

SDC Skills Survey 2021

An industry in crisis: the widening of the textile dyeing skills gap



society of dyers
and colourists

Foreword

by Dr Graham Clayton

Chief Executive Officer, Society of Dyers and Colourists

At the Society of Dyers and Colourists, we are not only providers of colour education, but also a hub of networking and knowledge-sharing for our global industry.

We have received anecdotal evidence in recent years, from members and the industry in general, that has pointed to the emergence of a worrying skills gap.

As such, we decided to carry out this specific piece of research to quantify the extent of the problem – gaining insight from industry professionals into the reasons for this – and identify how the sector as a whole can work together in an attempt to narrow, or close, that gap.

The results of our survey outlined in this white paper are very worrying. But we can also see that the industry is willing to collaborate to ensure that any dangers posed by a lack of suitably qualified people are mitigated.

Executive summary

There is an international lack of qualified textile dyeing professionals and this has led to a skills gap which is at crisis point, and already harming the industry.

The sector is in danger of losing knowledge and expertise permanently if action is not taken. The coronavirus pandemic has caused devastation to the textile industry worldwide – but there are already positive signs that this situation will ease in 2021.

About the survey

This survey was commissioned by the Society of Dyers and Colourists, and ran from 25th November to 14th December 2020.

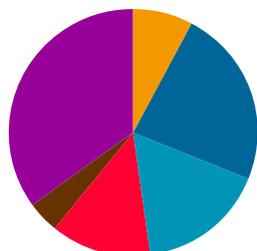
The questions were circulated among SDC members, shared with other relevant industry bodies for distribution to their members, and shared in various sector-focused social media groups and forums.

We received 117 responses, from people in varying levels of role seniority, among different types of dyeing-related businesses, across the globe.

To explore the nature and extent of a possible skills gap, we asked participants to say whether they agreed with a series of statements, and offered them the chance to comment further, and more specifically, in a series of comment boxes.

Findings

1. My organisation is generally able to recruit the qualified textile coloration employees we need.



7.8% strongly agree
23.5% agree
16.5% neutral
13% disagree
4.3% strongly disagree
34.8% not applicable

There is a division between those stating that they are currently able to recruit qualified textile coloration employees (31.3%) and those who indicate they are not able to recruit the talent that they need (17.3%). With over one sixth of employers not being able to find adequate human resource, this figure is set to increase in coming years.

2. There is an international shortage of knowledgeable textile coloration professionals.

25.4% strongly agree
45.6% agree
14.9% neutral
0.9% disagree
3.5% strongly disagree
9.6% not applicable



71%

believe there is a global shortage

An overwhelming majority (71%) state they believe there is an international shortage of textile coloration professionals. This strong response indicates the pressure that the industry is under to find the human resource needed to operate and innovate.

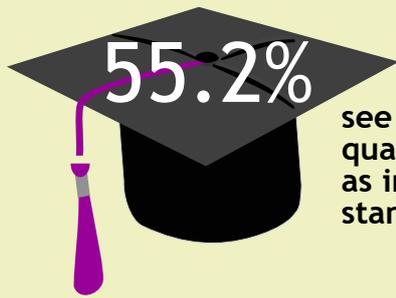
3. It is hard to find textile coloration professionals with knowledge that is transferable between companies and processes.

17.2% strongly agree
37.9% agree
19% neutral
9.5% disagree
1.7% strongly disagree
14.7% not applicable



Of those surveyed, the majority (55.1%) answered that they found it difficult to find textile coloration professionals with transferable knowledge and skills – suggesting a trend towards the learning of specific processes, rather than a deeper understanding of the scientific theory behind them.

4. SDC qualifications - FTCC, TCC, and ASDC - carry the most weight in this industry.



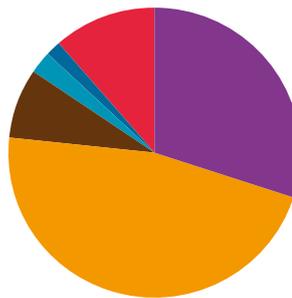
see SDC qualifications as industry standard

- 20.7% strongly agree
- 34.5% agree
- 25.9% neutral
- 11.2% disagree
- 0.9% strongly disagree
- 6.9% not applicable

55.2% of respondents answered that qualifications taught and awarded by the Society of Dyers and Colourists carry the most weight within the industry, with a minority (12.1%) disagreeing. This contributes to evidence that the SDC continues to be the industry standard for training for dyers.

