DESIGN VENTURA

Evaluation Report, March 2017

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"I think they [participants] have benefited enormously from the experience and being inspired to pursue career goals in the field of design"

Friends & Family Feedback, Design Ventura Masterclass

"I learnt that you will always make mistakes in life but instead of focusing on them, use them to get better and learn"

Yr 9 student, 2016 participating school

"A brilliant experience for both students and myself"

Classroom teacher, 2016 participating school

"You can interact with other people and finally think outside the box and be creative with family and friends, ...and we had a chance to create a product that could be sold in the design museum shop"

Yr 10 student, 2016 participating school

CONTENTS

Table of Contents

ACKNOWLEDGEMENTS

ACRONYMS

CPD   Continuing Professional Development
DV   Design Ventura
XC   Cross-curricular
KS   Key stage
DVW   Design Ventura Winner
TCS1 Teacher Practice case study 1 (Winning Teacher/School)
TCS2 Teacher Practice case study 2 (Returning Teacher/School)
TCS3 Teacher Practice case study 3 (First Time Teacher/School)

1. INTRODUCTION

1.1 Design Ventura Overview

Design Ventura[1] 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 seventh 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's 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.

Design Ventura 2016 offers an opportunity to look at different aspects of how the project is delivered, coinciding, as it did, with a period when the Design Museum was closed in order to facilitate a move to its new location in Kensington High Street. This meant that Design Ventura 2016 could not harness the many functions of the Design Museum in the same way as previous years, for example Design Museum exhibitions and learning activity. Thus, whilst the focus of Design Ventura 2016 remains 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, it also focuses on the role of online resources in supporting that learning experience.

This 2016 evaluation, the third 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 2016 evaluation methodology (see section 2) looks at evaluative data about the 2016 DV experience, but also considers detailed case study data that focuses on the longitudinal impact of Design Ventura on the practice of participating teachers. To do this the 2016 evaluation framework draws on an updated 'pyramid' of aims and objectives (2016 to 2019), see section 2.1. Responses to 2015 findings and recommendations, threaded throughout this evaluation, are highlighted where they inform emerging trends. However, of particular interest to this 2016 evaluation are the 2015 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.

- The importance of Design Ventura has increased as curriculum reform impacts on the opportunity for authentic Design activity in secondary schools.
- The potential of Design Ventura in raising the profile and highlighting the value of Design education to the secondary curriculum.
- The re-designed Design Ventura evaluation methodology appears to be successful in gathering data to support reporting on confidence and ambition and should continue to explore beyond headline findings in order to focus on and support change.

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

1. Introduction contd.

1.2 Methodology

The 2016 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 a range of teachers, to include a winning teacher/school, a returning teacher/school and a first time teacher/school.

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 mind-set (Craig, 2007).

1.3 Scope of Design Ventura 2016

As a museum education project, Design Ventura remains unusual because of its large scale and longitudinal nature. Ordinarily all Design Ventura schools can visit the Design Museum for free workshops and self-guided visits. However, as 2016 sees the museum moving from it's current building near Tower Bridge to a new larger site in Kensington, the museum will not be open for visits between 1 July and 24 November 2016. Consequently, as mentioned above, this evaluation report provides an opportunity to focus on Design Ventura delivery supported by on-line resources and e-learning. Free museum workshops and visits will resume for Design Ventura 2017.

Online and e-learning content for the programme maintained the focus of earlier years and included: an introductory briefing video permitting learners to be briefed on their task, images of successful projects from previous years, top tips sheets, worksheets and videos of designers and business people giving advice. DV 2016 offered live online teacher CPD sessions, live online workshops, new online learning resources and the opportunity to learn directly from industry experts. Design Ventura 2016 remains a free project and by the end of this, the 7th year of the programme, Design Ventura had reached 700 schools and over 47,000 students across the UK.

In 2016, schools were recruited through email, social media, flyer mailings and the Design Ventura webpage. Schools submitted their entries to the Design Museum at the beginning of November 2016 and 10 teams of students, see appendix vi, Pitching Schools, were invited to present their designs at a pitching day at the Design Museum in December 2016. The winning school was announced in February 2017.

2. METHODOLOGY

2.1 Overview

The Design Ventura 2016-2019 programme has five specific aims, with three anticipated outcomes[2]. Data has been captured and analysed to enable informed conclusions to be drawn about the degree to which the 2016 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 2016 allows us to report more reliably on how Design Ventura impacts learner confidence and ambition, and to explore how this might connect between 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[3], observations, interviews and focused case-stydies[4]. In 2016, case study data is collected relevant to specific aim number 5 above, to explore the sustainable/longitudinal impact of Design Ventura on participating teachers and their practice. 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 on-line via a link on the Design Museum website. Goldsmiths, University of London was responsible for design of the survey questionnaires, follow up survey administration, observations, stakeholder interviews, case-study data, data analysis and reporting

[2] See the in Appendix I Design Ventura Aims and Objectives Pyramid 2016 -19

[3] See examples of survey questionnaires in Appendices ii and iii

[4] See examples of interview schedules in Appendix iv.

2. Methodology contd.

2.3 Data Collected

During Design Ventura 2016, 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 outcome. 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 administered during the Design Ventura programme (see appendix ii and iii). In both questionnaires, respondents were asked to choose an encoded value judgement in response to a series of themed questions.

Observation data
The Pitching event in December 2016 was observed and observation data gathered.

Case-study data
Detailed case-study data was collected from three participating teachers. They were selected in order for this report to repost on a range of sustainable/longitudinal impacts. Thus the sample consisted of a previous winner, a returning participant and a first-time participant.

2.4 Data Analysis

The focus of the analysis of data gathered during Design Ventura 2016 remains on uncovering broad and holistic evidence against the 2016-2019 specific aims and anticipated outcomes, rather than an in-depth exploration of features of the 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

2. Methodology contd.

- 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 2016 to 2019. 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. FINDINGS on DESIGN VENTURA 2016

3.1 General Findings

3.1.1 Student survey profile

In 2016 the Design Ventura student survey received 1687 returns, from 105 different schools. It is encouraging that this represents a large year-on-year increase from 2015 of > 217%. Given the > 40% drop in 2013 responses, longitudinal analysis 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 2016: Student Survey

Your feedback on your Design Ventura experience is really important to us. By answering the questions below you are helping us find out more about how well the project works and what extra support or resources may be useful for next year.

This survey is being carried out by the Design Museum and Goldsmiths College, University of London.

Personal details are only collected so that data can be matched up - personal information will not be included or shared in the analysis or in the reporting. Further information about data protection is available from your teacher.

Your views really matter, so please answer all questions.

Thank you!

* Required

What is the name of your school *

What is the name of your teacher for the Design Ventura project? *

Are you male or female? *
○ Female
○ Male

Year Group at School *
○ Year 9
○ Year 10
○ Year 11

Figure 1: Example of Student Profile Questions

Gender

The survey data for the 2016 programme indicates a broadly equal gender balance, with 43% (52) of respondents female and 57% (48) of respondents male. This indicates a 9% shift from female to male participants from the gender profile of 2015 and represents and the first shift >2% in the gender balance of participants since 2012.

Year group

65% of the students surveyed in 2016 were in Year 9, 34% were in year 10 and > 1% of students were in year 11. This appears to confirm 2015 findings that indicate a longitudinal trend away from Year 10 participation because of 'exam pressure'.

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

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

Table 1: Summary of Student Survey Profile Data

3. Findings contd.

3.1.2 Teacher survey profile

115 teacher responses to the Teacher Survey were received from 105 different schools (see appendix v). This is a >140% increase in responses from the 2015 evaluation survey. Again, the majority of teachers reported that the Design Ventura programme was delivered in lessons this year, 58% (65%/77%/71%). 20% (17%/26%/26%) said that the programme, or elements of it, were delivered after school, and 28% during lunchtimes, 28% (25%/16%/21%). Two percent of teachers said their schools provided an 'off timetable' day or something else (6%/1%/2%).This represents a year-on-year decrease in delivery through timetabled lessons, and this will be examined further through teacher case-studies

Design Ventura 2016: 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

Your Name (this information will only be used for authentication purposes and will not be identified) *
First name and surname please

Name of School (this information will only be used for authentication purposes and will not be identified) *

How was the Design Ventura programme delivered in your school? (tick all that apply) *
☐ In lessons
☐ During lunchtime
☐ After school
☐ As an off timetable day
☐ Other

Figure 2: Example of School Profile Questions

Teachers responding to the survey reported that 5,938 (3,697) students submitted entries to the 2016/7 Design Ventura programme, an increase of >60%. 26% of teachers reported between 4 and 15 participating students in their schools. Around 30% said that between 16 and 39 students had participated and 29% said between 40 and 100 students had participated, with 3% reporting over 200 students taking part and 1% reporting over 400 students participating in Design Ventura 2016/17. This is broadly consistent with 2015 figures.

3. Findings contd.

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 2016 Design Ventura programme has improved students' enterprise and creative abilities (see table 2). The re-designed 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.

2016/17 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. 93% 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', reported on for the third time in this evaluation, with 90% 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 10% of students also reported that they found 'prototyping' and 'making' the most challenging aspects of the project.

"We could be really creative and as long as we related to change [the project theme], we could invent anything we wanted."

Yr 9 Student, DV 2016

Question Stem (N=1687)	Helped Overall	Helped a lot	Helped	Helped a little	Not sure	Hasn't helped
Better at responding to a design brief	94%	22%	52%	20%	2%	4%
Better at explaining design ideas	93%	23%	45%	25%	3%	5%
Better at presenting ideas to others	90%	25%	38%	27%	4%	6%
Better at seeing what it takes to make my ideas happen	90%	32%	38%	20%	3%	7%

Table 2: Has participating in the Design Ventura project helped you improve your enterprise and creative ability? (N is total number of responses)

3.2.2 Improving Business skills

Student survey responses indicate that participating in the 2016 Design Ventura programme has had a significant impact on students' business ability (see table 3). The re-designed survey instruments reveal that student responses were overwhelmingly positive with >89% of respondents indicating that their ability had increased in all categories they were questioned on.

91% of respondents reported that they 'understand more about the business side of design', while 90% 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 4% and 6%, reported that they found the 'finance' elements of Design Ventura the most challenging aspect of the project.

"[I enjoyed] Taking the driving seat in the process; being able to look at product from a business perspective"

Yr 10 Student, DV 2016

90% of students reported an improvement in understanding about how working with others can help overall achievement. With 89% reporting they understand more about how to get on with others in a team and 91% reporting that Design Ventura has helped them develop understanding of their own and others '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. 7% of students report that Design Ventura did not help them get better at team work, with a further 2% unsure if Design Ventura had improved their ability.

