

# **DESIGN VENTURA**

# **Evaluation Report** March 2018

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"It proved to be absolutely fantastic, I mean... what the Design Museum have put together is possibly the *best* package for teaching students about the *whole* design process I've ever seen, and... you know, sometimes you can spend hours looking on the internet, but it was just *all* there. And the students, we introduced the project and we saw the theme, and I had a whole class of students... total *gusto*, wanting to be making the product, wanting to see how they *did* in the competition"

Teacher, 2016 winning school case study (CS1)

"What you actually have to get out of the Design Ventura project is brilliant! Your very own design being turned into a real product sold from a shop's shelf. Therefore, my favourite aspect of Design Ventura was the chance to formulate a completely new idea."

Year 9 student, 2017 participating school

"The students loved working as a team and it was great for them to learn how to really take on different roles to get the job done. Those that didn't do it successfully understood by the end this was key and learnt a lot about the value of real teamwork. Great transferable skills all round"

Teacher, 2017 submitting school

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I would also like to thank the students, teachers, industry expert volunteers and family members who gave their time to respond to questionnaires, to participate in interviews and to contribute to longitudinal case-studies. A full list of the schools that contributed to this report is included in appendix v. Details of case-studies focused on the longitudinal impact of Design Ventura and on cross-curricular learning and teaching can be found in appendix vii.

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Jennifer Bain Goldsmiths, University of London March 2018

# ACRONYMS

- CPD Continuing Professional Development
- DV Design Ventura
- XC Cross-curricular
- KS Key Stage

DVWT Case Study 1 (Design Ventura Winning Teacher)

DVWS Case Study 1 (Winning Student 1 to 5

DVCS2 Case Study 2 (Returning Teacher/School and Cross-curricular Impact)

# 1.1 Design Ventura Overview

Design Ventura is the Design Museum's award winning, national, design and enterprise competition. A live brief challenges young people to design a new product for the Design Museum Shop. Now in its eighth year, Design Ventura is a free national competition for students in years 9, 10 and 11 and it aims to both give young people a taste of life within the design industry and to empower them to explore ideas from creative and business perspectives. Learners are invited to respond to a brief to design a product for the Design Museum Shop. They are supported by museum educators, practicing designers, business people and their teachers to produce a design solution, taking account of ethical, design and business criteria. The designs are judged by a panel of business and design professionals.

The central focus of Design Ventura 2017 was to provide a unique and real-world context for design and learning and to provide a rich and engaging learning experience that is a national showcase for young design and business talent. Design Ventura 2017 offers the first opportunity to look at delivery of the project in the Design Museum's new location of Kensington High Street, London. As such the focus of the evaluation of Design Ventura 2017 looks closely at the new Design Museum learning activities as well as continuing its focus on the role of online resources in supporting that learning experience.

This 2017 evaluation, the fourth carried out by the Design Department at Goldsmiths, University of London, remains focused on identifying and evaluating both the impact of this year's competition and the legacy of Design Ventura. Accordingly, the 2017 evaluation methodology (see section 2) looks at evaluative data about the 2017 DV experience, but also considers detailed case study data that focuses on the impact on a school community of winning DV, on the longitudinal impact of Design Ventura on teacher's practice and on the cross-curricular benefits of applying design thinking, methods and processes. To do this the 2017 evaluation framework draws on the 'pyramid' of aims and objectives for DV (2016 to 2019), see section 2.1. Responses to 2016 findings and recommendations, threaded throughout this evaluation, are highlighted where they inform emerging trends. However, of particular interest to this 2017 evaluation are the 2016 findings, highlighted below, which resonate strongly with the updated aims and objectives of Design Ventura and provide a platform to explore the projects' contribution to developing and sustaining design-led learning.

- Design Ventura remains highly effective in offering an authentic opportunity for design. Given the importance of the programme, the Design Museum should continue to evaluate the longitudinal impact of participation on teachers and students.
- Given the positive feedback on digital resources, these should continue to be developed and evaluated. The context of the Design Ventura brief should be considered.
- Attention should be given to the potential of Design Ventura in supporting year 10 and 11 GCSE projects.
- The potential of Design Ventura to offer development of transferable skills and authentic cross-curricular learning opportunities remains high. Consideration should be given as to how this might be shared with schools to encourage widening participation.

More information on Design Ventura can be found at http://ventura.designmuseum.org

# 1.2 Methodology

The 2017 methodology remains consistent with the redesigned 2015 methodology (see 2015 Design Ventura Evaluation report for more details). Analysis and findings are based on data collected from a range of stakeholders including participating students, teachers and parents. Emerging themes will be threaded through evaluation findings and conclusions. Case study data will focus on the longitudinal impact of Design Ventura through semi-structured interviews with teachers, to include a winning teacher/school, a returning teacher/school and a teacher/school who offer insights into cross-curricular learning opportunities.

In addition, teacher and student survey questionnaires will continue to focus on gathering data on confidence and ambition by referencing five generic skills that underpin innovative behaviour (Chell and Athayde, 2009) and by reference key indicators of self-efficacy and a growth mindset (Craig, 2007).

## 1.3 Scope of Design Ventura 2017

As a museum education project, Design Ventura remains unusual because of its large scale and longitudinal nature. 2017 saw the Design Museum move from its home near Tower Bridge to a new larger site in Kensington, free museum workshops and visits resumed for Design Ventura 2017. Consequently, as mentioned above, this evaluation report provides an opportunity to focus on how Design Ventura delivery can be supported by both the Design Museum and by on-line resources and elearning.

Following 2016 recommendations (see section 1.1 bullets 2 and 3), Design Ventura 2017 offered an updated user-centred approach to the competition brief, see image 1 below, focused on aligning with the updated GCSE specification and supporting a more diverse range of responses.



## Image 1: Design Ventura 2017 Competition Brief

Online and e-learning content for the programme maintained the focus of earlier years and included: an introductory briefing video supporting teachers and students in understanding the 2017 project focus, images of successful projects from previous years, top tips sheets, worksheets and videos of designers and business people giving advice. DV 2017 offered visits to the Design Museum and student workshops with the opportunity to learn directly from industry experts. Design Ventura 2017 remains a free project and by the end of this, the eighth year of the programme, Design Ventura had reached 860 schools and just under 62,000 students across the UK.

In 2017, schools were recruited through email, social media, flyer mailings and the Design Ventura web page, (see appendix v for a full list of participating schools). All schools submitted their entries to the Design Museum at the beginning of November 2017 and 10 teams were shortlisted as 'pitching schools' and invited to present their designs at a pitching day at the Design Museum in December 2017, (see appendix vi). The winning school was announced in February 2018.

# 2.1 Overview

The Design Ventura 2016-2019 programme has five specific aims, with three anticipated outcomes<sup>2</sup>. 2017 data has been captured and analysed to enable informed conclusions to be drawn about the degree to which the 2017 programme has fulfilled these specific aims and anticipated outcomes and, within this final report, findings from the evaluation are discussed under the following headings, which map to the five specific aims:

- 1. Improving enterprise and creative design skills amongst young people
- 2. Increasing students' understanding of business within the design industry
- 3. Motivating young people to fulfil their potential
- 4. Extending the reach of the museum through digital learning
- 5. Building sustainability

The updated evaluation methodology continues to locate within a qualitative, or interpretive, paradigm (Lincoln and Guba, 1985; Robson, 2010). Of particular relevance to this is concept of "individuals" interpretations of the world around them' (Cohen et al, 2007: 23), and we again use this to focus on providing insightful narrative and perspectives on how individual learners and teachers use the project.

We continue to capture data about skills connected to teaching and learning about enterprise, creativity and business in a museum and classroom context, and the methodology for 2017 allows us to report more reliably on how Design Ventura impacts learner confidence and ambition, and to explore how this might connect with young people's motivation to fulfil their potential. In the longer-term, the intention remains to collect longitudinal data in order to both explore ways to extend the reach of the Design Museum through digital learning opportunities and to build a sustainable legacy. As in previous years, the ambition remains to innovate where there are opportunities to do so (see section 5, Recommendations).

This evaluation of Design Ventura continues to use a mixed method approach, utilising student and teacher survey questionnaires<sup>3</sup>, interviews and focused case-stydies<sup>4</sup>. In 2017, case study data is collected relevant to specific aims number 3 and 5 above, to explore the sustainable/longitudinal impact of Design Ventura on participating teachers and their practice and the cross-curricular impact of design thinking, methods and processes in supporting young people to fulfil their potential. Where possible, reporting of findings indicates the precise % of teachers/students in which that finding was noted. However, where this is not possible, terms such as "few", "some" "significant" and "the majority" are used. Throughout the report, the activities being evaluated are referred to as 'the programme'.

# 2.2 Responsibilities

In order to take advantage of different skill sets, minimise costs, maximize access factors and provide an independent perspective on the data, the evaluation tasks have again been shared. The Design Museum recorded registration to the programme and alerted registrants to the evaluation surveys, which were accessible online via a link on the Design Museum website. Goldsmiths, University of London, was responsible for the design of the survey questionnaires, follow up survey administration, stakeholder interviews, case study data collection, data analysis and reporting.

<sup>2</sup> See the in Appendix I Design Ventura Aims and Objectives Pyramid 2016-2019

<sup>3</sup>See examples of survey questionnaires in Appendices ii and iii

<sup>4</sup>See examples of interview schedules in Appendix iv.

# 2.3 Data Collected

During Design Ventura 2017, the following data have been collected in order to identify progress against the five aims specific to Design Ventura 2016-2019 and report on the anticipated outcomes. To do this we collect (and analyse) the following categories of data to identify student and teacher reactions to the delivered programme, to explore the impact of digital learning opportunities as part of evolving an approach to extend the reach of the Design Museum and to explore the sustainable/longitudinal impact of Design Ventura.

## **Administrative Data**

The Design Museum has collected data relating to the characteristics of participating schools from the registration forms and details of activities they engaged in (see appendix v).

## **Survey Questionnaires**

Two online surveys: one for teachers and one for students were designed and administered during the Design Ventura programme (see appendix ii and iii). Illuminative highlights are included from student workshop evaluations and teacher CPD and Industry Expert evaluations. In all questionnaires, respondents were asked to choose an encoded value judgement in response to a series of themed questions and to provide more detailed comments where appropriate.

## **Case Study Data**

Detailed case study data was collected from two participating schools. They were selected in order for this evaluation to report on a range of sustainable/longitudinal impacts. Thus, the sample consisted of a previous winner, and a returning participant focused on cross-curricular delivery.

## 2.4 Data Analysis

The focus of the analysis of data gathered during Design Ventura 2017 remains on uncovering broad and holistic evidence against the 2017-2018 specific aims and anticipated outcomes, rather than an in-depth exploration of features of Design Ventura. Analysis was also guided by the *overall aim* and *anticipated impact*, below:

## **Overall Aim**

To support young people to develop skills and to see their creative/enterprising potential by working to a live brief in a real business context.

## **Anticipated Impact**

Participating young people will see the potential of their own ideas and the relevance of their learning in a real-world context. They will develop experience and skills to help them succeed in their future education and work. Participants will also gain insights into the importance of design in the UK economy.

Accordingly, analysis and interpretation of data was approached in a systematic and structured way, through categorising and coding data pertaining to the five specific aims, as detailed above. Data was also analysed to report on the three anticipated outcomes:

## **Anticipated Outcomes Over 3 Years**

- 60% of young people experience an increase in enterprise skills and creativity
- 60% of young people experience an increase in economic and business understanding
- 60% of young people feel more confident about the potential of their own ideas

In addition, data analysis retained some focus on planned outputs for 2017 - 2018. Consistent with previous years, interpretation of data also sought to uncover emerging relationships, themes and issues.

Observation and survey data are response-based samples, accordingly, data for analysis is from all schools which responded. Semi-structured interview data is from a representative sample of all school types (see appendix v). Direct quotations from qualitative data are used to illuminate and compliment the researcher's commentary and interpretation (Kvale, 1996) whilst charts and graphs are used to present the frequency distribution of quantitative data (Robson, 2010).

# 3.1 General Findings

## 3.1.1 Student Survey Profile

In 2017 the Design Ventura Student Survey received 2421 returns, from 119 different schools. It is encouraging that this represents a year-on-year increase from 2016 of 44%. Longitudinal analysis suggests that the number of students submitting entries to DV continues to rise, increasing the reach and associated impact of the programme. This also suggests that the response rate continues to be influenced by submission of student surveys being included in the conditions of entry.

As in previous years, students were asked to provide profile data (see figure 1 for an example) and this is summarised in table 1 below.

#### Design Ventura 2017: Student Survey

belo	r feedback on your Design Ventura experience is really important to us. By answering the questic wy you are helping us find out more about how well the project works and what extra support or surces may be useful for next year.
This	s survey is being carried out by the Design Museum and Goldsmiths College, University of Londo
inclu	sonal details are only collected so that data can be matched up - personal information will not be uded or shared in the analysis or in the reporting. Further information about data protection is liable from your teacher.
You	r views really matter, so please answer all questions.
Tha	nk you!
* Re	oquired
1.	School Name *
2.	Teacher's name *
3.	Gender * Mark only one oval. Male Female
4.	School Year * Mark only one oval. Year 9 Year 10 Year 11

Figure 1: Example of Student Profile Questions

## Gender

The survey data for the 2017 programme indicates a gender balance again skewed slightly toward male participants, with 46% (43) of respondents female and 54% (57) of respondents male. This indicates a 3% shift from male to female participants from the gender profile of 2016 and represents the first increase in female participants since 2014, reversing the trend of recent years.

## **Year Group**

67% of the students surveyed in 2017 were in Year 9, 31% were in year 10 and 2% of students were in year 11. This profile is broadly similar to 2015 and 2016 profiles, confirming findings that indicate a longitudinal trend away from Year 10 participation because of 'exam pressure'.