5. The textile coloration industry is currently seeing a skills gap - with a lack of younger technical staff coming through.

- 30.2% strongly agree
- 46.6% agree
- 7.8% neutral
- 2.6% disagree
- 1.7% strongly disagree
- 11.2% not applicable



76.8%
say there is a skills gap

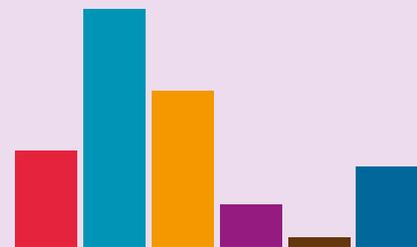
Of those surveyed, a very large majority of 76.8% agreed that the industry is currently experiencing a skills gap, whereby those with the scientific knowledge and experience are retiring and there is a lack of younger, technical staff entering the industry – with both of these factors combining, to create a talent vacuum.

6. The textile dyeing industry is currently seeing a skills gap, which is at crisis point, and is harming textile production.

53.4%

believe the skills gap is at a crisis point

- 15.5% strongly agree
- 37.9% agree
- 25% neutral
- 6.9% disagree
- 1.7% strongly disagree
- 12.9% not applicable



More than half of respondents (53.4%) said that this skills gap has hit a crisis point, and the industry is now actively finding that textile production is harmed due to lack of knowledge and skills within the workforce.



7. Knowledge of textile coloration in the supply chain is seriously lacking.

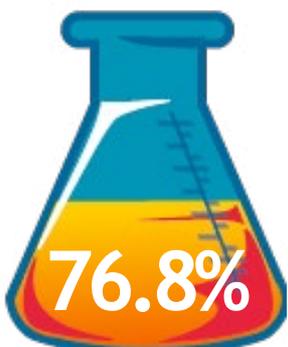


29.6% strongly agree
47.8% agree
8.7% neutral
3.5% disagree
0.9% strongly disagree
9.6% not applicable

77.4%
say knowledge is lacking

A large proportion of those surveyed (77.4%) stated that knowledge of textile coloration in the supply chain is severely lacking - highlighting the need for coloration experts to be able to ensure the dyes supplied can not only perform within regulation, but also result in a quality finished product.

8. There is a serious lack of scientific knowledge in the textile coloration industry.



report shortage of scientific knowledge

30.2% strongly agree
46.6% agree
7.8% neutral
2.6% disagree
1.7% strongly disagree
11.2% not applicable

76.8% of industry professionals questioned indicated that, as a whole, there is a serious lack of scientific knowledge in the textile coloration industry. This evidences that external theoretical training is not high on the agenda for many employers, who may prefer instead to train in-house on specific processes and tasks.

9. Textile coloration is no longer seen as a desirable career for young people.

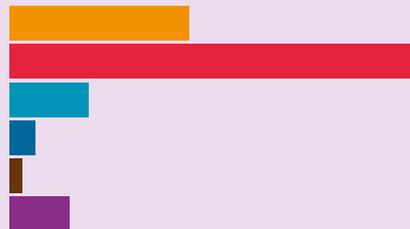
22.4% strongly agree
53.4% agree
11.2% neutral
5.2% disagree
2.6% strongly disagree
5.2% not applicable



Three quarters - 75.8% - of respondents to the survey stated that they believe that textile coloration is no longer seen as a desirable career for young people, with current perceptions of working within a dyehouse potentially out of favour among those who might choose and enter this profession.

10. The opportunities to gain industry experience whilst also gaining new knowledge are limited.

23.3% strongly agree
53.4% agree
10.3% neutral
3.4% disagree
1.7% strongly disagree
7.8% not applicable



76.7% agreed that there are limited opportunities to gain industry experience whilst also gaining new knowledge - perhaps shining a light on a lack of education provided concurrently to working within the industry, when both are vital to overall professional development.

11. Universities are equipping students with knowledge needed for a career in the textile industry.



**say university graduates
are well equipped**

6% strongly agree
56.4% agree
26.7% neutral
32.8% disagree
8.6% strongly disagree
9.5% not applicable

Almost two thirds - 62.4% - respondents said that they agree that universities are equipping students with the knowledge needed for a career in textiles, evidencing the need for the industry to continue working closely with educational institutions to provide fit for purpose learning.

