



**Paul Hamlyn
Foundation**

**Musical Futures:
Impact on Pupil
Participation and
Attainment in Music at
Key Stage 4 – Phase
Two Report**

October 2014

Paul Hamlyn Foundation
Musical Futures: Impact on Pupil Participation and Attainment in Music at Key Stage 4 –
Phase Two Report

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EXECUTIVE SUMMARY

Introduction and Approach

1. Musical Futures offers a combined innovative philosophy and approach to music teaching and learning. The central thrust of the approach is that music learning works best when young people are making music.
2. The Musical Futures website (<https://www.musicalfutures.org/>) is a continually evolving bank of resources and guidance materials, many contributed directly by teachers. The site has effectively become a one-stop shop for teachers and practitioners wishing to implement Musical Futures.
3. Through continued Paul Hamlyn Foundation support, Musical Futures has been rolled out across the UK, including in Wales, Scotland and Northern Ireland since 2011. A Musical Futures app which provides a new and unique perspective on using Musical Futures in a classroom was launched in January 2014.
4. Over the years a number of teachers have linked the introduction of Musical Futures to improvement in pupil participation and achievement in Music at Key Stage 4. Although the programme was never introduced with this objective in mind there have been indications of a clear, potential association. The Paul Hamlyn Foundation commissioned York Consulting to explore whether this relationship could be tested quantitatively.
5. This report explores the relationship between Musical Futures and pupil participation and achievement in music at key stage 4. The hypothesis to be tested is that Musical Futures schools will have higher levels of pupil participation and achievement relative to schools not delivering Musical Futures approaches.
6. In order to collect the necessary information to inform this report an online questionnaire was designed and targeted at music departments across England.

School Responses and Characteristics

7. We received a total of 327 responses to the e-survey. However for the purposes of our analysis 97 responses were deemed invalid. Excluding these respondents it generated a valid sample of 230 English schools; a response rate of 6.8%.
8. In order to conduct our analysis it was necessary to classify responding schools in terms of their association with Musical Futures. The classification categories adopted by York Consulting for the purposes of the research we were:
 - **Non Musical Futures user;**
 - **General Musical Futures user;**
 - **Substantive Musical Futures user.**
9. The “substantive user” group are those schools who have been using Musical Futures for longer and more extensively across year groups. We chose this group in order to strengthen the logic model linking change in practice to achieved outcomes.
10. Our methodology requires a self-assessment by the key teacher in the music department regarding whether or not their school is a user of Musical Futures. This is therefore about whether Musical Futures is embedded across the music department.
11. Responding teachers are a very experienced group. Almost two-thirds have been teaching for more than 10 years. This reflects their position as departmental heads.

12. It is possible that the relatively high turnover among music teachers might in the short term make it more difficult to establish a department-wide approach to the initiative. However in the long term it means that a larger number of schools are being potentially exposed to Musical Futures techniques.
13. The introduction of Musical Futures into the school appears to have influenced the qualification offer. These schools are more likely to offer a vocational qualification alongside the GCSE. This trend was most marked among “substantive users”.
14. Amongst schools planning a change in qualifications, “substantive users” are more likely to introduce a vocational qualification while “general users” are more likely to withdraw a vocational qualification. The former perhaps represents their commitment to a style of learning at a time when the Department for Education was endorsing more robust qualifications.
15. Schools observing a very positive participation effect were less convinced that the introduction of Musical Futures had led to an increase in pupil attainment at KS4 (51%). However “substantive users” were significantly more positive on this assessment: 62% compared to 37% of “general users”.
16. A higher proportion of substantive Musical Futures users than general Musical Futures users felt that pupil participation and attainment had increased over the study period. This supports our initial hypothesis and therefore strengthens the logic model linking Musical Futures inputs, outputs and outcomes.

Quantitative Analysis of Participation and Attainment

17. Our analysis is based on an extract of data from the Department for Education National Pupil Database (NPD) for the years 2002, 2005, 2008, 2009, 2010, 2012 and 2013.
18. In analysing the data we have split qualifications into two categories; GCSEs and vocational qualifications. Vocational qualifications are predominantly BTECs and relate to music and music technology. We have excluded graded exams and vocational related qualifications as the very high pass rates make it almost impossible to detect a change in trend.
19. Based on our logic model the strongest comparative test is between substantive Musical Futures users and schools who classified themselves as non-Musical Futures users. This is therefore our preferred test of the increased participation and attainment hypothesis. Statistical significance was tested using a T-test.
20. A T-test revealed no statistical significance in the relative performance of substantive Musical Futures users and non-Musical Futures users on GCSE participation (i.e. the number of students opting to study music GCSE) between 2002-2013 and 2010-13.
21. Schools classed as users of Musical Futures recorded a 70% increase in all music participation at Key Stage 4. This compares to an increase of 18% among non-Musical Futures schools. Over the period 2010-13 the difference between the two groups was even more marked with “substantive users” recording an increase of 36% compared to a “non-user” increase of 5%. This fits with the period one would expect Musical Futures to be having its greatest potential impact.
22. As might be expected Musical Futures schools had larger class sizes at Key Stage 4. In 2013 the average music class size among “substantive users” at Key Stage 4 was 22, increasing from 16 in 2002. Among “non-users” the average class size at Key Stage 4 in 2013 was 16 increasing from 15 in 2002.

23. A T-test result shows statistical significance for relative performance on all music participation (includes GCSEs and BTECs) between the two groups for both 2012-13 and 2010-13. The former is on the cusp of significance and the latter highly significant.
24. A comparison of GCSE music attainment between substantive Musical Futures schools and “non-users” shows the latter performing slightly better. Over the period 2002-2013 attainment levels have increased by 5 percentage points among “substantive users” compared to 8.3 percentage points among “non-users”.
25. A T-test shows that the difference between the two Musical Futures and non-Musical Futures groups on attainment is not significant.
26. The attainment levels of Musical Futures schools in the circumstances are quite encouraging given:
 - Levels of attainment increased over the period which is consistent with teacher perception;
 - Attainment levels increased from a lower base, which, unlike the “non-users” and the all schools figure, was below the 70% mark;
 - Improved GCSE performance was achieved at a time when the main focus for many schools was on the development and implementation of vocational qualifications;
 - The pupil ability levels of an expanded participation group are likely to be lower.

Conclusions

27. It should be noted that Musical Futures was not introduced as a vehicle to increase pupil participation and achievement in music at Key Stage 4. It was however subsequently recognised that it had the potential to generate such an effect: a view confirmed by qualitative teacher perception.
28. We are confident that we have identified a random sample of Musical Futures using schools and non-Musical Futures using schools to conduct a legitimate comparison of impact on pupil participation and achievement.
29. Our classification of schools as “substantive users” of Musical Futures provides a logic model for linking the introduction of Musical Futures to changes in pupil participation and achievement at KS4.
30. The analysis is conducted at a school level with heads of music self-classifying their school either as a ‘user’ or a “non-user” of Musical Futures. This is quite different from other recent Musical Futures surveys which typically asks a member of the music staff whether they use Musical Futures. This whole school endorsement approach strengthens the logic model which shows the linkage between inputs, outputs and outcomes.
31. We are unable to say very much about the likely population of Musical Futures schools. While 59% of responding schools identified themselves as ‘users’, our sampling base was skewed towards ‘suspected users’.
32. The presence of Musical Futures in schools is likely to be greater than the Head of the Music Departments self-classification of usage. One-quarter of non-using schools had a member of staff with experience of Musical Futures. This has potentially positive implications for longer term take-up of Musical Futures by schools.

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33. Musical Futures has been shown to have a positive participation effect. This is shown to be more significant when account is taken of all qualifications rather than GCSEs only. This was shown to be statistically significant.
34. The increase in participation in Musical Futures schools has been strongly influenced by the greater take up of vocational qualifications in these schools. The rate of take up of vocational qualifications is double that of non-Musical Futures schools. This difference was shown to be statistically significant.
35. The pupil achievement effect of Musical Futures, measured in terms of GCSEs is less evident to observe. While achievement rates in Musical Futures schools increased over time they remain just below the national trend. This does however represent a good result given the lower starting base, the fact that the expanded participation group is likely to have lower average ability levels and the fact these schools had a higher specialisation in vocational qualifications. The comparison between the two groups was shown to be statistically insignificant.

