability by making professional workshop practice compulsory and rigorous, including subjects such as machine maintenance, lean manufacturing and cleanliness.
- Maintain libraries as valuable resources for students and graduates.
- Make collaborative learning a key component in programme design:
 - To develop successful, mutually beneficial partnerships with industry to include live projects, work placements and sponsorship;
 - To create an international network of furniture craft exchange opportunities for students and teachers.
- To foster learning across disciplines and materials by establishing assignment briefs that bring students together to learn together and from each other.

Supporting graduates to set-up in business

A frequent criticism of arts education is that graduates leave without the skills and support necessary to set up their own business. Not only should students be up-skilled while on a programme, but mechanisms for support following graduation, and access to resources, are essential. I met many students who aspired to being self-employed designing and making furniture, but in every country I visited there were similar challenges to those which graduates experience in the UK. I hoped to find examples of highly-sophisticated incubator workshops and packages of support/funding linked to furniture programmes, however those that I did find were mostly outside the educational system. Cooperatives, fellowships, hot-benching, and maker-spaces all provide opportunities for graduates, but a more comprehensive support package with mentoring and networking may be necessary in a field that is extremely expensive to set up a workshop.

I believe we should;

Establish sustainable opportunities, both in and outside of the university sector, for graduates and others wanting to set up in business. Using existing models of cooperative workshops with shared resources and hot-benching, Fellowships/craftsperson in residence schemes, and incubator opportunities.





What additional support do graduates need to bridge the gap between education and professional life in a cooperative workshop like this example in Rochester USA

What next?

My Fellowship has been a particularly busy time for me, and I have now fully transitioned from my role as programme leader BA Furniture Design and Make at Rycotewood, to Head of Wood School at the Sylva Foundation. I have an exciting opportunity ahead of me that will allow me to personally benefit from the research and subsequent conclusions I have made. I will have oversight of a new centre for furniture craft education that will combine filling in some of the gaps in formal education, as well as working closely with graduates to provide sustainable business incubation opportunities.

At the Sylva Wood Centre we already have a hot-benching scheme and incubation workshop for Rycotewood graduates that we will build on. In 2020 we will provide two new incubation workshops and plan to establish a support mechanism for new and young businesses by providing advice/guidance, networking and opportunities to meet new clients.

The vision for the Sylva Wood School is to complement existing furniture craft education through our close relationship with Rycotewood, initially by offering short courses in our recently opened teaching barn to inspire individuals of all ages to engage in furniture making and woodworking. In 2020 we hope to have established a second teaching workshop to provide longer courses in craft skills, supporting participants to gain employment as craftspeople. We hope to attract graduates who wish to enhance their technical skills, adults wishing to change career, and young people who aspire to be furniture makers.

I will be presenting my research to a wide audience, initially by sharing my report with university programme leaders and talking to students about progression opportunities. I propose to communicate my conclusions through articles in relevant publications and by talking to organisations including the Furniture Makers Company and Royal Society of Arts, as well as employers within the furniture industry.

I do hope that my experiences and the knowledge gained will provide opportunities to make changes that benefits the future of furniture craft education.

Source list

Books

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McGarry. M, and O'Donovan. D, (2018) See the wood from the trees: The story of storm felled timber gifted to GMIT Letterfrack from Aras an Uachtarain. Artisan house, Letterfrack, Ireland

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Lammhults and Carl Malmsten Furniture Studies (2015) X Works

Swedese and Carl Malmsten Furniture Studies (2018) Malmstens X Swedese 2018

Manifesto

Crafts Council (2014) *Our future is in the making: An education manifesto for craft and making.* Crafts Council, London.

Reports

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Appendix one: Research Visits

Rochester Institute of Technology

Rochester Cooperative

Centre for Furniture Craftsmanship

Portland Cooperative

Maine College of Art

Bill Huston & Company

North Bennet Street School

Fort Point Cooperative

Charlestown Cooperative

Rhode Island School of Design

O&G Studio

Rochester Institute of Technology (RIT) New York State, USA

School for American Crafts
BfA Studio Arts (Furniture Design)
MfA Furniture Design

Andy Buck Programme leader Tim Wells Visiting professor

Visit 10.10.2018 - 12.10.2018

RIT is a large campus university in New York state and home to the School for American Crafts – offering a broad selection of material specialisms including glass, ceramics and jewellery. The furniture programmes were established by Tage Frid and have international recognition. Since my visit the BfA craft programmes have been joined together under the umbrella title of Studio Arts.

The furniture workshops and studios are spacious, very well equipped and accessible 24/7 with a buddy system in place and senior students taking responsibility (rota) for machine workshop supervision. The shared spaces and highly engaged students create a tight knit community. Low numbers of students (20xBfA and 4xMfA) means they can spread out and each has their own personal bench-space with their own tools.

Post graduate and senior students often take paid teaching and workshop roles to support themselves. The whole community benefits from continuity of support when staff are unavailable. I believe this opportunity is excellent in supporting the development of future craft teachers.













Professional practice is built into the daily/weekly routine with every student taking their own share of workshop responsibility. This is cited as one of the most important characteristics of the provision at RIT and is very impressive with students not only cleaning the workshops but each taking a machine and maintaining it for a three month period on rotation. This is led by workshop supervisor Will Treacy and means that students gain a full experience on all frequently used woodworking machines.

The students have observed that both the staff and programme are under pressure and that programme specific marketing is less visible within such a large diverse institution. Applications are declining across all craft subjects and as a result teaching hours have been reduced. The level of skills on entry have diminished over the years and reflects the reduction in opportunities to access crafts in school education or from parents. Many students have attended summer schools to bolster design and craft skills eg Penland, Haystacks, Anderson Ranch.

The craft furniture industry is very widespread across the USA making visits and guest speakers difficult and costly to arrange. However Andy Buck is a practising designer maker and has a broad network of designer makers and arranges field trips and guest speakers eg Alumni Wendy Muryama. The programme does not include any live projects

The balance of students on the programme is 1/3 international and 1/4 female. The fee's are circa \$45,000 per annum making it very expensive in comparison to the UK.



















10th October 2018

Today I met some of the instructors and graduate students @rit.furnituredesign what impressed me the most was the clear sense of a furniture community that has clearly existed for many years. There is evidence that it is bought into by everyone through the workshop organisation, shared responsibility and infectious enthusiasm. What also struck me was the significant parallels that can be struck between #ritfurnituredesign and #rycotewood as well as our education systems as a whole. More to come!

Also thought I should dispel the myth that H&S is taken a lot less seriously over here. I saw lots of guarded machinery!

11th October 2018

I've had such a great day meeting head of programme Andy Buck and visiting lecturer Tim Wells - so much to learn from two incredibly knowledgeable teachers and craftsmen! What really struck me today was the enthusiastic and responsible engagement in the one hour machine and workshop maintenance session. All of a sudden all students on programme jumped into action stripping machines down, hoovering them inside and out, replacing knives, abrasives and saw blades and finally polishing all machine beds! This progressed further into all common spaces including all shared tools and equipment. The workshops are spotless and each student learns how to maintain and set up every piece of equipment - this is a perfect example of what I hoped to find on my trip!! Professional practice that supports graduates to be either very employable or gives confidence in setting up their own workshop.











Booth 7A Bevier Gallery -2516 Student Services: Art, Design, SAC -2543 School of Art, Foundations Office -2545 School for American Crafts (SAC) Office -2574 2D Design & 3D Design Studies Witmeyer Computer Lab -2645 Wood & Ceramic Studio 3/Craft Village

11th October 2018

Thanks to all @rit.furnituredesign faculty and students for allowing me not only to sit in on your final design crit this afternoon but also allowing me to take part! It was great to see the whole community come together peers supporting and nudging in the right direction. Great to see all levels of study coming together learning from each other not only gaining and giving feedback but learning from excellent modelling of professionalism from grad students. Mixed level teaching isn't without its challenges but the benefits can be significant. Those that know me well can imagine how much I enjoyed getting involved!!

12th October 2018

Some of my favourite signs from around the Rochester Institute of Technology campus. Love the concept of a craft village! The school of American Crafts has some amazing facilities and programmes in Glass, Ceramics, Jewellery+metalwork alongside the prestigious @rit.furnituredesign I couldn't help feel that the very same pressures on student numbers + space/resource requirements we face in the UK are just as challenging here. The furniture programme is not closing (phew!) just being described differently. I've had such a lovely time here meeting some great staff and students - who all made me feel at home!

Centre for Furniture Craftsmanship (CFC)Maine, USA

Furniture comprehensive (9 months) Fellowship

Peter Korn President Aled Lewis Lead tutor

Visit 15.10.2018 - 17.10.2018

CFC is a not for profit organisation, established 25 years ago by Peter Korn in his backyard workshop and now located in a series of purpose built workshops. It delivers a broad range of educational programmes for amateur and professional woodworkers with a very high staff-student ratio and excellent resources. The nine month comprehensive programme could be considered an alternative to the vocational component of a higher education furniture programme and it is made up of increasingly complex design and make projects.

The facilities are excellent and typically 2-3 teachers (faculty) work with 12 students on each programme. The faculty are often a combination of permanent employees, professional visiting lecturers and alumni in a supporting role. These assistantships are carefully considered and act as a pipeline for those interested in becoming teachers. Students have very spacious workshops with their own bench and access to a dedicated wood machine workshop, finishing room and wood store. This is further complimented with an active professional gallery space, library and wood turning studio. The workshops are situated in a rural setting and can be accessed 24/7.