Question Stem (N=1687)	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)	91%	27%	41%	22%	3%	6%
Better at making good business decisions	90%	31%	41%	21%	2%	4%
Improved understanding of how working with others can help achieve more overall	90%	40%	22%	21%	2%	7%
Improved understanding of how to get on with others in a team	89%	26%	38%	24%	4%	7%
Improved understanding of how team members have their own strengths and weaknesses	91%	30%	40%	21%	3%	6%

Table 3: Has participating in the Design Ventura project helped you improve your business ability? (N is total number of responses)

What emerges from analysis of student data on business capability is that the re-designed 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 career 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 2016 had a very positive impact on students' design and business capabilities, with between 97% and 99% 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 findings, teachers believe students benefited most in terms of 'Responding creatively through the design process', 'Reflecting on and modifying ideas' and 'Communicating design ideas' where 98% of teachers reported an overall positive impact in each category. Teacher survey responses also indicate high levels of impact for 'Shared decision making and collaboration' (98%), 'Assessing materials, production techniques and manufacturing considerations' (97%) 'Knowledge and understanding

"[The outstanding feature of Design Ventura is] The link between industry and design - alongside teamwork and creative freedom."
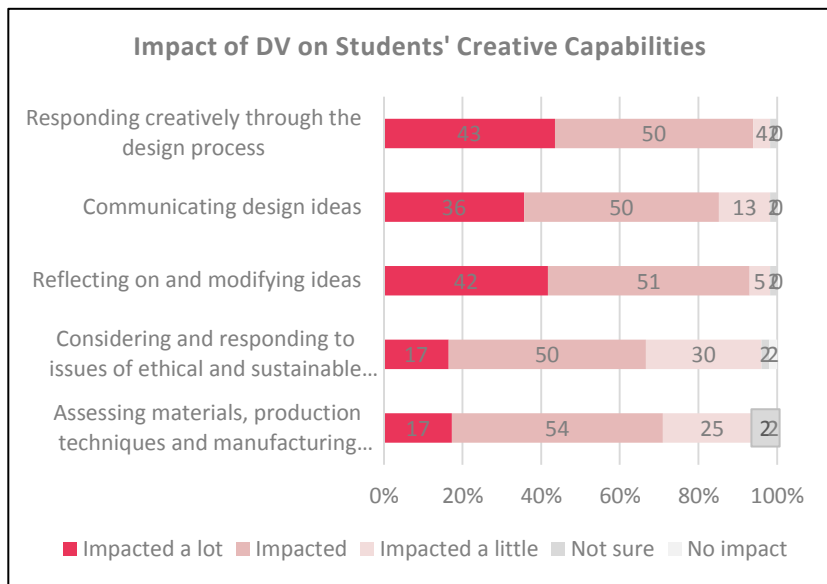
Participating Teacher, DV 2016

of business aspects of design' (97%) and 'Awareness of product marketing and target audiences' (97%).

Figure 3: Teacher Perspective on Students' Creative Capabilities

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

The impact on Design Ventura on students' business skill set overall remains high, according to 2016 teacher survey data. 97% of teachers reported that Design Ventura had a positive impact on students' 'Knowledge and understanding of business aspects of design', representing a 10% rise from 2015 data (see figure 4).
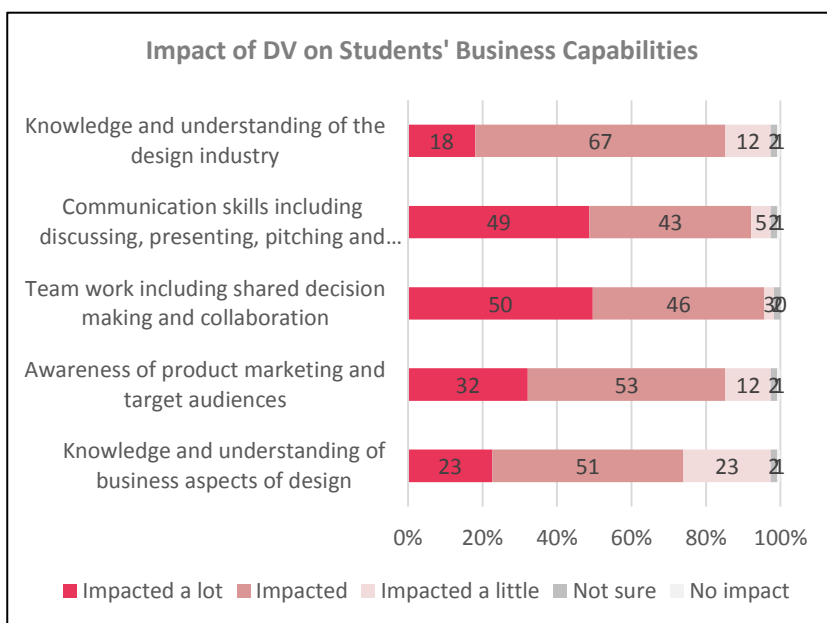
Figure 4: Teacher Perspective on Students' Business Capabilities

DV 2016 teachers increasingly recognise the benefits of a live brief in raising students' business related skills and in raising their own

3. Findings contd.

confidence in teaching (and recognising) business capabilities. Consistent with this, teachers reported that Design Ventura had a significant impact on 'Communication skills including discussing, presenting, pitching and using ICT' (99%). Again, the emerging picture is that the impact of Design Ventura 2016 on all measured elements of students' business skill set 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

"[It was] Amazing to see students develop team working skills and confidence, every student had a voice."

Participating Teacher, DV 2016

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 2016 shows that this engagement continues to result in positive changes in interest for both creative and business related skills for 58% and 46% of participating students respectively (see table 4).

Consistent with 2013, 2014 and 2015 findings, the impact on DV on raising interest in creative skills was greater than that on business related skills. However, this year the gap decreased by around 10%, this may be consistent with the way that participants experienced 2016 activities. No significant gender differences were evident.

Question Stem (N=1687)	Increased	Remained the same	Not sure	N
My interest in creative skills such as designing and making has ...	58% (62,62, 61)	35% (35,33, 34)	5% (2,3,3)	*1687*
My interest in business related skills such as finance or marketing has ...	46% (44,42,42)	40% (42,43, 47)	6% (7,7,4)	*1687*

Table 4: Has participating in the Design Ventura project changed your interest in creative and or business related skills?

3. Findings contd.

3.3.2 Increasing confidence and ambition

Design Ventura 2016 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 data analysis, the first to use the updated methodology, which revealed participation in Design Ventura had helped raise confidence in >88% of respondents (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=1687)	Helped Overall	Helped a lot	Helped	Helped a little	Not sure	Hasn't helped
I think I'm less worried about trying 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	91%(93)	26%(33)	43%(40)	22%(20)	3%(2)	7%(4)
It's helped me think about what I can achieve through studying	85%(88)	22%(25)	38%(39)	25%(24)	5%(5)	10%(8)
I understand more about how I can 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	86%(93)	28%(35)	37%(38)	21%(20)	6%(2)	8%(4)

**Table 5**: Has participating in the Design Ventura project improved your level of confidence and your ambition?

2016 findings in this area suggest that Design Ventura increased confidence in 'solving design problems' in 86% of students who participated, with 69% reporting a significant impact. Similar impact levels were reported on 'It's helped me think about what I can achieve through studying' (85% and 60%) and 'I understand more about how I can plan to achieve what I want to' (89% and 66%). 91% of participants reporting a positive impact on how they view making mistakes and respond to criticism.

Design Ventura also continues to have a significant impact on young people's aspirational thinking, with 89% reporting it helped them understand how to plan to achieve what they want to, with 66% reporting a significant impact. 86% 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 83% of respondents feel confident they can achieve their ambitions, with 85% indicating that they understand that planning for this to happen is a 'good idea'. 85% of Design Ventura 2016 student respondents indicate they feel positive about their futures. However, 8% of respondents are unsure of how they view their futures (see figure 5 overleaf).

Overall, 2016 data indicates that the impact of Design Ventura 2016 on all measured elements of students' confidence and ambition is well above the anticipated outcome that 60% of young people feel more confident about the potential of their own ideas.

3. Findings contd.
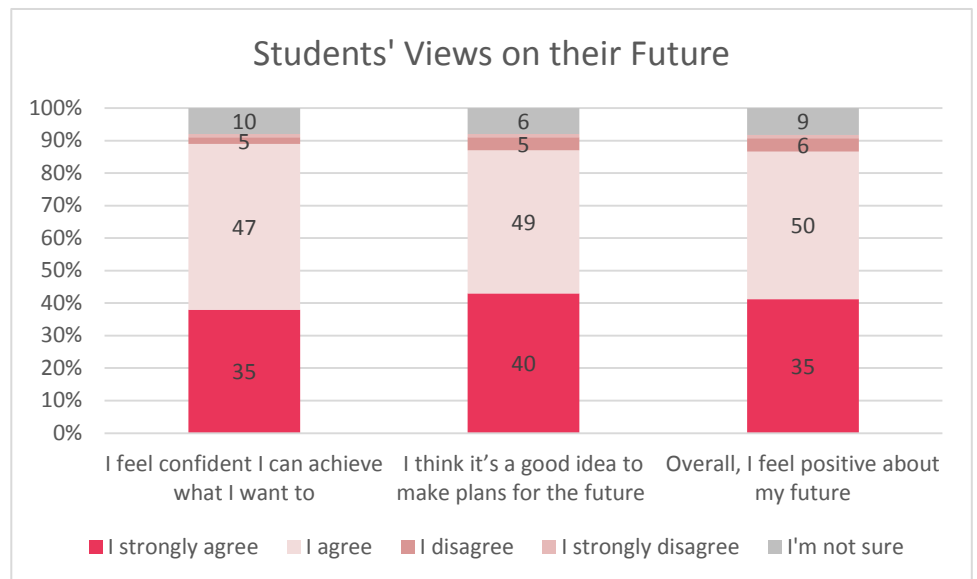
Figure 5: Student's Views on their Future

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 qualitative data, 2016 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 90% 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.

Question Stem (N=115)	Overall Impact	Big impact	Some Impact	A little Impact	Not sure	No Impact
Self-confidence	97%(100)	42%(44)	43%(46)	12%(10)	2%(0)	1%(0)
Resilience, flexibility and a 'can do' attitude	98%(100)	30%(42)	56%(54)	12%(4)	2%(0)	0%(0)
Team work including shared decision making and collaboration	98%(100)	50%(65)	46%(33)	3%(2)	2%(0)	0%(0)

Table 6: Teacher perspectives on Students' Personal capabilities

Strongest gains during Design Ventura 2016 appear to be in relation to resilience, flexibility and a 'can do' attitude, teamwork and collaborative working skills. Impact on self-confidence, according to both teacher and student perceptions, was slightly (1%) lower.