1 INTRODUCTION AND APPROACH

Introduction

Musical Futures

- 1.1 Musical Futures offers a combined innovative philosophy and approach to music teaching and learning. The central thrust of the approach is that music learning works best when young people are making music. Musical Futures is not a scheme of work, but rather a series of models and approaches that can be personalised by teachers, practitioners and others. Key contributing features involve engagement in meaningful and sustainable musical activities, making music learning relevant to young people and enabling young people to experience practical music making.
- 1.2 The Musical Futures initiative began in 2003 as an action research project funded by the Paul Hamlyn Foundation. The action research phase of the project culminated in the publication of a toolkit of teacher resources including: written materials; video and audio materials; and illustrative case studies highlighting participating teachers and pupils.
- 1.3 The Musical Futures website (<https://www.musicalfutures.org/>) is a continually evolving bank of resources and guidance materials, many contributed directly by teachers. The site has effectively become a one-stop shop for teachers and practitioners wishing to implement Musical Futures.
- 1.4 The site has effectively become a one-stop shop for teachers and practitioners wishing to implement Musical Futures.
- 1.5 Through continued Paul Hamlyn Foundation support, Musical Futures was rolled out in Wales, Scotland and Northern Ireland in 2011. A Musical Futures app which provides a new and unique perspective on using Musical Futures in a classroom was launched in January 2014.
- 1.6 The recent review of music in schools (Inspiring Music for all Next Steps in Innovation Improvement and Integration: Katherine Zeserson et al) published by the Paul Hamlyn Foundation in July 2014 made the following observations about Musical Futures.

73% of secondary teachers are aware of Musical Futures with 34% using it regularly and 30% of the total respondents reporting that the programme has made a significant and positive impact on the quality of music learning in their schools.

Musical Futures champion teachers are clear that Musical Futures has impacted on the status of music in their schools as well as providing a model for shared learning (between teachers).

Musical Futures values and principles are precisely aligned with the overriding need for teacher led innovation to improve the quality and reach of schools based music.

Musical Futures is arguably one of the largest single providers of CPD for teachers in the UK. Since 2006 Musical Futures has delivered 300 CPD days to approximately 3,200 delegates across the UK.

Musical Futures has played a significant role in demonstrating effective learner-led strategies but it is important to not assume that Musical Futures is the right choice for all students.

Musical Futures has demonstrated new and novel ways of integrating technology into the classroom most recently through the Find Your Voice initiative.

Musical Futures has had particular benefit for young people otherwise not well engaged in music, nor learning more generally. It provides an excellent platform for inclusion. There are examples of schools where it has had a profound impact on the whole school music culture.

An independent Musical Futures would have the invaluable role to play in helping address the key issues that need to be resolved to advance music education.

- 1.7 The references above highlight the many benefits attributed to the impact of Musical Futures in the classroom. Indeed, over the years a number of teachers have linked the introduction of Musical Futures to improvement in pupil participation and achievement in Music at Key Stage 4. Although the programme was never introduced with this objective in mind a strong qualitative association has been made. The Paul Hamlyn Foundation commissioned York Consulting to explore whether this relationship could be tested quantitatively.

Study Objectives

- 1.8 This report explores the relationship between Musical Futures and pupil participation and achievement in music at Key Stage 4. The hypothesis to be tested is that Musical Futures schools will have higher levels of pupil participation and achievement relative to schools not delivering Musical Futures approaches. This phase two report which focuses on all English schools takes forward the preliminary analysis set out in our phase one Champion Schools report (August 2013).
- 1.9 The analysis is based on a survey of all secondary schools in England conducted in February 2014. The survey was boosted by Musical Futures contact information held on the Musical Futures database.
- 1.10 **Section Two** examines school responses and characteristics and classifies respondents into substantive Musical Futures users, general Musical Futures users and “non-users” of Musical Futures.
- 1.11 **Section Three** sets out qualitative perceptions of schools regarding the teaching of music and additional support for Musical Futures.
- 1.12 **Section Four** tests out our key hypothesis by contrasting National Pupil Database (NPD) pupil participation and achievement data for a sample of Musical Futures users and “non-users”.
- 1.13 **Section Five** addresses the conclusions that can be drawn from the analysis.

Survey Approach

1.14 In order to collect the necessary information to inform this report an online questionnaire was designed and targeted at music departments across England by the following methods:

- **Wave one mailshots:**
 - Contact information held by Musical Futures (1302 named contacts);
 - External email campaign hosted by specialist marketing agency, The Education Company (725 named Heads of Music, 4457 generic contacts (i.e. info@schoolname.ac.uk)).
- **Wave two mailshots**, which included a covering letter from the Paul Hamlyn Foundation:
 - Reminder issued to Musical Futures contacts who had not yet completed the survey;
 - New contacts identified through downloading the Musical Futures App (295 named contacts);
 - Contacts for recent participants in an Institute of Education survey commissioned by the Paul Hamlyn Foundation (135 direct email addresses).

1.15 By utilising several sets of contact information in this way we ensured maximum reach to our target audience.

2 SCHOOL RESPONSES AND CHARACTERISTICS

Overview of Survey Responses

- 2.1 As part of this research an online questionnaire was designed and sent to all secondary schools in England (see **Annex A**). The purpose of this questionnaire was to:
- Identify schools currently using Musical Futures approaches and their degree of implementation;
 - Assess the perceived impact of Musical Futures on attainment and participation;
 - Inform the future support needs for Musical Futures and the wider music teaching community.
- 2.2 We received a total of 327 responses to the e-survey. However for the purposes of our analysis 97 responses were deemed invalid:
- 16 were from teachers outside the UK;
 - 50 were from teachers in Scotland, Wales and Northern Ireland;
 - 19 were duplicate responses, where more than one member of staff at an English school replied;
 - 12 were miscellaneous responses, for example sixth form colleges and primary schools.
- 2.3 Excluding these respondents it generated a valid sample of 230 English schools; a response rate of 6.8%.
- 2.4 The high number of invalid responses was due to our attempt to boost response by targeting individuals whose details were held on the Musical Futures database. It was not always possible from the email addresses to determine location and type of school.

Defining a Musical Futures School

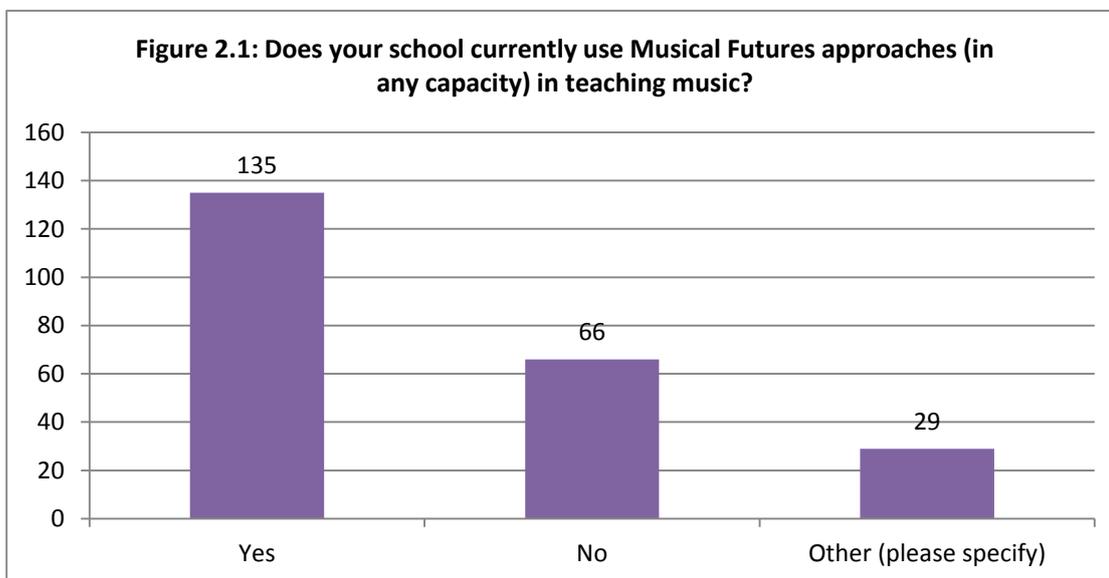
- 2.5 In order to conduct our analysis it was necessary to classify responding schools in terms of their association with Musical Futures. The classification categories adopted by York Consulting for the purposes of the research were:
- **Non Musical Futures user;**
 - **General Musical Futures user;**
 - **Substantive Musical Futures user.**
- 2.6 Details of the criteria for each classification are set out **Table 2.1**.

Table 2.1: Musical Futures User/Non-user Criteria	
Group	Criteria
Non-Musical Futures user	<ul style="list-style-type: none"> • Answered 'no' or 'other' to teaching using Musical Futures approaches.
General Musical Futures user	<ul style="list-style-type: none"> • Answered 'yes' to teaching using Musical Futures approaches but did not meet the additional criteria detailed below for "substantive users".
Substantive Musical Futures user	<ul style="list-style-type: none"> • Answered 'yes' to teaching using Musical Futures approaches; • Philosophy of Musical Futures fully or partially embedded in to schools teaching;

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	<ul style="list-style-type: none">• Year nine students taught using Musical Futures;• Musical Futures approach employed for two years or more in school.
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2.7 Prior to assessing the overall numbers allocated to each group it is perhaps useful to work through the analysis of the survey responses which make up the above criteria.