Gender	Female 46% (43/52/54/52/73/51/26)*	Male 54% (57/48/46/48/27/49/74)	
Year group	<b>Year 9 – 67%</b>	<b>Year 10 – 31%</b>	<b>Year 11 – 2%</b>
	(65.5/51/45)	(34/47/54)	(0.5/2/1)

\*Note:

2016/2015/2014/2013/2012/2011/2010 data is included in tables and charts throughout this evaluation, where available.

Table 1: Summary of Student Survey Profile Data

## 3.1.2 Teacher Survey Profile

136 teacher responses to the Teacher Survey were received from the 132 schools who submitted entries to DV 2017 (see appendix v). This represents a >18% increase in responses from the 2016 evaluation survey. Of the schools submitting entries 67% indicated that DV was delivered in lessons, (58%/65%/77%/71%) while 30% said that the programme, or elements of it, were delivered after school, or during lunchtimes. 3% of teachers said their schools provided an 'off timetable' day or another one-off event (2%/6%/1%/2%). This represents a consistent year-on-year picture of the majority of schools delivering DV through timetabled lessons, with a rise of 9% from 2016. 23% of schools submitting in 2017 indicated that they delivered DV across a multiple year group.

### **Design Ventura 2017: Teacher Survey**

Your opinions really matter to us and we value you taking the time to contribute to the evaluation of the Design Ventura programme.

This survey forms part of your final submission. Each of your answers will help us to find out more about how teachers and students experience the Design Ventura programme.

This survey is being carried out by Goldsmiths College, University of London and the Design Museum. (Our Information Management Policy can be viewed at <u>http://www.gold.ac.uk/governance/policies/#InformationManagement</u>).

All data collected will be treated as confidential and you will not be contacted or identified unless you give us explicit permission to do (please see web link or information sheet for details).

For further information about this survey please contact <u>ventura@designmuseum.org</u>

Thank you!

The Design Ventura Team

\* Required

1. Teacher name *
2. School name *
3. How many students took part in Design Ventura in your School? * This will help us to ensure you get the correct number of certificates sent to you

### Figure 2: Example of School Profile Questions

7640 students submitted entries to Design Ventura 2017. Of those schools submitting entries, 40% reported between 1 and 20 participating students, 36% reported between 21 and 50 participating students, whilst 21% said between 51 and 100 students participated. In addition, 16% of schools reported 100 or more participating students, with 7% reporting 200 or more and 1% reporting over 300 students participating in Design Ventura 2017. This range is broadly consistent with 2016 figures.

# 3.2 Improving Skills

Section 3.2 focuses on findings pertinent to specific aims 1 and 2, looking at the effectiveness of Design Ventura in improving the enterprise, creativity and business skills amongst young people, with anticipated outcomes that:

- 60% of young people experience an increase in enterprise skills and creativity
- 60% of young people experience an increase in economic and business understanding

## 3.2.1 Improving Enterprise and Creativity Skills

Student survey responses indicate that participating in the 2017 Design Ventura programme has improved students' enterprise and creative abilities (see table 2). The redesigned survey instruments reveal that student responses were overwhelmingly positive with the majority of respondents indicating that their abilities had increased in all categories they were questioned on.

2017 findings indicate that 94% of students report that participating in Design Ventura has helped them develop understanding of how to respond to a design brief. 92% of students report that Design Ventura has supported them in improving their design ideation, while student responses again indicate that Design Ventura has had a positive impact on their ability to 'present ideas to others', with 86% of students indicating increased ability. Design Ventura 2017 has had a positive impact on design development skills, with 90% of students reporting that participation helped them 'see what it takes to make their ideas happen', although around 10% of students again reported that they found 'prototyping' and 'making' the most challenging aspects of the project.

"The most valuable thing I have learnt today is how creating a persona is useful in the design process. It helped as it allows you to think about the problems of the specific age category. It meant that we could understand and create results for the category by thinking and using them to come up with ideas."

Year 9 Student, DV 2017

Question Stem (N=2421)	Helped Overall	Helped a lot	Helped	Helped a little	Not sure	Hasn't helped
Better at responding to a design brief	94%(94)	23% (22)	47%(52)	22% (20)	3% (2)	5% (4)
Better at explaining design ideas	92%(93)	23%(23)	47%(45)	22%(25)	3% (3)	5% (5)
Better at presenting ideas to others	86%(90)	22%(25)	37%(38)	27%(27)	6% (4)	8% (6)
Better at seeing what it takes to make my	90%(90)	31% (32)	41%(38)	18%(20)	4% (3)	6% (7)
ideas happen						

**Table 2:** Has Participating in the Design Ventura Project Helped You Improve YourEnterprise and Creative Ability? (N is the total number of responses)

## 3.2.2 Improving Business Skills

Student Survey responses indicate that participating in the 2017 Design Ventura programme has had a significant impact on students' business ability (see table 3). The redesigned survey instruments reveal that student responses were overwhelmingly positive with >89% of respondents again indicating that their ability had increased in all categories they were questioned on.

90% of respondents reported that they 'understand more about the business side of design', while 89% reported that they were better at 'making good business decisions about their designs'. Data again reveals the importance of the live brief in giving context to the business side of design. A small percentage of students, between 6% and 7%, once again reported that they found the finance elements of Design Ventura the most challenging aspect of the project. "What I enjoyed about Design Ventura was that it taught me the steps of being a real designer, especially the entrepreneurial side to the project."

Year 9 Student, DV 2017

89% of students reported an improvement in 'understanding about how working with others can help overall achievement'. With 86% reporting they understand more about how to get on with others in a team, while 89% reported that Design Ventura has helped them develop understanding of their own and other's 'strengths' and 'weaknesses'.

Some students continue to find working in teams 'difficult'. Again, some qualitative comments refer to a perceived lack of effort, and lack of co-operation. 10% of students report that Design Ventura did not help them get better at team work – a rise, with a further 2% unsure if Design Ventura had improved their ability.

Question Stem (N=2421)	Helped Overall	Helped a lot	Helped	Helped a little	Not sure	Hasn't helped
Better understanding of the business side of design (e.g. costs, marketing, profits)	90% (91)	30% (27)	38% (41)	21% (22)	4% (3)	6% (6)
Better at making good business decisions	89% (90)	21% (26)	43% (41)	25% (23)	5% (4)	6% (6)
Improved understanding of how working with others can help achieve more overall	89% (90)	26%(22)	41% (44)	22% (24)	(2)	(7)
Improved understanding of how to get on with others in a team	86% (89)	26% (26)	41% (38)	23% (24)	4% (4)	10% (7)
Improved understanding of how team members have their own strengths and weaknesses	89% (91)	30% (30)	41% (40)	19% (21)	4% (3)	7% (6)

**Table 3:** Has Participating in the Design Ventura Project Helped You Improve YourBusiness Ability? (N is the total number of responses)

What emerges from analysis of student data on business capability is that the redesigned evaluation methodology again appears to have had an impact on the consistency of quantitative data and qualitative comments. These combined data offer real insight into the importance of Design Ventura in providing access to, and experience of, authentic business practices. The data also highlight working in a team as a skill students want to use in their future careers and as one of the things they enjoyed most about Design Ventura.

## 3.2.3 Teacher Perspectives on Students' Enterprise,

## Creative and Business Skills

On the whole, teachers indicated that Design Ventura 2017 had a very positive impact on students' design and business capabilities, with between 96% and 100% of teachers reporting a positive impact across the range of design and business skills (illustrative skillset elements are reported in figures 3 and 4).

Teacher survey responses indicate that, consistent with 2015 and 2016 findings, teachers believe students benefited most in terms of 'responding creatively through the design process' (100%), 'reflecting on and modifying ideas' (99%) and 'communicating design ideas' (99%). Teacher Survey responses also indicate high levels of impact for 'shared decision making and collaboration' (99%), 'knowledge and understanding of business aspects of design' (97%) and 'awareness of product marketing and target audiences' (99%). Teacher responses also report that DV helped 97% of students to get better at 'considering and responding to

"[The outstanding feature of Design Ventura is] Raising awareness of the design industry for young people and giving real examples of what can be achieved with a good idea and resilient approach to turning their ideas into a viable business opportunity.

Participating Teacher, DV 2017

## issues of ethical and sustainable design.



Figure 3: Teacher Perspective on Students' Creative Capabilities

These findings are broadly similar to 2015 and 2016, suggesting consistent longitudinal gains, with the impact of Design Ventura 2017 on all measured elements of students' creative skill set, averaging 98%, well above the anticipated outcome that 60% of young people experience an increase in enterprise skills and creativity.

The impact of Design Ventura on students' holistic business skill set also remains high. Here 96% (97) of teachers reported that Design Ventura had a positive impact on students' 'knowledge and understanding of business aspects of design', maintain the rise from 2015 data (see figure 4).



Figure 4: Teacher Perspective on Students' Business Capabilities

DV 2017 teachers continue to value the learning benefits of responding to a live brief, in raising students' business-related skills and in raising their own confidence in teaching (and recognising) business capabilities.

Consistent with this, teachers reported that DV again had a significant impact on 'communication skills including discussing, presenting, pitching and using ICT' (99%). With the emerging picture that the average impact of Design Ventura 2017 on all measured elements of students' business skill set of 98% is well above the anticipated outcome that 60% of young people experience an increase in economic and business understanding. These findings remain positive year-on-year, indicating consistent longitudinal gains on all measured elements of students' creative, enterprise and business skill sets.

# 3.3 Motivating Young People to Fulfil Their Potential

Section 3.3 focuses on findings pertinent to motivating young people to fulfil their potential by looking at the effectiveness of Design Ventura in increasing interest in creative and business activity and by exploring confidence and ambition amongst young people. Success indicators include:

- Increased self-confidence.
- Increased ability to handle uncertainty
- Raised career and education aspirations
- Reduction of perceived barriers to success/achievement
- Increased interest in developing creative or business skills

With the anticipated outcome that:

• 60% of young people feel more confident about the potential of their own ideas

## 3.3.1 Interest in Creative and Business Skills

The Design Ventura programme is intended to engage learners in the development of skills so that they will be motivated to learn in the future. The evidence in 2017 shows that this engagement continues to result in positive changes in interest for both creative and business-related skills for 54% and 40% of participating students respectively (see table 4).

Consistent with previous years' findings, the impact of DV on raising interest in creative skills was greater than that on business related skills. No significant gender differences were evident.

Question Stem (N=2421)	Increased	Remained the same	Not sure
My interest in creative skills such as designing and making has	54% (58,62,62,61)	38% (35,35,33, 34)	4% (5,2,3,3)
My interest in business related skills such as finance or marketing has	40% (46,44,42,42)	45% (40,42,43, 47)	7% (6,7,7,4)

**Table 4:** Has Participating in the Design Ventura project Changed Your

 Interest in Creative and or Business-Related Skills?

"I feel the outstanding feature of Design Ventura is getting year 9 students to confront their initial fears about presenting their ideas. I was blown away by the quality of their pitches and the passion they had for their products."

Participating Teacher, DV 2017

## 3.3.2 Increasing Confidence and Ambition

Design Ventura 2017 student survey instruments were once again designed to collect data against indicators of self-confidence and self-efficacy (see methodology section above) to ensure consistency between quantitative and qualitative data. This follows on from 2015 and 2016 data analyses, the first to use the updated methodology, which revealed participation in Design Ventura had helped raise confidence in >88% and >87% of respondents respectively (see table 5). Prior to 2015 around half of students surveyed reported that participating in Design Ventura had increased their ambition about what they expected to achieve in their studies, with 51% reporting increased career ambitions. Similarly, just over half of students reported improvements in their willingness to take on new tasks. 2014 findings indicated more young people felt that their general self-confidence had remained the same (52%) than increased (44%).

Question Stem (N=2421)	Helped Overall	Helped a lot	Helped	Helped a little	Not sure	Hasn't helped
I think I'm less worried about trying	86%	17%	42%	27%	4%	9%
to solve design problems	(86,90)	(18,23)	(44, 46)	(23, 21)	(4, 4)	(10,5)
It's helped me understand that mistakes and criticism can be useful as they help you learn and improve	90% (91, 93)	26% (26, 33)	44% (43, 40)	20% (22, 20)	3% (3, 2)	7% (7, 4)
It's helped me think about what I can achieve through studying	85% (85, 88)	18% (22, 25)	39% (38, 39)	27% (25, 24)	5% (5, 5)	10% (10, 8)
I understand more about how I can	88%	21%	44%	23%	4%(	8%
plan to achieve what I want to	(89, 92)	(23, 28)	(43, 43)	(22, 21)	4, 3)	(8, 5)
It's focused my thinking about what kind of skills I might want to use in my future career	83% (86, 93)	23% (28, 35)	36% (37, 38)	24% (21, 20)	6% (6, 2)	11% (8, 4)

**Table 5**: Has Participating in the Design Ventura Project Improved Your Level ofConfidence and Your Ambition?

2017 findings in this area suggest that Design Ventura again increased confidence in 'solving design problems' in 86% of students who participated, with 60% reporting a significant impact. Similar impact levels were reported on 'it's helped me think about what I can achieve through studying' (85% and 58%) and 'I understand more about how I can plan to achieve what I want to' (88% and 65%). 90% of participants reporting a positive impact on how they view making mistakes and respond to criticism, with 70% reporting a significant impact.

Design Ventura also continues to have a positive impact on young peoples' aspirational thinking, with 88% reporting it helped them understand how to plan to achieve what they want to, with 65% reporting a significant impact. 83% of students indicated that the project had a significant impact on their thinking about the kind of skills they want to use in their future careers. Student survey data also indicates that 86% of respondents feel confident they can achieve their ambitions, with 88% indicating that they understand that planning for this to happen is a 'good idea'. 87% of Design Ventura 2017 student respondents are also unsure of how they view their futures (see figure 5 overleaf).