3. Findings contd.

3.4 Extending Reach: Digital 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 2016 offered an opportunity to look at different aspects of how the project was delivered, coinciding, as it did, with a period when the Design Museum was closed in order to facilitate a move to its new location in Kensington High Street. This meant that learning experiences during 2016 could not harness the many functions of the Design Museum in the same way as previous years, for example Design Museum exhibitions and learning activity. Thus, data collection during DV 2016 focused more closely on the role of digital resources and associated pedagogy in supporting the learning experience.
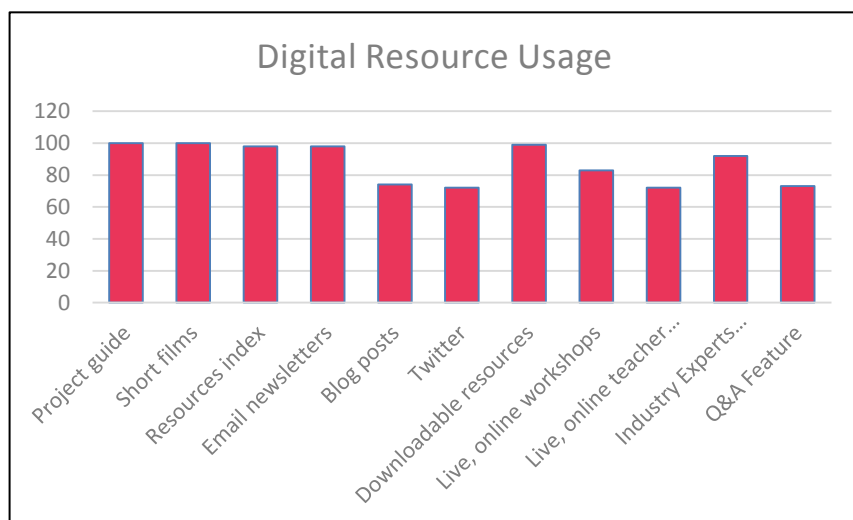
3.4.1 Digital Resources

One of the key *Objectives* of Design Ventura 2016-2019 is to '*Extend learning opportunities widely through diverse and accessible online resources*', thus the programme maintains a focus on widening participation. During DV 2016, the evaluation of this ongoing vision focuses closely on the updated digital resources.

Digital Resource Usage

2016 Teacher survey data indicates that the Design Ventura website (100%), project guide (99%), short films (100%), downloadable resources (99%), resources index (98%) and email news letters (98%) were the most widely used digital resources, see figure 6 below. Live online CPD (72%), blog (74%) and twitter (72%) were the least widely used of the 2016 digital resources.

"I think the website has developed incredibly well over the years and I wouldn't change anything at present."

DV 2016, Participating Teacher

Figure 6: Design Ventura Digital Resource Usage

Evaluation data indicates that 83% of participating schools took advantage of the offer of a live, online Design Museum workshop, up 64% from DV 2015, when 19% participated online. 95% of teachers used teacher notes and 70% made use of Design Ventura posters.

Digital Resource Value

Teacher survey data indicates that the downloadable resources were valued by 100% of teachers who accessed them. Evaluation data indicates that of the individual resources, the project guide, short films, the resource index and

3. Findings contd.

industry expert profiles were the most highly valued of the digital resources, with between 98% and 99% of teachers finding them valuable in some way, see figure 7 below.
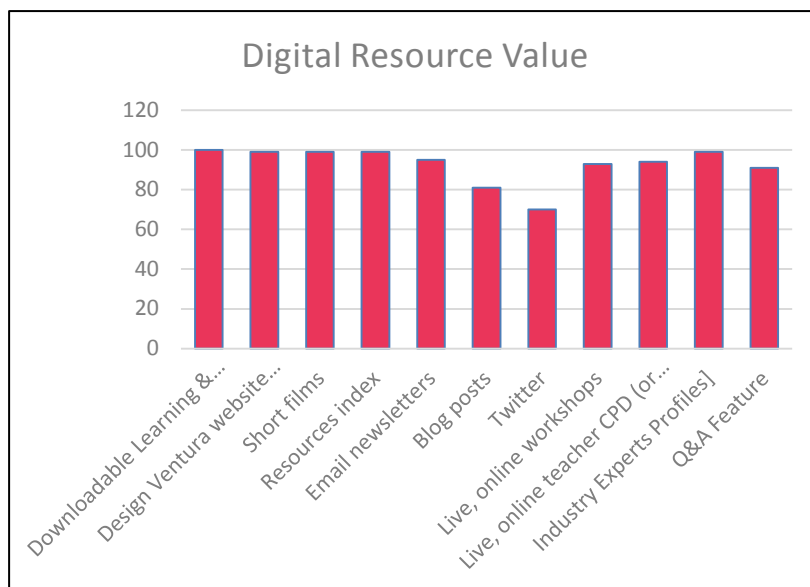

Figure 7: Design Ventura Digital Resource Value

The Q/A feature appears to the digital resource which increased in value the most during DV 2016, with 91% of teachers indicating they found it useful, a rise of 13% from DV 2015 (78%). The blog and twitter appear to be less valuable, with 81% and 70% of teachers respectively rating them of value. A more detailed breakdown provides additional insights into how digital resources are perceived in terms of the level of value, see figure 8 below.
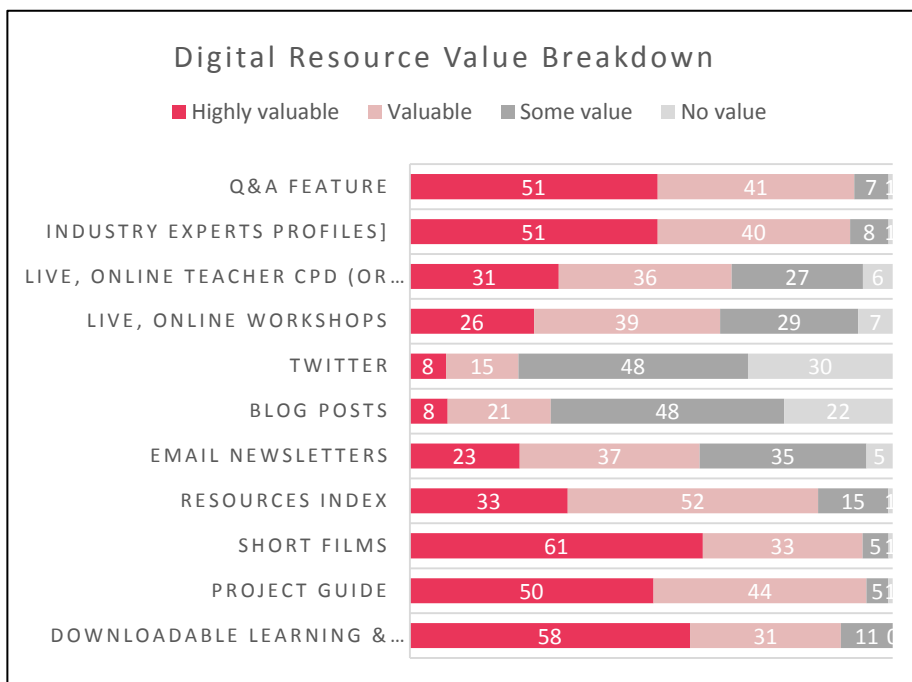

Figure 8: Design Ventura Digital Resource Value Breakdown

Data indicates that the digital learning and teaching resources are seen as highly valuable or valuable by 89% of teachers. Of the individual resources short films (94%), the DV project guide (95%) and industry expert profile (91%) were seen as being of the highest value. Again, the Q&A feature appears to have significantly

3. Findings contd.

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increased in perceived value, with 92% of teacher responses indicating this feature was highly valuable or valuable. This is of interest in understanding how digital resources can replicate valuable features of face-to-face interactions.

3.4.2 Design Ventura learning experiences

Design Ventura 2016 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
- the focus on a solution that must be commercially viable
- opportunity to engage with the design industry in an authentic context
- providing a creative learning experience free from 'exam constraints'
- the character and extent of the contribution of adults other than teachers
- the extent of group work

Authentic Professional Design methods

During DV 2016, data analysis again revealed the value to teachers and students of a 'real' brief, both in terms of engagement and motivation. Data 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 particular product and theme continues to appear to help some students to understand and participate actively. It was again 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, provided a shared focal point that facilitated engaging and constructive conversations with different adults: for example, handling and reviewing models again 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 2016 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 de-value design activity and highlight the value of mapping DV to GCSE exam specifications to both support learning and maximise impact.

DV 2016 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

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 digital resource findings, it appears that short films, industry expert profiles and the Q&A feature serve to provide similar support to face-to-face interactions.

Group work in school settings

2016 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 again 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 indicating time was "wasted" when groups failed to manage their own learning and work effectively, while some less able students continued to find this mode of working very challenging. Design Ventura 2016 continued to provide stimulating learning activities that were rated good, very good or OK by >90% of students in all categories. Take up of in-school workshops (62%) and online surgery workshops (55%) appears rather low, although, of those students who participated, around 90% gave positive ratings for the Design Museum in school workshops and 91% Design Museum online surgery workshops. 93% of students rated their DV lessons with teachers as good, very good or OK, see figure 6 below.
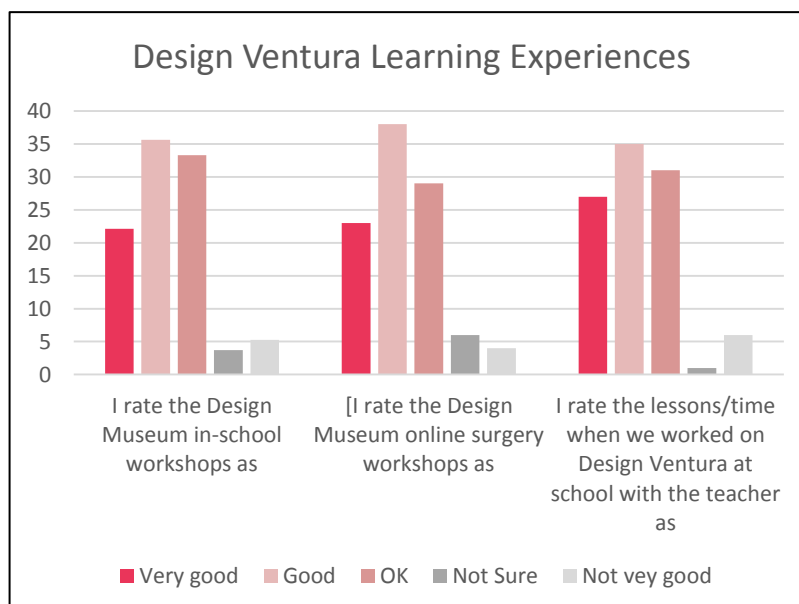
Figure 6: Satisfaction with Design Ventura learning experiences

Of significance is that, although qualitative data suggest both teachers and students miss the design museum activities, this does not appear to have had an impact on how students rate their learning experience, although it is interesting note that there appears to be a shift to more students rating their experience as OK, perhaps worthy of further evaluation going forward.

3. Findings contd.

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 to Participants

As part of the Design Ventura 2016 evaluation, semi-structured interviews were carried out with the latest (2015) winners of Design Ventura. These were included in the 2016 evaluation methodology in order to explore whether participating in Design Ventura had a lasting impact on:

- Skills
- Attitudes and Attributes.
- Knowledge and Understanding

Following on from 2015 case-study data, the findings from analysis of these interviews forms part of longer-term, in-depth insights into how Design Ventura impacts on participants. To supplement this data a semi-structured interview was also carried out with parents of a winning team member. Here direct quotations are used to illuminate the winners' experiences, Consistent with BERA ethical guidelines, data has been anonymised.

The Design Ventura 2015 winners were Finchley Catholic High School with their children's toy racer, 'Wheelys'. This was designed with the 2015 brief "Move" in mind, and the Design Ventura website reports '*these speedy toys were a favourite with the judges*'. Wheelys are propelled with a wind up rubber band mechanism and are made completely from their own packaging, meaning they use minimal materials. They can be customised using stickers and then raced.