N=230

2.8 Key points to note are:

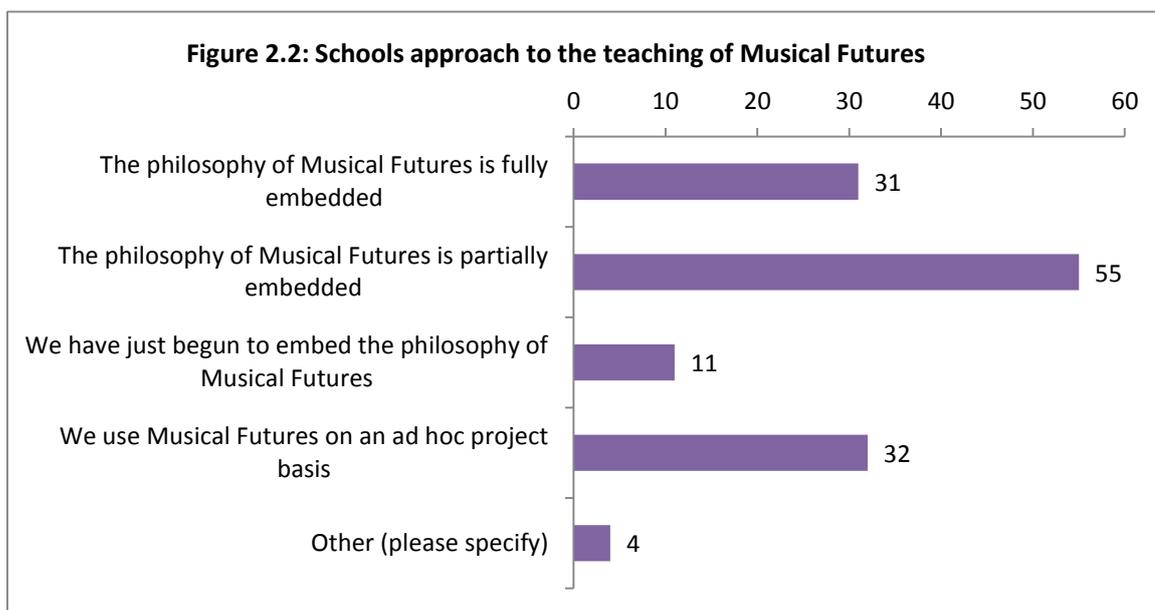
- The majority of schools (58.7%) that responded to the survey indicated that they use Musical Futures approaches. This is to be expected as the survey was primarily about Musical Futures and the survey was boosted towards expected Musical Futures users;
- Respondents that answered 'other' typically gave examples of using variations of Musical Futures approaches but not the extent where it is fully embedded in their departments – for this reason these responses were grouped as “non-users” for the purposes of the research.

2.9 From the above we have identified a total of 95 schools who classified themselves (typically head of music responded) as “non-users” of Musical Futures. We are confident that these schools can be regarded as typical of non-using schools and can therefore be used as our ‘control group’ in the quantitative comparator analysis (See Section Four).

2.10 Turning our attention to the 135 schools who answered ‘yes’ to using Musical Futures we set out to create two distinct types of users based on the extent Musical Futures influenced the teaching of music – “general users” and “substantive users”.

2.11 The substantive user group are those schools who have been using Musical Futures for longer and more extensively across year groups. We chose this group in order to strengthen the logic model linking change in practice to achieved outcomes. These are the schools one might expect most likely to be able to demonstrate any participation and achievement effects. Details of the key selection criteria are based on questionnaire responses set out in **Figure 2.2**.

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N=133

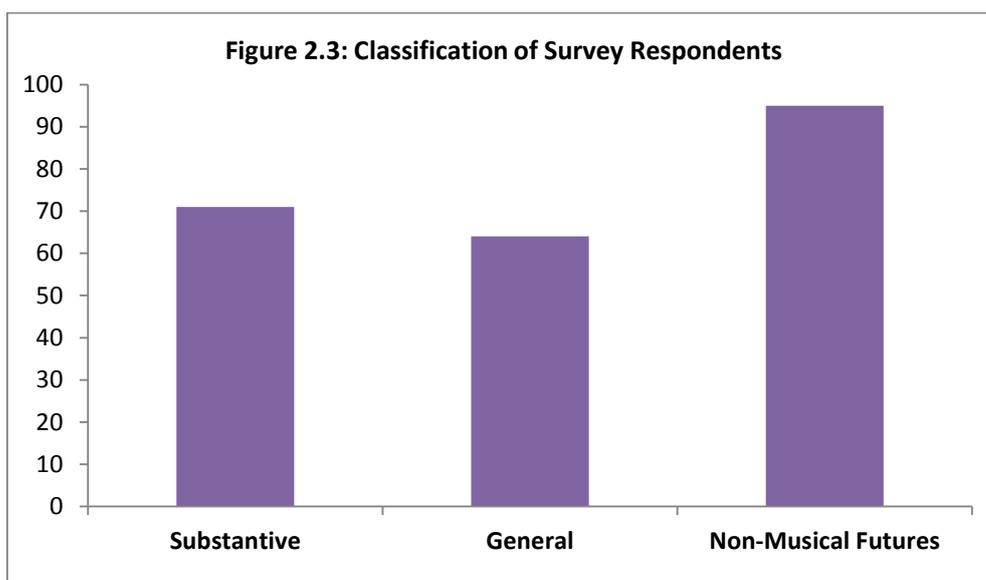
2.12 Key points to note are:

- 86 (65%) of those that use Musical Futures describe their schools approach as either fully or partially embedded – this meets the second criteria of a “substantive user”;
- Nearly a quarter of respondents (32) use the approach on an ad hoc basis and 11 (8%) are in the early stages of introducing Musical Futures – these are to be considered “general users”.

2.13 The final two criteria add further rigour to the selection process. Firstly of the 86 potential “substantive users” identified, 71 were teaching to Year 9 students (see table 2.8). This is a required field as it is at this stage we can trace likely effects on KS4 participation and attainment. The 15 schools that did not teach at this stage were redefined as “general users”. The final criteria schools had to meet to be considered a “substantive user” was teaching using the approaches for 2 years or more. This did not lead to the removal of any further schools from the substantive group but does ensure rigour.

2.14 This process generated the following classification of users:

	Schools	%
Substantive	71	30.9%
General	64	27.8%
Non-Musical Futures	95	41.3%
Grand Total	230	100.0%



2.15 **Figure 2.3** shows that Musical Futures users are split fairly evenly between “substantive users” and “general users”.

2.16 We are confident that the “substantive users” identified are representative of all “substantive users” and this group will be used as our target cohort to be directly contrasted with the “non-user” control group.

Department-wide Approach

2.17 Our methodology requires a self-assessment by the key teacher in the music department regarding whether or not their school is a user of Musical Futures. This is therefore about a department-wide approach. A decision has been made by the school to use Musical Futures in whatever degree/capacity. This is different from a teacher and a school unilaterally applying Musical Futures techniques or having previous experience of using Musical Futures. The department-wide approach strengthens our logic model but may understate the presence of Musical Futures in schools.

2.18 Most recent surveys of Musical Futures ask individual teachers whether they personally are using Musical Futures in the school. Direct comparisons of these results with ours regarding levels of Musical Futures usage maybe misleading.

School Characteristics and Perceptions

2.19 Details of the music positions held by survey respondents are set out in **Table 2.3**.

	Schools	%
Subject Leader	190	82.6%
Music Teacher	32	13.9%
Senior Management Team	6	2.6%
Student Teacher	2	0.9%
Grand Total	230	100.0%

N=230

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- The vast majority of teachers (83%) that responded to the survey were Heads of Music/Arts – this was our target group as these individuals represent the whole department and thus overarching knowledge/views of Musical Futures implementation within the school.

2.20 **Tables 2.4** and **2.5** contain details of the teaching experience of survey respondents.

Table 2.4: Number of Years Teaching Experience		
	Schools	%
0-4	22	9.6%
5-9	60	26.1%
10-14	54	23.5%
15-19	36	15.7%
20-24	24	10.4%
25-29	14	6.1%
30-34	15	6.5%
35-40	5	2.2%
Grand Total	230	100.0%

N=230

- 10% of teachers have been teaching for four years or less, over one third of teachers have been teaching less than 10 years;
- 59% of teachers have been teaching less than 15 years;
- 15% of teachers have been teaching more than 25 years.

2.21 Responding teachers are a very experienced group. Almost two-thirds have been teaching for more than 10 years. This reflects their position as departmental heads.