12. Ongoing education in the textile coloration workplace is vital to narrowing the skills gap.

87.1%

agree workplace education is vital

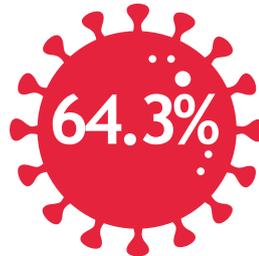
34.5% strongly agree
52.6% agree
6% neutral
1.7% disagree
1.7% strongly disagree
3.4% not applicable



A massive 87.1% agreed that ongoing education in the textile coloration workplace is vital to narrowing the skills gap, meaning that the industry consensus is that ongoing learning throughout a textiles career is key to overcoming the current human resource challenges the sector is facing.

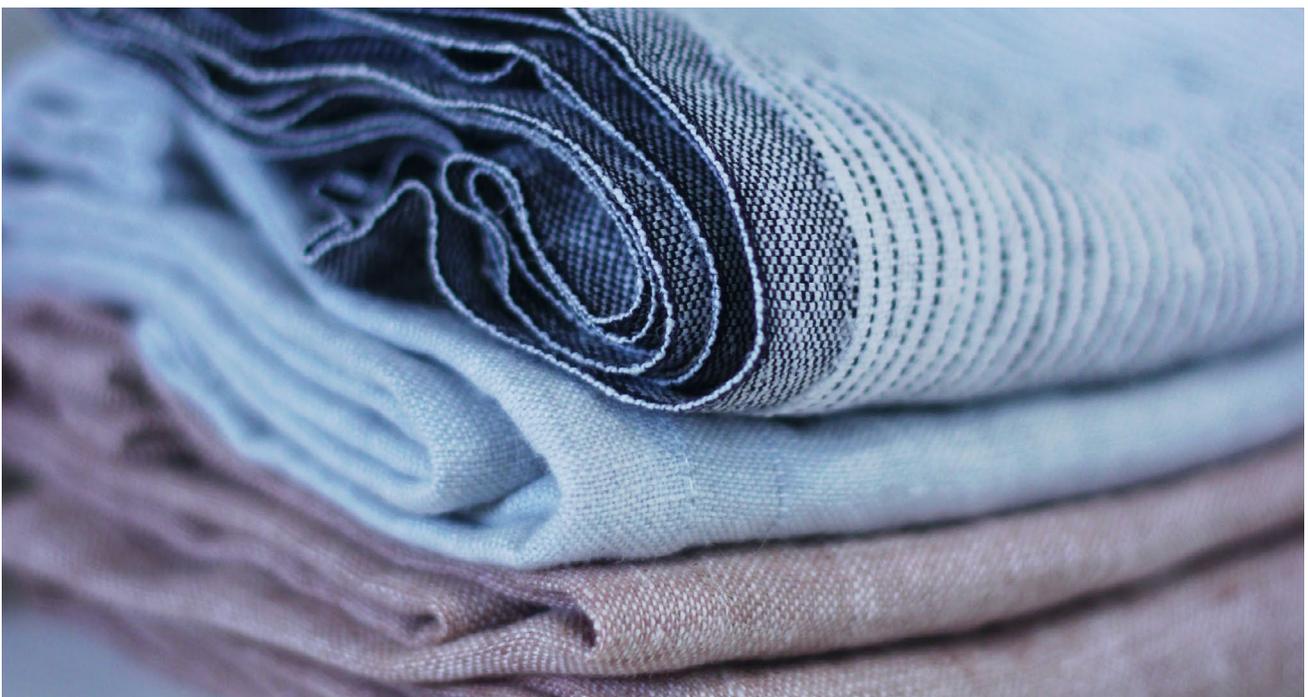
13. Coronavirus has caused serious, ongoing problems for the industry.

22.1% strongly agree
44.2% agree
14.2% neutral
6.2% disagree
0% strongly disagree
13.3% not applicable



feel the pandemic has caused serious issues

Of those surveyed, 64.3% agreed that the coronavirus pandemic has caused serious, ongoing problems within the industry - with no respondent strongly disagreeing. This illustrates the need more than ever for qualified industry professionals with the ability to innovate, to help ease or overcome pressures posed by Covid-19.