Figure 7: Design Ventura 2015 Winning Entry 'Wheelys'

When asked which aspects of Design Ventura had been most enjoyable, the boys stated the combined factors of the brief's "creative freedom" and working as a team. The opportunity to answer a real and open brief had contrasted with the structured, "step by step" approach of their Design Technology lessons in school

Longitudinal impact of working with industry professionals
The opportunity to develop their winning product with professionals had introduced the boys to Design in a live context that was very different to their experiences of Design as a school subject. Consistent with 2015 case- studies they

reported that working with professionals during Design Ventura had also opened up a range of creative career possibilities that the students had been previously unaware of. Student 1 summed this up:

"It helps you see the value of Design as something that, you know, it's the real world, isn't it, the world's designed, and there's so many people who have to do stuff to make that happen."

Longitudinal impact of valuing design skills

Consistent with 2015 findings, taking part in Design Ventura had broadened the students' appreciation of design skills as a whole. They described how the Design Ventura process had helped them make several key realisations. They developed understanding that a creative process was not "always one order" (a clear, linear process culminating in a presentation), but could instead mean moving between previous stages several times over. They had also begun to realise that design did not necessarily have to be "incredibly beautiful and extravagant", but could also be a "very simple idea". Immersion in the design process at this age had helped change the students' perception of the world around them. They recognised that even if they had not decided to follow a career path in Design, participating in Design Ventura had helped them to value the impact of design skills differently.

Teamwork and creative freedom

The 2015 winning team again described the strong sense of "unity" that had emerged from working together as a team to make one product. They reflected that developing a concept through teamwork was one of the key differences to Product Design projects undertaken at school.

Students again indicated that the structure of the Design Ventura brief had elicited a different approach to school Design briefs, which had often already contained a built-in 'solution'. Consistent with the views of students in 2015, they had found that Design Ventura enabled a more creative approach to Design. The students reflected that since Design Ventura they had found themselves looking at Design briefs "completely differently". Having understood what they were capable of producing from the "limitation" of one word meant they had a "broader way of thinking" once they returned to their school briefs. This had impacted on how the students now produced their ideas, giving them confidence to try new things.

Longitudinal impact of participating and being shortlisted

The team described winning the competition as "a very unique feeling" that had impacted significantly on their confidence levels. Student 3 reflected, as a consequence of winning, saying Design Ventura had "Brought me out of myself". He also said that the effect was ongoing citing that others had enjoyed their product and that it had sold successfully.

Now in Year 11, the boys were beginning to consider their career options and reported that winning Design Ventura had reinforced their confidence in making decisions about the future. Parents supported this view, with Parent 1 stating:

"Oh definitely, definitely, it's been so worthwhile... I can see my son, how he has changed. How he has become more confident. He wants to design more stuff and he's directing his future life towards Design. So I'm really… it has changed him, definitely"

The 2015 winning team also felt that winning had "inspired" students in younger years at their school to consider design differently. The boys described how their success had begun to change perceptions of the value of design. As with 2015 case studies, participating in a nation-wide competition was cited as being an important aspect of Design Ventura, as the students were able to contextualise their work in a wider community of students. The students felt that through

participating they had noticeably improved their design work, demonstrated by the differences between how they and fellow team members approached Product Design briefs to peers at school who had not participated in Design Ventura. They felt they now had a "much more… critical way of thinking", and were more likely to consider aspects that their peers might neglect when answering briefs.

Students indicated that participation in Design Ventura had taught them to listen to feedback from different sources, including their peers. The boys described the difficulties of listening to "negative feedback" but said they realised on reflection that this this had helped them to "improve our product even more".

3.5.2 Longitudinal Benefits to Teachers and Schools

Teachers were once again asked what they had gained from participation in Design Ventura 2016. Findings indicate that 95% of respondents agree that Design Ventura has given them a better understanding of how to engage students and 94% indicate 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 (96%). Response remain overwhelmingly positive and are broadly similar across all categories in 2015, see table 7 below.

Question Stem (N=115)	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	95%	33%	58%	18%	3%	2%
A better understanding of how to plan and teach enterprise and design together	94%	25%	66%	17%	3%	3%
A better understanding of what resources and people can be used to support the teaching of enterprise and design	96%	26%	62%	22%	2%	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 previous years, teachers rated working to a live brief and team working very highly, with combined ratings of valuable and highly valuable, achieving 94% and 97% respectively. These data are presented in figure 8 below.
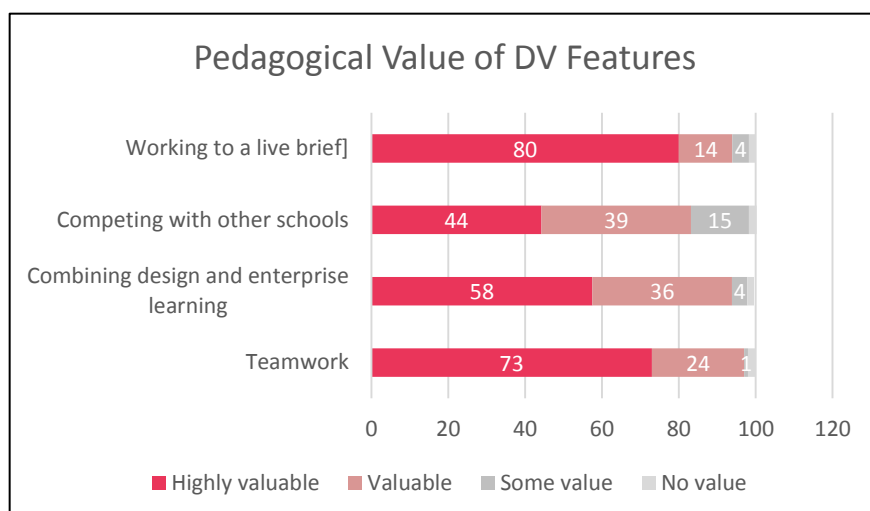
Figure 8: Value of different Design Ventura features

3. Findings contd.

Teachers continue to report that Design Ventura makes it possible to combine design and enterprise teaching 94% and most welcome the stimulus of competing with other schools 83%. In all categories, features were rated more often as highly valuable than valuable. The value of competing has risen by 3% in 2016, with analysis of qualitative data again indicating that some teachers regard the pressure of being 'competitive' or 'pressured' as something they would rather not encounter in authentic design activity of this type.

Longitudinal Participation

A key success indicator in this category is whether schools participate in the Ventura programme more than once. In the 2016 survey Teachers were again asked:

Figure 9: Teachers Longitudinal Intentions

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

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

This, represents a slight drop from 2015 data in all participation categories reported, although responses in all categories remain >90%

It is interesting to note that:
- 68% plan to bring students to visit the Design Museum

This finding represents an opportunity to plan for the high impact of Museum learning experiences, but also highlights the possible impact of a more diverse geographic spread of participating schools. Thus, in tandem with Museum activity, data appears to confirm the need to continue to develop complimentary digital experiences and resources.

3.5.3 Teacher Case Studies: Practice Led Sustainability

As part of Design Ventura 2016 evaluation, three impact case-studies were conducted with participating teachers from three schools:

- TCS1 Teacher Practice case study 1 (Winning Teacher/School)
- TCS2 Teacher Practice case study 3 (First Time Teacher/School)
- TCS3 Teacher Practice case study 2 (Returning Teacher/School)

These were included in the 2016 evaluation methodology as part of building sustainability, with a principle focus on exploring whether participating in Design Ventura had a lasting impact on:

- The teachers and their pedagogical practice
- The students and their design practice
- The perception of Design & Technology in school and by parents

In the case-study analysis below, direct quotations are used to illuminate the three teachers' experiences. Consistent with BERA ethical guidelines, data has been anonymised.

How teachers structured participation in Design Ventura

TCS1, from a winning school, had arranged the delivery of Design Ventura as an after-school option to one group of five students (who had put themselves forward). This group had been made up of four students from Year 10 and one from Year 9. This year had been the first time TCS1 had run the competition with his school, although he had also participated a few years earlier with another school. He explained that he had chosen to structure participation in this way because his previous experiences of teaching the project during class time had been too intensive to embed in the Year 10 curriculum. Making the project optional had also meant that the students taking part were more likely to be highly motivated.

TCS2 came from a recently shortlisted school. This was the first year that the school had participated. She had found out about the competition through a new teacher in her department coming from a school that had participated in Design Ventura. TCS2 delivered the project as part of the Year 10 curriculum, which became the first project of the academic year. Approximately 60 students participated in total. TCS2 explained that by involving everyone in this way, she had aimed to make the competition "a big thing" in the school.

TCS3 came from a returning school that had also been shortlisted in a previous year. Her school was now in its fourth year of participation. She herself had led the project over two of the four years. The first year she had led the project had been with two Year 9 "upper set" classes (approx. 40-45 students). The following year, she had worked again with Year 9, this time with two upper set classes and two mixed-ability classes (approx. 100 students). The initial thinking behind the selection of upper sets had been that the students from these classes would be able to manage the 'looser' brief structure of Design Ventura. The teacher confirmed that this had overall been the pattern, (the year the school had been shortlisted, the group had come from the upper sets). However, in the year where both mixed-ability and upper sets had participated, it had been a team from the mixed-ability classes that were selected to represent the school. The project had been taught in lesson time over both years she had led the project. This year, she explained, the school had reverted back to running the project only with the upper sets.

The Design Ventura Teaching Experience

When asked whether Design Ventura had been a different teaching experience to teaching the Design Technology curriculum, all three teachers responded positively. One of the key points their responses held in common was the effect

of the live brief on their *own* engagement levels. As TCS1 described it, "you put yourself under the spotlight, because you *know* that this could happen.

The combination of the brief' open-ended start-point, with the live brief, had removed a level of predictability held by most curriculum projects. As TCS3 explained:

> "*You* don't know how the project's going to go, so it challenges you professionally, because *you* have to think "well, if I was going to do something, what would *I* do?" And what does that mean to me?... I personally found the teaching of DV more exhilarating than the standard projects... because you didn't know what was going to be round the corner... and you don't quite *know* what's going to happen that day, so long as you stay one step ahead... And I think *that's* what's really exciting, because the children surprise you. Whereas you're never surprised [otherwise] really, and... and that's kind of why you teach, isn't it?"

This was supported by TCS2, who stated:

> "What *was* different was *we* were more - well, we were like "well, I don't *know* what the Design Museum are looking for!" And... because it took us out of our comfort zone a little bit... I wonder if the students felt like they could see that *we* were quite interested and excited about it as well, so it made *them* get on board as well?"

The impact of not-knowing the "right answer" was emphasised further by TCS2, who cited, as an example, the large quantity of GCSE light designs she had seen over the years. Here, she always had the sense that she could tell how students' products would evolve. The Design Ventura project, she explained, removed this certainty for both her and the students. The impact of this, she said, was that there was much more discussion as, "you end up sharing more about your design feelings with them and your thoughts with them". TCS2 acknowledged that this was, perhaps, also more accurately reflective of how design in the 'real world' develops – where the success of an outcome is never completely certain. The teaching experience therefore differed from the DT curriculum in the way it facilitated a sense of opening up connections between teachers and students.

