

You've got *boys* in
your class?

How high should they
sing?



An e-book for teachers

To accompany *Boys Keep
Singing*

Introduction



Welcome to Boys Keep Singing

My name Martin Ashley and I'm Professor of Education and Head of Education Research at Edge Hill University. I trained originally as a middle school music teacher and before that a sound man at the BBC. These were career decisions motivated by a love of choral singing developed through a childhood association with cathedral music.

But boys don't want to sing! Or so many people seem to think. This mattered so much that I wanted to carry out very thorough research into the problem—and then put the research into practice and research the results of doing that! This work has been generously funded by the Arts and Humanities Research Council and undertaken in collaboration with two good colleagues. Professor David Howard of the University of York is a vocal acoustics expert, and Jenevora Williams of the National Youth Choirs of Great Britain a singing teacher with nationally recognised expertise in boys' voices. My own expertise is in the sociological side—I'm supposed to know about why it's "not cool" or even "gay".

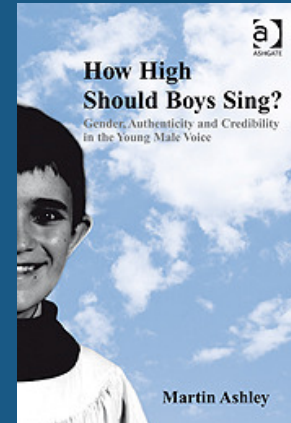
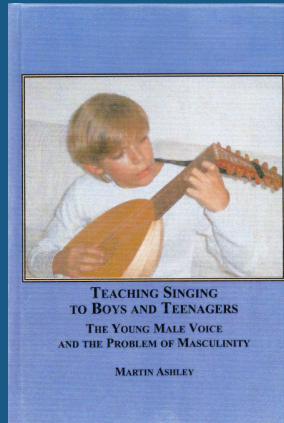
We've produced three main resources so far:

- A collection of films for boys
- A Digital book for boys
- A practitioner network

Plus this *e-book for teachers* which is a guide to those resources. We intend to produce further resources including a *cambiata* song-bank and a gaming tool for boys to assess their own voices. But the key to the success of all this will be the practitioner network. *We hope you will become a contributor.*

Why is the D-Book called *How High Should I Sing?*

This D-Book is based on the extensive research I carried out between 2000 and 2009. The results are published in these two (conventional) books:



This research has revealed a great dilemma. The traditional sound of boys' treble voices - the "sound of angels" is highly valued by adults (myself included) but increasingly unfamiliar to the peer group. It's a sound that is produced only by voices that are already going through puberty - a major misconception is that the voice "breaks" when puberty is reached. I correctly hypothesised that this would be a problem in a project that aimed to encourage more 10 - 14 year old boys to sing. As the D-book unfolds, it attempts to deal with this in as unbiased a way as possible.

sing up

Help kids find their voice

And why are the films called *Boys Keep Singing?*

Very simply because we've had the government funded National Singing Programme for primary schools, which has clearly become the envy of the world. Thousands of boys are now singing enthusiastically in their primary schools. But what happens after that? This project is most of all about keeping them going during Key Stage 3 (11-14 yrs). That means developing a much better understanding of the young male voice and what happens to it during puberty. And it means putting that understanding into practice!

How to Use the Resources



The short and honest answer to the question of how these resources should be used is that we're not quite sure yet! It's something we want to work out with you—members of the BKS network.

But one thing must be clear. My own books are, perhaps unusually, based principally on what boys say about singing. Listening to boys' views was fundamental to the research. But boys aren't going to read those books. They're full of big academic words! I always wanted to write something that boys would read. Thus was born an earlier e-book for boys, and I have to confess that it was inspired by the Co-ordination Group Revision Guides if you're familiar with them. That was before we got the big funding that allowed us to produce the films. The D-book is much revised, based on the content of the films, and contains illustrative sound files. **But it is fundamentally a book that's designed to be read.** It is not a website—it just uses web technology for delivery.