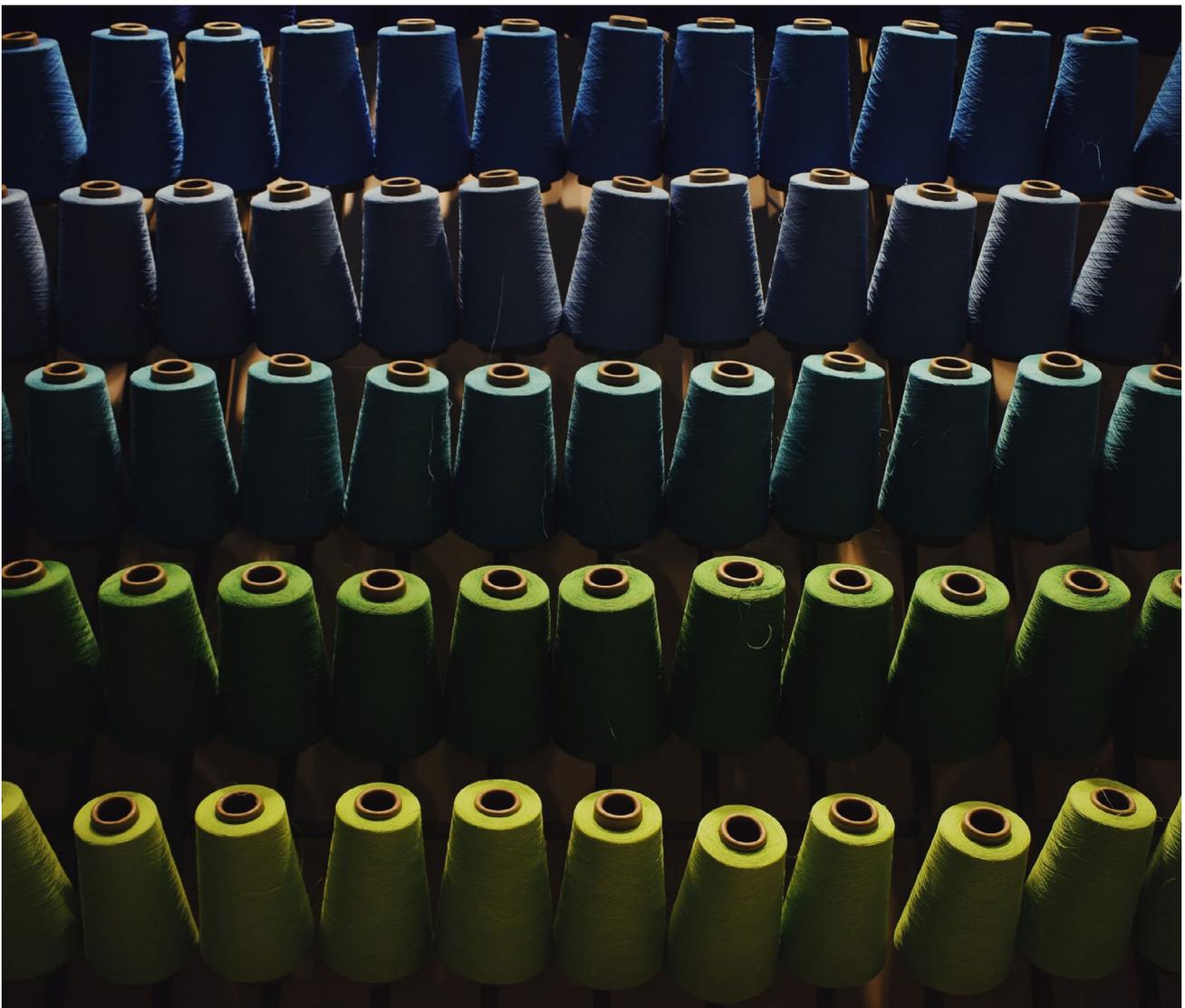
Opinion

What textile coloration skills are the most in-demand and difficult to find?

The research identified that the top coloration skills the industry agree are the most in-demand and difficult to find are:

- Qualified colour chemists
- A breadth of scientific knowledge
- Colour matching skills – especially in relation to bulk goods
- An understanding of dyes and suitability.

Other attributes that are hard to come by are softer skills, such as the ability to analyse and problem solve, as well as a need for staff able to carry out research and development – and drive innovation within the industry.



If you think there is a textile coloration skills gap or crisis, what do you believe are the reasons for this ?