The school has created an incredible community with everyone contributing to its development. The Messler gallery is a great space that brings the community together for weekly talks and inspiring exhibitions as well as end of course celebrations.

The comprehensive programme is a very intensive experience and covers a significant amount of furniture design and making in a short time. The expectations are very high and the delivery is fast paced - I felt that it was quite a challenge for the students to absorb all of the information. The balance of craft and design within projects is very important. I believe that some projects should solely focus on making to build craft skills whilst additional time to explore creativity would be beneficial on some of the later projects. However this would certainly mean extending the course! Most graduates look for further study/fellowships or find employment – it is unlikely that graduates will establish their own business although there are notable exceptions.

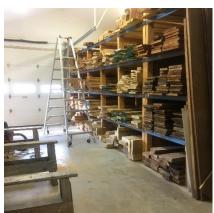
The fellowship programme provides free workshop spaces for up to six people and delivers on a charitable aim of the organisation. The space is very well equipped and applicants range from recent graduates (CFC and similar programmes) to experienced professionals (often international). Bi-weekly group critiques provides feedback to fellows led by Peter Korn and faculty. This is an excellent example of a post graduate opportunity to help bridge the gap between education and professional life. Feedback suggested that the experience varied depending on the make up of the group – aiming for a mix of experienced and inexperienced, perhaps having a lead fellow, would improve the learning opportunities further.

























14th October 2018

First orientation visit to @woodschoolmaine with lead instructor @aledlewisfurniture really excited to meet with president Peter Korn, staff, students and fellows tomorrow! First impressions are that students who come here are incredibly privileged to use such well equipped workshops in such a beautiful location! More tomorrow

15th October 2018

The nine month programme @woodschoolmaine is a condensed professional training in furniture making and design. It starts with basic hand and machine skills planing timber, cutting dovetails and making a complex wooden toolbox that will stand the test of time. The workshop is incredibly well resourced with its own machine shop, bench room and assembly/finishing/drawing space. The programme is designed to be sequential and is led by Aled Lewis (@rycotewood furniture trained) who is supported by an assistant tutor for each stage of the course. The students can access all workshops into the evening and at weekends to continue their learning something my students would love!! What is really exciting here is the way the community of staff, students (on both short and long courses) and fellows all inspire and support one another to learn. There are opportunities to progress from one week of study, through longer courses up to applying for a fellowship - before stepping out into the world.













16th October 2018

The fellowship workshop has six benches available and can often be a stepping stone for graduates of the school and others. It can provide an opportunity to try out new ideas and close gaps in technical knowledge. Anyone can apply for a stay of between one month and one year free of charge. Eventually it is hoped that scholarships can be provided for up to three fellows to also cover living expenses - thus making it even more competitive. They have access to the same high quality resources in their own dedicated building and are expected to give progress updates every two weeks in the form of a group critique. Each fellow is expected to give up to 6 hours labour back into the school. I was extremely lucky to meet @ykcurio who is currently a fellow whilst on sabbatical from RISD.

17th October 2018

@woodschoolmaine has its own dedicated gallery! The reason for existing is for the benefit of the community providing very first opportunities to exhibit, to provide inspiration and to sell work! The space is beautiful - well lit and spacious. The current exhibition shows work of scholars and fellows who have all been supported by the charitable objectives of the school - lots of things to take from such a professional and supportive environment!

President Peter Korn and lead tutor Aled Lewis led a critique of the fellows work this afternoon. This part of the school could give many lessons in my pursuit of how to bridge the gap between education and professional life! Perhaps additional mentoring and technical support beyond bi-weekly critiques would help. The sharing of the space with experienced designer-makers may also add value to the fellowship. The opportunity to chip in with my thoughts was thankfully positively received.

Maine College of Art (MECA)

Portland, Maine, USA

BfA Woodworking and Furniture Design

Matt Hutton Programme leader (on sabbatical) **Adam Rogers** Visiting professor

Visit 17.10.2018

MECA is a dedicated art college located in a converted department store in central Portland. The furniture major is one of eleven undergraduate arts programmes. There are a wide variety of resources available to students across subject specialisms and workshop access is 24/7 with a buddy system.

The programme focusses on studio art in wood (rather than fine woodworking) with an emphasis on creative expression and material exploration. Historically graduates leave with aspirations of self employment making one of a kind furniture – that has now evolved to include design for low volume production with less interest in fine woodworking. The wood workshops are very well equipped with recently updated machinery and a CNC router. Each student has their own workbench and space but they are not expected to collate a toolbox of hand/power tools of their own.

Professional practice modules are now integrated into the programme as well as live projects. Industry collaborations lead to a more objective response to design briefs. Students are encouraged to develop an understanding of the value of craft and design – considering the evolution of craft and branding in design for limited production.



















17th October 2018

I was told before I started this adventure not to book up every last minute to give space for the opportunities that pop up along the way. Today I was incredibly fortunate to get a tour of the workshops and studios of the furniture dept at MECA @mecaart by faculty member @adam.rogers.furniture Adam is currently leading a module that is linked to industry - that brings the experience for MECA students out of the classroom and into the real world. We do lots of this at #Rycotewood and it was great to discuss the benefits and challenges of live projects. Thanks Adam for making the time to host me this morning - another valuable addition to my research.

North Bennet Street School (NBSS)

Boston, Massachusetts, USA

Cabinet and Furniture Making 2 year

Dann Faier Department head **Steve Brown/Lance Patterson** Faculty

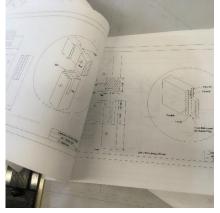
Visit 18.10.2018 – 19.10.2018

NBSS has a history that dates back to 1881 delivering programmes with traditional skills leading to careers in making. Its slogan, 'A good life built by hand', sums up the focus of all learning through doing. The school is housed in purpose renovated buildings in the centre of Boston and courses include violin making, bookbinding and piano technology.

The Cabinet and Furniture making programme is offered full time over two years with an emphasis on craft skills with little or no design education. Projects are based on 18th/19th century furniture designs – traditional models acting as a foundation for future work. There can be resistance to this approach but equally students do choose this programme specifically for the traditional approach/skills. This is a unique selling point of the programme but my experience in the UK is a significant reduction in students wanting this type of experience. As NBSS have started to see a downward trend in applications I believe this focus could be reviewed and the content rebalanced to bring it up to date – possibly through optional projects. The current teaching team have an incredible depth of experience in teaching traditional craft skills – all graduates of the programme. A sensitive input from a external designer would be needed.













The workshops are well equipped with bench spaces for each individual student spread out around a central enclosed wood machine workshop. Access is generous Monday to Friday (but not 24/7) – machines are only accessible with staff present and workshops are locked up at 9pm. Students are introduced to machine maintenance but not given the responsibility to change blades etc. Fundamental skills are delivered by demonstration and the high staff student ratio means that each student gets lots of guidance. Once the initial skill building projects are complete the students progress through tasks of increasing difficulty at their own pace using their own comprehensive personal set of hand tools. It was impressive to see such a well resourced library within the workshops.

There is some opportunity to design furniture but this is not a taught aspect of programme. Some students engage in live projects and commissions whilst studying however these opportunities are not integrated and are on top of the expected outcomes. NBSS have a online portal that promotes enquiries and live projects – this is accessible to students and alumni and results in paid work experience and support for graduates hoping to set up their business. I observed the success of this when I visited two long running cooperatives that have been set up by NBSS alumni. Students aspire to be self employed but the challenges are similar to the UK including access to resources. It is challenging to find internships/work experience placements and many alumni in the cooperative workshops have a second income.

The school arranges study trips to workshops, museums and timber yards – students also have the opportunity to exhibit and sell their work publicly. Students have access to school wide business courses and career workshops.









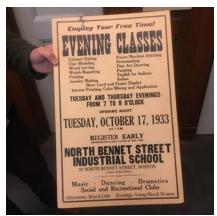
















18th October 2018

Today I visited @nbssboston and met some incredibly talented staff and students on their two year cabinet and furniture programme. It's focus is on traditional craftsmanship- so very limited design opportunities but considerable training in skills! I met Lance who has taught here for almost 40years - others there described him as a true master craftsman! He took me to see his shared workshop and I can only agree! More tomorrow when I'll get another chance to dig a little deeper.

19th October 2018

The slogan @nbssboston is 'a good life built by hand' today I was given a guided tour of some of the other programmes including Violin making and repair. The light was a little lower, the finishing room more like a science lab and the students were playing their violins for the very first time! This institution must be unique in offering such a broad combination of craft programmes in diverse subjects such as Bookbinding, Piano technology, Locksmithing and Preservation Carpentry! All with a focus on hand skills - It is a very special place!

Signs from around @nbssboston where evening classes in cabinet making and wood carving date back to 1933!

Rhode Island School of Design (RISD)

Providence, Rhode Island, USA

Furniture department BfA Furniture Design MfA Furniture Design

Lothar Windels Programme leader **Chris Rose** Senior Critic

Visit 22.10.2018 - 24.10.2018

RISD is an internationally renowned university of the arts that attracts a significant number of international students. It has an unparalleled alumni network that unlocks doors for graduates. Based in Providence it has formal connections with Brown University (Ivy league) that proves attractive to applicants. With fee's and living costs totalling over \$70,000 interest from European students is very limited with most international applicants coming from South Korea and China. RISD has a broad range of arts programmes including Industrial design and other crafts eg glass and ceramics - interdisciplinary work is encouraged.