Another enjoyable aspect of Design Ventura cited by all three teachers was the pitching event. TCS2 had been inspired by a feature on the Design Ventura blog about other schools holding their own pitching events. She had then initiated one for her own school. The 'real' aspect of the project became an effective way to involve other staff and students:

> "We booked the library and all the teams had to present a pitch, a bit like what we ended up doing when we came into the Design Museum... some of them brought their friends, we had other staff members coming in, we had a Deputy Head, we had some languages teachers, we had people coming in helping to be judges, and I really, really enjoyed doing that, because... it sort of, it helped to big the department up a bit, and it meant that we were discussing it with other teachers, so it was good for the profile of the department for that. In future, I could make an even bigger thing out of it and I could get parents into that stage, because actually, some of them did really fantastic presentations and it would've been nice even for the parents to have seen that."

TCS1 cited the pitching event held at the Design Museum as particularly "exciting". He had enjoyed seeing the students develop at this point, when they had the opportunity to see other schools' entries.

Design Ventura impact on Teacher practice

When asked how Design Ventura had impacted on their practice, the teachers highlighted several different points. TCS1 emphasised that involvement in an

3. Findings contd.

external process such as this had been highly affirmative because it had supported his own approach to pedagogy. TCS2 reflected on managing the group

work during the project. She said that she had found this aspect "a nightmare". Despite having some very successful groups over the three classes, there had also been many where the majority of members hadn't engaged. She reflected that, as a result, she wanted to re-assess the Schemes of Work from younger year groups to "bring in some of the aspects that *were* successful", citing, for example how one of the Year 10 teachers had used personality traits to group students. She emphasised the importance of group-work as a life skill, explaining that the school was now focusing on values or mind-sets such as "resilience, organisation and empathy", rather than on "academic ability". She hoped to develop this aspect of group work by encouraging "children [to] reflect on themselves… to form an effective group".

TCS3 reflected that participating in Design Ventura had "reignited" a "passion for design" that she had had before teaching DT:

> "I think actually, just, you know, teachers exposing themselves to that sort of thinking, and *those* sorts of projects... I think I'd probably *question* why you were in teaching if that experience didn't then make you turn the lens back on yourself, and kind of go, well, *why* am I actually doing... these things?"

When asked about changes to her practice, she explained that during the project she had realised the importance of "taking that step back". As she elaborated:

> "It probably gave me the confidence to tweak projects, and, I hate to use the word "allow", but in some respects, it *is* "allow" the students to *guide* where their product was going to go… Because ultimately, you can't spoon feed the whole time…. I think that's probably it, that if I was going to put it in a nutshell... whereas *before* I would've wanted to guide and suggest, actually, you know, coming away from *telling* and being more of a sort-of *mentor* to their learning, rather than a coach, if that's the right way to look at it."

TCS2 and TCS3 also cited the re-engagement with enterprise that the brief had provided. Design Ventura's emphasis on costing was important because it was not something usually covered by the DT curriculum, and, again, the live-brief aspect had helped. TCS2 expressed a desire to develop this as a "learning opportunity" in future, citing the emphasis on numeracy in the new GCSE specifications as a chance to integrate this aspect. She reflected that more involvement with the Business Studies and Maths departments could be highly beneficial.

Design Ventura's Impact on students and student practice
The case-study teachers all agreed that Design Ventura had provided a very different learning experience to customary Design & Technology lessons at school. Here, again the "open" quality of the one-word brief was cited by all as being particularly important because it facilitated another way of working. As TCS3 explained:

> "They can design anything within that and… *that*, in my opinion, supports kind of a higher-level thinking, and actually, an element of creativity that is *lost* in D&T projects and teaching… It is effectively an independent learning experience. "

TCS1 echoed this. He felt that the brief's structure allowed students greater ownership over their work:

> With DV, I think it's easier because you can say "look lads, this is *your* thing, you can go with it" – that's kind of what happened, so they took control of it. Yeah, so you do give them a lot more room to make mistakes.

This was supported by TCS2, who reflected:

> What was different was that we were asking them to be a bit innovative, and we were asking them to be a bit exciting and to think differently about it, and I think sometimes we *don't* do that. We say "we want you to demonstrate this skill, we want you to show that you can do *that*, we want you to see that". Whereas this was - "it can probably be a very simple idea, it probably *has* to be a very simple idea"

She recounted that her students had found this "scary" at first because they were "constantly looking… for a 'right' answer". The current educational system, she said, had accustomed them to a "checklist for success", and she could not give them a checklist on this occasion. She reflected that, as she herself didn't know what Design Ventura were looking for, this injected a new dynamic into the classroom.

Furthermore, the brief took away Design Technology's usual weighting towards a final outcome. TCS3 reflected that under the typical structure children tended to become "quite precious about what it is that they're making"
whereas Design Ventura removed the "precious" element through its emphasis on "rapid" prototypes. As well as this, the cross-section of skills called upon by the brief had also been beneficial:

> They're *learning* that design isn't just about a finished product, and that design is… it's *huge*… it encompasses, you know, you *are* talking about enterprise, you *are* talking about how can you design… a *method* to communicate what your idea is *about*… in *that* sense, it's a completely different learning experience.

The teachers agreed that the live brief aspect of Design Ventura had made a "major difference" (TCS1), to student enjoyment. TCS1 and TCS2 acknowledged that the possibility for students to have their product sold in the Design Museum shop was not something schools could simulate to the same level. TCS1 also made this point about the pitching event.

The film/video support provided by the Museum was also cited by the teachers as an extremely positive and "exciting" (TCS2) resource. Through these, students felt that they were being directly addressed and this impacted significantly on motivation. The teachers likewise said their students had enjoyed the opportunity to visit the Design Museum itself, although TCS2 reflected that it had become increasingly difficult to take students on trips in recent years:

> "[The students] don't *go* into town, they don't go into museums on their own. Some of them do, their parents will take them, but most of them won't. So *actually* taking them on the tube, doing something like that… culturally it's… a bigger picture for them… that has had a big impact."

The case-study teachers all spoke of how participation in the competition had been a rare opportunity for the students to understand a wider context for design, and the range of people involved in design (including the financial side). TCS1 felt that the different journeys his students had made – to the Design Museum to both pitch and attend final event, and to Shoreditch to visit the designers' studio – had all been important for his students in the long-term as well as the short-term:

> "They might not even know it, but I'm sure that 20 years down the line they will. That's it for me, they might not understand how much they're getting out of it until they're older."

3. Findings contd.

The pitching day had been especially enjoyable for students. TCS1 and TCS2 stated that this had helped their students with their confidence levels. This day had also been important because it had exposed students to work by other schools, to other ways of thinking about the brief. TCS2 also reflected that it had enhanced her "London-centred" students' awareness of people from outside the city. Furthermore, she explained, the impact of being shortlisted *within* her own school community, revealing that it had resulted in teachers being able to give "positive affirmation" to certain students who weren't often praised in other aspects of school life and these students particularly enjoyed this positivity. The sense of pride felt by the students at the point of pitching was also cited by TCS3:

> "They were so passionate, and so excited, by what they had achieved. And I think it's that sense of achievement, that yes, maybe the final ten got that, because they get through, but equally, I think if you even just *apply* and be that *one* project in the school, it gives you that achievement too."

Design Ventura impact on design skills

When asked if Design Ventura had impacted on students' design skills, TCS3 highlighted the progress she witnessed in students' engagement with ideation. Instead of following their usual pattern of drawing then making, the students began to work in a different mode:

> "It became more of a process of "I'll draw something and then I'll give it a go and then adapt it and then go kind of back and forward"...[It] was all about the modelling... returning to the designs, and adapting and you know, *enhancing* them where possible… maybe that was the biggest impact and the biggest change that I saw.

TCS1 said that he felt it was the communication that had significantly differed to how students usually did things in the classroom. For him, this communication covered not only the conversations, but also the sketching and modelling. This, he stated, had made the process much "richer". As a winning school, the opportunity to talk further with different people during the process (i.e., to explain their ideas in the pitch to the panel, to designers), had been the biggest difference."

TCS2 felt that as a group, the students had worked extremely well together, stating that this was what they might not be able to do as much in lesson time. However, TCS1's experiences of teamwork differed from that of TCS2 and TCS3 because the group had been made up of volunteer students and work for Design Ventura had been conducted after school. TCS2 and TCS3 had worked with a larger number of groups, inside class time. They described their experiences of managing groups as "50(good)-50(bad)" (TCS2). However, both teachers acknowledged the importance of team work as an important, real-world skill and were keen to develop this in future.

The teachers all spoke of the improvement in confidence that they had seen in their students overall. TCS1 felt that DV had particularly helped his students experience designing as a process *not* directly tied to grades:

> "*This* didn't have that element; that *tag*, that *chain*, if you like, wasn't on them. It was just "go away, do something, we'll see what happens". It wasn't the pressure of [GCSE]... and if they didn't win, they wouldn't have felt low self-esteem."

Building Sustainability: Design & Technology and Parents Perceptions

TCS1 felt that the impact of winning Design Ventura had been highly positive, but that the "true benefits" would not be fully evident until the students reached A-Level. He felt that further benefits would be seen "over the course of many years", stating that if he was still teaching at the school in ten years' time, he was sure

he would still be showing students the winning product as an inspiration story. When asked about the school's perception of the subject, he stated:

> "I think the school perceive it very well. And they know now *some* people, who would've gone "oh look, they're not doing too great over there", would've gone, "oh wow, they've actually won a national competition. The boys actually *do* care; the boys *do* want to do well with it".

During the interview with TCS1, we were joined by three of the students from the winning team, and two parents. When the parents were asked about whether Design Ventura had changed their view of Design as a subject, or their views of careers in Design, one parent responded that it had "definitely" changed her perceptions:

> "I can see my son, how he has changed. He wants to design more stuff and he's directing his future life towards Design… it's very inspiring for all the families... it's *very* inspiring, for my younger son as well. I think it's inspiring for the whole school, all the children. Not only the winning... it's just – making, thinking, what they can do *next*, you know? And it's

> amazing, because, I could hear them saying, you know, "I want to create this, I want to create this"... It has helped with the imagination I think. It has *really* done something amazing for them."

This was supported by the second parent, who explained:

> "It's become reality, it's like, you know, from something – an *idea* – to reality, which is *brilliant*, he's come out – somebody's *noticed*."

When asked what careers they might consider for the future, the three students cited Programming, CAD, and Architecture or Engineering and acknowledged the role of Design Ventura in steering them toward "design" themed career choices.

> "I've spent the last six months stressed about what's going to happen to the department. I go to bed at night worried about it… so *actually*, doing this well, has enabled me to take a slight breather, because, good news is… what makes such a big difference. You know the Head - who's always been supportive - but the Head loves it, thinks it's great, loves a national competition. He loves being able to put something in the newsletter. It's on the school website. It's going to be great - the parents have got really involved, you know. We've got quite a, quite a *vocal* set of parents that... You know, obviously, we've got some parents that are not engaged, but we have some *very* engaged parents. I got a… message from an ex-student saying "oh miss, you were all over the… Parents' Facebook group". Because one of the parents had posted [about Design Ventura], and she got 170 likes!... So, it's *that* sort of thing."

TCS2 also spoke of her intention to publicise the department's success in Design Ventura at a Year 9 options evening the following week. She hoped that this would help her to recruit more students for the subject at GCSE. She spoke of how her department often got "forgotten about" (despite being "noisy and messy") – and that her students were often removed from DT classes to focus on raising their grades in Maths and English. This, in turn, was impacting on the results in her subject:

I completely respect that they need the intervention there, [for] some of them, but for some of them, what gets them out of bed in the morning is coming and doing DT and coming, sitting in the workshops. So, being able to have a good news story… it makes a big difference.