One of the issues we've had to deal with is -girls! The evidence that girls put 11–14 year old boys off singing is overwhelming and incontrovertible. We're suggesting that you target your new Y7s early in the school year with some class singing that contains an element of voice education. Girls' voices change too and boys and girls need to learn together about the effects of puberty on voices. Thereafter, you're going to have to provide a single-sex singing opportunity for those boys that want to do it. **And it's for those boys that these resources have been produced.**

Using the D-book

1. Read the D-book yourself, be absolutely confident that you understand every bit of it. Follow up the references in this e-book if you feel your subject knowledge lacking in any area.
2. Encourage boys who might be interested to read it in their own time. It's not fundamentally a classroom resource. **It's for boys to study** but *you need to tell them about it* (and give them your school log-in).
3. These green boxes will contain learning objectives and key points from research you should find useful and might include in your own scheme of work.



Our initial roll-out strategy

Case study schools We have already worked with schools that have been successful in keeping boys singing. You'll see them in the films, *for inspiration, not cloning!*

Laboratory schools Newly recruited, these schools receive a free day's INSET and we keep in close touch with them to research the impact of these materials.

Community singing opportunities from church choirs to youth rap, these opportunities are a key part of keeping boys singing. If you are responsible for a good boys' singing opportunity, **please join our network.** It will be an opportunity for boys to know about you.

Any school or choir is welcome to join the network and share expertise. Please do!

The next six pages correspond to the pages of the D-book. Then there is an appendix with further information for teachers. These pages explain a little more about what we're hoping boys will learn and point to ways you could encourage them.

The Home Page

Learning Objectives:

What is meant by "digital book".

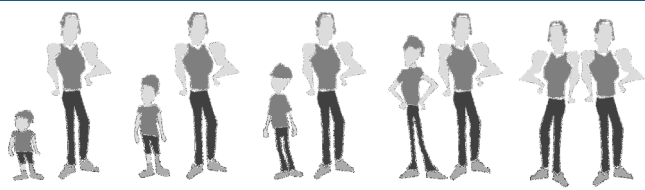
It's on-line but, unlike an e-book which is just print, it contains multi-media files including MP3, .pdf and video clips.

How to navigate it.

Users need to check out that their computer plays the MP3 files, opens the .pdf documents and plays the streaming video clips. To test the MP3 functionality, click "Listen to boys". This file appears at the top of each page and two boys describe the main learning objectives.

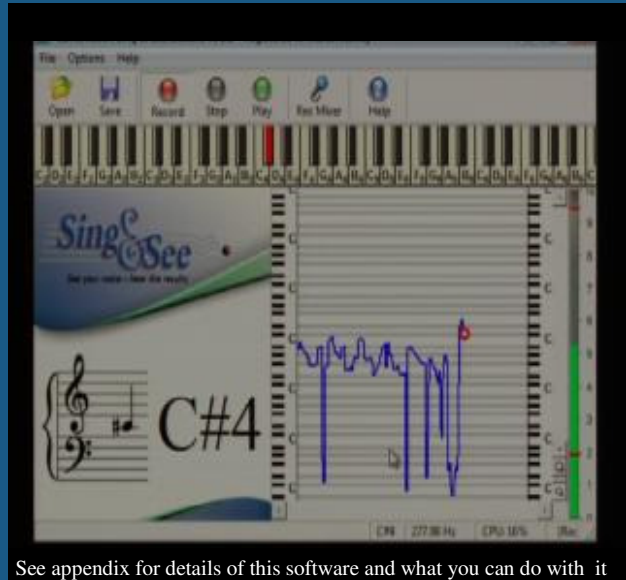
Your speaking voice gives you an identity which is related to your age and physical growth

The singing adventure is *only just beginning*. Ages 10 - 15 are particularly exciting times for boys' voices.



The cartoon strip shows five stages of growth, which very approximately correspond to National Curriculum Key Stages. They've been used quite extensively with boys in the research who have been asked to self-identify with the cartoon they think is them now.