The furniture department is freestanding with circa 100 students who can access a broad range of excellent resources. Each undergraduate student has their own studio space and final year students also have a bench in one of either the wood, metal or upholstery workshops. Post graduate students have their own booth which acts as a studio within the workshops. Having such a substantial community of students creates a very exciting learning environment.













Access to a world class museum, libraries (both books and materials), workshops and a unique nature lab make RISD an exceptional place to study. Shared spaces were very well equipped and clean/organised whereas individual workspaces were much less tidy. Students are encouraged to build up their own tool kit with less emphasis on quality tools for fine craft.

Making is core to the programmes but typically graduates will look to work as designers including setting up studios often in partnership with other graduates. I met Jonathan (Jewellery) and Sara (furniture) who met at RISD and set up O&G Studio on graduation. Students are given introductory projects in the individual workshops for example a simple wooden table to develop basic hand and machine skills. The diversity of materials and design focus means students are less inclined towards developing high level craft skills – ideas are considered more important.

The department is truly international attracting both students and faculty from around the world and encouraging opportunities for collaborative research projects. Students regularly exhibit at the Milan Furniture Fair and the International Contemporary Furniture Fair (ICFF) in New York.

The department is very well linked to the professional world with frequent guest critics, field trips and live projects. These projects often come to the department through the significant alumni network and have recently included Swarovski, IDEO and Steinway.













Whilst it is evident that many graduates go on to establish their own businesses the programmes avoid being diluted by the inclusion of business studies by offering optional classes and access to a highly skilled careers service. Internships are available and an employers event frequently attracts over 150 employers. The careers team offer a non-biased portfolio review and one to one feedback.

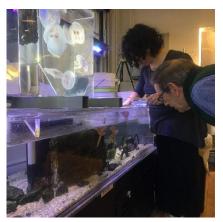
The programmes are very attractive and there are more than six applications for each place. Whilst I learnt that the depth of craft skills on entry is diminishing year on year it was interesting to hear that applicants are required to submit a one minute film of them making something. They are also encouraged to go off to take a summer school class in making.







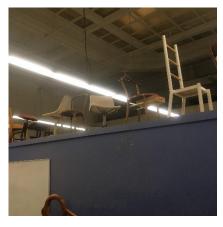












22nd October 2018

The @risdmuseum is wonderful! Just like the MFA in Boston they have a variety of benches - however these aren't attributed to the designer or maker.

23rd October 2018

This morning I was fortunate to meet with Chris Rose for a tour of @risdnaturelab Established in the early twentieth century it set out to "open students' eyes to the marvels of beauty in nature...of forms, space, color, texture, design and structure." Today it continues to do this through hands on examination of living and non living authentic specimens. I had to admit my snake phobia and avoided that part of the tour! It is a remarkable resource that is being used in so many exciting and innovative ways.

24th October 2018

A tour round the workshops and studios @risd.furniture reminded me of when I first toured the furniture department at Bucks College in the mid 90's. It was spacious and well equipped with 80 undergraduates and 20 post grad students each with a dedicated studio and workshop space of their own! The buildings are either purpose built (long ago) or converted from public spaces eg a bank! The personal workshop space could be in the extensive metal fabrication workshops - wood workshop with comprehensive mill or in the former bank closer to digital equipment and upholstery studio. Head of dept Lothar Windels gave me a comprehensive tour and then we discussed the special qualities of this internationally renowned institution.

I was invited to join the afternoon senior design crit. It was a 5 week chair project that showed the diversity of creativity and material exploration that RISD students engage in. It was lovely to see such an open platform for













..... feedback with staff and students from other levels of study and departments dropping in. I was also lucky to meet Sara from O&G studio who had been invited to join as a guest critic - small world!

Each MfA student gets a spacious booth in the wood shop over the 2/3 year duration of their study. Their integration into the wider creative community at RISD is evident in the breadth of their work and influences. Makes me want to study again! Although I'm not so keen on the fee's! Whilst the introduction of fees in the UK has made some impact on an applicants decision making here they are significantly higher with an all in (fees accommodation etc) cost of approaching \$70.000 per year!! That said last year there were six applicants for every place and Lothar told me it was getting harder to get a place year by year! I probably wouldn't get in!!!

Signs at #risd - the school is attractive to students as it has so many creative workshop spaces and an incredible alumni to call upon. The relationship with #brownuniversity means students can attend classes and study dual degrees! The potential cross pollination between students is significant.

Some of the furniture workshop spaces are in a former bank! The spaces are often beautiful!

Senior (3rd year) benches in the wood shop were not always tidy and organised. But the work being produced displayed a nice balance of creativity and craft.

Letterfrack

Royal Danish Academy of the Arts (KADK)

PP Mobler

capellagården

Malmstens

KFK

Stenebyskolan & HDK

Not Quite

National Academy of the Arts Oslo (KHIO)

Fellesverkstedet

Bergen University

Aldea

Letterfrack, Galway Mayo Institute of Technology Ireland

Furniture department

BSc Furniture Design and Manufacture

BSc Furniture and Wood Technology

BSc Teacher Education

Dermot O'Donovan Head of department **Sean Breen** Lecturer

Visit 04.03.2019 – 05.03.2019

Letterfrack was established 30 years ago and has grown into an impressive, specialist furniture school. Its rural location in the west of Ireland is both beautiful although perhaps isolated. The location attracts students to Letterfrack as do the highly experienced teaching staff, the focus on skills and an integrated work placement. Attendance is high and students are highly motivated.

In Ireland opportunities to study construction (making and technical drawing) are integrated into the leavers certificate for secondary school students – culturally making is embedded into formal education. The teacher education programme is now 20years old and graduates are in high demand for their practical skills. This in turn is the best marketing tool that letterfrack possess.

The three programmes offered are all structured around a common first year that has significant workshop practice – all students will make a series of set projects (with limited or no design input) that cover basic skills. Students can transfer







between them and typically there is movement from design and manufacture to wood technology. It was suggested that this is due to the employment opportunities available on graduation.

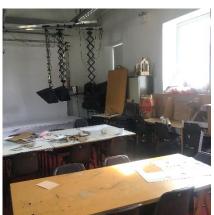
The work-placement is a crucial element of the student experience and in the future it will increase from six months to one year. Students can work abroad and some come to the UK, however many do stay in Ireland. There is currently a considerable skills gap as many people emigrated during the recession and many more employment opportunities than graduates.

The experience of this time in industry has a significant impact on the fourth year of study, it clarifies the roles that the students will take on graduation. Speaking with a whole group of final year students it was clear that none of them would consider a workshop practical role – looking towards pre-production including technical drawing and project management. Whilst makers in Ireland are typically trained through apprenticeships some graduates find employment in furniture production and architectural joinery but not bespoke craft.

The resources in the school are excellent with considerable space given to workshops. The large machinery workshop has production scale equipment including a CNC router that all students can access. Sessions are timetabled and entry is limited to these times with the teacher.

Design studios are available but a studio culture was not evident – the heavy timetabled load on both teachers and students does not seem conducive to this. I felt that some













design decisions were rushed reflecting time pressures. Projects were well designed and incrementally developed craft and design skills together.

The recent addition of a mobile sawmill and kiln means 50% of the timber used is now Irish and often local, it is much less expensive and an incredible learning experience. Students do not pay extra for materials and as a result there was lots of wastage.

The teaching team are very cohesive and meet to drink tea and eat lunch three times each day. This informal meeting point is very helpful in the smooth running of the campus and programmes. The staff are almost exclusively graduates of Letterfrack and the number of guest speakers has decreased. I believe it would be beneficial to look outside of the institution and it was pleasing to hear that the they would be interested in international collaboration and exchange.

Graduates are unlikely to set up in business as a furniture designer maker without unique circumstances; access to workshops/clients/other income. The potential to have a fellowship or incubator workshop within the institution was possible but there has not been any demand.

A reputation has been gained through the successful delivery of live projects with clients such as the National Museum of Ireland and the presidents office. Live projects can be both internal and external and are regularly integrated into the curriculum. The teaching team are very clear about how they enhance the educational experience and at the same time considerably increase the teachers workload.



















4th March 2019

The first day of my Fellowship part two was an incredible tour around @gmitletterfrack meeting all of the staff and students by Sean Breen - thank you to Sean and everyone for being so welcoming!! Three degree programmes are delivered alongside one another often crossing over in terms of skills and staff are BSc Furniture Design and Manufacture - BSc Furniture and Wood Technology and BSc Education (with a design, technical graphics and woodworking focus!) The overriding feeling was one of an amazing community of woodworkers - the workshops were bustling with enthusiastic designers and makers led by time served passionate lecturers! Looking forward to tomorrow!!

Sean Garvey and Martin Kearney were giving a lecture and demonstration in the recently installed (2years) timber shed. Cutting locally sourced chestnut on the mobile saw mill brings to life timber technology lessons that were once delivered by PowerPoint! Every student in the first year of study will get the opportunity to see the mill in action and get hands on with timber preparation. Martin is the expert and manages the kiln from which dry local Irish timber emerges ready for use after several weeks. This facility was supported by government funding and adds significant value not only to the students learning experience but also the local rural economy! Timber is often donated to the school allowing them to process interesting logs that are both unusual and potentially of low economic value. Exciting to think that in the third year they are now self sufficient for approximately 50% of the schools timber usage! A model that should be replicated back at home!