3. Findings contd.

Suggestions for developing Design Ventura

Several suggestions for developing the structure of Ventura emerged during the three interviews. TCS and TCS3 both said they felt that participation in Design Ventura could be enhanced by a slightly later launch date. Both teachers reflected that starting the competition immediately in September had been difficult to manage and recommended starting six weeks later. TCS3 (whose school had participated in the competition four times) explained they had found this "tricky year on year":

> "Because there's so much tape you have to, you know, organising things and getting things going... and sparking up the kind of, enthusiasm - perhaps after the half term, in October, would just give that kind of head space, which would push everything on a little bit..."

She felt the timings of the workshops were particularly important. She had found she needed to book the workshops before the summer to be able to integrate them at the right time in the project - ("because if they go to it kind of Week 6, they're *past* the need to think about what they might design"). TCS3 also said she thought the outcomes by students would have "been improved" if the competition was launched later. She particularly emphasised that a later date would help with managing the group work aspect of classes, because it would allow her the time to profile and "build relationships" with her students first through another (individually-based) project. TCS3 also reflected that a similar competition for an older age category "could have a big impact" on students when applying through UCAS for art and design schools and design schools.

All three teachers praised the resources provided by Design Ventura. Suggestions for development centred on how these could be expanded to cover other aspects of the process. TCS3 suggested the option of virtual tours of the Design Museum to allow "more students in more schools" to attend. TCS1, whose school had won, reflected that some aspects of the winning experience could be beneficial if shared with all participants, suggesting:

> "So, the designers, even if you had an audio… [saying] *you* could get a chance to come here to Shoreditch and meet whoever it is" - you know what I mean? Something like that… or just them giving tips."

He stated that, to him, "post-winning" had been better than the year his previous school hadn't reached the final stages, "not because they won… but [because] the experience is much better". He reflected that offering some of these later-stage experiences virtually could be a way to expand student access this stage. It could also be a way to help the winning team understand and prepare for their meeting with the designers:

> "I think the films, or videos, help, the support – those videos are really good because they open up loads of questions more than anything… Whoever wins tonight, maybe they could have videos of them, they could post them "this is an example video of a meeting" etc. Because I think we went into these meetings and… you don't really know what's going to happen."

He also wondered if there could be more student involvement in the product development itself, citing the "gap" between the first meeting with the designers and the second when the product was already complete.

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

2016 data reveals that overall ratings for Design Ventura were once again very positive. 68% of students (78%, 72%) rate their experience as good or very good (see figure 10). Despite the increase in participation and the increased use of digital resources, and no access to Museum facilities, Design Ventura 2016 has maintained broadly similar to previous years. There were no discernible differences in student ratings between year groups.
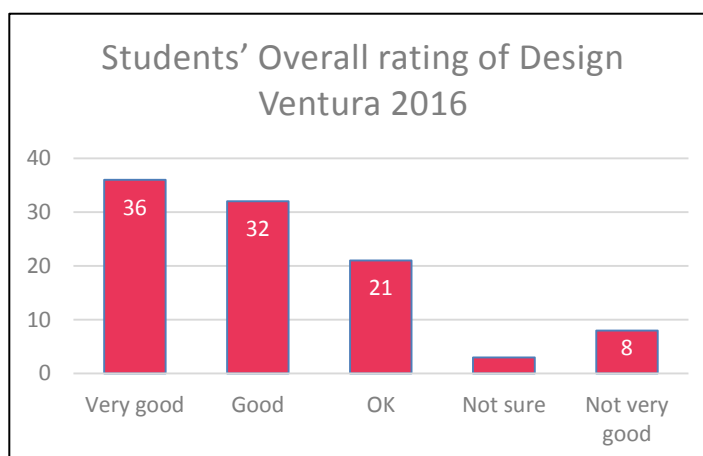
Figure 10: Students' Overall rating of Design Ventura

21% of students (14%, 25%) gave Design Ventura a rating of OK. This is broadly similar to previous years, suggesting the low 2015 figure may be an anomaly.

The Design Ventura student survey 2016 again invited students to give written comments on what they liked best about working on Design Ventura. As in previous years, working as a team (34%), freedom to develop and design products (39%) and the experience of being creative (31%) were the most popular features of the programme.

Teamwork and working in groups	34%
Live brief/Freedom to develop the product	39%
Fun/design/creativity	31%
Making a prototype	22%
Business/finance	17%
Other	5%

Table 8: Students most liked about Design Ventura (N=1687)

Students again repeatedly highlighted the value and enjoyment they get from group work:

"We all worked together and put all our ideas together. It was fun combining them to come up something unique and different"

3. Findings contd.

Year 9 student

2016 responses again highlighted the value participants place on creative freedom:

"We got to make our own designs and have lots of fun creating our own things."
Year 9 student

"I got to create a product that I would actually like to buy myself"
Year 9 student

Consistent with 2014 and 2015 data, 2016 student data 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.

One year 10 student commented:

"You have to be on the ball, keep going and be positive, but also be aware you need to make decisions and improve as you go …it's a juggling act"

Once again, in order to get balanced data, students were also invited to comment on what they liked least about Design Ventura (see table 9). Comments were broadly similar to those offered in previous years. The most frequent comments were again about the lack of time available to students to finish the project (23%). For some, the finance, costing and documenting side of things was least liked (16%), while others disliked the research, presentation and pitching side of things (12%).

Documentation/finances/worksheets/	16%
Timing/Lack of time	23%
The pitch/presenting	12%
Working on the product	9%
Not winning/competing	3%
Pressure/stress	4%
Teamwork and working groups	1%

Table 9: Students least liked about Design Ventura (N=1687)

Illuminative comments in 2016 include:
"Balancing other activities and work with the work required for the project"
Year 10 student

"Pitching because we had to do it in 6 lessons and we should have had more time to do the whole design ventura."
 Year 9 student

*"Creating something as a team which we could all agree on."*
Year 9 student

3. Findings contd.

3.6.1 The Teacher Experience

2016 findings revealed that 89% (100%, 91%) of teachers gave a rating of good or very good for their overall experience of Design Ventura. These data are presented in figure 11, and represent a 11% drop from 2015. However, this is broadly similar to 2013 and 2014 data, suggesting the low 2015 figure may be an anomaly.

Teacher's Overall rating of Design Ventura 2016

Rating	Value
It was very good	48
It was good	41
It was OK	8
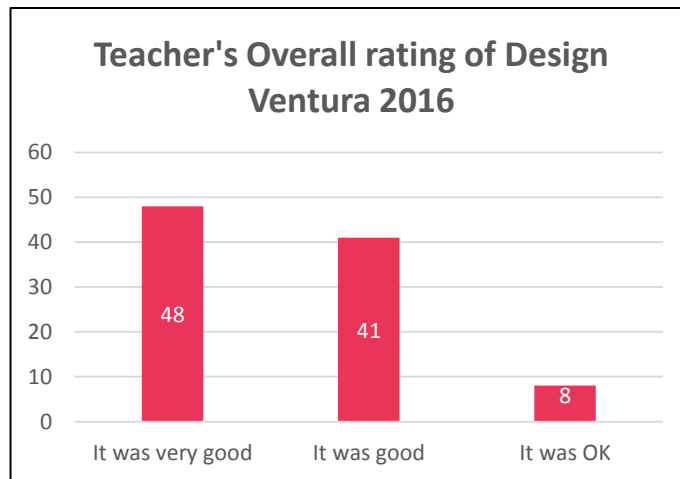
Figure 11: Teachers' overall satisfaction

When asked to comment on the outstanding feature of participating in Design Ventura, teachers offered 98 responses. The majority emphasised the value of students being involved in an "authentic live brief". Illuminative comments included:

"Real life brief and our judging day at school (we organised for some designers to come into school to assess the students' work and they picked the winner to represent the school)."

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

"The online workshops eliminated the idea of a classroom, teacher led project. It was their project to discuss with designers."

"The live brief and the potential opportunity to have a product manufactured. The fact it is a competition. The webinars made the students really think about their work and how they could present it"

The video clips and the whole concept of making the project live and real world.

In 2016 teachers again highlighted the chance to engage in collaborative design and work in a group as a key value:

"Teamwork, seeing all the pupils come together to produce some really amazing, high quality work. They've truly excelled themselves and we thank you for the challenge..."

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."
"

Teachers were again invited to comment about their experience of running Design Ventura for their students. This attracted 95 comments in total, the majority of which focused on positive aspects of the programme. The thread of these comments is summarised in table 10 overleaf:

Student engagement	23%
Digital Resources	32%
Teamwork	27%
Timing issues	15%
Other	4%

Table 10: Teacher comments about running Design Ventura for students

Illuminative comments include:

"They found working in teams a very steep (but valuable) learning curve."

"Students love it, coming in the top 10 last year really helped its promotion this year."

"The experience overall, but we really appreciated the handling collection you sent out this year. We shall continue to use it as well."

"Resources this year seemed to have improved and worked well"

Teachers were also invited to give written comments on how Design Ventura might be improved and/or comments about their experience of running Design Ventura for their students. Their responses fall under the broad themes outlined in table 11.

Timing issues/lack of time	28%
Teacher resources & support /instructions	20%
Exemplars of successful entries	14%
Access to Digital Resources	7%

Table 11: Teachers comments about how Design Ventura might be improved

In common with 2015 data, many comments were again about time available, organisation and the timing of certain events, including the project launch. These were typified by the following:

"The deadline should be a bit later in the year to allow students more time to develop work. Also the deadline date needs to be made clearer on the website."

"Not sure when it was launched for teachers? At the end of the summer term would be good so all planned, CPD workshops completed before the September start."
"

Additional illustrative comments on resources include:

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

"Winning examples used? possible feedback given"

"I find the resources are better suited to more able students. Those of lower ability are far less enthused by them and have needed separate, differentiated worksheet

4. CONCLUSIONS: What we found out from Design Ventura 2016

4.1 Overall Impact

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

Data analysed in relation to anticipated outcomes for 2016 confirms that the Design Ventura programme again improved enterprise and creativity skills for the vast majority of participants. The target set was that 60% of participants should experience an improvement of a range of identified enterprise and creativity skills. An improvement > 90% of participants was achieved for all categories These gains were confirmed by the judgements of teachers. A similar picture was revealed for business skills.

Confirmation of the high level of success against 2016 anticipated outcomes is welcome. This is consistent with findings in previous years and provides longitudinal insights into the success of Design Ventura, particularly given the 2016 focus on digital resources. This is consistent with the aim to widen participation in Design Ventura without any appreciable reduction in outcomes for participants.

The revised methodology and student survey instrument continue to greatly the collection, and subsequent analysis, of data around student confidence and ambition. 2016 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 solving design problems. 91% of participants reported increased confidence in responding to mistakes and criticism. 85% of participants reported Design Ventura had impacted on their ability to recognise the role of study in achieving their ambitions. 89% of participants reported increased focus on future careers, with 86% 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 2016 data confirmed also an increase in student's teamwork ability. 90% of students reported that Design Ventura had helped develop their understanding of the value of teamwork, with 89% getting better at working with others. 91% of 2016 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, working to a real brief, teamwork and combining design and enterprise were rated highly or very highly, by > 90% of teachers.