Overall, 2017 data indicates that the average impact of Design Ventura 2017 on all measured elements of students' confidence and ambition of 85% is well above the anticipated outcome that 60% of young people feel more confident about the potential of their own ideas.



Figure 5: Student's Views on Their Future

# 3.3.3 Teacher Perspectives on Students' Confidence and Ambition

Teachers were also asked to assess the impact that the programme had on students' confidence. Consistent with 2016 qualitative data, 2017 teacher survey responses indicate teachers feel that Design Ventura had some positive impact on 100% of all measured elements of personal capabilities associated with increased confidence and ambition. In addition, between 96% and 99% of teacher responses indicated that the programme had a significant impact on their students across the range of capabilities explored. These data are presented in table 6, below.

#### Overall Some A little Big Not No Question Stem (N=136) Impact impact Impact Impact Impact sure Self-confidence 99% 38% 51% 11% 1% 0% (43,46) (97,100) (42,44) (12,10) (2,0) (1,0) Resilience, flexibility and a 'can 99% 32% 52% 15% 1% 0% do' attitude (98,100) (30,42) (56,54) (12,4) (2,0) (0,0) Team work including shared 40% 0% 99% 54% 6% 1% decision making and collaboration (0,0) (98,100) (50,65) (46,33) (3,2) (2,0)

**Table 6**: Teacher Perspectives on Students' Personal Capabilities

Gains were made in the overall impact of DV 2017 in relation to resilience, flexibility and a 'can do' attitude, teamwork and collaborative working skills and self-confidence.

"It has really developed self confidence in the students." Participating Teacher, DV 2017

# 3.4 Extending Reach: Resources and

# Pedagogy

Section 3.4 focuses on findings pertinent to specific aim 4, extending the reach of the museum through digital learning.

As highlighted in the introduction to this report, Design Ventura 2017 offered the first opportunity to look at delivery of the project in the Design Museum's new location of Kensington High Street, London. As such data analysis in this section focuses on the new Design Museum learning activities as well as continuing its focus on the role of online resources in supporting that learning experience.

# 3.4.1 Museum Learning Activities and Digital Resources **Design Museum Learning Activity Usage and Value**

The focus of this section is on Design Ventura museum-based learning activities, specifically 2017 Teacher Survey responses on the impact of Design Museum workshops, Design Museum exhibition visits and Design Museum CPD.

Workshop survey responses indicate that >400 students participated in Design Museum-based workshops. 2017 Teacher Survey responses indicate that 24% of respondents had brought students to a Design Museum-based workshop. Teacher responses valued the simplicity of booking the workshops, with 68% indicating it was 'very easy' and a further 19% indicating it was 'easy'. 97% of teacher responses were positive about the welcome to the museum and the facilities available. Of the teachers who brought students to DV 2017 museum workshops 71% rated the learning experience as 'very good,' whilst a further 16% rated it as 'good' and 13% rated it 'OK' (see figure 6 below).

When asked to comment on the duration of the museum-based workshops, increased in DV 2017 from 45 to 90 minutes, 97% of respondents indicated they preferred the longer length, with 97% indicating they were more likely to bring students to the museum for a longer, 90-minute, workshop. Where teachers included qualitative comments on the workshops, these were overwhelmingly positive about content, structure and learning gains, typified by comments such as:

"I thought it [the museum-based workshop] was really well thought out with excellent understanding of how to engage the students. They learnt a lot and were really inspired to be working with professional designers. The students found it very exciting and came back really motivated".

However, a small number of teachers felt that the focus of the workshop might be adapted to focus on different stages of the project, with one respondent commenting:

"The content was only relevant to the very start of the project. We were expecting a workshop that would cover/challenge/review the ideas and development stage".

Teachers reported similarly positive experiences of learners visiting the Design Museum exhibitions, specifically the Designer, Maker, User exhibition, with 71% rating the learning experience as 'very good', whilst a further 16% rating it as 'good' and 13% rating it as 'OK' (see figure 6 below).

34% of Teacher Survey respondents attended CPD events at the Design Museum during DV 2017. Of those 50% felt it was a 'highly valuable' experience, with a further 28% indicating it was of 'value', whilst 17% felt it was of 'some value' (see figure 6 below).

"The [best thing for me was the] Design Museum workshop: we learned a lot and were able to think outside the box and have more original ideas"

Year 9 Student, DV 2017



Figure 6: Value of Design Museum Learning Experiences

## **Digital Resource Usage**

One of the key *Objectives* of Design Ventura 2017-2018 is to 'extend learning opportunities widely through diverse and accessible online resources', thus the programme maintains a focus on widening participation. During DV 2017, the evaluation of this ongoing vision focuses closely on the updated digital resources.

2017 Teacher Survey data indicates that 98% used the main Design Museum website and the Design Museum Shop website. 99% used the Design Ventura website, with downloadable resources (100%), project guide (99%), short films (99%), resources index (98%) and email newsletters (95%) again the most widely used digital resources. The online blog (49%) and Twitter (44%) were the least widely used of the 2017 digital resources. 98% of teachers used teacher notes, 69% used Design Ventura handling collections and 87% made use of Design Ventura posters.

### **Digital Resource Value**

DV 2017 Teacher Survey data indicates that the main Design Museum website and the Design Museum Shop website were valued by 98% of users, whilst the Design Ventura website was valued by 99% of users.

Design Ventura digital resources were again highly valued by survey respondents. The downloadable resources were valued by 100% of teachers who accessed them. Whilst the Design Ventura project guide (99%), short films (99%), resources index (98%) and email newsletters (97%) were again the most widely valued digital resources. Over 50% of teachers used live online CPD and webinars in 2017. Amongst those, teachers valuing live online CPD increased by 20% in 2017, from 72% to 92%, with a similar increase in those valuing live online webinars (93%).

The Q&A feature again increased in value during DV 2017, with 96% of teachers indicating they found it useful, a rise of 5% from DV 2016 (91%). The blog and Twitter appear to be less valuable, with 85% and 66% of teachers respectively rating them of value, this is broadly similar to 2016 data. A more detailed breakdown provides additional insights into how digital resources are perceived in terms of the level of value, see figure 7 below.

Web resources are superb and guide you through the design process. Support from the Design Ventura team is amazing. All should be congratulated.

Participating Teacher, DV 2017



Figure 7: Value of Design Ventura Digital Resources

Overall, analysis of DV 2017 data around digital resources indicates that these continue to both support those schools who cannot physically access the Design Museum, whilst also supplementing the learning experiences of those who can.

## 3.4.2 Holistic Analysis of DV Learning Experiences

This section offers a summary of holistic learning experiences. For a supplementary discussion see section 3.6 Qualitative Experience below.

Design Ventura 2017 teaching and learning experiences remain notable for:

- being recognised as a unique opportunity to engage with a live brief
- being shaped by a complex and authentic challenge
- providing opportunities to engage with the design industry in an authentic context
- providing a creative learning experience free from 'exam constraints'
- working with and learning from adults other than teachers
- the extent of authentic group work

## **Authentic Professional Design Methods**

DV 2017, data analysis again revealed the value to teachers and students of working to a real-world brief, both in terms of engagement and motivation. 100% of teachers felt that working to a live brief was 'valuable', with 75% finding it 'highly valuable'. 2017 Teacher Survey data also revealed a mixed response to the updated brief format. Whilst a majority of teachers valued the more open brief, with indicative responses including:

"I like the idea of focussing on the target market as it led the students to really think about who the product was for."

Some teachers felt the updated brief too open, typified by comments such as: "The students struggled with the brief as it was too vague. As teachers we preferred when a key word was given such as move, connect, handy etc."

Data again revealed that, where students were encouraged to use industry practices when working upon a particular design or product, this provided a focal point for learning. For example, where a design idea supported application of knowledge and understanding about marketing, pricing, design development, end users or environmental issues. This kind of pedagogy was often supplemented effectively by an expert/teacher providing generalised rules or principles in person or online.

Starting the learning conversation from a target audience, rather than a single word theme, appears to support students in exploring a wider range of responses. Once again, it was observed that some students only became fully engaged once they were given the opportunity to engage in physical making, for example, producing a model of their design ideas.

Products as part of a 'handling collection', both real and virtual, continue to provide a shared focal point that facilitates engaging and constructive conversations with different adults: for example, handling and reviewing models helped to develop conversations about materials, social impact and design value. This observation suggests that design and making activity can continue to provide a nexus for a network of learning conversations between students and with different educators and professionals.

## Challenge

Teaching and learning in Design Ventura 2017 was again valued because, increasingly, it not only supplements the subject curriculum, but rather provides a unique opportunity for students and teachers to engage with an authentic and complex design challenge and design process, where students were expected to have discussions, make independent decisions and carry out tasks which were inter-disciplinary and non-linear. Participating teachers report that they find this both stimulating and daunting. They indicate an increasing 'curriculum squeeze' that continues to devalue design activity and highlight the value of mapping DV to GCSE exam specifications to both support learning and maximise impact.

DV 2017 data again indicates that this kind of learning continues to be perceived by students and teachers as a major strength of Design Ventura. Many learners continue to report that learning as part of Design Ventura was stimulating and worthwhile. They report it was clear how knowledge and skills could be applied, although many continue to describe their frustration at the lack of time they can spend on the project with many citing 'exam pressure' as the root cause. It should again be noted, that some less confident learners continue to be challenged by this approach, often because of the contrast to curriculum-based learning where they know 'the script' and are often presented with 'solutions', rather than problems.

#### **Contribution of Professionals and Facilitators**

Findings indicate that the input of business and design industry experts continued to add to the authenticity of the Design Ventura activities. When cross-referenced to extending reach, pedagogy and resource findings, it appears that the Design Museum remains a hugely valued central resource for DV, whilst short-films, industry expert profiles and the Q&A feature serve to provide complimentary support to face-to-face interactions.

#### **Group Work in School Settings**

•

2017 data indicates that group work continues to be seen as one of the biggest assets of the DV learning experience. In school settings, group work appears to continue to have had a number of benefits:

- it facilitated learning between students within and between groups
- it encouraged learners to take responsibility for their own learning

- it permitted learners to make learning relevant to their own concerns
- it empowered learners to make decisions
- it facilitated powerful interactions with adults
- it supported identification and allocation of tasks relative to learner interests and strengths

Some issues with group work remain, with survey responses again indicating the impact of groups failing to manage their own learning and progress, while some less able students continued to find this mode of working very challenging.

# 3.5 Building Sustainability

Section 3.5 focuses on findings pertinent to specific aim 5, looking at the effectiveness of Design Ventura in building sustainability. Success indicators include:

- Longitudinal impact on participants
- Longitudinal impact on teachers

## 3.5.1 Longitudinal Benefits of Winning Design Ventura

As part of the Design Ventura 2017 evaluation, semi-structured interviews were carried out with the latest (2015) winners of Design Ventura. These were included in the 2017 evaluation methodology in order to explore whether participating in Design Ventura had a lasting impact on both teacher and student:

- Skills
- Attitudes and attributes
- Knowledge and understanding

Following on from 2015 and 2016 case study data, the findings from analysis of 2017 case study interviews continues to form part of longer-term, in-depth insights into how Design Ventura impacts on participants, both students and teachers. The 2016 winning teacher and team, consisting of five students, were interviewed about their experiences of participating in, and winning the competition. Their reflections specifically explore the ways in which this participation impacted on:

- The teacher and his practice
- The students and their practice
- The perception of Design & Technology in school and by parents

Here direct quotations are again used to illuminate the winning teacher and winning team experiences, and, consistent with BERA ethical guidelines, data has been anonymised where deemed appropriate, to teacher DVWT and DVWS 1, 2, 3, 4 or 5.

The brief for 2016 was set by Asif Khan, Architect and Designer in Residence 2010 at the Design Museum. The theme was "Change". Harrogate Grammar School won the competition with Aqua Hook (renamed HOOK<sup>2</sup>O), a water bottle hook that can be clipped to any loop outside of a bag to carry a bottle. Designed with the 2016 brief in mind, this practical product was a favourite with the judges.



Image 2: Design Ventura 2016 Winning Entry, HOOK<sup>2</sup>O

## Winning School Case Study Context

The winning school case study context will outline:

- How Harrogate Grammar became involved in Design Ventura
- How the project was structured into the curriculum

2016 was the first year that Harrogate Grammar School had participated in Design Ventura. DVWT said he had found out about the competition through his faculty leader, who had put a leaflet on his desk and asked if he knew of it. Having participated in another design competition through the Design Museum a year earlier (with one student being successfully shortlisted), DVWT had been especially pleased to find that there were further opportunities in the shape of Design Ventura. He decided to enter immediately, introducing the competition as the first project for his only Year 10 GCSE class (comprised of 20 students). He had been delighted with the Design Museum's resources, and with the immediate and positive effect that the project had had on the students:

"It proved to be absolutely fantastic, I mean... what the Design Museum have put together is possibly the best package for teaching students about the whole design process I've ever seen, and... you know, sometimes you can spend hours looking on the internet, but it was just all there. And the students, we introduced the project and we saw the theme, and I had a whole class of students... total gusto, wanting to be making the product, wanting to see how they did in the competition. So, you know... as well as learning the design skills, it was a very competitive way of accessing it."

The project was delivered in class time, with an average of two fifty-minute lessons a week spent on its development and an occasional further fifty-minute class set aside for making and prototyping. DVWT had also found the project to be a useful way to integrate the theoretical aspects of the (now former) GCSE curriculum, for example, where it asked students to think about client markets and customer profiles. This aspect, DVWT explained, aligned even more positively with the new GCSE curriculum and he therefore intended to continue with Design Ventura as the first Year 10 project.