- Most boys do this remarkably accurately.
- The research has tended to suggest that boys have a realistic perception of their stage of physical growth.
- The figure that particularly interests us the middle one (the first one in long trousers). This is KS3 boy! (11- 14 yrs).



It's absolutely crucial that boys get the message that the singing adventure is *only just beginning*. Hopefully the SingUp campaign has worked well in primary school, but research by Graham Welch and his colleagues suggests that boys can turn against the "school song" by the end of Y6 and become more interested in their own music. But there is far too little work on what this really means for 10–14 year old voices. The first thing to establish is that there is a distinct vocal identity that makes 10 - 14 year olds different to 7 - 11 year olds, and different again to 12 - 15 year olds (the age overlap is deliberate). Later pages will explain this. So boys should identify themselves both physically and vocally before going to the next page.

During the research, we made quite extensive use of the *Sing and See* voice pitch display software. Boys found this really interesting and we intend to produce an on-line voice game based on this kind of technology. But there are still a surprising number of technical problems to solve. Meanwhile, you could purchase Sing and See for your school and use it in your music scheme of work. There are instructions on how to do this in the appendix.

Your Larynx

Learning Objectives

The correct name for the "voice box" is the larynx.

The sound source in the larynx is the vocal folds (sometimes incorrectly called "cords" or even "chords").

The vocal folds are very small and may be compared in size to the edge of a 50p piece.

Sound is produced when air from the lungs passes through the folds to make them vibrate - and they vibrate very rapidly.

Like most other musical instruments, pitch is primarily dependent upon the length of the vibrating part.

The larynx and vocal folds are growing all the time - as the folds lengthen, the pitch of the voice correspondingly falls.

You can hear this effect when you listen to boys and men yelling at a sports match - and singing can be likened to controlled yelling.

I have found that boys are generally rather vague about where their voice comes from, though most will recognise the so-called "Adam's Apple" which is the visible bump or protrusion on the front of the neck. All this is illustrated in one of the .pdf files.

The visible Adam's Apple nicely illustrates the degree to which the larynx tilts and moves up and down (see films!) It is often significantly more visible in adult males than boys, and this can help boys to appreciate the extent to which their larynx grows rapidly during puberty. It reinforces the idea that the folds are growing relatively quickly in length, so the pitch of the speaking voice is falling. A twelve year old boy talking does not sound like a nine year old, - but neither would most people say the twelve year old's voice has "broken".

The video clip of the folds vibrating can be misleading because stroboscopic photography is used and you cannot actually see the real speed of vibration.



Of course, there may be some boys out there with a "so-what?" attitude to the small size of the vocal folds! (the model above is 5x adult size.) It is one of those scientific awe and wonder things, really. I was once at a conference where the speaker compared the size and power of the human vocal apparatus with a grand piano. No D-book can substitute for inspired teaching, so maybe you need to offer the occasional inspiration! *What we're really trying to get across here is that it is normal and natural to sing at the pitch dictated by your vocal fold length.*

Key Research (bitesize)

Many primary schoolchildren wrongly thought that accomplished high voice singing by boys was "unnatural" or "weird", often because of a belief that "boys can't sing".
(Ashley)

Most untrained listeners begin to recognise masculinity in a boy's speaking voice due to a fall in pitch from about age 10 upwards—but many boys will continue to sing in a high register for three or more further years.
(Sederholm)

Changing Size

Learning Objectives

Boys' voices do not suddenly "break"—they gradually change.

Between the ages of 11 and 14 the average length of the folds increases from just under 10mm to nearly 12mm.

This can result in a new singing range that is called cambiata.

Cambiata is lower than treble but higher than men's vocal parts. It is unique to boys.

Cambiata sounds more masculine than treble, which can sound "cute" to adults if the repertoire is inappropriate.

The sound tube from the larynx to the mouth is called the pharynx and its muscular movement turns the "buzz" of the folds into recognizable vowel sounds.

What is Cambiata singing?