Design Ventura also helped to develop teacher capability: 95% of all participating teachers agreed that the programme helped give them a better understanding of how to engage students in learning about enterprise and 94% agreed that it helped give them a better understanding of how to teach enterprise and design together, while 96% 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, 90% of teachers report that they will look for further opportunities to combine enterprise and design teaching outwith Design Ventura in the future.

4.2 A Sustainable Legacy

For the first time 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. Conclusions from the participating teacher case studies indicate that the lasting impression of Design Ventura on their students' is that it is an invaluable experience which exposes learners to a range of design and business skills and helps them develop career confidence. All three teachers indicate the importance of Design Ventura in providing a unique and authentic learning experience.

Teacher case study data highlights the potential of Design Ventura in raising the profile of D&T in schools. Common themes include the value of a live design brief, free from the constraints of 'exam pressure', the value of the authenticity of DV in motivating students and reinvigorating teacher practice. Teacher case studies also reveal that participating in Design Ventura had noticeably improved students' transferable skills, such as critical thinking, and they were more likely to consider aspects that their peers might neglect when answering briefs. Teachers report that DV has supported development of their pedagogy, particularly in teaching enterprise and business aspects of design and highlight the value of well structured supporting resources. Teacher case study data also reveals the value placed on being shortlisted and on winning in terms of student experience. TCS2 and TCS3 illuminate issues with timing in maximising the impact of Design Ventura and also suggest value of DV in preparing students to succeed at GCSE. Key suggestions were to map DV to updated GCSE specifications to support this link and, in addition, to explore ways that more students might experience the benefits of being shortlisted and of winning. Parent interview data appears to confirm that they share many of the positive views of case study teachers.

As demand for Design Ventura continues to grow, some schools have sustained their participation and new schools have joined, with the survey sample providing the largest data set to date. 92% of teachers said that they would like to participate in Design Ventura again. 90% of teachers will look out for other opportunities to combine enterprise and design in teaching. 93% would recommend Design Ventura to other teachers, with 0% of teachers unlikely to participate in Design Ventura again.

4.2.1 Factors Impacting Participation

Continuing Opportunity to engage in authentic Enterprise and Design

As the curriculum and associated examination system in England and Wales continues to moves away from a focus on creative subjects, such as design, Design Ventura appears 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 the digital resourcing of the project supports this

widening participation. However, there remain some issues with resources and a continued focus on refining these should be maintained.

The opportunity to engage with the museum as educator

The scale and accessibility of the new Design Museum offers potential to continue as an effective broker between schools and the worlds of design and business and the move to the new site offers an exciting opportunity to consolidate this role in 2017. In continuing to developing Design Ventura, along with Deutsche Bank, the Design Museum has through improved digital resources for DV 2016 shown 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 be done without compromising the quality of the experience. However, they also highlight the importance of a more blended face-to-face to include direct contact with professionals, exhibitions and learning in a museum context. It is again 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 2016 through providing an opportunity for authentic design and enterprise, supported by 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 2016 evaluation data:

- A retained focus in 2016 survey questionnaires upon core design competences, such as communicating design ideas, indicates that these continue to be developed through participation in Design Ventura.
- Findings continue 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 application of number.
- 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 significant and longitudinal.
- Parent data provides a triangulated perspective to support longitudinal gains for students.
- Findings again revealed the potential of Design Ventura in raising the profile and highlighting the value of Design education to the secondary curriculum.
- 2016 Teacher case-studies suggest that Design Ventura offers the strongest support in retaining a curriculum presence.
- 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:
  - 1687 Student Survey Responses (up from 776 in 2015) an increase of >217%
  - 115 Teacher Survey Responses (up from 82 in 2015) an increase of >140%

4. Conclusions contd.

- 2016 data has consolidated that view that the re-designed 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.
- There appears to be a shift in gender balance of participants – to 43% (-9%) female and 57% (+9%) male
- 2016 data appears to confirm a longitudinal shift in participant year group to 65.5% year 9, 34% year 10 and 0.5% year 11 consistent with 2015 data.
- The year group and gender profile of the winning team over last three years of Design Ventura appears to be inconsistent with the overall profile of participants
- Teacher case-studies and longitudinal survey data are consistent in highlighting the the timing of Design Ventura as problematic from both learning and organisational perspectives

5. RECOMMENDATIONS from Design Ventura 2016

The systematic analysis and interpretation of data collected during the evaluation of Design Ventura 2016 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. Given the shift indicated by 2016 data, the gender balance of participants should be monitored going forward.

3. The characteristics of winning teams should be monitored and cross-referenced to the broader population of participants.

4. Consideration should be given to supporting year 10 and 11 participation through mapping aspects of Design Ventura to GCSE specifications.

5. Consideration should be given as to how to cascade the experience of shortlisted and winning participants to the broader cohort.

6. In light of teacher concerns around project timing, considerations should be given to this in project planning.

7. Given the positive feedback on Digital Resources, these should continue to be developed. Consideration should be given to recommendations 4 and 5 above.

8. 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.

9. Data collected in 2016 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.

10. Design Ventura 2016 data indicates that there has been some success in closing the gap between creative and business-related skills. This should be monitored going forward.

11. Collection and analysis of longitudinal impact data, done for the second time in 2016, again offers encouraging insights into the long-term benefit to students of participating in Design Ventura. Collection of data should continue to establish and support the sustainable sustainable benefits of Design Ventura.

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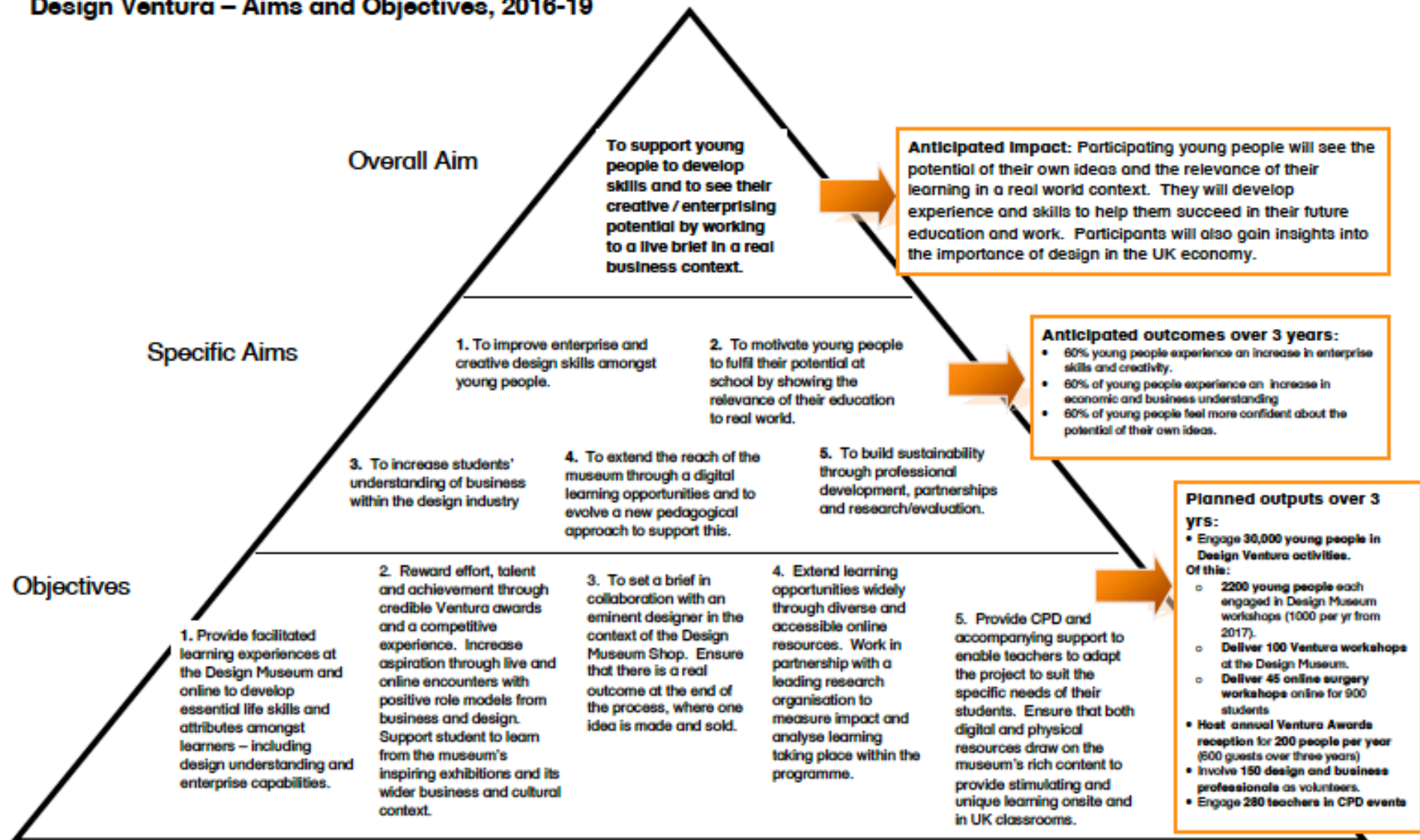
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Design Ventura – Aims and Objectives, 2016-19

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.

Specific Aims

1. To improve enterprise and creative design skills amongst young people.

2. To motivate young people to fulfil their potential at school by showing the relevance of their education to real world.

Anticipated outcomes over 3 years:
- 60% 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.

3. To increase students' understanding of business within the design industry

4. To extend the reach of the museum through a digital learning opportunities and to evolve a new pedagogical approach to support this.

5. To build sustainability through professional development, partnerships and research/evaluation.

Objectives

1. Provide facilitated learning experiences at the Design Museum and online to develop essential life skills and attributes amongst learners – including design understanding and enterprise capabilities.

2. Reward effort, talent and achievement through credible Ventura awards and a competitive experience. Increase aspiration through live and online encounters with positive role models from business and design. Support student to learn from the museum's inspiring exhibitions and its wider business and cultural context.

3. To set a brief in collaboration with an eminent designer in the context of the Design Museum Shop. Ensure that there is a real outcome at the end of the process, where one idea is made and sold.

4. Extend learning opportunities widely through diverse and accessible online resources. Work in partnership with a leading research organisation to measure impact and analyse learning taking place within the programme.

5. Provide CPD and accompanying support to enable teachers to adapt the project to suit the specific needs of their students. Ensure that both digital and physical resources draw on the museum's rich content to provide stimulating and unique learning onsite and in UK classrooms.

Planned outputs over 3 yrs:
- Engage 30,000 young people in Design Ventura activities.
  Of this:
  - 2200 young people each engaged in Design Museum workshops (1000 per yr from 2017).
  - Deliver 100 Ventura workshops at the Design Museum.
  - Deliver 45 online surgery workshops online for 900 students
- Host annual Ventura Awards reception for 200 people per year (600 guests over three years)
- Involve 150 design and business professionals as volunteers.
- Engage 280 teachers in CPD events

Design Ventura Evaluation

41

Appendix ii – Design Ventura 2016 Student Questionnaire

Design Ventura 2016: Student Survey

Your feedback on your Design Ventura experience is really important to us. By answering the questions below you are helping us find out more about how well the project works and what extra support or resources may be useful for next year.