### Longitudinal Impact of Winning on Teacher and Teacher Practice

Design Ventura impacted positively on DVWT's practice in a number of ways. He clearly felt there had been a big difference between DV and other Design & Technology projects:

"Oh, I enjoyed the fact that it's a challenge and I enjoyed the fact that while the students are super keen, because obviously they're picking it as a subject area, it was a real inspiration that they suddenly thought "actually we're working on a live project!" So as a teacher, it's great because you can see and advise, and you can help and sort of cajole them to develop ideas, but what's really nice is that you suddenly see this spark of inspiration. Someone came to observe one of the lessons and their feedback was "the students are hooked" and it was – they were hooked and committed, because they could see that there was a goal at the end, and, they're ambitious and competitive you know, and it nurtures them to be ready for future study in life and so for a teacher, it's a fantastic position to be in".

He particularly valued the 'live' nature of the DV brief, highlighting it as beneficial both in terms of his own practice and that of the students, indicating that DV was:

"the nearest that they'll [the students] probably get in their school life to being with the 'real' client brief"

DVWT also indicated that DV's success with the Year 10 participants in the school impacted significantly on how the department went on to teach Design & Technology with classes from other years:

"We've actually used some of the ethos of the Design Ventura

competition and made another, simpler project and they actually followed the same process, so it was quite interesting to see that the students at a younger age also enjoyed the challenge."

DVWT's department also began to integrate the project's financial and business aspects into projects for the younger year groups, for example, by restructuring how designs were "mapped" in terms of "clients and client needs". Teachers had begun to ask Year 7s and 8s more closely to think about *who* they were designing for and to think carefully about these needs. One of the most important changes DVWT cited in his practice was an increased emphasis on iterative design and allowing for "failures" to happen much more frequently:

"It's about learning from the failures, and some students struggle with that concept. Certainly, with Design Ventura, lots of students had failures and I think traditionally in D&T you want to have like "this is your outcome, it's made, it's finished, it's working". But actually, that's not design, it like, one outcome might work, the others might fail. So, I think with my practice I've sort of said to students "well, you've not failed, there's just a new opportunity" ... and I think sometimes that's forgotten"

Design Ventura's emphasis on prototyping multiple times and "going away and doing research" had been helpful to DVWT because it supported ideas that he had been developing in his own teaching practice. He underlined the impact of this by commenting:

"If I'm totally honest, I think it's been an amazing experience, and I think, you know, I wish I'd know about it earlier, because the whole process... in a way, covers some of the parts that often when you teach, are a challenge... A lot of students when they design things, they already have a preconception and you try really hard to stop students designing the first thing, you're designing a whole range of products, again ... in my practice, Design Ventura really testifies that's the thing to do."

When the moment came to select which of the five groups would be put forward as their DV 2016 submission, DVWT decided to involve his A2/ A-level students as judges, as "a way to get some integration going between the years". He felt that this had been particularly successful because it broadened out the conversation between student year groups, allowing the A-level students to "see things from the other side of the table" and challenging the Year 10 GCSE students to present to people who weren't their teachers. Furthermore, DVWT explained, the A-level students' rationale for their final selection correlated "exactly" with the thoughts of staff attending the presentations, explaining the decision on who would represent the school had been unanimous. He highlighted the value of this approach to DV in supporting development of self and peer-assessment skills.

### Longitudinal Impact of Winning on Students and Their Practice

DVWT felt strongly that Design Ventura had helped contribute to a key shift in students' design skills and creative thinking. As he explained, prior to this project, students had tended to stay with their first ideas and DV changed how students viewed these by encouraging them to ask for feedback from others and to think "well, actually, is that the best solution?" Again, the iterative emphasis here was on "a new way of thinking" that created a significant shift in students' approach..."it was there, every lesson, in your face, being done and being done brilliantly!". DVWT also explained how the winning team had used this iterative process to such a successful end:

"I think it was solid research... and being open minded to the fact that they'd got some ideas, but actually, with further research, they could isolate a specific product... it was the same problem that people were reporting back every time – that these bottles would split the bags and because we're one of these

schools where every child has an i-pad, it would just destroy the i-pad, the textbooks, and when people were doing sport they could, you know, it was that whole picture that started to manifest itself, where there was an opportunity for something that was going to solve this problem, which I think was great. I think those students were very good at looking around and being able to, within themselves... discussing it, to be able to identify and isolate a problem

The project had also facilitated a change in *pace* for students, DVWT said he saw students realise that, "*actually, you've got to be quite rapid sometimes in these processes for an idea to be successful*". The students themselves echoed this point. As one student said, "*it taught us to hurry up*!"

As the students progressed through the various stages of the competition, they began to use their time outside of classes to independently develop their work. The students all agreed that the live brief aspect had been highly motivating and *"exciting"*. They also cited the fact that they had had more independent choice than usual (both in selecting *who* they wanted to work with and *what* they wanted to explore) as another motivating factor.

Participation in the stages leading up to the final had significantly enhanced students' self-confidence and communication skills. They explained how presenting their project to professionals at the Design Museum had made them realise they could feel confident in other contexts, for example, when presenting in an English lesson to other classmates, typified by comments such as:

"I was still pretty worried about that! And then it's like 'well actually – I've done it in front of these millionaire designers, what's this? Some classmates!"

DVWT echoed this point about confidence in other classes, indicating that other subject teachers had highlighting the cross-curricular benefits of DV, by explaining to him that the students were now more likely respond to the questions they were asked. As DVWT explained:

"I think the fact that they had to be able to price it, cost it, within the make of the project, it meant that it dragged things in... their numerical skills... the fact that they were creating a Power Point presentation was obviously literacy, and literacy skills... you know, as ever, I think... people can actually often "earmark" Design as a specific subject, because actually, it's the application of lots of other subjects that gives you that good design. And it goes the other way as well. You know, the good designers, by doing the activities and marketing, research, being able to think laterally... enables a new skill set that they integrate into other subjects."

DVWT also highlighted how events leading up to winning had impacted on students' communication skills in a variety of ways, explaining how the students had interacted with other passengers and their feedback when practicing their pitch on the train on the way down to the Design Museum. When asked how the competition had impacted on their design skills, the students cited aspects such as the time-frame of the project (developing ideas quickly), and learning to think about design in terms of "real" users... "because it's a product that could actually in the end be commercially sold and marketed". Winning team students also highlighted that working with professional designers after winning the competition had likewise strongly benefitted their design skills and developed their understanding of "real-world" design much further:

DVW3: Also, it helped me with developing my GCSE products in general, because we'd worked with professionals from the Design Museum, and they gave us really good ideas, then we took the ideas... I don't know about you guys, but I took the ideas and I used them, for example when I designed a bike stand...

*DVWS4: Yeah, it gives you a bit of an insight on how the professionals develop their designs.* 

DVWS1: And it also makes you think about the consumer... as you do think about the consumer with your projects... well with this, it was actually going to be used and so it was like "well, actually the customer is the most important thing. We're going to have to make consumers want it."

Case study data also revealed the impact that the final stages of developing and refining their winning product had on students' learning and awareness about aspects of the design process that they hadn't been aware of, or experienced, before:

DVWS3 Yeah... it was sort of developing little ideas, like, the spiked end, we changed...

DVWS3: And also the ...

DVWS2: ... Typeface, I guess because at school we haven't got all the like, professional manufacturing techniques... we found it quite hard to like, print the type onto our product, but because they had done similar projects before, they knew instantly what to do and it was kind of just...

DVWS3: We had a Skype call with them actually didn't we, so they were like, showing us our name, our branding all that kind of thing.

*DVWS2: Mainly just turning it from a DT product into a professional product... DVWS3: ... A real design...* 

DVWS2: ... Yeah, a lot of it was just packaging, wasn't it? That was quite a big part of it.

DVWS1: I think I will actually think that after we sent the design out, I have a feeling that many people just think "ah that's it they didn't do anything, the rest of it wasn't designed by them", but actually, we had a massive input onto what they did. They had many designs. They were like "do you want this, do you want this, do you want this?"

DVWS4: Yeah, like little differences in the sort of design...

DVWS1: Yeah, and also, we chose the colours too. And it's like, you appreciate other designs as you walk around through shops, you're like "oh actually, yeah it does take a lot more to go into design than one would think.

Likewise, visiting Deutsche Bank had been a big inspiration for the students, as DVWT explained:

"...And again, Deutsche Bank were superb in letting us go round their office, so again the students saw how the finance world works, and actually... if you look on a bigger scale, how it all integrates together, so you know, that they've had experience of working with professionals, who are recognised in their fields, is superb as well, because they realise that these aspirational jobs that they hear about in the future are not just aspirational, they're achievable."

The students echoed their teacher's enthusiasm, recounting how welcoming staff had been at Deutsche Bank. The students recounted how they had brought a batch of their final product with them on this visit and how, to their amazement, it had been "sold out" to Deutsche Bank staff.

The winning school case study data also highlighted that, overall, the winning school students, teachers and wider school community were extremely proud of the funds raised by the sales of their product. They indicated that a total of £1079 would be donated to their local Macmillan Cancer center, with two winning students emphasising the importance of the charitable aspect of DV, revealing that Macmillan had recently cared for two of their family members. Winning DV had, therefore, also been a positive experience because it had enabled the students to contribute to a cause that had real personal meaning.

When asked at the end of the interview if they wanted to make any additional comments, the students offered the following responses:

DVWS3: I think we'd like to thank the Design Museum for all they've done...

DVWS2: They've done a lot ...

DVWS4: It's been a great experience, an unbelievable experience... DVWS1: Yeah, because without them, this wouldn't have happened would it?!



Image 3: Design Ventura 2016 Winning Entry, HOOK<sup>2</sup>O

### Longitudinal Impact of Winning on the Broader Perception of Design

Case study data confirms that winning DV had positive implications on the broader school community. DVWT said he felt that winning DV had clearly affected overall interest in Design & Technology, a subject frequently felt to be *"always on the periphery, fighting our corner"*. Winning had been a strong affirmation for all, engendering a sense that *"actually our students are really good!"*. Both DVWT and the students said they had noticed an increased sense of effort and *"community"* amongst Design & Technology staff and students since the result had been announced. As one student explained:

"Back to the younger students getting more involved... well, I think when we did it, when we did our project, we kept going back at lunchtime and no one was there. But now there's like Year 7s like welding... they're doing everything now!"

The success also had a positive impact on the number of students choosing Design & Technology as a GCSE option, with DVWT indicating that the impact of winning had "quickly percolate[d] down" to younger students/years. He explained that in 2016, when the students had entered, and then won the competition, the department had enrolled one Year 10 GCSE group, however in 2017, the year after this, there had been two Year 10 GCSE groups. This impact appeared to be having a continuing effect with DVWT providing anecdotal evidence of this. He explained that he had recently attended a Year 9 Parents' Evening, where he had found himself approached by an increased number of parents, all of whom indicated that their children would like to study Design & Technology at GCSE. In a school that he described as "predominantly academic", DVWT felt that this was extremely encouraging. The winning students who had parents from non-design backgrounds said that winning Design Ventura had made their parents take Design "more seriously now", with one student describing the experience as having been "an eye opener" for his parents.

As a career choice, DVWT also said that winning, combined with a growing awareness of the contribution of design to the UK economy, had contributed to an increased interest in design degree pathways for the school. Amongst the five students from the winning group, three said they would be going on to study Design & Technology at A-level, and a fourth said that he would be studying Engineering, but with the intention to return to Design "further down the line".

This student also cited a specific talk given by an engineer on a Design Museum visit as having helped him understand this was possible. Three of the students said they felt that winning had directly impacted on their decision to continue with the subject. As they explained:

DVWS3: It's made a difference I think... DVW S1: Personally, I think it's made a big difference. Because, this isn't something that everyone gets. So, as it being on your CV, if you're going to pursue a career in Design, and you've got exactly the same A-levels as someone else, maybe even a bit worse, they'll be like "ooh...."

DVW S4: ...But "they've won this competition!"

DVW S2: And you've had the work with the professional designers before, so you've had an insight into what that's like.

DVWT confirmed the students' enthusiasm to continue with their Design/ Design & Technology learning experiences, revealing:

"[The students] are hooked, they realise it's a skill set, there's huge opportunities for them, and having done Design Ventura, it's kind of opened a window as to what is possible."

In summary, the 2016 Winning Team case study data strongly confirms that both DVWT and students' reflections on their experience of the competition were extremely positive. When invited to add closing comments, DVWT neatly concluded the 2016 winning school case study by explaining that he would shortly be attended a meeting for a schools' alliance group in North Britain, where he intended to tell as many people as possible to "get involved" in Design Ventura.

## 3.5.2 Longitudinal Benefits to Teachers and Schools

In 2017, Teachers were once again asked what they had gained from participation in Design Ventura. Findings indicate that 96% of respondents agree that Design Ventura has given them a better understanding of how to engage students, whilst 97% indicate that they have a better understanding of how to plan and teach enterprise and design together. Teachers also indicate that they have a better understanding of what resources and people that could be used to support teaching in this area (98%). Responses remain overwhelmingly positive and show an overall increase in all categories from 2016, see table 7 below.

Question Stem (N=136)	Helped Overall	Helped a lot	Helped	Helped a little	Not sure	Hasn't helped
A better understanding of how to engage students to learn about enterprise and design	96%(95)	34%(33)	49%(58)	14%(18)	1%(3)	2%(2)
A better understanding of how to plan and teach enterprise and design together	97%(94)	32%(25)	49%(66)	15%(17)	1%(3)	3%(3)
A better understanding of what resources and people can be used to support the teaching of enterprise and design	98%(96)	35%(26)	47%(62)	16%(22)	1%(2)	1%(2)

**Table 7**: Benefits of Design Ventura to Teacher's Practice

The majority of teachers continue to enjoy and value the opportunities provided by participation in the Design Ventura programme. This year they were again asked to rate the value of particular features of the programme. As in 2015 and 2016, teachers rated working to a live brief (100%), the opportunity to combine design and enterprise learning (100%) and team working (99%) as the most valuable features of DV. These data are presented in figure 7 below.