The English are famed throughout the Western world for the quality of boys' singing in places such as cathedrals. But we can also be shamed for our ignorance of how voices change! There are still some who will suggest boys stop singing when their voices "break" but such a view is quite out of touch with today's vocal science.

A really key point for teachers to understand is that the lowest note of the singing range is about four to six semitones below the pitch centre of the speaking voice, and during puberty this is constantly shifting downwards. A good teacher will listen to a boy speak and work out the pitch range that suits his voice. An excellent teacher will do this in the middle of a music lesson, allocating boys to part ranges as the lesson proceeds—but by listening to the boy's normal speaking, not by embarrassing him with a "sing this note" in front of everybody else!

Now, unfortunately, this *does* mean you have to arrange music yourself, choose wisely and transpose or pitch shift if you have the technology. This is because composers and publishers have let us down—too few have understood the most basic principle of cambiata: *The song must fit the voice, not the voice the song.*



This is Dr John Cooksey who has conducted the world leading research on which all our resources are based. Cooksey's ability to walk into a classroom, hear boys talk and identify the pitch range for them to sing is legendary.

Hear a broadcast about Cooksey from the US:

http://news.minnesota.publicradio.org/features/2003/08/08_postt_changingvoices/

For boys, this can be tremendously liberating! They do not have to "sound like girls". This is the whole point of "the singing adventure is just beginning". Being a boy is great because you get different voices! The sound of the cambiata voice is not universally familiar. You need to get used to it to recognize its magical boy-like quality. The point is made in the D-book that many people expect the "cute" sound you get when boys with unchanged voices sing *Danny Boy*, *Tears in Heaven* or *Imagine*. But this is for the benefit of "grannies" - not for the benefit of boys themselves.

Key Research (bitesize)

Six stages of voice change have been recognised, which approximately correspond to the stages of puberty.

(John Cooksey.)

The cambiata voice is well established in the United States where music is specifically arranged and published for it.

(Don Collins.)

Boy singers who have recorded albums consistently report that the audience for their work is "grannies". There is a problem with "cute"

(Martin Ashley.)

Changing Gear

Learning Objectives

The male voice has four singing registers ("gears" - *not to be confused with parts*).

The register for everyday speech is also the register for popular singing. It is correctly called modal or thick fold, but is often referred to as "chest voice".

The high register for boys' classical singing is the thin fold, commonly called "head voice"

There is sometimes an audible break between the two registers, called passagio.

These registers are available to both men and boys, though at different relative pitches.

The thin fold register is used by a lot of rock singers as well as classical counter-tenors.

Male voices have a huge range between very low Russian basses and boy sopranos in the highest falsetto register.

Hence we get the idea that it's "gay" for boys to sing high. This is very annoying to those boys who do and many keep their singing secret from school peers. An obvious answer is better musical and vocal education, which is what we're attempting, but it's not easy! There is also the vocal health controversy. Choir directors like to keep their best trebles for as long as possible, but singing teachers worry about the potential harm of exploiting voices too far into change.



Finally, we need better education about gender. Pause to think. Why do boys have a problem with sounding like girls if not because our patriarchal society still has the hidden agenda of female inferiority? The D-book's answer is the clip of Jean-Baptiste and Clémence. We rather hope this speaks for itself—but you might venture a *guided* discussion with your boys!

You sing like a girl?

This page has been truly the hardest to write and is probably the most important. Boys can get a whole extra octave or more through thin fold register but the sound is often mistaken for a girl's voice by inexperienced listeners. Yet it is highly prized by enthusiasts of choral music *and by boys who have learned to sing in this way*. The key point the D-book is trying to put across is that the human voice is incredibly versatile, and the male voice particularly so if fully exploited by boys and men. There are audio extracts which show that plenty of adult rock singers exploit their high thin fold and falsetto registers, and that to do so is a "normal" activity of singing.

For adults who have worked out their sexuality, it's not a problem. For mid-pubertal boys, however, it absolutely is!