No furniture workshops are complete without a well equipped machine shop! This one is incredible - today I saw second year students on both the Education and













..... Furniture Wood Technology programmes using a beam saw, CNC, edgebander, veneer press, planer-moulder (four-sider), as well as more typical woodworking machines! These are all industry standard and up to date making the competent users all very employable on graduation. The students all make use of these skills on the 6 month (soon to be 12 month) industry placement in year 3 of study. The students really benefit from this real world experience and come back (mostly!) with a new found confidence and vigour for the final year. They often go to companies making furniture or architectural joinery both inside Ireland and abroad! This is a key component of making their graduates employable - well done @gmitletterfrack I'm sure it is not always plain sailing but the excellent results are obvious.

5th March 2019

A common first year across all three BSc programmes focus's heavily on furniture making hand skills. Each student will make the same projects, including dovetailed box, marquetry panel and a dining chair (amongst others). Every student is required to be fully prepared with a set of high quality hand tools specified by the lecturers and in most cases bought directly from the institution. The combination of good quality tools, well designed projects, high quality teaching (demonstration/guidance) as well as practice gives everyone who comes through Letterfrack the opportunity to develop excellent skills.

I very strongly believe that live projects bring learning to life and here @gmitletterfrack it is obvious they feel the same way. Students were able to tell me how live projects had encouraged them to apply to the institution after seeing public seating in a national gallery, explain the challenges of working directly with a client and the benefits of working collaboratively. Lecturers explained the added







..... challenges they can bring but we agreed on the incredible opportunities they give to everyone involved. The table and benches illustrated were designed and prototyped last year for the campus canteen and will be made by two Furniture Wood Technology students this year. The added value to the students is significant and Letterfrack gain some bespoke furniture that knocks spots off run of the mill contract furniture!

It became obvious that the location of the institution - in the far west of the country, rural and rugged Connemara - had an impact on the people and the programmes.

Encouraging people to come - to move away from city life - to move away from family to study in a small village on a stand alone campus must be quite a marketing challenge. Yet once they arrive they must be blown away by the facilities, enthusiasm of the staff, links with industry and the very high employability of graduates. But there are advantages of being located away from distractions and I'm sure students cannot help but be influenced by the natural beauty that surrounds the place. I felt very comfortable at Letterfrack so much that I could easily have stayed - I fell in love with its beautiful rural location and look forward to going back!

Royal Danish Academy of the Arts (KADK) Copenhagen, Denmark

BA Product + (Furniture, Space and Materials)
MA Furniture and Object

Nicolai de Gier Programme leader MA

Visit 07.03.2019 - 08.03.2019

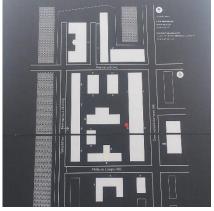
KADK is situated in the centre of Copenhagen and feeds on the incredible tradition of Danish furniture design and craftsmanship. Whilst the programmes have a specialism in furniture, government controls on student numbers have reduced opportunities and undergraduate programmes have been merged together much like many examples in the UK.

The emphasis is now more skewed towards design and away from the tradition of Danish manufacturing. The programmes have an international outlook with live projects taking the students outside Denmark to collaborate with manufacturers in Egypt, Mozambique and Indonesia. This gives them first hand experience of a truly international industry to engage with global issues and consider their responsibility as a designer.

Craft skills on entry are typically limited and early projects are workshop focussed to address this. The formal education system has become more academic with reduced opportunities to make things and experience tools and materials. Workshops are shared spaces, students have ample studio space but do not have access to their own bench.









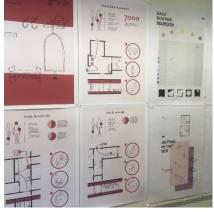




Graduates progress into design studio roles with very few having any interest in designer-maker opportunities. The university has provided summer opportunities for graduates to try things out however time and space is at a premium so longer incubation opportunities are not possible.

The most impressive feature of KADK are the regular opportunities for live projects, embedded into the programme. Often working with international brands such as Hay, students are exposed to the real world of designers and manufacturers building up an understanding of how they work together. Projects with manufacturers based in other countries are typical giving excellent multi-cultural learning opportunities.













8th March 2019

Yesterday I visited the Royal Danish Academy of Design in Copenhagen. Nicolai de Gier lead for the masters programme - Furniture & Object gave me a short tour and we sat to discuss ideas of an international network of furniture educators in his office.

The MA Furniture & Object has an emphasis on live projects working on annual collaborations with Danish brand Hay and an international project with manufacturers previously in Egypt, Japan, Indonesia and Mozambique. The focus is on design for industry although there is a significant relationship with making through material exploration and prototyping in the well equipped workshops. Nicolai explained the relationship between designer and craftsman in Denmark as being intrinsic with its rich heritage of furniture design and cabinet making.

@kadkdk secret chair museum! I was fortunate to be shown this fantastic educational resource that design students can use to explore chair construction, ergonomics, proportions and materials. I think this is the best collection of chairs I've ever seen! Capellagården Vickleby, Sweden

Fine woodworking 3 year

Mathias Nilo Programme leader

Visit 11.03.2019 - 12.03.2019

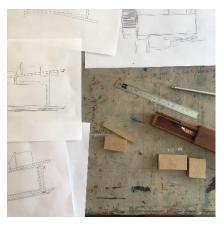
Capellagården was established on the island of Öland in 1960. Swedish furniture designer Carl Malmsten had already set up a number of craft/furniture schools and this community of craftspeople and education was to be his final example. Fine woodworking was the first to grow into a longer programme followed by textiles, ceramics and organic gardening. The vision was a creative environment where teachers and students could learn together, this combined with the isolated island location and small groups established an intense experience. Mathias aptly described it as a 'creative monastery'.

The three year furniture programme is effectively made up of two separate levels of study, brought together into a well designed course. (See appendix b for details of the Swedish education system). The first is a one year Art and Culture preparatory course that attracts many applicants (over sixty for six places). Students pay for this year of study; they have already completed formal education and typically are mature students. The following two years have been designated as vocational higher education and fees are paid by the state.

Skills on entry are declining and are a reflection of the reduction of craft opportunities in formal education.













This is offset by the age and high level of demand (including international applicants). Woodwork does exist in schools but it is under immense pressure from more academic subjects; there is a backlash across the country.

It is not mandatory to study the preparatory year to join the vocational programme however in reality all six students typically progress. The school provides an idealistic experience that attracts students who wish to live rurally and set up a workshop on graduation. Students confirmed this and explained the challenges of equipping a workshop and finding interesting work as a designer-maker. Whilst a rural location is less expensive the market is often in the main cities.

The programme content focusses on hand skills initially before moving into small scale wood-machining. The pedagogic approach is learning by hand – drawing by hand, processing timber by hand and using basic machinery; It feels like 'slow making'. This allows technical skills to develop free from the burden of design; although Mathias pointed out that a certain degree of individualisation is possible. Chairs could be replica's of Malmsten or Wegner again not weighing down the student with creative problem solving.

The opportunity to collaborate with other craft disciplines is obvious and projects are annually integrated into the programme. Capellagården has a summer long exhibition, and along-with the school shop, provides selling opportunities for batch produced projects. These are excellent examples of successful live and collaborative learning experiences.













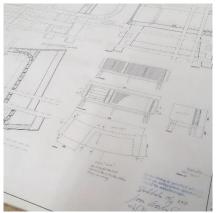
Students are responsible for the management of the workshops and in turn are technicians, cleaners and provide the fika (coffee and cakes). Initially this is closely supervised developing over time to a comprehensive knowledge of machine and workshop maintenance. As a result the workshops are very well maintained and organised.

All students have an individual workspace with a bench; students choose their place and are not arranged by year-group. They generally have their own tools but some manage with school hand tools for the whole three years. The space is quiet and calm, students are focussed on their work producing craftsmanship of the very highest quality. In the final year students are able to apply for and be assessed against the gesäll standards. Loosely translated as journeyman, the gesäll piece must combine a set range of technical challenges within a predetermined time-frame. It can be a replica or designed by the student. This high level of complexity and standard of excellence is not evident in the UK; the attention to detail and finesse expected and delivered is incredible.

Students were very aware that often these high level craft skills may not be used in employment on graduation yet they all recognise the benefits of reaching a level of excellence.

The unique features of the school including significant access to workshops, mixed crafts community, long tradition and atmosphere of the place are all very attractive. Students do look beyond the school, exhibiting at the Stockholm Design Fair, international visits and exchanges.



















11th March 2019

I have just spent an incredible day @capellagården with Mathias Nilo, master of the wood programme, giving me a tour and short history of the school. He described it as a 'Creative monastery' - it's location on the island of Oland (off the east coast of Sweden) as well as the idealistic approach to craft and living/working in a creative community all contribute to make it unique. I had heard and read about capellagården but until you visit a place the picture is incomplete - what I now can clearly see, is that It is a truly special place!