As evidenced through survey answers, industry professionals highlighted the following top reasons for the textile coloration skills crisis:

- Technical knowledge is seen as hard to achieve – and is often undervalued by employers
- An increase in process automation and computerisation
- A lack of young people entering the industry, due to negative perceptions of a career in textile coloration, combined with knowledgeable staff retiring.

Further reasons identified included poor promotion of opportunities in the industry, as well as a lack of locally-available training and support from employers in relation to learning opportunities, showcasing that online training that can be accessed anywhere, at any time, is vital.

Also underlined was the need for more apprenticeships, as well as the trend for younger people preferring to become designers rather than textile coloration professionals.

Worth noting was an indication that a career in textile dyeing may not be desirable to young people due to environmental concerns, or the perception of the industry as not being as eco-friendly as it could be.

Relevant comments:

“Every student wants to become a designer with no interest in the dyeing side, unless they are the type of person to learn themselves – which many don’t. Placements are good, but they need to understand how things are really made and the processes and science behind them, such as colour, that some colours are harder to achieve and why.” **Vanessa Yoxall-Golec, dyehouse manager at Calder Textiles, UK**

“I think the reason is the perception that textile colouration skills are only applied for the big textile industries, and also lack mass-customisation processes – when this is not the case.” **Bintan Titisari, textile design lecturer and practitioner, The Craft Department, Institute of Technology, Bandung, Indonesia**

“In the 1960s when computers and engineering were new and exciting to graduates, the textile industry was a mature industrial sector, and looked unexciting in comparison. Great candidates who would have made good technical experts pursued other career routes. Those not in the know still think of the dirty, hazardous working environments of the late 19th century, yet the industry that current dyers and colourists are familiar with is far more innovative, complex and riveting.” **John Hansford, president of the SDC, UK**

“People just don’t know about it as a career path and/or don’t know how to get into it as a career.” **Fiona White, textile designer at Jakob Schaefer, Switzerland**

If you think there is a textile coloration skills gap or crisis, what do you believe could make things better?

Of the industry professionals surveyed, there were many ideas of how the current skills crisis could be mitigated, with the top points being:

- Part-time or online learning being made available globally
- Incentivisation of young people with higher starting salaries
- More dedicated support from governments globally, such as subsidised training
- A more practical approach to learning, i.e. earn and learn
- Those with key skills and knowledge taking up training or teaching positions
- Bridging the skills gap through more apprenticeship opportunities.

A further idea included generating more active engagement with schools and further education to highlight textile coloration as a potential career path for young people, offering a clear understanding of what the career ladder looks like and opportunities for progression.

It was also suggested that there should be a more cohesive approach industry-wide, with increased levels of communication between training providers and the sector.

Further to this, some respondents stated that engaging with fashion brands to educate them on the importance of understanding the dye process – and how it can help improve their products – would have an effect on improving the popularity of textile coloration as a career.

Other suggestions included training newcomers in the industry in the adoption of innovative and sustainable processes.

Relevant comments:

“Support for specific training programs – as offered through SDC courses – along with good quality on the job training with experienced dyers in the workplace is the way forward. I would suggest that the best prospects for the future textile dyeing operations get the opportunity to work with some experienced technicians.” **Paul Hamilton, director of dyehouse, Bulmer and Lumb, UK**

“The problem in Australia is that if training is not organised at a national level, the remaining industry will disappear.” **Anonymous chemical and dyestuff/academic, Australia**

“Training courses that are available globally, online, would help to bridge the skills gap.” **Anonymous dyehouse director, China**



If you think there is a textile coloration skills gap or crisis, what do you believe will happen if this gap is not narrowed or closed?

When asked what they believe will happen if the current skills gap is not narrowed or closed, survey respondents were mostly unanimous in the main points that:

- Industries will disappear across the globe
- Knowledge and expertise will be lost permanently
- Quality would be compromised, with higher processing costs and inferior end products
- Loss of competitiveness will result in lack of innovation.

This paints a severe picture if the talent crisis within the sector is not solved, with other answers stating that smaller dyehouses will be forced to close and only larger operations with in-house training would remain.

It was also suggested that dye and chemical supply quality will decline, as purchasers will not have the knowledge required to ensure that they are fit for purpose.

Dyehouse efficiency will be compromised, as they will begin to be populated with employees from unrelated industries without the key skills and qualifications required to operate effectively.

Sustainability is also at risk, as the loss of professionals with the scientific knowledge to innovate new eco-friendly processes means that dyehouses may struggle to remain compliant with ever-changing regulations.