Key Research (bitesize)

Listeners in perceptual tests were less able to tell boys' and girls' voices apart than they had imagined. The ability to do this is affected by the age of the singers, the experience of the listener, the acoustic environment and other factors including the sex of the conductor!

(Graham Welch & David Howard)

Adolescent boys face huge social pressures to avoid performances associated with femininity and demure singing is one of these

(Lucy Green)

Joining In

Learning Objectives

Certain teaching styles are more successful than others in motivating boys to sing.

Boys are not greatly concerned about the gender of their teacher, but they are very concerned about the development of their own gender identity.

There are a small number of constantly recurring structural factors in the organisation of schooling which significantly determine how successful boys' singing will be.

Some genres are more authentic for boys' voices than others.

And the key organisational issues?

However good a teacher you are, you're unlikely to make it with boys if your school can't deal with these. Have a look at the *How Cool is Your School* .pdf and self-assess! (The sport one is the real killer!)



In the film that goes with this page, we used an actor to play the part of a how not to do it teacher. He is in fact acting out behaviours that have been observed by researchers. I wasn't sure when I first saw the rushes, but the number of boys and teachers who've said to me "I've been a victim of that" has convinced me that it's right. So study the film carefully and do the opposite!

What works?

This is as much a page for teachers as it is for boys, but it should make boys reflect on the kind of deal they're getting at their school. It's inescapable that in some schools boys sing enthusiastically whilst in many others, they don't. Why?

Well, one misconception must be dealt with straight away. You do not necessarily need a man! It's quite erroneous to imagine that boys are more likely to sing if they have a male teacher role model. Our case study schools demonstrate very clearly two things:

1. Good teaching makes a huge difference, but teacher gender is largely irrelevant.
2. There are some key organisational issues that successful schools address but others don't.

What is this good teaching? It's time you learned from the boys!

- Passionate, outgoing commitment to boys' singing—almost mad about it!
- Strong subject knowledge
- First rate inter-personal skills and real respect for your students
- Sense of humour and fun

If you have all these, you're half way there!

A word about genre

It doesn't have to be hip-hop and rap! Boys will actually sing anything if you are confident with it, if it's *right for their voices* and enjoyable. Hopefully we can share repertoire via the network.

Key Research (bitesize)

Schools need to tackle a macho culture which discourages boys' participation in the arts. (Salisbury & Jackson)

Strategies based on same-gender teachers have wholly failed with boys because male to male bonding has reinforced laddishness. (QCA)

Treble and cambiata voices do not work well for aggressive rock music. (Ashley)

Big Acoustics

Learning Objectives

Once the sound has left the mouth, the final shaping and colouring is done by the environment.

An acoustic space is an environment that shapes and colours sound by reflection of the sound waves from walls, floor and roof.

Electronic amplification and processing is almost always used to enhance voices in most genres.

Certain kinds of building can also do this through reverberation—a property of their acoustic space.

Classical genres are more likely to employ the acoustics of the building and the vocal training of the singer.

In some ways, this page is a post-script, but there simply could not be a project on boys' singing without reference to the classical sacred choral tradition, which is what this is really about!

Big acoustic spaces are actually a very important part of that tradition. If you read the research of Welch and Howard you'll see that enthusiasts for the tradition have been found to over-estimate the effect of the singers' sex and under-estimate the effect of the acoustic environment in creating the "boy" choral sound. This is not what matters here. What really matters are these two points:

1. Many, many boys are discouraged by "posh" and "religious" - the words they use to describe this kind of music.
2. But...there are more boys than we think who've got over this prejudice and derive enormous satisfaction from such singing, whether or not they have a religious belief. They just keep the fact secret.

So my question is, why shouldn't more boys? I'd want to be confident that neither of these two things are standing in their way

- Social class or financial privilege
- Adult image makers' prejudgement of boys' taste

We chose the TARDIS theme and a space-age cathedral order to de-emphasise the religious aspect. Boys and their families can make their own minds up about that. This is about singing and the awareness of the



effect of acoustic space. It's also about what the voice is capable of. There are many activities you can do. A starting point might be an enquiry into how speakers and singers were heard before the regular use of electronic amplification. Students might also like to experiment with digital reverberation to see if they can recreate acoustic environments they've visited.