This survey is being carried out by the Design Museum and Goldsmiths College, University of London.

Personal details are only collected so that data can be matched up - personal information will not be included or shared in the analysis or in the reporting. Further information about data protection is available from your teacher.

Your views really matter, so please answer all questions.

Thank you!

* Required

School Name *

Fitzwimarc

Teacher's name *

Miss Gosden

Gender *

○ Male

◉ Female

School Year *

○ Year 9

◉ Year 10

○ Year 11

Tell us about your Design Ventura experience *

	Very Good	OK	Good	Not very good	Not sure	I didn't do this
I rate the lessons/time when we worked on Design Ventura at school with the teacher as:	●	○	○	○	○	○
I rate the lessons/time when we worked on Design Ventura at school with the teacher as:	○	○	○	○	○	○
I rate the Design Museum in-school workshops as:	○	○	○	○	○	○
Overall, I rate my Design Ventura experience as:	○	○	○	○	○	○

What did you enjoy the most about the project? *

Working together and helping each other

What did you find the most challenging about the project? *

coming up with totally different ideas

Tell us how the Design Ventura project has helped you with your designing *

	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 understand more about how to respond to a design brief:	○	●	○	○	○
I am better at explaining my design ideas:	○	○	●	○	○
I am better at presenting ideas to others:	○	○	●	○	○
I understand more about the business side of design (e.g. costs, marketing, profits):	○	●	○	○	○
I understand more about making good business decisions about my designs:	○	●	○	○	○
I understand more about how working with others can help achieve more overall:	○	●	○	○	○
I understand more about how to get on with others in a team:	○	○	●	○	○
I understand more about how team members have their own strengths and weaknesses:	○	●	○	○	○
Design Ventura has helped me see what it takes to make my ideas happen:	○	●	○	○	○

Other skills I am now interested in are...

solving many problems in one product and the effect on the user

Tell us a bit more about what you think about your future *
i think its a good idea to make plans

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

Tell us a bit about how helpful you have found these Design Ventura resources *

	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	○	○	◉	○	○	○
Films	◉	○	○	○	○	○
Blog	○	○	◉	○	○	○
Twitter	○	○	○	◉	○	○

Tell us which of these Design Ventura resources you were shown by your teacher *

- ☑ Design Ventura website
- ☑ Films
- ☐ Blog
- ☐ Twitter
- ☐ None

Responses cannot be edited

Design Ventura 2016: 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

Teacher name *

....

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

....

How have your students gained from Design Ventura? *

Tell us a bit about how you think Design Ventura has impacted upon your students' learning in the following areas

	It's impacted a lot	It 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	◉	○	○	○	○
Responding creatively through the design process	○	◉	○	○	○
Assessing materials, production techniques and manufacturing considerations	○	○	◉	○	○
Communicating design ideas	○	○	○	◉	○
Knowledge and understanding of business aspects of design	○	○	○	○	◉
Awareness of product marketing and target audiences	○	○	○	◉	○
Reflecting on and modifying ideas	○	○	◉	○	○
Considering and responding to issues of ethical and sustainable design	○	◉	○	○	○

Tell us a bit about how you think Design Ventura has impacted upon your students' business and personal capabilities in the following areas *

	It's impacted a lot	It 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	◉	○	○	○	○
Team work including shared decision making and collaboration	○	◉	○	○	○
Communication skills including discussing, presenting, pitching and using ICT	○	○	◉	○	○
Self-confidence	○	○	○	◉	○

What have you gained from Design Ventura? What has worked? *

Tell us a bit about how taking part in Design Ventura has helped your practice in the following areas

	It's helped lot	It'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	◉	○	○	○	○
A better understanding of how to plan and teach enterprise and design together	◉	○	○	○	○
A better understanding of what resources and people can be used to support the teaching of enterprise and design	◉	○	○	○	○

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

	Highly valuable	Valuable	Some value	No value	I don't know
Working to a live brief	◉	○	○	○	○
Competing with other schools	◉	○	○	○	○
Combining design and enterprise learning	◉	○	○	○	○
Teamwork	◉	○	○	○	○

Whilst waiting for the opening of the new Design Museum, this year we are especially interested in finding out about how to improve digital learning. So, tell us a bit about the following features of the online workshops *

	Highly valuable	Valuable	Some value	No value	I don't know
Design Ventura website project guide	◉	○	○	○	○
Short films	○	◉	○	○	○
Resources index	◉	○	○	○	○
Email newsletters	○	◉	○	○	○
Blog posts	◉	○	○	○	○
Twitter	○	◉	○	○	○
Downloadable resources	◉	○	○	○	○
Live, online workshops	○	◉	○	○	○
Live, online teacher CPD (or recording of)	◉	○	○	○	○

Tell us a bit about how you rate the value of the following sections of the Design Ventura website *

	Highly valuable	Valuable	Some value	No value	I don't know
Teaching and learning resources	◉	○	○	○	○
Short films	◉	○	○	○	○
Industry Experts Profiles	◉	○	○	○	○
Blog	◉	○	○	○	○
Q&A Feature	◉	○	○	○	○

Tell us about other resources you used to support running Design Ventura in your school *

- ☐ Teacher notes
- ☑ Products from the Design Museum shop (Design Ventura Handling Collection)
- ☐ Online workshops
- ☐ Design Museum Shop website
- ☑ Design Museum main website
- ☑ Design Ventura e-newsletters
- ☐ Design Ventura posters
- ☐ Teacher CPD session
- ☑ None of the above
- ☐ Other: ....

Are there any other online Design Ventura resources you would find helpful? *

no it was amazing

Looking forward, tell us a bit about how Design Ventura has encouraged you to engage with enterprise and design? *

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

Appendix iv – Design Ventura 2016 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 to engage students to learn about enterprise and design	A better understanding of how to plan and teach enterprise and design together	A better understanding of what resources and people can be used to support the 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 brief	Competing with other schools	Combining design and enterprise learning	Teamwork

- 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 2016 Evaluation

- Alcester Grammar School
- Alexandra Park School
- Ardingly College
- Ark All Saints Academy
- Ash Green School
- Ashcroft School
- Audenshaw School
- Beal High School
- Brentwood School
- Brighton College
- Bristol Grammar School
- Bullers Wood School for Girls
- Burntwood School
- Caterham School
- Central Foundation Boys' School
- Chancellors School
- Charterhouse School
- Charters School
- Chigwell School
- Colne Community School
- Colyton Grammar School
- Dame Alice Owens School
- Dartford Grammar School for Girls
- Dover Grammar School for Boys
- Endon High School
- Epping St John's Church of England VC School
- Farmor's School
- Ferndown Upper School
- Graveney School
- Great Marlow School
- Hailsham Community College Academy Trust
- Hans Price Academy
- Hardenhuish School
- Harris Academy Rainham (previously the Chafford)
- Harris Boys Academy East Dulwich
- Harrogate Grammar School
- Haverstock School
- Heathcote School & Science College
- Heckmondwike Grammar School
- Highfields School, Wolverhampton
- Idsall School
- Invicta Grammar
- Ipswich High School
- Ladybridge High School
- Lammas School and Sixth Form
- Langley Park School for Boys
- Linton Village College
- Maltby Academy
- Mayfield Grammar School for Girls
- Melksham Oak Community School
- Mill Hill County High School
- Mill Hill School Foundation
- Newstead Wood School for Girls
- Norbury Manor Business and Enterprise College for Girls
- Notley High School and Braintree Sixth Form
- Nottinghill & Ealing High School
- Oakham School
- Orleans Park School
- Ormiston Venture Academy
- Park House School
- Pensby High School
- Queen Mary's Grammar School
- Rainham Mark Grammar
- Redden Court School
- Reepham High School & College
- Richard Challoner School
- Richmond Park Academy
- Royal Grammar School, Newcastle
- Rushcliffe School
- Saint John Bosco College
- Sir Harry Smith Community College
- Skipton Girls' High School
- South Devon UTC
- South Wilts Grammar School for Girls
- St Alban's Catholic High School
- St Albans High School for Girls
- St Clement Danes School
- St James' Catholic High School
- St Laurence School
- St Marylebone School
- St Olave's Grammar School
- St Wilfrids's Catholic High School
- Stockley Academy
- The Deepings School
- The FitzWimarc School
- The Hart School
- The John Roan School
- The King John school
- The Latymer School
- The Littlehampton Academy
- The Priory School, Shrewsbury
- The Sydney Russell School
- The Vale Academy
- The West Bridgford School
- Thomas More Catholic School
- Toot Hill School
- Townley Grammar School for Girls
- Trinity Academy
- Ursuline High School Wimbledon
- Vyners School
- Watford Grammar School for Girls
- Westhoughton
- William Howard School
- Wilmington Grammar School for Girls
- Woking High School
- Wren Academy
- Yew Chung International School Gubei Campus

Design Ventura Shortlist 2016

Congratulations and thank you to all Design Ventura schools that have completed the project by submitting an entry and participating in the project's evaluation.

Our panel of shortlisting judges have selected the top entries from the 240 schools who registered to take part, the shortlisted schools will be invited to pitch their idea to a panel of judges here at the new Design Museum in mid December.

All schools that have submitted an entry will receive participation certificates in the post. The shortlisted schools will be contacted separately by email and letter with details of the pitching event.

DESIGN VENTURA SHORTLIST 2016

The Design Ventura top ten shortlisted schools for 2016 are.....
(in alphabetical order)

Alexandra Park School, London

Grow up
A flat packed plant holder that encourages the reuse of containers.

Chancellors School, Hertfordshire

Light up your life
A DIY lamp kit with bendy legs to adapt to many terrains and uses.

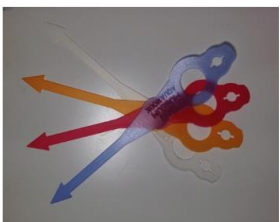### Dame Alice Owens School, Hertfordshire

Forest Fits
A unique set of seasonal themed coasters which fit together to create new shapes.

Endon High School, Staffordshire

Skyline Solvers
A tactile, changeable puzzle with images of London's most popular landmarks.

Harrogate Grammar School, Harrogate

Aqua Hook
A water bottle hook that can be clipped to any loop outside of a bag to carry a bottle.

Invicta Grammar, Maidstone

Eazy Squeezy
A device that can help you to make a cup of tea safely and without mess.

Reepham High School & College, Norfolk

Bluprint
An interactive toy with pop out shapes that can be combined in different ways to create imaginative, fun characters.

St Marylebone School, London

Geompot
A biodegradable plant pot which changes colour when moist to reveal an image inspired by the Design Museum and to indicate when you need to water the plant.

St Olave's Grammar School, Kent

Marble blocks
A puzzle game which fits together to make a course for a marble to run through.

Woking High School, Surrey

Shift
A colour changing t-shirt to encourage young people to embrace each person's individuality.

Goldsmiths
UNIVERSITY OF LONDON

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DESIGN VENTURA 2016

CHALLENGE 2016

The exciting design and enterprise competition for 13–16 year olds.
ventura.designmuseum.org

the **DESIGN MUSEUM**

+

BORN TO BE
The Deutsche Bank youth engagement programme