To put this succinctly, as one respondent highlighted - the world would be full of brown fabric.

Relevant comments:

“Costs will increase if we continue with traditional processes, and the gap between the end-user and the manufacturer will grow.”
Anonymous senior general manager in R&D - laboratory, India

“Sustainability demands are dynamic and growing rapidly. In absence of “Systematic Continuous Learning” the textile supply chain will miss professionals who can implement current expectations efficiently.” Ullhas Nimkar, director at Nimkartek, India

What effect has coronavirus had on your organisation, and the textile coloration industry in general, in 2020?

As Covid-19 continues to have negative effects on all industries across the globe, respondents to the survey indicated the key effects that the coronavirus pandemic has had on the industry in general in 2020 as:

- Rampant redundancies and furloughing, with remaining staff overburdened and suffering from lack of expertise
- A large decline in orders due to reduced demand
- Changes in the supply chain.

Whilst some of those that answered stated it would be some time before we see the full impact of Covid-19 on the industry, some also said that the industry was starting to pick back up, with changes in the way that consumers are ordering mean that demand is starting to rise again.

Respondents also said that they have had to assess priorities and find new and innovative ways of working that can be applied to practices moving forward.

Reduced training opportunities for junior staff was also indicated as a detrimental effect that the virus has had on the sector.

“Our factories are under increasing pressure to produce and dye more orders than ever - so efficiency and correct processing are vital to maintain quality standards.” Vicki Lawton, technologist, Cleland McIver, UK

“I have seen the ability of many companies to launch – in parallel with the standard production – new medical textile materials that can be used during the pandemic.” Anonymous textile academic, Italy

“Covid has had a significant impact on the textile industry globally, but there is hope as consumers begin to shop differently, online.” Anonymous dyehouse manager, Italy





Summary

From the responses to the comprehensive survey, it can clearly be seen that the sector is at crisis point when it comes to the required knowledge, experience, and skills required to secure the future of the dyeing industry.

An overwhelming majority of respondents agreed that this is due to the lack of newer talent entering the industry, and experienced dyeing professionals retiring – leaving a skills vacuum that will have devastating effects on textile coloration operations across the globe.

Urgently needed is globally available, cohesive training in the scientific foundations of the application of colour to fabric, including the chemical processes that underpin it. This knowledge can then be used to research, develop, and innovate within the industry to help improve on product quality and efficiency of operations.

An industry-wide effort is needed to engage with training bodies, schools, and further education institutions, and the end-user such as fashion brands, to help change perceptions of a career within the industry and entice new talent.

The coronavirus pandemic has evidently been devastating for the sector globally, but already new opportunities are being identified, and in places the industry is beginning to rebuild. It is clear that qualified professionals will be integral to that recovery.

About the Society of Dyers and Colourists

The SDC is the outstanding provider of colour education, offering a range of internationally recognised coloration courses and qualifications. Our mission is to educate the world in the science of colour. Founded in 1884, the SDC became a registered charity in 1962 and was awarded a Royal Charter in 1963.

The SDC remains the only organisation in the world able to award the Chartered Colourist status.

It works globally, with worldwide membership and is a centre for networking and community engagement amongst the coloration industry.

The SDC's Colour Education Pathway

The SDC aims to be the outstanding provider of colour education, with internationally recognised coloration courses and qualifications.

It begins with the entry-level Foundation Textile Coloration Certificate (FTCC), followed by the Textile Coloration Certificate (TCC), and finally, the degree-equivalent Associate of the Society of Dyers and Colourists (ASDC).

Together each level offers a framework for a promising technician's whole professional development plan. Course fees are £1,605 for FTCC, £5,350 for TCC, and £12,000 for ASDC - and those in the UK can get assistance of up to 60% from the SDC's [Future Textile Dyers Fund](#) for the first two qualifications.

Due to the effect of the coronavirus pandemic, further discounts are in place for the 2021 and 2022 cohorts - [details can be found online](#).

The ASDC is a third of the cost of a university degree equivalent and provides more focused and specialist learning in the science of dyeing. This ultimately leads to Chartered Colourist (CCol) status - the industry's highest level of qualification.

Those who attain ASDC and CCol are recognised as experienced and highly-competent professionals - and find that, as a result, more ambitious career goals are in easier reach.

To find out more, get in touch with the SDC today via [Colour.Network](#)



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