Figure 7: Value of Different Design Ventura Features

In all categories, features were rated more often as highly valuable than valuable, with 75% of teachers finding 'working to a live brief' highly valuable, 67% finding 'teamwork' highly valuable and 64% finding the opportunity to 'combine design and enterprise' highly valuable. There remain mixed findings around the value of competing in DV 2017. Whilst 99% of teachers found competing with other schools valuable in some way, qualitative data again reveals that competing remains a source of stress for some teachers.

## **Longitudinal Participation**

A key success indicator in this category remains continued participation by teachers and schools. In the 2017 survey teachers were asked:

Design Ventura	2017: Teacher Survey
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18. Looking forward, tell us a bit about how Design Ventura has encouraged you to engage with enterprise and design? \* Mark only one oval per row.

	Yes, I would like to do this	No, I won't do this	l don't know
l plan to participate in Design Ventura again	$\bigcirc$	$\bigcirc$	$\bigcirc$
l will look out for other opportunities to combine enterprise and design in teaching	$\bigcirc$	$\bigcirc$	$\bigcirc$
I plan to bring students to visit the Design Museum	$\bigcirc$	$\bigcirc$	$\bigcirc$
I will recommend Design Ventura to other teachers	$\bigcirc$	$\bigcirc$	$\bigcirc$
It is unlikely that I will do this kind of project again	$\Box$	$\bigcirc$	$\bigcirc$

Figure 8: Teachers Longitudinal Intentions

Their responses again suggest that participation in Design Ventura continues to develop pedagogy and increase levels of interest in this kind of design activity:

- 92% (92) said that they would participate in the Design Ventura programme again
- 1% (0) are unlikely to participate again
- 95% (93) will recommend DV to other teachers
- 89% (90) will look out for other opportunities to combine enterprise and design in teaching

Positive responses in all participation categories reported remain high and are broadly consistent with 2016 findings, as indicated in brackets above.

It is interesting to note that:

72% (68) plan to bring students to visit the Design Museum

This finding, up 4% from 2016, represents a continued opportunity to plan for the high impact of museum learning experiences in tandem with complimentary digital experiences and resources, and is triangulated by findings in section 3.4.1 above.

# 3.5.3 Teacher Case Study: Cross-curricular Delivery Case Study Context

Grieg City Academy has participated in Design Ventura since the competition first launched in 2010. The school's Head of Enterprise and Design & Technology has overseen all Design Ventura teams in this period. Of particular interest is that, over this period, the project has been delivered in a cross-curricular format, combining Enterprise with Design & Technology, and it is this cross-curricular approach that informs this case study focus, in particular the ways in which this approach impacts longitudinally on:

- Cross-curricular development and application of design knowledge and skills
- Preparation for Design & Technology GCSE.

Consistent with ethical guidelines, the teacher's name has been anonymised to DVCS2 and direct quotations are used to illuminate DVCS2's experiences.

## Longitudinal Impact of Cross-curricular Delivery

Greig City Academy had become involved in the first year of Design Ventura, DVCS2 said, because it *"sounded different... it allowed the kids to challenge themselves rather than the typical Design & Technology... which can be quite dry."* The school had experienced success within the first two years of participating, reaching the final and receiving an Innovation Award. DVCS2 was the only teacher at the school to have been consistently involved in the project, although another teacher had also participated in the most recent competition year. The main issue, DVCS2 said, was that her school's fortnightly teaching cycles made it difficult to achieve outcomes without a lot of extra teaching time. However, in addition to her role as Head of Design and Technology, DVCS2 also acted as Head of Faculty for Work-Related Learning (in charge of Enterprise, Work Experience and Careers) and she illuminated this as supporting cross-curricular delivery, spread across both Enterprise and Design & Technology groups.

It is this particular approach that is of interest as a case-study. As DVCS2 explains:

"When I package it, I package it with the Enterprise... I don't present it as a Design and Technology competition... The way in which we try to deliver the Enterprise is, they have a little mini business, they have... opportunities to enter into as many competitions as possible and take part and go to see things... which means that they are enterprising just by participating in those things, but also... the philosophy behind being enterprising – that kind of thinking is built into how they are taught to work. So, a lot of it is self-driven... because that's what their GCSEs are about; independent study, as well as what your teacher gives you... because what your teacher gives you is never going to be the full diet."

DVCS2 originally ran Design Ventura as a cross-curricular project partly because of the school's timetable, as there was not quite enough time to complete with all Design & Technology students (two Year 9 and sometimes two Year 10 groups – approximately 20 students per class). To accommodate this, in parallel to Design & Technology classes, DVCS2 would also assign the project to the school's Enterprise group, with the final teams comprised of students from both areas:

"So, some of the [Enterprise] kids sometimes are in my [D&T] class as well, so it's happening in various spaces. So, I'm pulling possible kids from there and kids from my Enterprise group as well... and what generally happens... [is] you get a mix... cross-curricular groups as well as delivery. That has real impact."

DVCS2 indicated that Design Ventura was a good match for many subjects, in this case both Enterprise and Design & Technology, she said, because of its emphasis on "being innovative [and] talking about understanding the needs of people, society, stakeholders, costing [and] budgeting...." These overlaps helped build a relationship between subjects, here Enterprise and D&T, and also "put a value level" on Design & Technology as a subject for students working across curriculum areas:

"Because they recognise that 'oh, yeah, but I'm doing that in D&T' and it also makes them feel that 'oh I can do D&T'. So it can up the choices, or their thinking about it. Or you get the right calibre of students to opt for the subject as well... Because we are training them for industry, so the work that they're producing at Year 9, when they do a submission for that competition, is sometimes ... it could be better than a GCSE piece of work, and I have to say to them 'you've done it before'."

This point, "you've done it **before**", was cited by DVCS2 as being of real use in proving to less confident students that they were more capable than they realised. As DVCS2 pointed out, Design Ventura "gives them a stepping stone, it gives them the confidence." This cross-positioning between Enterprise and Design & Technology therefore had the dual effect of elevating Design & Technology as a subject and raising students' belief in their own abilities. Furthermore, as a core competition project, Design Ventura helped create a valuable sense of momentum in the school and this also had the effect of helping students develop their understanding of working to deadlines across subjects.

"Because I always remind them - 'it's got nothing to do with me, it's external. I can't control it. It says, 'submit online'; if it's not online on that date, then that's it, too bad!'. And then, they keep reminding me!"

Experiences of managing such time constraints, or deadlines, became especially useful as students moved towards the final stages of their GCSEs:

"... getting them to understand 'pack all those skill sets into a very short space of time'. Which is what we require from them really for their GCSEs. Because the window of producing your final outcome for your D&T GCSE is very tight, and so they need to be used to that, being concise, quick, think quick, you know – but look at the questions and unpick information, right?... So it's a very good training tool to make sure that students are hitting the right level across all their GCSEs."

This comment is useful in summing up DVCS2's key points around the benefits of a cross-curricular approach to Design Ventura, namely that the knowledge and understanding became less "*compartmentalised*" and that this helped develop an overall ethos, of enterprise, independence and confidence, that fed forward as students progressed towards their GCSEs.

### Longitudinal Impact on Cross-Curricular Student Practice and Confidence

As she worked across several departments, DVCS2 was able to witness first-hand how the skills students developed through Design Ventura fed into other subject lessons. For example, when discussing the ways Design Ventura impacted on students' critical thinking, she commented:

"... yeah, because when we're in the lessons, so some of them will be in Enterprise, or Maths, but also will be taught by me, so their responses are different – their mindset, their understanding, they get it quicker than others because they've been exposed to it, they've been exposed to the need for that [a more critical] kind of approach."

Crucially, DVCS2 felt that experiencing DV in a cross curricular-context allowed students to develop a more holistic perspective of their curriculum subjects, as she described:

"Because students are very compartmental, because their secondary experience is. So I say to them 'don't separate your [subjects] ... you have five periods a day, but every subject has a relationship. Every subject.' So the other day when we were doing Design Ventura, and I said to them 'so what are you going to put on the packaging? What is the Design Museum, who goes there?' ... I said, 'so, do they all speak English? ... So they had to fall back on their languages that they know personally or do a translation, to include a leaflet that has the most common languages... So again, bringing in the use of language, it's important to understand that other people speak other languages.... I always link it to other subjects that they do... So the maths as well... you need to understand proportion. And you need to understand size and you need to understand quantity, you need to understand the proportion of our product... So, Maths, English... I say if... you spell a word that is specifically related to the topic or the subject wrong, that's zero... you need to know how to spell it, you need to understand what it means, it is in context."

However, in illuminating the potential of Design Ventura in developing transferrable skills and authentic cross-curricular learning, DVCS2 also revealed the importance of teacher practice in both recognising the potential for this and in developing the holistic perspective of the curriculum. This is illuminated by comments such as:

"We talk a lot about context, context in terms of materials, context in terms of the language, context in terms of how you explore in relation to what the topic is. And that sits with some of their other subjects... Everything about Design & Technology, everything that we talk about maybe through Design Ventura, is part of all your other subjects, it's not separate. And I said, 'if you can develop these skills sets here, you can transfer them and use them anywhere'... if you can construct work and present work... then you can do that in your English or in your History essay, you can do it anywhere."

DVCS2 also emphasised the unique role of DV in supporting development and application of authentic business skills, and she particularly recognised and valued the cross-curricular benefits of this:

"Yeah... although I think now it's [business skills] more there with the new curriculum, where you need to know the cost of materials and approximate, but it's still not as in-depth as if you were doing a Business Studies course or an Enterprise course, whereas within Design Ventura it's specifically asking you to talk about the source of your materials, and how much it will cost and you need to know what the end unit price is going to be because you've got to put your profit margin in.... so they're forced to look at the price context for the Design Museum, to see what products are within that range... and that also allows me to do some more in-depth work with them on Enterprise itself in terms of budgeting and costing... and we look at that balance sheet and plan the budget..."

### Longitudinal Benefits of Opportunities for Authentic Design

When asked about the differences between DV and Design & Technology projects, DVCS2 cited the emphasis on process rather than final outcome. The importance of an opportunity to experience authentic design process was something she consistently recognised in her evaluation of DV and, as a consequence, emphasised in her teaching, *"this is what happens in the real design world... and what Design Ventura allows to happen"*. She elaborated on the importance of this in supporting a range of transferable skills, by commenting:

"... that's a good thing about doing Design Ventura as well, is they do have to do a lot of iteration, a lot of not just being content with 'that's my design', which is often how they work, they have to keep revisiting and thinking 'why is

that not quite right?' And recognising that it's ok it's still not quite right, that it takes time, thinking it through and problem solving."

Consistent with a range of longitudinal data, DVCS2 also underlined the importance of the Design Ventura live brief. She felt that because, along with improving students' engagement and motivation, it also encouraged students to explore design in context. DVCS2 explained that, in her experience, students' first responses to briefs were often to immediately "go online" or begin designing without unpacking key ideas or researching the context in which their product would sit. The act of visiting the Design Museum, "a real, live space" and researching the "organisation, and their needs and their stakeholder needs, and looking at what their culture is..." also contributed to students thinking about design, and particularly their designs, beyond the classroom.

DVCS2 also highlighted group work as one of the most beneficial aspect of DV: "Because it's group work, it also supports the weaker ones... who might struggle if I say 'OK, all of you, you're going to do your first project... here it is'... they would probably find it very difficult to get started. But because we do it as a group thing, and they're put into groups and they're competing against themselves, they work together. They all learn the same skills at the same time. They're all contributing, they're all questioning, they're all peer assessing themselves and checking things out and looking for the information, so they're forced to have contact with all the aspects of it."

DVCS2 also revealed that students consistently enjoyed multiple aspects of Design Ventura. These included visiting the museum itself, attending the workshops, and meeting different people. The students especially relished the opportunity to share their work with others, as this gave them "a real sense of pride". DVCS2 said she often displayed students' work in the trophy cabinet at the school's entrance, and when students were able to tell others about their work at school open evenings, this sense of pride was further heightened. She also reiterated how much students enjoyed the process itself, "the fact that through doing the project there are certain skills they didn't know they had, certain techniques that they learn".

This recognition of learning, something she described as 'learning-to-learn', was, she felt, enhanced by enjoyment of the freedom that DV provided:

"[It's] ... 'I can do that!' And they know how to do it and they also enjoy being able to show one another. They're very good, they work very well together, so if one person understands something they'll just get up and show the next person. It's really good. That's what they enjoy. They've got a little, like, corporate behaviour going on and that's good!"

When asked about her own enjoyment, DVCS2, in common with students themselves, indicated that she most liked seeing students' progress during the process and then witnessing their sense of achievement at the end:

"Every sheet they do, I'd say 'don't throw it away', so first draught, second draught, third draught, fourth draught and so on until we get to the one that's the final one and I show them at the end and I say, 'can you imagine - look at where you started!' They go 'Miss, Miss, please don't show that!' And they see the growth for themselves. So, they see their actual progression and that's really good to see and it's really nice to watch."

DVCS2 also revealed that one of the most enjoyable aspects of DV was observing students' pride at the awards evenings organised by the Design Museum for those involved in the project, where students received certificates and prizes for taking part. She said she always made sure to emphasise to students that it was not winning that mattered, but what they had got out of the process and that this too should be celebrated:

"The issue is, 'what have you got out of it? And, would you do it again?' And if the answer is 'no', then 'why'... because I like to... and they'll tell me certain things and then I'll tweak it, if need be. So I do really enjoy doing it, yeah."