Table 2.5: Teaching Experience in Current School		
	Schools	%
0-4	77	33.5%
5-9	74	32.2%
10-14	49	21.3%
15-19	10	4.3%
20-24	11	4.8%
25-29	2	0.9%
30-34	5	2.2%
35-39	2	0.9%
Grand Total	230	100.0%

N=230

- A third of respondents had been at their current school for less than five years. This is indicative of high labour mobility in the music education sector
- Only 13% of staff had been at their school for 15 years or more.

2.22 It is possible that the relatively high turnover among music teachers might in the short term make it more difficult to establish a Whole School Approach to the initiative. However in the long term it means that a larger number of schools are being potentially exposed to Musical Futures approaches.

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2.23 Of the 95 schools that were identified as not adopting Musical Futures approaches (see figure 2.3) we asked the following two questions in regards to previous knowledge:

- Have Musical Futures approaches ever been taught in your school?
- Personally have you ever taught using Musical Futures approaches?

2.24 Respondent details are shown in **Tables 2.6** and **2.7**.

Table 2.6: Musical Futures Approaches ever Taught in School		
	Schools	%
Yes	25	26.3%
No	63	66.3%
Don't know	7	7.4%
Grand Total	95	100.0%

N=95

- For the majority of respondents (66%) Musical Futures had never been a part of music teaching at their school;
- A little over one quarter however did say Musical Futures was once a part of their curriculum.

2.25 It would be instructive to explore for the quarter of schools the reason why Musical Futures was withdrawn from the curriculum. Was it linked to a departing teacher or a deliberate policy to change approach?

Table 2.7: Personally Ever Taught using Musical Futures Approaches		
	Schools	%
Yes	22	23.2%
No	73	76.8%
Grand Total	95	100.0%

N=95

- 73 (77%) of respondents had no experience of teaching using Musical Futures;
- Almost a quarter of teachers in non-Musical Future schools had taught using Musical Futures.

2.26 It is interesting to note that almost one quarter of teachers within this group indicated that they had experience of teaching Musical Futures. This is very similar to the proportion indicating that Musical Futures was part of the curriculum suggesting that these teachers may have tried to use it in their current school.

2.27 This supports our view that schools can have a Musical Futures presence, through for example a single teacher, even though the music department as a whole is not committed to the approach. Indeed we are aware of some 'Musical Futures Champions' (national advocates of the approach) who are in this position.

2.28 "Substantive" and "general users" were asked further questions regarding their experience of Musical Futures, these are classified by user type ("Substantive" and "General").

2.29 The range of year groups supported by Musical Futures are highlighted in **Table 2.8**.

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	Substantive		General		Total	
	Schools	%	Schools	%	Schools	%
Year 7	41	57.7%	32	51.6%	73	54.9%
Year 8	52	73.2%	40	64.5%	92	69.2%
Year 9	71	100.0%	47	75.8%	118	88.7%
Year 10	27	38.0%	18	29.0%	45	33.8%
Year 11	21	29.6%	11	17.7%	32	24.1%
Total	71	100.0%	62	100.0%	133	100.0%

N=133

- More schools teach Musical Futures at Year 9 (88.7%);
- A higher proportion of “substantive users” teach at Year 9 (100%);
- “Substantive users” are more likely to teach at Year 10 (38%) and Year 11 (30%).

2.30 This confirms findings from our Musical Futures Champions Phase One report which indicated that schools tend to start with the lower year groups and move up the school as they become more experienced.

2.31 **Table 2.9** considers school duration of teaching Musical Futures.

	Substantive		General		Total	
	Schools	%	Schools	%	Schools	%
1 year or less	0	-	20	33.3%	20	15.3%
2 years	14	19.7%	10	16.7%	24	18.3%
3 years	12	16.9%	12	20.0%	24	18.3%
4 years	14	19.7%	7	11.7%	21	16.0%
5 years or more	31	43.7%	11	18.3%	42	32.1%
Grand Total	71	100.0%	60	100.0%	131	100.0%

N=131

- Almost half (44%) of “substantive users” have been teaching Musical Futures for more than five years;
- One fifth of “substantive users” have been teaching Musical Futures for two years;
- 50% of “general users” have been teaching Musical Futures for two years or less.

2.32 As one might expect, teachers in schools classified as “substantive users” had longer experience of teaching Musical Futures. A little under half have been teaching it for more than five years compared to less than one-fifth of “general users”.

2.33 Respondents were asked whether all music teachers in their school used Musical Futures (**Table 2.10**).

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	Substantive		General		Total	
	Schools	%	Schools	%	Schools	%
Yes	44	62.9%	36	60.0%	80	61.5%
Yes mostly	20	28.6%	18	30.0%	38	29.2%
No	6	8.6%	6	10.0%	12	9.2%
Total	70	100.0%	60	100.0%	130	100.0%

N=130

- The majority of schools reported that all music teachers applied Musical Futures approaches;
- Almost 10% of schools indicated that some teachers were not teaching with Musical Futures;
- Trends in teacher participation were similar for “substantive” and “general users”.

2.34 Where schools have classified themselves as users of Musical Futures, the norm is for close to all teachers in the music department to teach to the approach.

2.35 Details of the changes in qualifications offered in schools before and after the introduction of Musical Futures are set out in **Table 2.11**.

	Substantive						General					
	GCSE		Vocational		Both		GCSE		Vocational		Both	
	Schools	%	Schools	%	Schools	%	Schools	%	Schools	%	Schools	%
Before	48	70.6%	6	8.8%	14	20.6%	37	62.7%	6	10.2%	16	27.1%
After	36	50.7%	6	8.5%	29	40.8%	30	50.0%	7	11.7%	23	38.3%
Change	-12	-25.0%	0	-	15	107.1%	-7	-18.9%	1	16.7%	7	43.8%

NB: 127 responded ‘before’ and 131 responded ‘after’

- There was a significant reduction in the number of schools only offering a GCSE qualification post Musical Futures introduction. A fall of 25% for “substantive users” and 19% for “general users”;
- The number of schools offering joint qualifications post Musical Futures increased remarkably. An increase in 107% for “substantive users” and 44% for “general users”.

2.36 The introduction of Musical Futures into the school appears to have influenced the qualification offer. These schools are more likely to offer a vocational qualification alongside the GCSE. This trend was most marked among “substantive users”.

2.37 Details of likely future changes in qualifications for Musical Futures schools are shown in **Table 2.12**.

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	Substantive		General	
	Schools	%	Schools	%
Introduce GCSE	1	1.6%	3	5.5%
Drop GCSE	1	1.6%	1	1.8%
Introduce vocational qualification	9	14.8%	7	12.7%
Drop vocational qualification	2	3.3%	6	10.9%
None	48	78.7%	38	69.1%
Grand Total	61	100.0%	55	100.0%

N=116

- A slightly higher proportion of “substantive users” are planning to introduce vocational qualifications (15%);
- A higher proportion of “general users” are planning to drop vocational qualifications (11%) and introduce GCSEs (5.5%).

2.38 The majority of schools have no immediate plans to change their qualification offer. Interestingly however a higher proportion of “general users” have plans for a change: 31% compared to 21% of “substantive users”.

2.39 Amongst schools planning a change in qualifications “substantive users” are more likely to introduce a vocational qualification while “general users” are more likely to withdraw a vocational qualification. This perhaps represents relative commitment to the approach at a time when the Department for Education is endorsing more robust qualifications.

2.40 Schools perceptions of the introduction of Musical Futures on student participation in Music at KS4 are set out in **Table 2.13**.

	Substantive		General		Total	
	Schools	%	Schools	%	Schools	%
Increased	55	77.5%	36	61.0%	91	70.0%
No change	15	21.1%	14	23.7%	29	22.3%
Decreased	0	-	0	-	0	-
Don't know	1	1.4%	9	15.3%	10	7.7%
Grand Total	71	100.0%	59	100.0%	130	100.0%

N=130

- 70% of schools thought that participation had increased post Musical Futures;
- A higher proportion of “substantive users” thought participation had increased (78%); compared to 61% of “general users”.

2.41 There is a clear perception amongst schools that music participation at KS4 has increased as a result of the introduction of Musical Futures (70%); this was higher among “substantive users” (78%).

2.42 School perceptions of the impact of Musical Futures on pupil attainment at KS4 are highlighted in **Table 2.14**.

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2.14: Impact on Attainment						
	Substantive		General		Total	
	Schools	%	Schools	%	Schools	%
Increased	44	62.0%	22	37.3%	66	50.8%
No change	20	28.2%	26	44.1%	46	35.4%
Decreased	1	1.4%	0	-	1	0.8%
Don't know	6	8.5%	11	18.6%	17	13.1%
Grand Total	71	100.0%	59	100.0%	130	100.0%

N=130

- Approximately half of schools thought that pupil attainment had increased post Musical Futures;
- Approximately two-thirds of “substantive users” and one-third of “general users” thought attainment had increased;
- A significant proportion of “general users” (44%) thought there had been no change in pupil attainment following introduction of Musical Futures.