The main programmes delivered at capellagården are Furniture | Textiles | Ceramics | Gardening The School was established by Carl Malmsten on redundant farms in the small village of Vickleby. It was the last (of several) schools he set up and was focussed on the principle of a community of craftspeople in mixed disciplines all working and learning together. It is thriving today with 60 applicants for 6 places on the furniture programme! The holistic approach means that during summer and autumn the school kitchen is self sufficient in organic produce and all staff and students dine together.

The act of eating together in a common dining hall helps to build and enhance the community. I was made very welcome by everyone - staff and students - who all sat, ate and drank together. It must help to remove barriers between everyone and reinforces the family of creative thinkers and makers. I particularly enjoyed drinking coffee from mugs made by students collected from a cupboard made by students!

12th March 2019

The furniture students at capellagården have access to excellent workshops from 7-11pm every day of the week! It













..... is essential that each student has their own personal space at their workbench. Most collect their own hand tools but the school can provide them for international students. Much like I witnessed in RIT they take full responsibility for the cleanliness of the spaces and for the maintenance of the machines. Clean up of the floors happens daily and for one week each semester every student becomes workshop master - giving up one day to workshop duties and leading the cleaning! Students told me that time management is critical - so much access can lead to long working hours - the need to understand productivity levels and tiredness around machinery is essential to retain quality and safety!

Third year students often choose to produce a Gesäll project - translated as a journeyman project. This can be designed and made by the candidate but also could be a replica that meets strict guidelines so that specific skills and techniques are demonstrated to examiners. I am unaware of an equivalent level in the UK or anything I would consider as robust a training in furniture making! The patience and skill demonstrated is exceptional. Drawings here are made by hand - to help develop a deeper understanding of the outcome - and in this case submitted for assessment prior to it commencing. Arvid @renard_woodworks is making what I can already see will be an excellent sideboard - the attention to detail is apparent in all of his work!

Whilst fine furniture making is the central component of study capellagården ensure students access a broad creative education. This week first and second years are taking an art class in this beautiful building purpose renovated delivered by a resident artist! That said the students all prefer to be at their bench!!







12th March 2019

It was great to hear about collaborative projects between crafts often at an individual level or in projects that combined students from different disciplines. The school has an exhibition that is open for the whole summer along with a shop. As Öland is a summer tourist destination it attracts customers and is also an opportunity to show work to employers and alumni. Pictured are some folding tables made in batches by a small group of furniture students within one week - they have a matching tray that has a print designed by textiles students. The aim is for all areas to contribute products for sale to facilitate the long running of the exhibition. I also learnt about a collaboration between ceramics and furniture using a single oak tree that was felled locally. It is great to see live projects that bring the learning to life! And add another dimension to the slow paced fine furniture making.

As I plan my onward journey to Stockholm I cannot leave capellagården without commenting on the importance of Fika! It is more than just a coffee break it is a ritual that brings people together. The daily routine is regularly punctuated with Fika and certain days of the week are special Fika where coffee is served with cake or freshly baked bread. Each programme also had its own space in the workshop where students are able to sit together. Both @rycotewood_furniture and @sylvawoodschool have regular tea breaks but not like quite this - definitely something I should bring back with me!

Training to be a crafts person requires a deep understanding of tools and how materials behave when the two connect. I believe that central to this understanding is practice and experimentation - the importance of having a bench of your own and to collate a personal tool kit is of paramount importance. To own tools and understand how



..... to care for them, to improve them, to make them sharp and to produce high quality work with them is part of the process. It follows that building your own toolbox and carefully positioning the tools inside is part of the journey at capellagården I saw lots of toolboxes lovingly crafted but functional and being used daily! I think you can definitely learn something about a craftsperson from their toolbox!





Malmstens, Linkoping University Stockholm, Sweden

BA Furniture Design
BA Furniture Cabinetmaking
BA Furniture Upholstery

Ulf Brunne Head of department
Leo Johannsson Programme leader Design
Anna Karoliina Priha Programme leader Upholstery

Visit 14.03.2019 - 18.03.2019

Malmstens is a stand alone furniture school affiliated to Linkoping University. It offers a unique collection of undergraduate furniture programmes with an emphasis on craft skills and collaboration. Like Capellagården it was established by Carl Malmsten; whilst there are similarities it is much more industry focussed and students benefit from a much larger team of fourteen inspiring staff and incredible industry networks. Being situated in Stockholm it is easy to attract guest speakers and is close to industry for visits.

The school has impressive industry standard resources for all programmes and is housed in a purpose-designed building. Cabinetmaking students and Design students have their own wood machining workshops. The class sizes are small (six to eight per year) and every student has their own space in studio or workshop. Workshops are cleaned and maintained by the students with reference to a daily and weekly schedule. Workshop access is seven days a week with long opening hours, with machines closing at 21.00 and benches at 23.00.







Common workshop induction training for cabinet-making and design students, in year one, gives them all an in depth understanding of materials, hand processes and wood machining. Set projects are designed to allow students to gain a broad experience free from design initially, however a stool project very quickly introduces design processes.

I observed excellent internal collaborations built into the structure of the programmes, reflecting the manner in which craftspeople and designers work together as equals in the outside world. Students are taught to be respectful of each others specialist skills and the best outcomes demonstrate the sensitivity brought to these relationships. This is evident in gesäll pieces crafted by upholsters and cabinetmakers. Typically they act as clients for the design students who in very close association generate proposals that are frequently created and submitted for assessment. I was particularly impressed to see upholstery gesäll pieces labelled as being designed, frame manufactured and upholstered by three separate students.

The structure of the cabinetmaking programme leans more towards accurate and creative use of wood-machines rather than focus on hand skills. Both are evident in chair-making and gesäll pieces, with students having the opportunity to develop both in tandem. Students can re-produce replica Carl Malmsten (and other designers) furniture whilst developing skills. Classes in business studies, design studies, drawing and design history compliment the workshop based training. Places are competitive resulting in a students being highly motivated, often joining from preparatory furniture programmes with good skills. Whilst the access to resources is excellent, students do need to be driven and organised to manage their time.







External collaborations are particularly relevant to the designers. Alumni are spread across the industry and provide contacts for live projects that do go into production. Malmstens are frequently approached to collaborate with international companies and are in the fortunate position to select strategically who they wish to work with. Recent projects include Lammults, Swedese and Swedish Wood. These partnerships often lead to exhibitions that travel internationally to both London Design Festival and Salone de Mobile – Milan.

A recent project combined a partnership with Swedish Wood and a Chinese manufacturer, for the Chinese domestic market. It involved cultural research, international travel and the complexities of language. Experiencing international communication and developing an understanding of a Chinese manufacturers capacity and potential really sets these students up for working in a global industry.

BA Furniture Upholstery is internationally unique at undergraduate level. It has recently struggled to recruit sufficient students as feeder programmes have closed. It is under pressure and may follow BA Furniture Restoration in disappearing from Malmstens offer, however there are plans to redevelop the curriculum. It is such an important programme that could attract an international audience but a challenge that would need to be overcome is that all of the programmes are currently delivered in Swedish.

Design graduates have a depth of knowledge in working with wood, they have developed excellent CAD skills that go beyond abstract technical drawing skills to work close to the reality of industry expectations. The cooperation between students makes this a reality.













Future developments include developing a more formal alumni network, an international symposium, opportunities for Masters level study and investigating the potential of incubator workshop/studio opportunities. At present design graduates find employment in studios, whereas there is a split in graduates from cabinet-making, some find employment as makers and other look to set up in business often in partnership.



















14th March 2019

Today I was very warmly welcomed to @malmstens_liu by director of studies Ulf Brunne. The school initially created in 1930 to train skilled craftsmen to make Malmsten furniture has a fresh modern look! It moved to this purpose designed facility 10 years ago from its original location in the centre of Stockholm. It has been very cleverly constructed to perfectly meet the needs of 60+ undergraduate students studying on one of three furniture programmes: Cabinetmaking | Furniture Design | Furniture Upholstery

A significant benefit of having a stand alone campus that only serves furniture students is being able to deliver common courses/modules. This saves teaching resources that can be used elsewhere as well as bringing all students together to share ideas and develop friendships (start to build their professional networks). The tool tray pictured is a common project for all students that will cover wood machine training - the tray changes slightly each year so I could distinguish between them! Once trained they have 7 days a week access to workshops without direct supervision - unheard of in UK institutions. This trust and professionalism on the part of the students is very impressive. Not to take advantage of such freedom and to always work to safe protocols. The stools are another common project where a similar amount of timber is given to each student (of a different species) who then has a short time to design and make. The results are an opportunity to challenge their ideas and the norms in solid wood construction - the results can be very educational.

Students and teachers both positively described the importance and benefits of collaborative projects between programmes. Some courses (modules) bring together students from each programme into teams to deliver a







..... prototype using the combined skills of all three. Other projects can be like real life interactions between professionals, for example a crafts person making a replica chair and working with an upholsterer to create the seat cushion(s). Another great example is for an upholsterer to collaborate with a designer in the creation of a new piece of soft furniture. I was particularly interested in any perceived hierarchy or tensions but the students all confirmed that they worked equally and that these projects were an integral part of their studies.

15th March 2019

I cannot over emphasise how supportive and friendly all the furniture people I've met are! (I'm not surprised!) is it something to do with the wood?? Another area of common ground is the coming together of all staff for coffee or tea around a large table - this one @malmstens_liu is just like one @gmitletterfrack and the one @rycotewood_furniture Its such an important part of the culture of the three places - where ideas are shared - problems are solved informally! I think you can tell a lot about an organisation by how they treat their staff and whether they have the time to stop for coffee!