### **Longitudinal Impact on Perceptions of Design & Technology**

DVCS2 revealed that Design Ventura participation had impacted very positively on raising the profile of both Design & Technology and Enterprise in the school community. She described how, at school open evenings, parents would talk to her about the competition and describe the impact that taking part had on their children. Furthermore, she described that developing a cross-curricular approach, "packaging" Enterprise with Design & Technology, the reciprocal benefits of this, as revealed above, raised the profile of design by having a positive cumulative effect on other areas of school life. The enthusiasm for taking part in projects such as Design Ventura was so great that she often found students asking her when the next competition would start. Building up this momentum was therefore highly positive for the school community.

The impact of Design Ventura was also felt at the point of selecting Design & Technology-related options for GCSE and A-Level. As discussed above, DVCS2 described how the cross-curricular involvement, delivered through Design Ventura during Year 9, helped students develop their understanding and application of a wide range of transferable skills. This increased understanding of and confidence in design as a subject appears to often support an increase in the number of students opting to continue with Design & Technology at, and beyond, GCSE:

"... most of them who actually do Design Ventura working with me and doing it as part of Enterprise itself, they will choose to do Design & Technology at GCSE. And they understand what they're going to have to do, they get it... So they were already in this - you know - 'explore, create, evaluate' and the continuous iterations, so they were used to it."

### **Additional Longitudinal Outcomes**

Throughout the case study interview DVCS2 revealed the many positive outcomes, for both students and her own practice, of participating in Design Ventura. However, when asked for any additional comments at the end of her case study interview, she revealed that an additional, and perhaps serendipitous, positive outcome from participating in Design Ventura had been the lasting relationship that the school had built with one of the Design Museum's volunteer workshop designers. She revealed that this designer had worked with the school through one of their early Design Ventura experiences, and the arrangement had been so successful that the school still employed him to lead extra-curricular workshops on a range of projects with a range of Enterprise and Design & Technology year groups.
## 3. Findings contd.

### 3.6 Qualitative Experience

Section 3.6 focuses on findings pertinent to the qualitative experience, looking at the effectiveness of Design Ventura in providing a learning experience of the highest quality. This provides complementary data to the sections above. Success indicators include:

- Levels of enjoyment amongst all participants
- Perceived efficacy of the project in achieving its five specific aims
- General feedback comments, quotes etc. gathered from all participants

### 3.6.1 The Student Experience

2017 data reveals that overall ratings for Design Ventura were once again very positive, with 70% of students (68,78,72) rating their experience as good or very good (see figure 9). Despite the increase in participation and the increased use of digital resources, introduction of the new Design Museum facilities has seen a rise of 2% and a return to satisfaction the level of previous years. There were again no discernible differences in student ratings between genders or year groups. 22% of students (21,14,25) gave Design Ventura a rating of OK. This is broadly similar to previous years, again suggesting the low 2015 figure may be an anomaly.



Figure 9: Students' Overall Rating of Design Ventura

#### **Student Views on Outstanding Features of Design Ventura**

The Design Ventura Student Survey 2017 invited students to give written comments on what they liked best about working on Design Ventura, see thread summary in table 8 below. As in previous years, working as a team (38%), freedom to develop and design products (39%) and the experience of being creative (31%) were the most popular features of the programme.

Live brief/Freedom to develop the product	41% (39)
Teamwork and working in groups	38% (34)
Fun/design/creativity	36% (31)
Modelling/making a prototype	24% (22)
Business/finance	19% (17)
Other	9% (5)

**Table 8:** Students Most Liked About Design Ventura (N=2421)

Students' 2017 qualitative responses again repeatedly highlighted the value and enjoyment they get from creative freedom, typified by comments such as:

"What I really liked best is the freedom of choice in what to design" Year 9 Student, DV 2017

## 3. Findings contd.

"[What I liked best was] having the opportunity to invent my own ideas and portray my own opinions on other designs the experience overall required me to be imaginative which I enjoyed." Year 10 Student, DV 2017

Student's qualitative responses also highlighted the value that DV 2017 participants place on group work:

"It gave us the opportunity of working together, developing our social skills." Year 9 student, DV 2017

"You could add all your creativity together and create something crazy, but useful."

Year 10 Student, DV 2017

Consistent with 2017 case study data (see section 3.5.3 above) 2017 student data again confirmed an emerging theme around the value of Design Ventura in providing authentic cross-curricular links to subjects such as maths, and the potential of Design Ventura to develop transferable skills such as critical thinking.

Students variously commented:

"You have to consider all of the elements of manufacturing and creating an original product, working it out and putting it all together" Year 10 Student, DV 2017

"It really made me need my arithmetic, working out finances for the manufacturing cost of one product" Year 9 Student, DV 2017

#### **Student Views on Design Ventura Delivery Model**

Students were also invited to comment on what they found most challenging about Design Ventura (see table 9). Comments were broadly similar to those offered in previous years. The most frequent comments were around the difficulty of making decisions (25%), the finance, costing and documenting side of things (19%) and the challenge of working as part of a team (15%. For some students the lack of time available to finish the project (14%) was the most challenging aspect, whilst others were most challenged by presentation and pitching (10%).

Making decisions about the product	25%
Documentation/finances/worksheets/	19%
Teamwork and working groups	15%
Timing/Lack of time	14%
The pitch/presenting	10%
Not winning/competing	3%
Pressure/stress	2%

Table 9: Students Least Liked About Design Ventura (N=2421)

Illuminative comments in 2017 include:

"Making a final decision of what our design would look like and figuring out the cost of how much it would be, and the target audience would our design be suitable for" Year 10 student, DV 2017

"Planning the cost and planning the measurements of my product." Year 9 student, DV 2017

"Agreeing on one idea as a collective." Year 10 student, DV 2017

### 3.6.2 The Teacher Experience

2017 findings revealed that 100% of teachers felt that participating in DV was a positive experience, with 90% (89) of teachers giving a rating of good or very good for their overall experience. These data are presented in figure 10 below and represent a 1% rise from 2016. This is broadly similar to data in five of the last six years of the competition.



Figure 10: Teachers' Overall Satisfaction

#### **Teacher Views on Outstanding Features of Design Ventura**

The Design Ventura Teacher Survey 2017 once again invited teachers to give written comments on what they view as the outstanding features of Design Ventura (see thread summary in table 10 below). As in previous years, the value of a live brief (59%) was considered the outstanding feature of the programme.

Value of a live brief	59%
Value of resources	38%
Impact on student engagement	26%
Impact on teamwork	27%
Supporting Transition to GCSE	18%
Raising Profile of D&T	13%

Table 10: Teacher Views on Outstanding Features of DV 2017 (N=136)

The majority of teachers emphasised the value of students being involved in a live brief, working in real world design contexts. Illuminative comments included:

"As always, Design Ventura is a fantastic way to engage pupils in 'real DT' rather than a made-up brief from the school. It helps pupils work together and create a product in a real setting." Teacher, DV 2017

"The open brief really challenges the student to think out of the box, to be creative and remove them from their comfort zone" Teacher, DV 2017

There was also a notable increase in those who saw this as valuable in supporting GCSE success:

"[The outstanding feature of Design Ventura is] *The opportunity to work with industry on a real brief with links to the GCSE"* Teacher, DV 2017

## 3. Findings contd.

"It was good. The new GCSE asks students to write their own brief in response to a set context so this approach was really helpful". Teacher, DV 2017

"Designing for a target audience fits in well with the new GCSE specifications." Teacher, DV 2017

Teachers also commented frequently on the value of DV supporting resources. This was typified by the following comments:

"[The outstanding feature of Design Ventura is] The wealth of resources and guidance given to support schools."

Teacher, DV 2017

"[The outstanding feature of Design Ventura is] the handling collection provided by the museum and the ability of an educator to come and complete an in-school work shop was a great experience and this really helped pupils move on as they were able to return to the handling collection over the duration of the project."

Teacher, DV 2017

In 2017 teachers again highlighted the chance to engage in collaborative design and work in a group as a key value:

"[The outstanding feature of Design Ventura is] *The opportunity to collaborate* and problem solve." "It's rewarding to see the pupils work as a team, grow in confidence and produce exciting products." Teacher, DV 2017

Teacher responses again emphasised the benefit of Design Ventura in working with Industry Experts:

"Having a greater understanding of the whole design process including costing and budget. Working as a business. Understanding of how what they are doing in school has similarities to what would be done in industry." Teacher, DV 2017

They also emphasised the benefit of Design Ventura in raising the profile of D&T:

"This has really helped to raise the profile of the subject." Teacher, DV 2017

#### **Teacher Views on Design Ventura Delivery Model**

2017 Teacher Survey again asked respondents to give written comments on the Design Ventura delivery model. These were largely very positive and, consistent with the outstanding features detailed above, focused on the value to students, and the broader school community, of engaging with authentic design and enterprise activity. Illuminative data includes:

"The additional planning was worth it! Students loved working to a live brief & parents loved that their child was taking part in a national competition with such established companies." Teacher, DV 2017

"This has been a fantastic first time of running the Design Ventura design Challenge, students have really enjoyed it, we've had various other members of staff come in and see what the students are doing and have also helped to run a mini Pitching event, this includes the Head teacher! " Teacher, DV 2017

Teachers also emphasised the value of DV in supporting teamwork and engagement: *"This competition encouraged the students to work together and create innovative projects that met the needs of a set target audience, great experience, thank you"* Teacher, DV 2017

### 3. Findings contd.

And again emphasised the value of DV 2017 in supporting GCSE projects:

"This is the second year that I have run the competition as part of introduction to the GCSE during lesson time, and it has brought enthusiasm from students and an easy way to transition students from KS3 to KS4" Teacher, DV 2017

In 2017 teachers were once again asked to comment on how Design Ventura might be improved. Their responses fall under the broad themes outlined in table 11 below

Timing issues/lack of time	26%
Local/Networked workshops and CPD	15%
Teacher resources & support	14%
Exemplars of successful entries	10%
Access to/organisation of Digital Resources	7%

**Table 11:** Teachers Comments About How Design Ventura Might be Improved(N=136)

In common with 2016 data, many comments were again about time available, and the schedule of events. These were typified by the following data:

"Time scale - Sept to Nov is difficult to manage with new cohorts."

"We struggled with the very short timeline but will try to combat next year by having it in lesson time..."

"More time needed to complete the task set with a later submission date."

Teachers also recognised the value of face-to-face workshops and Design Museum visits, with many comments suggesting local or networked delivery for those outside of London, with a range of constructive comments:

"Design workshops outside of London would be good - maybe a university setting that offers product design"

"As a teacher in a school in the North, I felt that there weren't the opportunities for pupil workshops and visits to the Design Museum. 57% of our pupils are disadvantaged, many would not be able to afford a trip to London to research the Design Museum or take part in a workshop. It would be amazing if you could run mobile workshops across the country so more pupils could have that opportunity"

"As a school so far away from London we would really like to see some workshops brought out of the Design Museum, so a travelling workshop?? I know of at least 3 other local schools that were also unable to attend a workshop because of distance but I think this would be really valuable to our students, we could do this as a collaboration, we would be happy to hold such an event here at our school and invite other schools to attend if this could be organised! "

"It would be good to have regional workshops/CPD sessions as there were local schools also doing the competition and it would be good to network."

"Virtual Design Museum Visits would be great"

Teachers again touched on how they perceive the value of sharing/cascading best practice from previous years would improve Design Ventura, with illustrative comments suggesting a role for students:

"I would like to see a presentation from one of the winning schools on how they achieved their end result."

"[I suggest a] Role for students in CPD"

"More student CDP - could there be a student led CPD as well as teacher/ expert?"

The 2016 winning team teacher, DVWT, also highlighted a role for cascading student knowledge and participation through DV, commenting:

"We used A2 A-level students as judges, as a way to get some integration going between the years"

In summary, most of the comments focused on adjusting the current delivery model, rather than on major changes. Several of the comments on timing also recognised the constraints and issues with any delivery model. It is pleasing to note that many of the teachers very much value the way DV has developed, but recognise the need to maintain a focus on raising the profile of the competition with a range of stakeholders:

"I think it's a great competition - just think the profile needs to be raised within individual schools and departments."

"Work with AQA and the exam boards to get this embedded in more schools, it is such a valuable tool to use especially with the new curriculum in mind."

### 4.1 Overall Impact

Design Ventura 2017 findings reveal that the programme continues to provide a learning experience of the highest quality for those who engage with its activities. Students and teachers have again indicated high levels of satisfaction and enjoyment for all elements of Design Ventura. Increased participation, and associated data sample size, indicate that overall ratings of the Design Ventura experience remain consistently high. This year 90% of teachers (89% in 2016, 100% in 2015, 91% in 2014, 86% in 2013) and 70% of students (68% in 2016, 78% in 2015, 72% in 2014, 68% in 2013) rated their experience of the project as good or very good. This remains broadly consistent with longitudinal data in the respective categories.

Data analysed in relation to anticipated outcomes for 2017 confirms that the Design Ventura programme again improved enterprise and creativity skills for the vast majority of participants. The 2016-2019 target is that 60% of participants should experience an improvement in a range of identified enterprise and creativity skills. During 2017 improvement was reported by an average of >90% of participants across all categories. These gains were confirmed by the judgements of teachers. A similar picture was revealed for business skills, where improvement was reported by an average of >88% of participants across all categories.

Confirmation of the high level of success against 2017 anticipated outcomes is welcome. This is consistent with findings in previous years and provides longitudinal insights into the success of Design Ventura, particularly given that 2017 saw the first year of delivery in the new Design Museum and a return to a blended delivery focus with complimentary digital resources. This is consistent with the aim to widen participation in Design Ventura without any appreciable reduction in outcomes for participants, however, respondents' suggestions for more widely networked delivery are noted, (see section 5, recommendations).