2.43 Schools observing a very positive participation effect were less convinced that the introduction of Musical Futures led to an increase in pupil attainment at KS4 (51%). However “substantive users” were significantly more positive on this assessment: 62% compared to 37% of “general users”.

2.44 The overall analysis of participation and achievement shows substantive Musical Futures users more positive than “general users” towards our hypotheses. This is encouraging as it is exactly what our logic model would predict.

2.45 Approximately half of Musical Futures users indicated a willingness to be consulted further about their experiences (**Table 2.15**).

2.15: Willing to Take Part in Further Consultation						
	Substantive		General		Total	
	Schools	%	Schools	%	Schools	%
Yes	40	56.3%	27	46.6%	67	51.9%
No	31	43.7%	31	53.4%	62	48.1%
Grand Total	71	100.0%	58	100.0%	129	100.0%

N=129

3 QUALITATIVE PERCEPTIONS

3.1 In this section we highlight respondents’ qualitative perceptions on Musical Futures and on music teaching generally. Details are presented separately for Musical Futures users and “non-users”.

Musical Futures Users

3.2 Details of perceived Musical Futures support needs are shown in **Table 3.1**.

Table 3.1: What do you regard as the most significant current and future support needs that schools and teachers have in relation to Musical Futures?		
	Schools	%
Information and resources	31	30.1%
Training	27	26.2%
More resources and equipment	23	22.3%
Financial support/advice	12	11.7%
Peer network/support	12	11.7%
Promotion of music and Musical Futures	9	8.7%
Appropriate assessment	5	4.9%
IT support	2	1.9%

N=103

3.3 The further development of Musical Futures information and resources was the most prominent area of support identified, accounting for 30% of responses. Typical examples included lesson plans, teaching materials and information on how to implement Musical Futures approaches with limited space and resources.

3.4 22% of teachers had issues with the number of instruments and availability of space in their school, which they would like help addressing.

3.5 Many teachers attributed the problem of not enough instruments to departmental funding cuts. This was a contributing factor to the 12% who highlighted a need for both direct and indirect financial support. Indirect finance, from school/central government, requires the support of Senior Leadership Team and represents an area for improvement

3.6 Linked to the above, 9% of teachers responded that the promotion of music as a subject was an important factor. Respondents felt this was required not only to secure funding but also to restore the perceived value of the subject relative to ‘Ebacc’ subjects.

3.7 Over one-quarter of teachers highlighted the need for further training for Musical Futures and 12% indicated that greater support from peers/a Musical Futures network would be useful.

3.8 **Table 3.2** highlights teacher perceptions of Musical Futures. This was an optional open question and individual teachers could identify more than one theme (responses are far greater than respondents).

Table 3.2: Impact of Musical Futures and/or the teaching of music in your school?		
	Schools	%
Increased participation/engagement	44	45.4%
Enjoyed by students	19	19.6%
Improved content/quality of lessons	15	15.5%
Problematic/difficulties	14	14.4%
Positive	13	13.4%
Helped develop students	12	12.4%
Independent learning	8	8.2%
Increased attainment	7	7.2%
Enjoyed by teacher	1	1.0%

N=97

3.9 Encouragingly the most frequent teacher response (45%) to what impact Musical Futures approaches have had in schools was increased participation and a greater engagement from students. These responses included higher KS4 participation and the take-up of musical instruments and was strongly influenced by the reported increased student enjoyment of music.

3.10 Some teachers (14%) have experienced difficulties in implementing Musical Futures in their schools. Examples of this included:

- Assessments not designed to encompass Musical Futures;
- SLT not convinced by the approaches;
- Less musically able students behaving badly in group work situations.

3.11 A total of 7% of teachers noted a positive impact on Key Stage 4 attainment, it is possible this relatively low figure is due to the fact that respondents may not have been using the approaches long enough to notice a direct impact on attainment yet. 12% of teachers felt Musical Futures has helped developed students wider skills in the form of increased confidence and independent learning.

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3.12 Details of additional factors influencing the teaching of music are shown in **Table 3.3**.

Table 3.3: What other issues or factors, if any, affecting music education in schools, most concern you?		
	Schools	%
Music not viewed as important/valued	31	31.0%
Assessment/bureaucracy	24	24.0%
Limited time/resources	22	22.0%
Funding	20	20.0%
Subject content/quality	13	13.0%
Government interference/policy	12	12.0%
Participation/uptake	10	10.0%
Attitudes towards music (other than value)	1	1.0%

N=100

3.13 The most significant factor identified as affecting music education was the subject being devalued relative to other subjects, this accounted for nearly a third (31%) of responses. This has partly impacted on participation (10%), funding (20%) and limitations placed on resources (22%) as music is seemingly crowded-out by other priorities/subjects – particularly Ebacc subjects.

3.14 12% of teachers directly specified current government policy as having a negative impact on the subject and the arts in general.

3.15 24% of teachers criticised the assessment methods and bureaucracy placed on music. This included current assessment methods not factoring a student’s progress properly and the expectation to assess key skills (literacy and numeracy) in the classroom.

Non-Musical Futures Users

3.16 Details of non-Musical Futures users’ perception of issues affecting music teaching are set out in **Table 3.4**.

Table 3.4: What factors/issues, if any, affecting music education currently concern you?		
	Schools	%
Music not viewed as important/Valued	42	50.0%
Funding	23	27.4%
Limited time/resources	17	20.2%
Participation/uptake	16	19.0%
Subject content/quality	13	15.5%
Assessment/bureaucracy	11	13.1%
Government interference/policy	5	6.0%
Attitudes towards music (other than value)	1	1.2%
Reliance on external facilitators	1	1.2%

N=84

3.17 As with the schools adopting Musical Futures approaches, a large proportion identified a devaluation of music as a major concern (50%). Again music being excluded as an EBacc subject is a significant factor influencing this response.

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- 3.18 This has impacted on funding (27%) and limitations on available resources (20%) which were also significant areas of concern.
- 3.19 A total of 19% of teachers highlighted falling levels of participation particularly at Key Stage 4 and a decline in take-up of orchestral instruments.
- 3.20 Additional teachers' views regarding the teaching of music in their school are shown in **Table 3.5**.

Table 3.5: Anything you would like to say about the teaching of music in your school?		
	Schools	%
Supported and developed well	35	58.3%
Lack of resources/funding	11	18.3%
Met with challenge	7	11.7%
Good opportunities	7	11.7%
Enjoyed by students	6	10.0%
Good uptake/participation	5	8.3%
Focus on benefits of studying music	3	5.0%
Practical approach	2	3.3%

N=60

- 3.21 The majority of teachers (58%) felt they were supported well by their school and that the teaching of music was developed to a high standard.
- 3.22 18% of teachers indicated they were limited by available resources and funding. Suitable practice space was often noted as an issue.

4 QUANTITATIVE ANALYSIS OF PARTICIPATION AND ATTAINMENT AT KEY STAGE 4

Introduction

- 4.1 In this section we directly contrast levels of Key Stage 4 participation and attainment between schools using and schools not using Musical Futures approaches. Our initial hypothesis was that Musical Futures should have higher levels of both participation and achievement than comparator schools. Findings from **Section 2** however, suggests that this is less likely to be the case for qualification achievement; particularly if the measure of achievement is GCSE pass rate (A*- C). This is based on teacher perception and reflects increased participation in vocational qualifications.
- 4.2 Our analysis is based on an extract of data from the Department for Education National Pupil Database (NPD) providing music attainment results at KS4 for the years 2002, 2005, 2008, 2009, 2010, 2012 and 2013. The tables in the section provide year on year percentage changes as well as longer-term changes.
- 4.3 In analysing the data we have split qualifications into two categories: GCSEs and vocational qualifications. Vocational qualifications are predominantly BTECs and relate to music and music technology. We have excluded graded exams and vocational related qualifications as they are not close GCSE substitutes.