Robin Helgesson is a third year studying for his BA in Cabinetmaking he gave up his time to show me around and explain how the programme worked. As with all good furniture programmes the personal space afforded to each student is critical - here each student has a bench | toolbox | trolley(+tool drawer) | trestles x4 | high level storage space. This is so impressive and gives the space physically and metaphorically for Robin and others to produce excellent work. His gesäll piece is almost complete and looks fantastic. With circa 24 students across the three years, all of the personal space/resources and a machine workshop of their own they are very lucky students! @woodworker.rhs @malmstens_liu













16th March 2019

As far as I am aware the möbeltapetsering (upholstery) is the only academic BA programme of its kind. It has a much smaller intake than the design and cabinet making programmes with only 4 per year. They have amazing facilities and work on both traditional and modern pieces. They often reupholster pieces learning very traditional methods and as I have previously mentioned they also collaborate to create new work. Their work can also be examined as a gesäll project - often reaching the very highest level of quality.

The furniture design students have a personal space in the studio and access to shared benches and their own machine workshop!! It is equipped with top of the range machines (Martin, Panhans etc) just like the cabinetmakers but without a thickness sander. The expectations for making prototypes to a high quality is apparent and all students supervise one another whatever the programme. The keen eyed amongst you will have noticed the chairs on high shelves around the studio space - yet another collection of chairs just as impressive as those I've seen already!! I'm quite jealous

18th March 2019

Today the students at Malmstens were busy getting work professionally photographed ready for their upcoming exhibition at the Milan furniture fair. Whilst they exhibit annually in the Stockholm fair, this is the second year running they will be showing work in Milan. Ulf Brunne, director of studies, told me how live projects with industry make it possible! They support the programme and students giving them real world project briefs, feedback and financial support. This brief was connected to Swedish Wood using the ubiquitous timber Pine. It has become a popular material with the designers at the school but when



Arbetsplanering

Penskring

Register of the state of the



..... asked some of the cabinet makers suggested a preference for hardwoods! The live projects vary year on year and take advantage of the fact that many Swedish furniture companies employ several alumni of the school. The link with Swedish Wood started a few years ago and resulted in an international collaboration with Chinese manufacturers - being able to carefully choose the collaborative projects has allowed them to move into an international arena and allow the design students to face some of the everyday industry challenges of communication and cultural differences. I am incredibly impressed with the projects and look forward to seeing who they work with next!

The cleaning is carried out with similar precision to the cabinet making - that said the separate machine workshop for the designers is just as clean and tidy! Smaller group sizes and project programming helps but fundamentally students all buy into the importance of good workshop practice and maintain the equipment to a high standard. The trolley of cleaning materials is specifically for the machines - students work collectively in the common areas and alternately take individual responsibility for a machine. This is certainly an area we can improve @rycotewood_furniture expectations need to be set very high and maintained!!

A lovely collaborative project between cabinetmakers and designers is called 'tiny product'. They are divided up into groups and work as small teams to design a small object ready for a production run between 50-150 to be carried out over 3 days. The designers create technical drawings and visualise the production whilst the makers develop the processes and jigs (and subsequently make the products) This is all without a CNC router so intelligent design development is crucial. The school then keep them as







..... gifts! The spirit of collaborations is a significant and unique feature of the school and teaches the students so much about how to cooperate/behave in the real world. This project was launched yesterday along with another which links designers with both upholsters and cabinetmakers. The later act as clients for the designers who design a Gesäll piece for/with them under the strict criteria. I'm sure some prefer working alone and others may not always pull their weight but by pushing them all outside their own comfort zones will definitely pay dividends. I'm a big fan!

I would really like to thanks all of the staff and students @malmstens_liu for giving me the freedom to explore their institution from top to bottom! I knew a little about Carl Malmsten before this research trip but now I am in awe of a man who has left such a legacy for furniture designers and craftspeople. Beyond the library at the school is a small room of his furniture along with books, pictured and some student work - it's not a formal archive but it is organised by a foundation that support the students. It was lovely to be shown and to explore his work first hand to help me learn more about him. The vision he had to support and develop furniture education in Sweden has certainly had a lasting impact and continues to inspire and engage students today. I've included some images taken around the school that show the key features of collaboration between students, of the rich history they belong to, the highest level of craft skills, the creative development of ideas through making and the realism of working with industry both creatively and through modern machine practices (not just by hand!).

Stenebyskolan, Dals Langed, Sweden

Preparatory: Furniture Crafts (Wood)

Vocational Higher Education: Furniture making, restoration

and upholstery

Jeff Kaller Rektor

HDK Steneby, (Gothenburg University)

BA Wood Oriented Furniture Design (WOFD) MA Applied Arts

Rasmus Malbert Programme leader BA WOFD Luka Jelusic Lecturer BA WOFD

Visit 20.03.2019 - 23.03.2019

With a history of over 100 years of craft education Stenebyskolan/HDK Steneby has a broad range of furniture programmes at different levels of study. All programmes are post compulsory education and the rural location dictates that students come to live in or close to the school. The combination of levels and partnership between Stenebyskolan and HDK Steneby makes the institution a unique and special place to study. There is potential to progress between preparatory and higher education levels of study.

The two year preparatory programme has its own workshops with wood machine workshop, individual workbenches and a communal design studio space. After training access to the wood machine workshop includes evening and weekends,







there is a rule dictating a minimum of three students should be present. Students make very impressive objects learning a high level of craft skill through projects of increasing technical challenge. These are mostly design and make assignments with both a creative and craft element. Graduates can go straight into (self) employment or progress to further study.

The two year vocational higher education programme has specialisms in cabinet-making, furniture restoration and upholstery. It is based in linked industrial units approximately 5 miles away from the main site giving it a real sense of being work related study. The students mostly work on live projects from a simple repair to batch production. They are managed by a Master to ensure that a balanced learning experience is possible and payment supports the learning environment. Alongside the live projects classes are delivered in business related skills as well as developing craft skills. The workshops are very well equipped and wood machinery is shared by the cabinet-makers and restorers. A CNC router is available in a separate unit, it is an impressive resource available to all programmes at the school but without a dedicated technician it is significantly underused. Small class sizes and no fee's make vocational higher education an attractive option for those who want to learn practical skills without the compromise of design study.

Undergraduate study is delivered by HDK Steneby; part of the Academy of Arts and Crafts at Gothenburg University. This partnership was initiated circa 2000 taking existing three year programmes in wood, metal and textiles and developing them into BA's. The workshops and design studios are much the same however the emphasis of WOFD has changed







from focussing heavily on cabinet making (often gesäll standard) to a much broader design and make education. Students still gain an extensive practical experience using hand and machine tools to explore and manipulate wood and I observed extensive workshop/machine cleaning/maintenance much as I have in other institutions. The focus on materials is evident across all of the undergraduate programmes and introductory courses make it possible to use all of the workshops to combine materials. The approach across the school is thinking through making, with the expectation that by using materials and by making you become a better designer.

WOFD students often work on live projects with industry learning about real world challenges, for example communication difficulties and late delivery, they learn to react and solve problems as they arise. Impressive examples I observed included; a collaboration with the upholsterers on the vocational programme to design for a local school/library. And a brief that focussed on the circularity of materials linking multiple companies in material recycling/development, mould making and pressing. This design meets industry project was exhibited at the Stockholm furniture fair, an annual opportunity for the students.

The rural location is very attractive and being isolated means that students are thoroughly engaged in their studies and become develop close friendships. The municipality are supportive of the school and shared funding of resources such as the library and exhibition spaces as well as projects in the local environment bring the community together. A great example of this is the outdoor kitchen and sauna spaces designed and built by students as an eight week







summer project. A group of wood/furniture students from Steneby and architectural students from the USA collaborated with the local community to bring their ideas to life, it is located below the school on the waterfront and used by everyone.

Despite its rural location the international links are very notable. The unique features of the undergraduate programmes attract international students and staff. The programme level links are often with world renowned institutions and programmes, Metal Art has close ties with Hereford College of Art, UK and Carbondale, USA, with staff, students and practitioners travelling between them. WOFD has links and exchanges with schools in Japan, RISD and University of the Arts Philadelphia in USA. They did have a successful regular student exchange with Bucks College in the UK but this has lapsed. There is certainly an opportunity for this to be recreated in the future with like minded programmes.

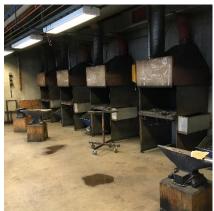
What makes the HDK Steneby programmes accessible and truly international is that they are taught in English. Often undergraduate studies are delivered in the local language (Malmstens, Khio, Bergen) whereas Masters studies are in English attracting applications from all around the world. I met students from the UK on both the BA and MA programmes.

The combination of furniture programmes, at different levels, all thoroughly embedded into the craft community make this a special place to study. Workshops and specialisms in a wide variety of crafts add significant value to the experience. Students benefit from access to excellent resources, high quality teaching staff and low numbers.

