The revised methodology and student survey instrument continue to greatly improve the collection, and subsequent analysis, of data around student confidence and ambition. 2017 data analysis indicated for the first time that the Design Ventura programme has impacted on all attitudes and attributes. 86% of students reported an increase in confidence in solving design problems. 90% of participants reported increased confidence in responding to mistakes and criticism. 85% of participants reported Design Ventura had positively impacted on their ability to recognise the role of study in achieving their ambitions. 83% of participants reported increased focus on future careers, with 88% also reporting that Design Ventura had increased their awareness of the need to plan for this to happen. Again, these gains were confirmed by the judgements of teachers.

Design Ventura 2017 data again confirmed an increase in student's teamwork ability. 89% of students reported that Design Ventura had helped develop their understanding of the value of teamwork, with 86% getting better at working with others. 89% of 2017 participants understand more about how team members have their own strengths and weaknesses.

All the main features of Design Ventura were individually rated highly or very highly by the vast majority of teachers. In particular, the value of working to a real brief, teamwork and combining design and enterprise were rated of value, by > 99% of teachers. Design Ventura also helped to develop teacher capability: 96% of all participating teachers agreed that the programme helped give them a better understanding of how to engage students in learning about enterprise and 97% agreed that it helped give them a better understanding of how to teach enterprise and design together, while 98% of teachers said that they gained

a better understanding of what resources and people could be used to support this kind of activity. These improvements are confirmed by the responses of students who continue to report very high levels of satisfaction with the quality of their teaching and learning within Design Ventura sessions taught by their own teachers. In addition, 89% of teachers report that in the future they will look for opportunities to combine enterprise and design teaching in addition to Design Ventura.

## 4.2 A Sustainable Legacy

The 2015 evaluation of Design Ventura considered the longitudinal legacy of participating in Design Ventura, through case studies of two previous winning teams: Dove Bunting, winners in 2010, and Card Cogs, winners in 2014. This was followed up in the 2016 Design Ventura evaluation through case studies of three categories of participating teacher: previous winner, first-time participant and returning participant.

### 4.2.1 Factors Impacting Participation

### **Opportunities to Engage in Authentic Enterprise and Design**

As the curriculum and associated examination system in England and Wales continues to move away from a focus on creative subjects, such as design, Design Ventura appears to continue to provide an ever rarer opportunity for students and teachers to engage with authentic practice in this area. It continues to address the curriculum areas of enterprise and design together, by identifying a set of learning outcomes that are complementary or common. The increasing take-up of Design Ventura demonstrates that the curriculum and learning experience on offer is attractive to more and more schools and that the digital resourcing of the project supports this. In addition, 2017 data reveals that teachers are increasingly recognising the value of Design Ventura in supporting GCSE progress. However, there remain some issues with Design Ventura scheduling and timescales and an evaluative focus on this should be maintained.

### The Opportunity to Engage with the Museum as Educator

The scale and accessibility of the new Design Museum has acted successfully as an effective broker between schools and the worlds of design and business during DV 2017. The move to the new museum site has consolidated DV through continued development of face-to-face workshops and CPD and the accessibility of exhibitions and the museum shop. Through its continued partnership with Deutsche Bank, the Design Museum has improved both face-to-face and digital resources for DV 2017, showing that the benefit of authentic design education and enterprise opportunities can be made available to more learners in diverse locations. Findings suggest that this can largely be done without compromising the quality of the experience. However, they also highlight that, for some schools, direct contact with professionals, exhibitions and learning in a museum context is inaccessible. It is recommended that focus should be maintained on emerging themes from this evaluation to inform strategic development.

### **Alternative Modes of Teaching and Learning**

Design Ventura continues to supplement and compliment the teaching and learning that is going on in schools. This was achieved in 2017 through providing an opportunity for authentic design and enterprise, supported by blended museum-based and digital resources and learning opportunities. Developing and spreading expertise in these modes of teaching and learning remains an important outcome for the project.

### 4.3 Emerging Themes

The following themes emerged form analysis of Design Ventura 2017 evaluation data:

- Findings reveal an increased awareness of how Design Ventura might support GCSE progress and KS3 to KS4 transition.
- Teacher data confirms the value of the new brief format in aligning Design Ventura more closely to GCSE specifications.
- Findings confirmed that the benefits to students of participating in Design Ventura appear to be significant and longitudinal.
- Findings confirmed the benefits to teachers of participating in Design Ventura appear to be significant and longitudinal.
- Focused case study data provides a triangulated perspective to support longitudinal gains for students and teachers.
- A retained focus in 2017 survey questionnaires upon core design competences, such as communicating design ideas, indicates that these continue to be developed through participation in Design Ventura.
- A retained focus in 2017 survey questionnaires upon key indicators of confidence and ambition indicates that these continue to be developed through participation in Design Ventura.
- Focused case study data provides a triangulated perspective to support development of core competences.
- A specific 2017 case study focus on cross-curricular learning and transferable skills continues to highlight the potential of Design Ventura for application and development of cross-curricular learning and transferable skills, such as critical thinking, ideation, communication and maths/numeracy skills.
- The specific 2017 case study focus on cross-curricular delivery of Design Ventura, reveals the positive impact of this on 'de-compartmentalising' learning, supporting application of skills across subject areas.
- The specific 2017 case study focus on cross-curricular delivery of Design Ventura, also reveals a reciprocal benefit to this approach in raising understanding of the value of design learning amongst students and teachers.
- Findings again reveal the potential of Design Ventura in raising the profile and highlighting the value of design education to the secondary curriculum, but also reveal that this could be promoted more effectively.
- The importance of Design Ventura continues to increase as curriculum reform impacts on the opportunity for authentic design activity in secondary schools.
- Consistent with the above, the importance of Design Ventura continues to increase as curriculum reform impacts on the opportunity for authentic design activity in secondary schools.
- Submission of survey questionnaires as a condition of entry has again greatly enhanced submission rates and, consequently, the data set on which to evaluate Design Ventura:
  - 2421 Student Survey Responses (up from 1687 in 2016 and 776 in 2015) an increase of >311% over two years
  - 136 Teacher Survey Responses (up from 115 in 2016 and 82 in 2015) an increase of >165% over two years
- 2017 data has consolidated the view that the redesigned Design Ventura evaluation methodology appears successful in gathering data to support reporting on confidence and ambition.
- The redesigned survey questionnaires again appear to be effective in minimising inconsistencies between qualitative and quantitative data.
- Findings reveal the trend toward male participants appears to have partially reversed, with 46% female (+3%) and 54% male (-3%).
- 2017 data appears to confirm a longitudinal shift in the balance of participant year group toward year 9 (67%) and year 10 (34%), consistent with 2015 and 2016 data.
- .

- The year group and gender profile of the 2017 winning team appears more consistent with the overall profile of participants
- Teacher case-studies and longitudinal survey data are again consistent in highlighting the timing of Design Ventura as problematic from both learning and organisational perspectives, with 2017 data also revealing a need to consider developing local networks for workshop and CPD delivery.

The systematic analysis and interpretation of data collected during the evaluation of Design Ventura 2017 have resulted in the following recommendations

- 1. Design Ventura remains highly effective in offering an authentic opportunity for design, achieving success against all key performance indicators. Given the importance of the programme, the Design Museum should continue to consider how to develop and resource the project in the longer-term.
- 2. The revised 2017 brief and ongoing development of supporting resources appear to have had impact in aligning aspects of Design Ventura to GCSE specifications. This should continue to be developed and monitored going forward.
- 3. Data collected in 2017 indicates that the Design Museum-based learning activities, new for 2017, were well received and well structured. These should continue to be evaluated and developed.
- 4. Consideration should be given to the role of students in workshop and CPD delivery, and in contributing to the management/delivery of the competition.
- 5. The specific 2017 case study focus on cross-curricular delivery of Design Ventura reveals the benefits of developing a cross-curricular perspective. Consideration should be given to *explicitly* referencing and building awareness of this through CPD and project resources.
- 6. Consideration should continue be given as to how to cascade the experience of shortlisted and winning participants to the broader cohort.
- 7. In light of teacher concerns around accessibility to Design Museum-based learning experiences, consideration should be given to developing local networks for workshop and CPD delivery.
- 8. In light of teacher concerns around project timing, consideration should continue to be given to this in project planning.
- 9. Given the positive feedback on digital resources, these should continue to be developed. Consideration should be given to recommendations 4 and 5 above.
- 10. Learning in Design Ventura remains dependent upon the quality of group work. Consideration should again be given to development and assessment of group work capability in design through sharing exemplar approaches and resources.
- 11. Data collected in 2017 again highlighted the potential of Design Ventura to offer development of transferable skills and authentic cross-curricular learning opportunities. Consideration should be given as to how this might be shared with schools to encourage widening participation.

- 12. Design Ventura 2017 data again indicates that there has been some success in closing the gap between creative and business-related skills. This should continue to be monitored going forward.
- 13. Collection and analysis of longitudinal impact data, done for the third time in 2017, again offers encouraging insights into the long-term benefit to students and teachers of participating in Design Ventura. Collection of data should continue to establish and support the sustainable benefits of Design Ventura going forward.
- 14. Given the shift indicated by 2017 data, the gender balance of participants is less of a concern, but this should continue to be monitored going forward.
- 15. The characteristics of the 2017 winning team represents better alignment to the broader population of participants, but this should continue to be monitored going forward.

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### Appendix i – Design Ventura Aims and Objectives 2016-2019



# Appendix ii – Design Ventura 2017 Student Questionnaire

18	Design Ventura 2017: Student Survey	2/27/2018	2/27/2018 Design Ventura 2017: Student Survey 8. Tell us how the Design Ventura project has helped you with your designing ' Mark only one oval per row.					
-	ntura 2017: Student Survey ur Design Ventura experience is really important to us. By answering the questions			It's helped me a lot	It's helped me	It's helped me a little	It hasn't helped me at all	I'm not sure if it's helped me
	ng us find out more about how well the project works and what extra support or		I understand more about how to respond to a design brief:	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
	carried out by the Design Museum and Goldsmiths College, University of London. only collected so that data can be matched up - personal information will not be		I am better at explaining my design	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
available from your			ideas: I am better at presenting ideas to others:	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Your views really m Thank you!	atter, so please answer all questions.		l understand more about the business side of design (e.g. costs, marketing, profits):	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
* Required			I understand more about making good business decisions about my designs:	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
1. School Name			about my designs. I understand more about how working with others can help achieve more overall:	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
2. Teacher's nam	e *		I understand more about how to get on with others in a team:	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
3. Gender *			I understand more about how team members have their own strengths and weaknesses:	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Mark only one Male Female	vəl.		Design Ventura has helped me see what it takes to make my ideas happen:	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
4. School Year * Mark only one Year 9 Year 10 Year 11	val.							

s/d/1pnUavTSGHBJLfMkEsXH-\_mHyQkRCSXmdkDYaiHhAdB

#### Design Ventur 5. Tell us about your Design Ventura experience \* Mark only one oval per row.

	Very Good	Good OK	Not very good	Not sure	l didn't do this
I rate the lessons/time when we worked on Design Ventura at school with the teacher as:	$\bigcirc$	$\bigcirc \bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
I rate the workshop at the Design Museum	$\bigcirc$	$\bigcirc \bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
I rate the visit to the Design Museum Shop and exhibitions as:	$\bigcirc$	$\bigcirc \bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
I rate the Design Museum in- school workshops as:	$\bigcirc$	$\bigcirc \bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Overall, I rate my Design Ventura experience as:	$\bigcirc$	$\bigcirc \bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

#### Tell us a bit more:

#### 6. What did you enjoy the most about Design Ventura?

 $^{7.}$  What did you find the most challenging about Design Ventura?  $^{\ast}$ 

\_\_\_\_\_

\_\_\_\_\_

#### https://docs.google.com/forms/d/1pnUavTSGHBJLfMkEsXH-\_mHyQkRCSXmdkDYaiHhAdBg/edit

	It's helped me a lot	It's helped me	It's helped me a little	It hasn't helped me at all	I'm not sure if it's helped me
I think I'm less worried about trying to solve design problems:	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
It's helped me understand that mistakes and criticism can be useful as they help you learn and improve:	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
It's helped me think about what I can achieve through studying:	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
I understand more about how I can plan to achieve what I want to:	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
It's focused my thinking about what kind of skills I might want to use in my future career	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

#### Tell us a bit more about how Design Ventura has changed your interest in the following skills \* Mark only one oval per row.

	Increased	Remained the same	Decreased	Not sure
My interest in creative skills, such as designing and making has	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
My interest in business related skills, such as finance or marketing has	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
It's helped me become interested in other skills (tell us what they are in the next question)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

11. Other skills I am now interested in are...

42

# 2/27/2018 Design Ventura 2017: Stadent Survey 12. Tell us a bit more about what you think about your future \* i think its a good idea to make plans Mark only one oval per row.

	I strongly agree	l agree	l disagree	I strongly disagree	Not sure
Overall, I feel positive about my future	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
I think it's a good idea to make plans for the future	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
I feel confident I can achieve what I want to	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
But, if I'm going to do this I know I will need to make a plan	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

## 13. Tell us a bit about how helpful you have found these Design Ventura resources \* Mark only one oval per row.

	This resource helped me a lot	This resource helped me	This resource helped me a little	This resource hasn't helped me at all	I'm not sure if this resource helped me	I didn't use this resource
Design Ventura website	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Films	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Blog	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$
Twitter	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	

### 14. Tell us which of these Design Ventura resources you were shown by your teacher \* Check all that apply.

Check all that appy.