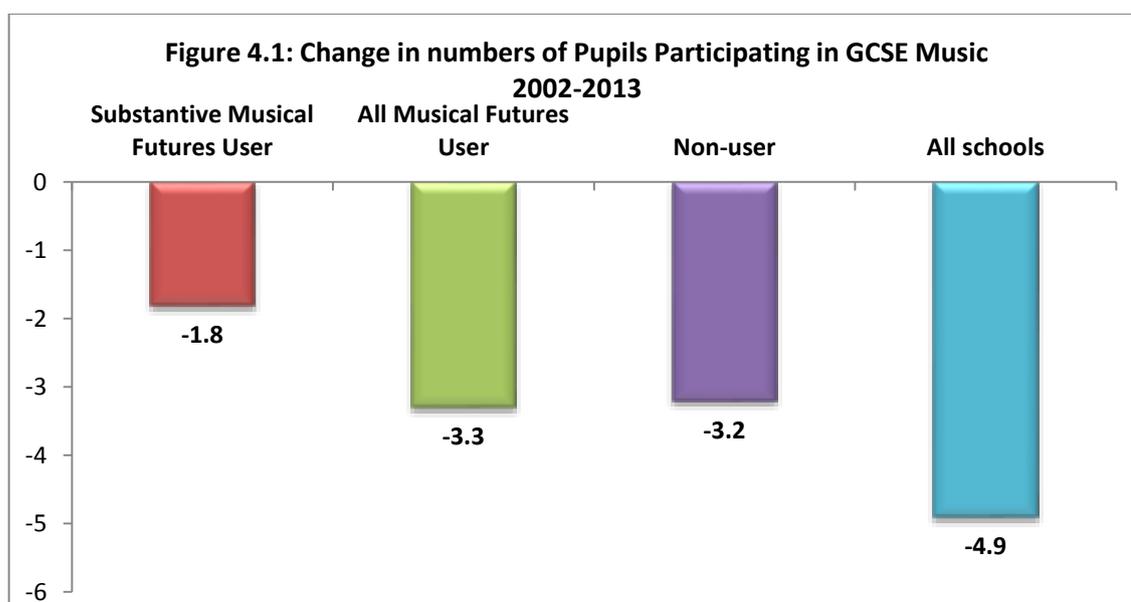
Comparative Testing

- 4.4 The purpose of the analysis is to contrast Musical Futures users with “non-users”. We have identified two measures of ‘users’ and “non-users”:
- **Musical Futures users:**
 1. Substantive Musical Futures users (N=71);
 2. All Musical Futures users (N=135); includes “substantive” and “general users”.
 - **Musical Futures “non-users”:**
 3. Non-Musical Futures users (N=95);
 4. All schools (N=3359) (in case of all schools the majority will be “non-users”).
- 4.5 Based on our logic model the strongest comparative test is between substantive Musical Futures users and schools who classified themselves as non-Musical Futures users. This is therefore our preferred test of the increased participation and attainment hypothesis and where we tested for statistical significance by means of a t-test.
- 4.6 T-tests were performed on observations of individual schools data (e.g. the change in the number of pupils in a school participating in GCSE Music) and conducted at the 95% level, due to the small sample sizes consideration was given for values close to this. A summary of test results are set out in **Annex B**.

GCSE Participation and Achievement

4.7 Details of the changes in the number of pupils participating in GCSE Music over the period 2002-13 are recorded in **Table 4.1**.

Table 4.1: Pupils Participating in GCSE Music 2002-2013								
	Musical Futures Substantive	% Change	Musical Futures All	% Change	Non Musical Futures	% Change	All School	% Change
2002	880	-	1,892	-	1,041	-	43,595	
2005	963	+9.4%	2,386	+26%	1,158	+11.2%	53,335	+22%
2008	994	+3.2%	2,366	-0.8%	1,182	+2.1%	54,136	+1.5%
2009	1,061	+6.7%	2,314	-2.2%	1,133	-4.1%	50,231	-7.2%
2010	902	-14.9%	2,073	-10.4%	1,140	+0.6%	45,695	-9%
2012	820	-9%	1,811	-12.6%	944	-17.2%	40,990	-10.3%
2013	864	+5.4%	1,830	+1.0%	1,007	+6.7%	41,466	+1.2%
Change 2002-13	-16	-1.8%	-62	-3.3%	-34	-3.2%	-2,129	-4.9%
Change 2010-13	-38	-4.2%	-243	-11.7%	-133	-11.7%	-4,229	-9.3%



4.8 At a national level GCSE participation over the period 2002-2013 recorded a net decline of 5%. Over the last three years the numbers fell by 9%. The performance of Musical Futures schools therefore needs to be placed in a context of declining GCSE participation nationally.

4.9 GCSE participation among substantive Musical Futures schools fell by 1.8% over the study period. This was slightly lower than that experience by non-Musical Futures users (-3.2%) and the national trend (-4.9%).

4.10 Over the more recent period 2010-13, participation declined less among “substantive users” with the bigger gap relative to “non-users” (-12%) and all schools (-9%).

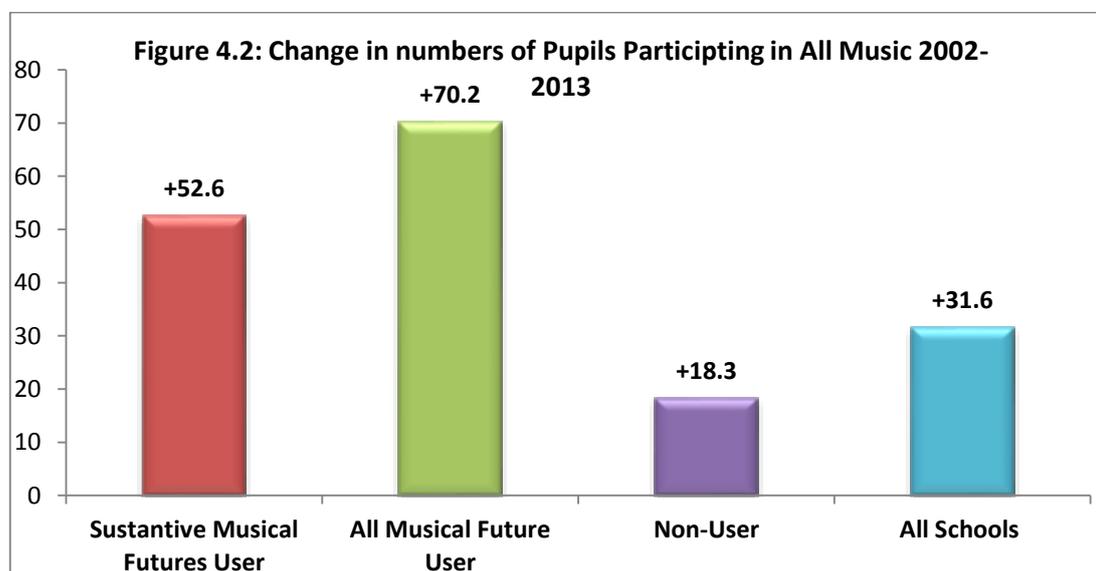
4.11 A T-test revealed no statistical significance in the relative participation of substantive Musical Futures users and non-Musical Futures users on GCSE participation between 2002-2013 and 2010-13 (see **Annex B**).

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4.12 This result is not particularly surprising as we know from teacher responses (Section Two) that qualification expansion over the period was driven primarily by the growth of vocational qualifications in music: primarily BTECs. A better measure of the participation effect is therefore the combined numbers of pupils presented for both GCSEs and vocational qualifications. The perception of Musical Futures using teachers is that these numbers will have increased and that the increases are attributable to Musical Futures.

4.13 Details of changes in music participation measured by all qualifications (GCSE plus vocational) between 2002 and 2013 are set out in **Table 4.2**.

Table 4.2: Pupils Participating in All Music (GCSE+BTEC) 2002-2013								
	Musical Futures Substantive	% Change	Musical Futures All	% Change	Non Musical Futures	% Change	All School	% Change
2002	880	-	1,892	-	1,041	-	43,595	
2005	963	+9.4%	2,386	+26.1%	1,158	+11.2%	53,335	+22.3%
2008	1,036	+7.6%	2,431	+1.8%	1,197	+3.4%	54,680	+2.5%
2009	1,147	+10.7%	2,503	+3.0%	1,162	-2.9%	51,543	-5.7%
2010	985	-14.1%	2,209	-11.7%	1,167	+0.4%	47,096	-8.6%
2012	1,140	+15.7%	2,675	+21.1%	1,174	+0.6%	52,769	+12.0%
2013	1,343	+17.8%	3,221	+20.4%	1,231	+4.9%	57,362	+8.7%
Change 2002-13	+463	+52.6%	+1,329	+70.2%	+190	+18.3%	+13,767	+31.6%
Change 2010-13	+358	+36.3%	+1012	+45.8%	+64	+5.5%	+10,266	+21.8%