19th March 2019

Today I have travelled across Sweden to Dalsland to visit @stenebyskolan and @wood_oriented_furniture_design amongst a number of other furniture programmes the school offers. It is particularly exciting as I came here 21 years ago as an exchange student whilst studying Furniture Design and Craftsmanship at Bucks College (as it was then known). It was the most exciting part of my furniture education to come to this remote location and to focus for four weeks in such an inspiring place. I slipped into the workshops and studio briefly this evening to meet with programme leader Rasmus Malbert @materialistdesignstudio - some things felt very familiar but much has evolved since then! I can't wait to go back tomorrow and take a proper look!

20th March 2019

The programmes here at Stenebyskolan are focused on materials and hands on learning. There are courses in Wood oriented furniture | Metal (both jewellery/object and artist blacksmithing) | Textiles including (weaving, printing fashion). Today I was given a full guided tour by rector Jeff Kaller - who showed me all of the workshops new and old and explained the relationship between them. I was finally able to get a grasp on the different levels of Swedish craft education (he showed me a great diagram) and how they interact with each other. Since I was here last the three year programmes have been validated at degree level and are run by HDK | Gothenburg University added to which they additionally deliver an international masters course. The University have established new buildings including a state of the art facility for Metal art! The other programmes at this site are preparatory - leading towards higher education or perhaps employment. This is similar to our FE colleges - here they offer 2 year study in a range of materials often feeding the degree education here but













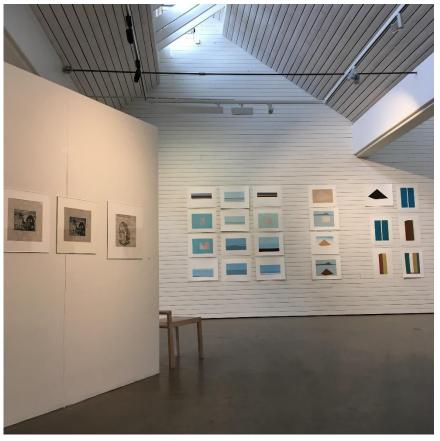
..... predominantly sending them off to study across the country and Europe. The final visit was to a separate industrial facility where vocational education is delivered in cabinetmaking furniture restoration and furniture upholstery. This is quite a different model that I will explain separately.

At a separate industrial unit up to 10 students can study for a two year vocational degree (I imagine it is similar to an HND or perhaps an FdA in the UK) the subjects on offer here are Cabinetmaking | Furniture restoration | Furniture upholstery. What makes it special is that each subject has a Mäster who guides the students and the work they undertake is often real life commissions or restoration projects. The students also study business skills and CAD etc alongside a real life work experience. The decision to base this in separate workshops and to equip them with a mix of old and new machines was taken to make it similar to how they will experience employment or self employment. They also have a 5axis CNC that is a collaborative venture between the University and Stenebyskolan. This is so impressive - the connection with reality working on paid projects (that financially supports the project), low staff:students ratio and quality of resources seems like a brilliant educational model.

Jeff explained that both the BA and Masters programmes attracted international students from around the world and as we entered the vast metal workshop we met Jack @work_of_iron all the way from England! What made this meeting remarkable was that I had met Jack once before, a little over a year ago when he and I were briefed as #churchillfellows2018!!!! I shouldn't be surprised as HDK/stenebyskolan offer the number one artist blacksmith course anywhere in the world but to literally bump into him is amazing! Looking forward to catching up with him tomorrow and sharing tips.







21st March 2019

As in other Swedish schools Fika is taken guite seriously! The opportunity to come together and talk is clearly seen as highly important for students and staff by the number of such spaces dotted all around the place - typically one for each programme. I am very impressed with the lead taken by final year @wood oriented furniture design student Rasmus who has contacted many companies asking for sponsorship through the supply of materials and furniture for their Fika space! He has secured considerable support including the generous gift of these stools by @swedeseab Not only do they have lovely furniture to sit on there is an obvious educational benefit in being surrounded by well designed and manufactured furniture as well. This positive relationship and industry support is something @rycotewood furniture students would definitely benefit from and I encourage them to perhaps engage on a similar project!

@stenebyskolan has a series of exhibition spaces some available for students and some used by both the school and other arts organisations in the local community. This is one of many ways in which the school is fully embedded and engaged with is locality and people. The main exhibition space has a programme that can include international visual and applied artists bringing a diverse range of cultural opportunities and experiences to everyone in this rural setting.

Being located in a rural environment for over 80 years has meant that stenebyskolan is part of the cultural heritage of the place. Recent projects have further embedded the relationship through designing and building a Sauna and outdoor kitchen for the community to use. The project was led by Luka Jelušic landscape architect and furniture designer (lecturer at the school) who worked with seven







..... students from across the wood programmes and 14 architectural students from a university in USA. Three weeks in the design and five weeks to build collaborating in the process with local people has created such a great legacy for all to share! Some of the architects hadn't even used a hammer and none had built a full size building but through teamwork and hard graft it was completed on time. Take a look @langedpark I especially enjoyed watching the shingle making machine - although Luka told me it was hard work just to get it working!

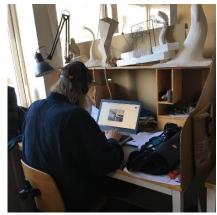
21st March 2019

@wood_oriented_furniture_design students are engaged in live projects throughout the programme. Some include collaborations with students studying in metal or textiles and each year the first years work with upholsterers from the technical programme at Stenebyskolan - this year they are about to create soft furniture for/with local primary school children. The images show the most recent second year 'Design meets industry' brief that was exhibited at the Stockholm Furniture Fair last month. The students were asked to contemplate circularity in design using recycled textiles in partnership with a company who are developing new materials for a circular economy. Other outside organisations included a CNC company to produce pressing moulds and another to form the materials under heat and pressure. The material is designed to be able to cope with future re-grinding and re-forming into new products. The realities of waiting for moulds to be delivered at the last minute, communication with multiple organisations and the ultimate deadline of the exhibition in Stockholm were just a few of the valuable lessons learnt! This contact with the real world is essential to prepare graduates for life beyond education it challenges them to work in a more risky way learning lessons that would be so much less effective without taking part! Well done @materialistdesignstudio and Luca for making them happen!













Perhaps @wood_oriented_furniture_design is the most similar to the BA programme I lead @rycotewood furniture it is certainly a balance of designing and making - with a focus on wood as the major material - an immediate engagement with material - live projects and every student has their own bench, tools and access to machines. The machine driving license is similar but here students are able to access them 7 days a week and late into the evening - my students would be very jealous! A couple have been upgraded since I last visited but mostly they are the same mixing solid cast older machines with more precise panel saws, a laser cutter etc. Bjorn is the technician and he is on hand to guide students with processes, jigs and technical knowledge. Much like Rycotewood benches are in a separate space with students mixed up across all years BA and Masters meaning that significant learning is taking place between each other. Again responsibilities for cleaning are shared and all students 27 pull their weight.

What is different here is that every student also has their own studio space! It makes a difference!

@lillsnickensteneby is a two year programme in post compulsory education. It is often used as a preparatory course leading to degree level study but can also lead directly to employment. It is very skills oriented but has a design education too with the majority of briefs including some creative input. It's quite hard to compare to programmes in the UK as all of the students are over 19 years of age and really is full time! They are afforded the same access 7 days a week including their own machines and each have a bench with plenty of space and their own toolbox. They also exhibit at the Stockholm Furniture Fair during the second year! This level of study attracts a fee but it is covered by a tuition fee loan. For those really





..... wanting craft skills this is a perfect start and in some cases enough - I met Chrisse and Klara who will be moving into the Not Quite workshops together in the summer!

As I reflect on my time @stenebyskolan I'm not sure three days was enough to see everything! What I have found is when an institution give me a tour, make introductions then allow me to wander and talk to anyone I get such a deep understanding of the place. Whilst I was particularly interested in the furniture design and making on both @wood oriented furniture design and @lillsnickensteneby I could see how the opportunities to work across materials and workshops is such an important part of the school. The meeting of people and ideas across materials and processes has happened for many years and continues to be of central importance to the whole community. These laminations are by a Masters student who is specialising in Metal Art - whilst I was there he was camped in the wood workshop and it was obvious that lots of sharing teaching and learning was happening. Having visited as an exchange student 21 years ago I can say it has definitely evolved but hopefully my students might be able to see opportunities for exchange or progression to Masters study in the future!

Oslo National Academy of the Arts (KHIO) Oslo, Norway

BA Interior Architecture and Furniture Design MA Design (Interior Design and Furniture Design)

Sigurd Strom Professor Furniture Design **Frido Evers** Lecturer

Visit 25.03.2019

In 1996 the Norwegian government determined that arts schools in Oslo should merge together to create the National Academy of the Arts. The schools finally came together in a physical way in 2010 when they re-purposed a former sail making factory. Shared resources and expertise has the potential for creative collaboration and this is now starting to happen.

The furniture study at both BA and MA level is a specialism within the broader programmes. Student cohorts are very small with twelve BA and eight MA places, they are very sought after opportunities. Undergraduate study is taught in Norwegian therefore students are typically Nordic whereas post-graduate study is in English and attracts applications from over 32 countries. Places are extremely competitive as students are attracted by the incredible resources and the lack of fee's.

Each student has their own studio space and after training access to a wide range of very professional, up to date, workshops. Students have a swipe card that gains them













access to spaces and tools dependent on their training record. The tools and machinery in the wood workshop are of the highest quality available. Gigantic ceramic kilns, a foundry, several forges, and fine metalworking equipment are linked with other specialisms/programmes but can be accessed by all. The digital resources are impressive, a CNC router, water jet cutter and large laser cutter are all managed by a knowledgeable technician.