Design Ventura website

Films
Blog
Twitter
None

## 15. Tell us which of these Design Ventura resources you accessed yourself \* Check all that apply.

Design Ventura website
Films
Blog
Twitter

None

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Design Ventura 2017: Student Survey 16. Are there any other Design Ventura resources you would find helpful? \* 2/27/2018

Thank you for completing this questionnaire.

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## Appendix iii – Design Ventura 2017 Teacher Questionnaire

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2/27/2018

Desion Ventura 2017: Teacher Survey

#### Design Ventura 2017: Teacher Survey

- Your opinions really matter to us and we value you taking the time to contribute to the evaluation of the Design Ventura programme.
- This survey forms part of your final submission. Each of your answers will help us to find out more about how teachers and students experience the Design Ventura programme. This survey is being carried out by Goldsmiths College, University of London and the Design Museum. (Our Information Management Policy can be viewed at http://www.gold.ac.uk/governance/policies/#InformationManagement).
- All data collected will be treated as confidential and you will not be contacted or identified unless you give us explicit permission to do (please see web link or information sheet for details).
- For further information about this survey please contact ventura@designmuseum.org
- Thank you!
- The Design Ventura Team
- \* Required
- 1. Teacher name \*
- 2. School name \*
- How many students took part in Design Ventura in your School? \* This will help us to ensure you get the correct number of certificates sent to you

://docs.google.com/forms/d/1s4dkgSwpz-ki/6H7Rzagu7buc9oSCZ255iKfgSd38khw/edit	

### Deigs Versan 2017: Taxs 4. How have your students gained from Design Ventura? \* Tell us a bit about how you think Design Ventura has impacte following areas Mark only one oval per row. ura 2017: Teacher Survey . acted upon your students' learning in the

	It's impacted a lot	lt has had impact	It's impacted a little	It hasn't had any impact	I'm not sure if it has had any impact
Knowledge and understanding of the design industry	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Responding creatively through the design process	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Assessing materials, production techniques and manufacturing considerations	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Communicating design ideas	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Knowledge and understanding of business aspects of design	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Awareness of product marketing and target audiences	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Reflecting on and modifying ideas	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Considering and responding to issues of ethical and sustainable design	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

# 5. Tell us a bit about how you think Design Ventura has impacted upon your students' busi and personal capabilities in the following areas ' Mark only one oval per row.

	It's impacted a lot	lt has had impact	It's impacted a little	It hasn't had any impact	I'm not sure if it has had any impact
Resilience, flexibility and a 'can do' attitude	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Team work including shared decision making and collaboration	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Communication skills including discussing, presenting, pitching and using ICT	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Self-confidence	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

#### Derign Ventura 2017: Teacher Survey 6. What have you gained from Design Ventura? What has worked? \* d your practice in the foll Tell us a bit about how taking part in Design

fark only one oval per row.					
	lt's helped lot	lt's helped	It's helped a little	It hasn't helped at all	I'm not sure if it's helped
A better understanding of how to engage students to learn about enterprise and design	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
A better understanding of how to plan and teach enterprise and design together	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
A better understanding of what resources and people can be used to support the teaching of enterprise and design	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

### 7. Tell us a bit about how you rate the value of the following features of Design Ventura \*

	Highly valuable	Valuable	Some value	No value	l don't know
Working to a live brief	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Competing with other schools	$\bigcirc$	$\bigcirc$	$\bigcirc$		$\overline{\bigcirc}$
Combining design and enterprise learning	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Teamwork	()	()	()	()	$\bigcirc$

#### $^{8.}$ Tell us a bit about how useful you found the following features of the project $^{\ast}$ . Mark only o ne oval per rov

	Highly valuable	Valuable	Some value	No value	I didn't use this
Email Bulletin newsletters	()	()	()	()	()
Twitter	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\overline{\bigcirc}$
Live, online webinars	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Live, online teacher CPD (or recording of)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Museum based CPD events	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Workshops at the Design Museum	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Design Museum in-school workshops	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Visits to Design Museum exhibitions	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Teacher notes	$\bigcirc$	$\odot$	$\bigcirc$	$\odot$	$\odot$
Products from the Design Museum Shop (Design Ventura handling collectino)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Design Museum Shop website	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Design Museum main website	Ö	Ö	$\overline{\bigcirc}$	$\overline{\bigcirc}$	Ö
Design Ventura posters	0	0	$\bigcirc$	$\bigcirc$	0

https://does.google.com/forms/d/1s4dkgSwpm-kN6H7Rzagu7buc9oSCZ255iKfgSd38

Design Vennes 2017 Tender Survey 9. Do you have any comments on the new brief format? \* This year, we did not have a one word theme, instead students were asked to focus on a partic target audience.

10. Did you bring your students for a Design Ventura workshop at the Design Museum? \* Mark only one oval.

Yes Skip to question 11.
No Skip to question 16.

### Museum workshops

For 2017 we have a new building and a new format for the Design Ventura workshops at the Design Museum, as you attended one of these with your students we would like to hear your feedback:

### 11. Please rate your experience of booking the workshop session \* Mark only one oval.

- Very easy Easy OK Difficult Very difficult

#### 12. Please rate your experience of arriving at the museum and the facilities available to you: \* Mark only one oval per row

	Very good	Good	ОК	Bad	Very bad	I didn't do this
Welcome on arrival	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Common room - lockers and lunch facility	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Workshop	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Visit to Designer Maker User	$\odot$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\odot$	$\odot$
Visit the Design Museum Shop	$\odot$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

13. The duration of the workshop has changed from 45 mins to 90 mins, do you prefer the longer length? ' Check all that apply.

- - Yes
  - No

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 Design Venna 2017: Tester Survey

 14. Are you more likely to bring your students to the Design Museum for a 90 minute workshop than a session that lasts 45 mins? \*

 Check all that apply.

Yes
No

15. Any additional comments on workshop length or content:

16. Tell us a bit about how you rate the value of the following features of the Design Ventura website * Mark only one oval per row.
---

	Highly valuable	Valuable	Some value	No value	I didn't use
Teaching and learning resources	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Short films	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Industry Experts Profiles	$\overline{\bigcirc}$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Blog	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Q&A Feature	$\odot$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Resources index	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Project Guide	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Downloadable resources	Ő	$\bigcirc$	0	$\bigcirc$	$\bigcirc$
Short films	$\overline{\bigcirc}$	$\overline{\bigcirc}$	$\bigcirc$	$\bigcirc$	$\overline{\bigcirc}$

17. Are there any other online Design Ventura resources you would find helpful?  $^{\circ}$ 


2/27/2018	Design Ventura 2017: Teacher Survey						
	23. Tell us what you think the outstanding feature of Design Ventura has been for you and your students $^{\circ}$						
	24.						
	We occasionally need to clarify responses to survey questionnaires. Are you happy for us to contact you to clarify any of the information that you have provided should the need arise? * Mark only one oval.						
	Yes						
	No						
	If yes, please provide your contact details						
	<sup>25.</sup> Email						
	26. Daytime phone number						

Thank you for participating in this survey. Good luck in the competition!

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217.01 Design State Starkers

A Cooking forward, tell us a bit about how Design Ventura has encouraged you to engage with

Are only one owal per row.

Yee, I would like to do this No, I wont do this I don't know

I plan to participate in Design
U will look out for other

I will look out for

20. Tell us a bit about your overall experience of participating in the Design Ventura programme \* Mark only one oval per row.

It was very good It was good It was OK It was poor It was really poor
Overall satisfaction

 $^{\mbox{21.}}$  Tell us how you think Design Ventura could be improved?  $^*$ 

\_\_\_\_\_

 $^{22}$  Tell us if you have any other comments about your experience of running Design Ventura for your students  $^{\ast}$ 

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## Appendix iv – Design Ventura 2017 Teacher Case Study Interview Schedule

- Would you start by telling us a little bit about yourself, your professional background and how you got in to teaching Design & Technology?
- How long has the school been involved with DV?
- How long have you been involved with DV?
- Why did the school/you become involved with DV?
- Tell us a bit about how you delivered DV during the winning year? In lessons, lunch time etc.?
- Was/is Design Ventura a different teaching experience to teaching Design Technology at school? What's different about it?
- Were/are there particular aspects of Design Ventura that you enjoy? Why?
- How has DV impacted on your practice? Did/do you do things differently in the classroom?
- Are there any aspects of design process that you feel DV particularly helped you with?

### Note: Xref to questionnaire areas

A better understanding of how	A better understanding of how	A better understanding of what resources	
to engage students to learn	to plan and teach enterprise	and people can be used to support the	
about enterprise and design	and design together	teaching of enterprise and design	

- Has it impacted what you do in the classroom outside of DV? If not, why?
- What has been the biggest impact of DV on you/your practice?
- Anything else you want to tell us about your personal experience of DV?

Thanks. We'd like to ask you a bit about what you think the impact of DV was on students, with a focus on the winning team.

- Do you think Design Ventura was a different learning experience to Design & Technology lessons at school? What was different about it?
- Were there particular aspects of Design Ventura that your students enjoyed? Why?
- How did DV impact on their design skills? Did they start to do things differently in the classroom during DV?
- Are there any aspects of design process that you feel DV particularly helped them with? Why?

### Note: Xref to questionnaire areas

Working to a live	Competing with	Combining design	Teamwork
brief	other schools	and enterprise	
		learning	

- Did it impact on what they do in the classroom outside of DV? If not, why?
- What has been the biggest impact of DV on them/their practice?
- Anything else you want to tell us about your student's experience of DV?
- Lastly, would you tell us a bit about what the impact of winning DV has been on perceptions of Design (Design & Technology)? Profile, numbers, career choice etc. With reference to:
  - The students?
  - The school,
  - The parents?

## Appendix v – List of Schools that Participated in the 2017 Evaluation

Alcester Grammar School Aldenham School Alderwood Senior School Archbishop Blanch Ash green Ashcroft Technology Academy Barton COurt Grammar School **Beaumont School Beechen Cliff School Beechen Cliff School Belfairs Academy Berlin British School Bilton School** Blythe Bridge High School & Sixth Form **Brighton College Bullers Wood** Burnage Academy for Boys **Burntwood School** Carshalton High School for Girls Casterton College Rutland Chadwell heath academy **Chancellor's School Charters School** Charters School, Sunningdale, Ascot **Chiswick School** City of Norwich School Colchester Royal Grammar School Colfe's School **Colyton Grammar School Crispin School** Dartford Grammar School for Girls **Dulwich College Edmonton County School Endon High School** fairmead Special School Ferndown Upper School **Finchley Catholic High School** Friern Barnet School George Spencer Academy Nottingham **Glenthorne High School** Great sankey high school Greig City Academy **Haggerston School** Hans Price Academy Harris Academy Rainham Harrogate Grammar school Harrogate Grammar School

Heckmondwike Grammar School **Highfields School** Highsted Grammar school Ilford County High School International Community School Invicta Grammar Kensington Aldridge Academy Kew House Kingsbridge Community College Ladybridge High School Lancaster Girls' Grammar School Langley Park School for Boys Langley Park School for Boys Latymer Upper School Latymer Upper School Linton Village College Lord Derby Academy Lord Derby Academy Mark Hall Academy Melksham Oak School Mill Hill County High School Mulberry UTC Newcastle Royal Grammar School Nonsuch High School North Birmingham Academy North Birmingham Academy Notley High School Notre Dame School Plymouth **Oakham School Oaklands School Orleans Park** Our Lady of Sion School Paignton Community and Sports Academy Park House School Parliament Hill Pensby High School **Plymstock School** Queen Elizabeth Grammar School Queen Marys Grammar School Rainham Mark Grammar School **Rangitoto College Redland Green School Ricards Lodge High School Riverside School Roundwood Park Rushcliffe School** 

**Sharples School** Simon Balle All-through School Sir Harry Smith Community College South Dartmoor Community College South Wilts Grammar School St Alban's Catholic High School St Anthony's Academy St Cuthbert's Catholic High School St Lawrence St Lawrence College St Marylebone St Olave's Grammar School St Pauls Way Trust School St Pauls Way Trust School Swakeleys School for Girls The Abbey School The FitzWimarc School The Hart School the highcrest academy The king John School The King John School The King's (The Cathedral) School The Littlehampton Academy The Quest Academy The Quest Academy The Ravensbourne School The Royal Masonic School for Girls The St Michael Steiner School The Vale Academy **Trinity Academy** Tunbridge Wells Girls' Grammar School Upton Hall School FCJ UTC Warrington Waldegrave Weatherhead High School Westgate School William Hulme's Grammer School Wimbledon High School Woking High School wood green academy Woolwich Poly Woolwich Polytechnic Yateley School

#### DESIGN VENTURA SHORTLIST 2017

(in alphabetical order)



#### Beechen Cliff School

Card Hero A portable phone stand that is the size of a credit card so that it fits neatly into a wallet or purse.



#### Chadwell Heath Academy

#### Animittens

Mittens in the shape of animals that encourage children to get involved with household chores.



#### Fairmead School

Spinning Thumb Plate A plate with thumb dent and sliding guard, helping those that find it hard to hold or carry a plate full of food.



Graveney School

Multi-Purpose Tidy Handy suction clips for storing and keeping items to hand.





Hans Price Academy

Plate Mate Fun attachment for holding your toast on the side of a plate to make more space and keep it from getting soggy.





#### Simon Balle All-through School

Drop Charge A humorous bungee jumper inspired wrap for keeping charger cables tidy.



South Dartmoor Academy

Emooji A fun ruler with stencils for creating your own emoji drawings.



The King John School

Lightning Bolt A lightning bolt shaped reflector that contains a puncture repair kit.



#### Weatherhead High School

#### The Flower Pot

A polypropylene plant pot that expands as the plant grows, reducing the waste of replacing pots.



Woolwich Polytechnic School for Boys STIX Wooden construction game made up of rods and connectors.





# Goldsmiths

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