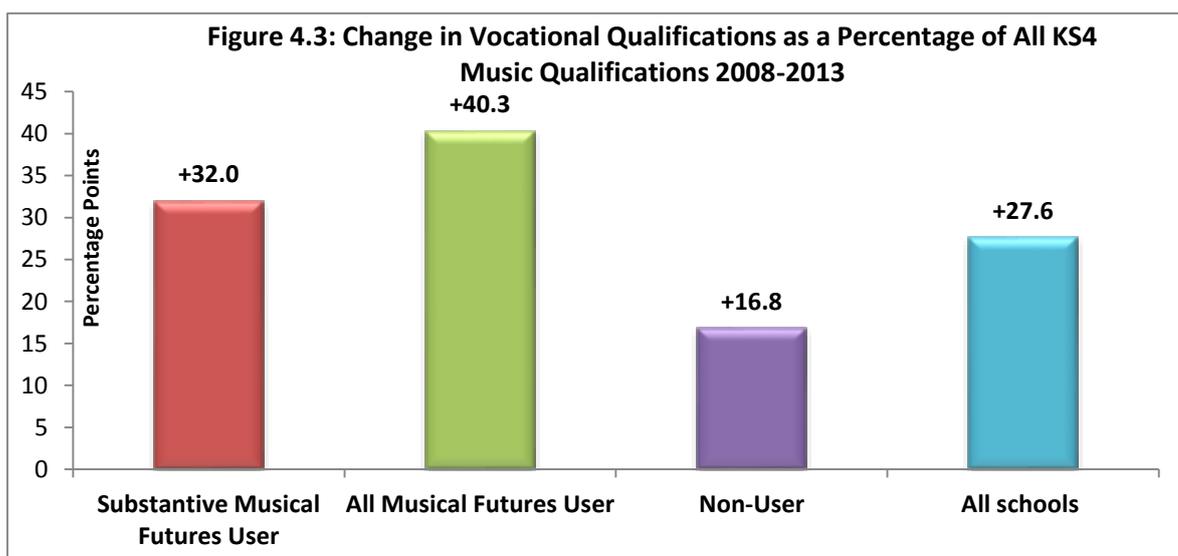


4.14 The national trend on all music qualification participation is a 32% increase between 2002 and 2013. An increase of 22% was recorded between 2010 and 2013. This is very different from the GCSE trend and reflects a national increase in the number of pupils presented for a vocational qualification in music.

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- 4.15 Schools classified as “substantive users” of Musical Futures recorded a 53% increase in all music participation. This compares to an increase of 18% among non-Musical Futures schools. Over the period 2010-13 the difference between the two groups was even more marked with “substantive users” recording an increase of 36% compared to a “non-user” increase of 5%. This fits with the period one would expect Musical Futures to be having its greatest potential impact.
- 4.16 As might be expected Musical Futures schools had larger class sizes at Key Stage 4. In 2013 the average music class size among “substantive users” was 22, increasing from 16 in 2002. Among “non-users” the average class size in 2013 was 16 increasing from 15 in 2002.
- 4.17 A T-test result shows statistical significance for relative performance on all music participation between the two groups for both 2002-13 and 2010-13 (See Annex B). The former is on the cusp of significance and the later highly significant.
- 4.18 **Table 4.3** contains details of the relative share of vocational qualifications to all qualifications between 2002 and 2013.

Table 4.3: Percentage of Vocational Qualifications in All Music Participation				
	Musical Futures Substantive	Musical Futures All	Non Musical Futures	All School
2002	0	0	0	0
2005	0	0	0	0.03
2008	4.0	2.8	1.3	0.1
2009	7.5	7.5	2.3	2.5
2010	8.4	6.1	2.3	2.9
2012	28.0	32.2	19.6	22.3
2013	36.0	43.1	18.1	27.7
Change 2008-2013	+32.0	+40.3	+16.8	+27.6

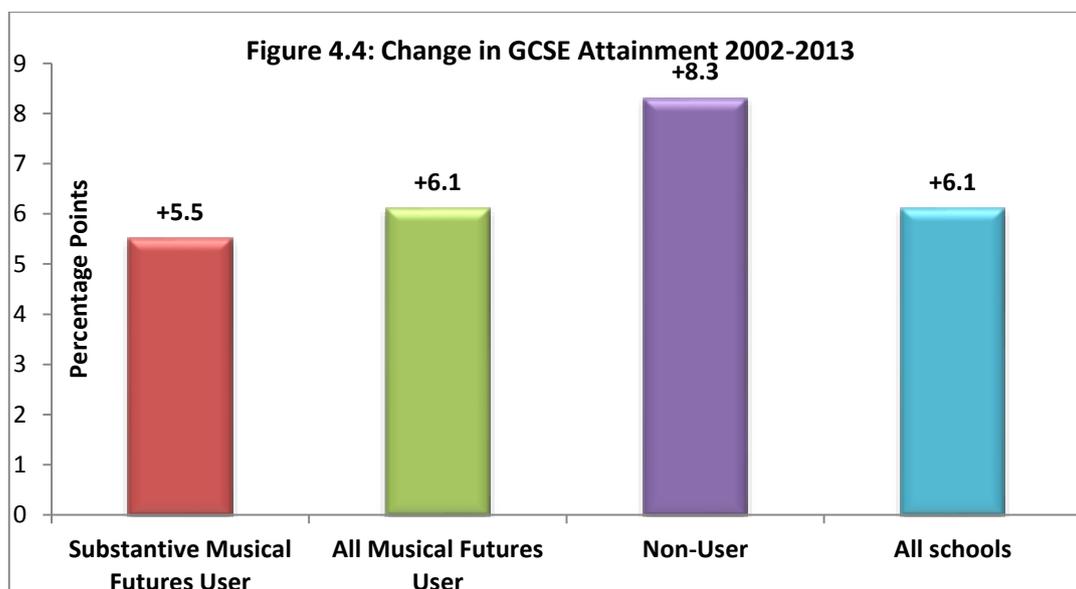


- 4.19 Nationally participation in vocational music qualifications has been on an increasing trend. Between 2008 and 2013 participation increased by 28 percentage points. This represents quite a dramatic shift with no music vocational qualifications on offer before 2005.

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- 4.20 Among substantive Musical Futures schools vocational qualification participation increased by 32 percentage points between 2008 and 2013. This compares to an increase of 17 percentage points among non-Musical Futures schools. In 2013 the proportion of vocational qualifications in substantive Musical Futures schools (36%) was double that in “non-user” schools.
- 4.21 Increased music participation in substantive Musical Futures schools has been driven by vocational qualifications. This suggests that Musical Futures has encouraged the take-up of vocational qualifications and/or vocational qualification has encouraged the take-up of Musical Futures.
- 4.22 A T-test shows statistical significance between the “substantive user” and “non-user” group on the growth of music vocational qualifications between 2012 and 2013, this period was tested due to the limited observations before 2012 (See Annex B).
- 4.23 Details of GCSE attainment levels within 2002-2013 are set out in **Table 4.4**.

Table 4.4: Percentage of Pupils Attaining GCSE Music (A* - C)				
	Musical Futures Substantive	Musical Futures All	Non Musical Futures	All School
2002	67.6	67.6	71.6	70.3
2005	66.5	70.8	70.1	70.4
2008	71.4	72.1	76.3	73.9
2009	74.2	75.3	78.1	75.7
2010	76.7	77.0	77.2	77.5
2012	73.9	72.9	81.9	77.8
2013	73.1	73.7	79.9	76.4
Change 2002-2013	+5.5	+6.1	+8.3	+6.1



- 4.24 Levels of GCSE music attainment have been historically high nationally, consistently featuring above the 70% mark. Nationally the pass rate increased by 6 percentage points between 2002 and 2013. The pass rate in 2013 was 76.4%.

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- 4.25 A comparison of GCSE music attainment between substantive Musical Futures users and “non-users” shows the latter performing slightly better. Over the period 2002-2013 attainment levels have increased by 5.5 percentage points among “substantive users” compared to 8.3 percentage points among “non-users”.
- 4.26 A T-test shows that the difference between substantive Musical Futures and non-Musical Futures groups on attainment is not significant (see Annex B).
- 4.27 The attainment levels of Musical Futures schools in the circumstances are quite encouraging given:
- Levels of attainment increased over the period which is consistent with teacher perception;
 - Attainment levels increased from a lower base, which, unlike the non-Musical Futures schools was below the 70% mark;
 - Improved GCSE performance was achieved at a time when the main focus was on the development and implementation of vocational qualifications;
 - The pupil ability levels of an expanded participation group are likely to be lower.