The emphasis of the furniture programmes has evolved over the past five years and whilst making and manipulation of materials is essential the aim is not to produce highly skilled craftspeople. Students are encouraged to become independent creative practitioners, asking questions and solving problems. Norway does not have any industrial furniture production and although there is a resurgence of interest in craft it is most likely to serve the growing market for bespoke/custom furniture. It seems that the programme will move towards developing designer-makers.

Skills are not developed at school level in Norway and technical ability on entry has reduced, however it is pleasing to hear that perhaps an interest in skills is coming back. Students often progress from BA to MA study as it is tougher to find employment without a post graduate qualification. The institution does not provide any incubator opportunities for graduates however there are opportunities to use well equipped shared maker-spaces in Oslo.

The facilities and potential for collaboration at KHIO is incredible, however the lack of a furniture industry in Norway and only a developing market for bespoke furniture make it a challenging place to establish yourself or find employment as a craftsperson.

























25th March 2019

Oslo National Academy of the Arts is one of the largest art academies in Europe. It was created through the Norwegian government decision to merge arts education in the capital together and they moved into beautiful buildings - a former sail making factory- in 2010. Today I with met Sigurd Strom professor of furniture design.

The thing that surprised me most was that higher education is free in Norway including international students!! It's tough to get a place on both the BA + MA programmes perhaps not surprising given the lack of fees. The BA is taught in Norwegian so only attracts Nordic students whereas the Masters programmes ate taught in English and attract students from all over the world. The cohorts are small and on the design programmes each has their own studio space. The studios were large and divided between the three programmes within the school of design - graphics + illustration | fashion + costume | interior architecture + furniture - so six specialisms in one space! The idea behind this and the merger of arts schools is to foster collaborative practice - I was told this is beginning to happen more frequently.

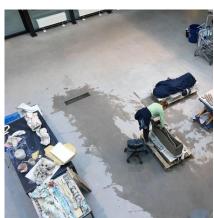
Workshops with access to tools and materials are essential in the development of designers and makers. @khio has some incredible workshops that once trained sufficiently all students from any programme can gain access. Of course some programmes are heavily reliant on specific areas but the freedom to explore and experiment is impressive. They really are 'state of the art' (a phrase that is often used but not often be accurate!) they are situated right in the centre of all studios in sensitively redeveloped factory buildings. The joining together of schools brought a capital injection for new machinery and equipment to compliment some that has stood the test of

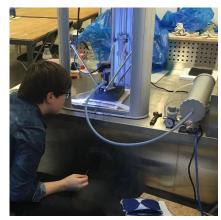












..... time. The kilns are huge, apparently they are the largest (in education) in Europe - I saw them from two storeys up! They have combined the best resources from the independent schools and added to them - they have excellent metal, wood, digital, ceramics, printing workshops! The idea of collaborating and sharing across programmes is still developing but the aim and ideal of coming together whilst making is definitely possible in such a well designed and equipped space!

A difference between a programme that is design or craft centred is where the students have their own personal space. Do they have a workbench or a studio desk? Here the wood workshop has shared benches, shared tools and lots of learning by doing rather than taught craft skills. It was explained how the programme has evolved moving towards design from craft over the past 20 years and how the education was focussed on the individual. There is a movement towards artistic and creative output - graduates who ask questions and self reflect. There isn't a Norwegian furniture industry and with lots of wealth the concept of designer maker is something students may wish to follow on graduation. Whilst I'm more familiar with the teaching of craft skills (perhaps a more narrow view) here I could see how with low numbers and workshop access how working things out yourself would lead to adaptability in an uncertain and changing future. Access to digital equipment especially a CNC router is becoming essential even for small businesses therefore education does need to support this area of learning for aspiring craftspeople.

Bergen University

Bergen, Norway

BA Design (Furniture & Spatial Design/Interior Architecture)
MA Design (Furniture & Spatial Design/Interior Architecture)

Gulleik Lovskar Lecturer

Visit 28.03.2019

The furniture programmes at Bergen University are located in a new building within the faculty of Arts, Music and Design (KMD). The Art culture and history in Bergen is important with excellent museums and galleries, whereas design and craft does not have same continuous history. Gulleik explained how the coastal region was home to approx. 500 small workshops but over the past 100 years this number has dwindled. KMD is a school in transition with new and existing students settling into a new space.

The amalgamation of the Art and Design schools into a brand new building has inevitably encountered some teething problems however when they are overcome the potential for collaborative learning is great. The building has workshops on the ground floor and studios above – spread out within large open plan floors. Programmes and individuals have created walled spaces that perhaps resist some of the potential for shared learning. Creating a studio culture is a central aim of the institution with students working alongside each other across specialisms, this is a work in progress and how the space is organised will be critical.













The emphasis of the programmes is on international issues, a more theoretical education not focussed on materials or craft skills. Students are encouraged to ask questions about mass consumption & mass manufacture, materials development and every project should take climate change into consideration. Whilst the school has the most amazing workshop resources students could follow an academic and theoretical approach that avoids them!

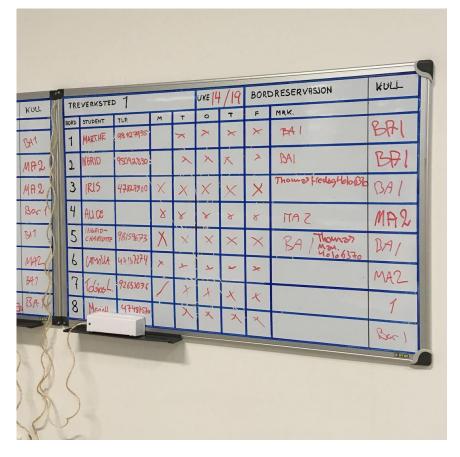
The wood and metal workshops are very well equipped with state of the art equipment. Digital resources are currently being improved as part of the initial fit out of the new space. Students were particularly frustrated by the timetabled access to these spaces. A booking system is used to sign up for access but limited numbers and space along-with priority to graduating students means it can take weeks to access them. The student numbers are similar to other institutions but they are not given the same level of independence or responsibility perhaps reflecting the emphasis of the programmes.

The technician and tutors lead skill building projects in steam-bending and stool making (using a fixed quantity of material). These are material and workshop introductions that engage the students in the design process through making/materials but subsequently this approach is not obviously encouraged.

Incubation opportunities are possible in the city with some links to the University however these are also in development. Students expressed an interest in staying in Bergen and developing a design culture in the region.



















28th March 2019

Today I visited the Bergen University department of KMD Kunst Musik Design. The merging of three separate schools has led to the subsequent creation of this brand new building for Art and Design! It was designed by Norwegian architects Snøhetta and staff and students moved in last year! So @kmdbergen Is a school in transition.

I now expect to find super clean workshops and top quality machines everywhere I go - here was no exception. Being so new they almost looked like they had hardly been used at all. The BA+MA Interior Architecture and Furniture Design was described to me as being theoretical and an academic approach to design. The students could potentially get through the BA with only limited engagement with this workshop, perhaps only first year inductions and construction courses. There is a strict policy on H&S, maximum numbers at one time, and the requirement for a technician to be present. A whiteboard is used by the students to book time well in advance. Priority is given to graduating students and those studying a particular workshop based course (module). It looked very organised but students were frustrated about the limitations placed on them. I am sure that may be to do with the transition to the new building but it could also be due to a shift away from making towards a more academic research based programme. I'm keen on a more immediate hands on experience of materials and tools - I feel that they are equally valuable approaches to study!

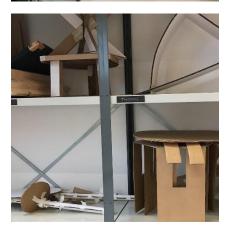
What a beautiful 'end grain' floor! The new building for KMD was designed around a vast central atrium that is used by students in a wide variety of ways. The potential for collaborative working across programmes is an obvious aim with an expressed link to big issues like global goals













.... and climate change - in fact lots of the staff and students were at a conference whilst I visited. Unfortunate timing for me but I was lucky to meet and be shown around by some lovely furniture students! @kmdbergen

Students all have their own well equipped and spacious studio space. They are expected to attend every day to generate a positive studio culture and peer to peer learning. Some students felt it was a shame that BA1+2 were on a separate floor to BA3 and MA and that dividing walls between programmes or individuals (mainly in fine art) discouraged collaborations. Again I'm sure these are the things that will be ironed out during this transition period - the vast open spaces available to be reconfigured with temporary walls gives so many possibilities rather than being divided into separate rooms as many older buildings can be.

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To complete a research project and report such as this requires a significant amount of support and understanding from loved ones and colleagues.

To my partner Rae, my daughter Sophie and my mum Marianne – without you this would not have been possible, thank you for your ongoing support of all I do.

To all of my colleagues at Rycotewood and the Sylva Foundation – thank you for giving me the time to undertake this project. Thanks to Drew Smith, Lynn Jones and Gabriel Hemery.

To all of my hosts in the institutions and workshops I visited - thank you for your incredible generosity. Special thanks to Aled Lewis for helping me make so many amazing connections in the USA.

To the Winston Churchill Memorial Trust – thank you for giving me this incredible opportunity.

My late father lan is my inspiration and I would like to dedicate this report to him.