5 CONCLUSIONS

- 5.1 We are confident that we have identified a random sample of Musical Futures using schools and non-Musical Futures using schools to conduct a legitimate comparison of impact on pupil participation and achievement.
- 5.2 Our classification of schools as “substantive users” of Musical Futures provides a logic model or clear progression of inputs, outputs and outcomes for linking the introduction of Musical Futures to changes in pupil participation and achievement at KS4.
- 5.3 The analysis has been conducted at a school level with heads of music self-classifying their school either as a ‘user’ or a “non-user” of Musical Futures. This is quite different from other recent Musical Futures surveys which typically asks a member of the music staff whether they use Musical Futures. This whole school endorsement approach strengthens the logic model.
- 5.4 We are unable to say very much about the likely population of Musical Futures schools. While 59% of responding schools identified themselves as ‘users’, our sampling base was skewed towards ‘suspected users’.
- 5.5 The presence of Musical Futures in schools is likely to be greater than the Head of the Music Departments’ classification of usage. One-quarter of non-using schools had a member of staff with experience of Musical Futures. This has potentially positive implications for longer term take-up of Musical Futures by schools.
- 5.6 Musical Futures has been shown to have a positive participation effect at Key Stage 4. This is shown to be more significant when account is taken of all qualifications rather than GCSEs only: an increase of 70% between 2002 and 2013 for all Musical Futures users compared to 18% of “non-users”. Substantive Musical Futures users experienced a similar positive participation effect against “non-users” which was shown to be statistically significant.
- 5.7 The increase in participation in schools using Musical Futures substantively has been strongly influenced by the greater take-up of vocational qualifications in these schools. The rate of take-up of vocational qualifications is double that of non-Musical Futures users. This difference was shown to be statistically significant.
- 5.8 The pupil achievement effect of Musical Futures, measured in terms of GCSEs is less evident to observe. While achievement rates in Musical Futures schools increased over time they remain just below the national trend. This does however represent a good result given the lower starting base, the fact the expanded participation group is likely to have lower average ability levels and the schools had a higher specialisation in vocational qualifications. The comparison between the two groups was shown to be statistically insignificant.

ANNEX A
SURVEY QUESTIONNAIRE

Music Teaching and Musical Futures E-survey

Introduction

Please take this opportunity to inform us of your experience of applying Musical Futures techniques and approaches in teaching music at your school. Even the knowledge that you don't use Musical Futures will be valuable, as will any insight into general issues facing music teaching in schools. The results will be used by York Consulting to assess, on behalf of the Paul Hamlyn Foundation, the impact Musical Futures has on pupil progression and attainment at Key Stage Four. All responses will be treated in the strictest confidence.

School and Experience

1. Please provide details of your school:

School name

School post code

2. Your position in school:

3. Your experience

Number of years
teaching music in
your **career**

Number of years
teaching music in
your **current
school**

Musical Futures

4. Does your school currently use Musical Futures approaches (in any capacity) in teaching music?

- Yes
 No
 Other (please specify)

5. Have Musical Futures approaches ever been taught in your school?

- Yes
 No
 Don't know

Music Teaching and Musical Futures E-survey

6. Have you personally ever taught music using Musical Futures approaches in a previous school?

- Yes
 No

Implementation of Musical Futures

7. How would you describe your schools approach to teaching Musical Futures?

- The philosophy of Musical Futures is fully embedded
 The philosophy of Musical Futures is partially embedded
 We have just begun to embed the philosophy of Musical Futures
 We use Musical Futures on an ad hoc project basis
 Other (please specify)

8. Is Musical Futures a fundamental component of Music teaching in your school?

- Yes
 No
 Other (please specify)

9. Which year groups are taught using Musical Futures?

- Year 7
 Year 8
 Year 9
 Year 10
 Year 11

10. How long ago was Musical Futures first introduced into the school?

- 1 year or less
 2 years
 3 years
 4 years
 5 years or more

11. Do all music teachers in your school apply a Musical Futures approach?

- Yes
 Yes mostly
 No

Music Teaching and Musical Futures E-survey

12. Which qualifications were available, both before and after the introduction of Musical Futures?

	GCSE	Vocational qualification	Both
Before Musical Futures:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After Musical Futures:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. Have you any future plans to change the music qualifications you currently offer?

- Introduce GCSE
- Drop GCSE
- Introduce vocational qualification
- Drop vocational qualification
- None

Other (please specify)

14. At the KS4 level what impact do you think Musical Futures has had on:

	Increased	No change	Decreased	Don't know
Music participation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music attainment?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Further Consultation

15. Would you be willing to take part in a short telephone interview to provide additional details about your future plans for Musical Futures?

- Yes
- No

16. If yes, please provide your contact details:

Name

Email address

Telephone number

Anything else you would like to say

Music Teaching and Musical Futures E-survey

17. What do you regard as the most significant current and future support needs that schools and teachers have in relation to Musical Futures?

18. Is there anything you would like to say about the impact of Musical Futures and/or the teaching of music in your school?

19. In addition to the needs for support from Musical Futures you may have mentioned above, what other issues or factors, if any, affecting music education in schools, most concern you?

Anything else you would like to say

20. What factors/issues, if any, affecting music education currently concern you?

21. Is there anything you would like to say about the teaching of music in your school?

Thank you for taking the time to complete this questionnaire. Please click 'Done' to submit your response to York Consulting. If you would like further information about the survey contact Matthew Cutmore at matthew.cutmore@yorkconsulting.co.uk

ANNEX B
TESTS OF STATISTICAL SIGNIFICANCE

Tests of Statistical Significance

This annex is a supplement to Section 4 of the main report. We have tested for the statistical significance of the reported data on participation and attainment between Substantial Musical Futures users and Non Musical Futures users. The test chosen for all was an unpaired, single tailed t-Test that assumes unequal variance performed at the 95% level. Observations are the changes between years in the number of students taking part or achieving qualifications in music.

Null hypothesis – No relationship between the two groups.

GCSE Participation: t-Test: Two-Sample Assuming Unequal Variances (2013-02)		
	Musical Futures Substantive	Non Musical Futures
Mean	-0.976744186	-0.322033898
Variance	188.9280177	117.7738165
Observations	43	59

Hypothesized Mean Difference	0
df	77
t Stat	-0.259002605
P(T<=t) one-tail	0.39816219
t Critical one-tail	1.664884537
P(T<=t) two-tail	0.79632438
t Critical two-tail	1.991254395

The respective p-value above indicates there is no statistical significance on the participation in GCSEs from 2002-2013 between groups.

GCSE Participation: t-Test: Two-Sample Assuming Unequal Variances (2013-10)		
	Musical Futures Substantive	Non Musical Futures
Mean	1.037736	-0.91071
Variance	87.42163	51.35552
Observations	53	56

Hypothesized Mean Difference	0
df	97
t Stat	1.216232
P(T<=t) one-tail	0.113424
t Critical one-tail	1.660715
P(T<=t) two-tail	0.226848
t Critical two-tail	1.984723

As with the 2002-2013 tests we can say it is highly unlikely any participation would hold up in the wider population.

All Participation: t-Test: Two-Sample Assuming Unequal Variances (2013-2002)		
	Musical Futures Substantive	Non Musical Futures
Mean	4.333333	0.808824
Variance	167.078	112.5151
Observations	48	68

Hypothesized Mean Difference	0
df	88
t Stat	1.555287
P(T<=t) one-tail	0.061734
t Critical one-tail	1.662354
P(T<=t) two-tail	0.123467
t Critical two-tail	1.98729

It is reasonable to say there is some statistical significance (p-value is close to 0.05) on all music participation (2002-2013). This supports the main finding of Musical Futures increasing participation.

All Participation: t-Test: Two-Sample Assuming Unequal Variances (2013-10)		
	Musical Futures Substantive	Non Musical Futures
Mean	5.037037	-0.08696
Variance	123.7345	71.31586
Observations	54	69

Hypothesized Mean Difference	0
df	96
t Stat	2.810066
P(T<=t) one-tail	0.003002
t Critical one-tail	1.660881
P(T<=t) two-tail	0.006003
t Critical two-tail	1.984984

When testing the data from 2010-13 for overall participation the p-value is significantly less than 0.05. This is strong statistical evidence of a participation effect respective to Musical Futures.

Vocational Qualifications -Test: Two-Sample Assuming Unequal Variances (2013-12)		
	Musical Futures Substantive	Non Musical Futures
Mean	4.210526316	-2.066666667
Variance	39.95321637	49.92380952
Observations	19	15

Hypothesized Mean Difference	0
df	28
t Stat	2.693539737
P(T<=t) one-tail	0.005904056
t Critical one-tail	1.701130934
P(T<=t) two-tail	0.011808112
t Critical two-tail	2.048407142

The low p-value indicates the key finding of Musical Futures impact on vocational qualifications is very statistically significant.

GCSE Attainment (A*-C): t-Test: Two-Sample Assuming Unequal Variances (2013-02)		
	Musical Futures Substantive	Non Musical Futures
Mean	-0.45238	0.745763
Variance	127.766	64.5377
Observations	42	59

Hypothesized Mean Difference	0
df	69
t Stat	-0.58915
P(T<=t) one-tail	0.278843
t Critical one-tail	1.667239
P(T<=t) two-tail	0.557687
t Critical two-tail	1.994945

The high p-value indicates the results for GCSE attainment (A*-C) from 2002-2013 aren't statistically significant.