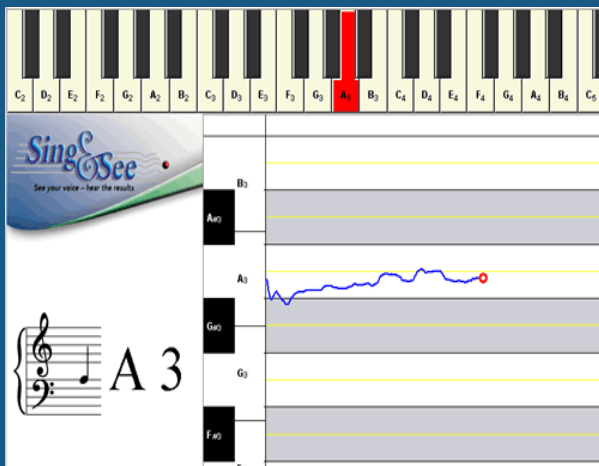


Finally, the sports stadium is not there just because "boys like football" (though many do). It's there to give a very important message. Singing is teamwork and a social activity. You don't have to go on X Factor—you can lose your very ordinary voice in the crowd. So I leave you with some reflection on values:

- Do you want to promote individualism through imitating the X Factor?
- Do you want to promote community and society through organising big singing events in big spaces?

Appendix 1 - Using Sing and See software

There are a number of software programmes on the market which use visual, graphic display of voice pitch. Some of them also display an acoustic spectrograph which allows more advanced analysis of the upper partials (harmonics) that colour the voice, including the famed singer's formant. Sing and See is one of the best of these and it can be used for singing training in all sorts of ways. At a simple level, you can see how accurately intervals are pitched by observing how well the pitch trace line of the voice fits between the fixed pitch bars. This real-time visual feedback has been shown significantly to increase singer's pitching—and it can be used for errant young trombonists too!



Sing and See was developed by Dr William Thorpe at the National Voice Centre, University of Sydney. It is marketed by a company called CantOvation and you can download the student version for £29 from their website. We really think it would be an excellent investment for any school, or indeed choir. You can see more about it on our network site, where there are some direct links.

If you want to type the address into your browser, it's www.singandsee.com

A possible disadvantage is that it only works with solo voices. You can't use it to train the pitch accuracy of a choir and you need a good quality voice signal which currently makes it difficult for boys to use on home computers with only built in low quality microphones.



Now we've developed a unique use for Sing and See, based on the principle that the lowest note of the singing range is about four semitones below the pitch centre of the speaking voice. We've found that this really captures the imagination of KS3 classes and boys have been surprisingly keen to volunteer themselves whether as big lads with low voices or little ones with high voices!

1. Get Sing and See onto your whiteboard, with a good, hand held mike plugged into the computer
2. Explain to the class that the graph trace is following the pitch of the speaking voice, and that we can approximate the centre of this by a mid-point line through the graph
3. Ask for some suitable volunteers to count steadily backwards from 20 into the mike, whilst everybody watches the pitch trace
4. Use the mouse to click the piano keys down in semitones below the centre of this (Sing and See plays the notes) and ask your volunteer to sing down too.
5. It's guaranteed that he won't be able to go any lower than the four or five semitones. About a sixth to a ninth up from there and you have his current modal singing range!

- You can watch a demonstration on our network site -

We're now working to develop this kind of technology into a stand-alone game version of all this for boys to use themselves on home computers as the next part of our project.

Appendix Two—Cooksey's Voice Classification in a little more detail

There is a .pdf on the Changing Size page of the D-book. It includes a highly simplified version of Cooksey's scheme which is entirely qualitative and designed in the main to emphasise to boys the cambiata phase. It doesn't give any actual pitch data. If you are going to do some work in class (particularly with Sing and See) and need to understand the stages better, the information below from my Ashgate book (*How High Should Boys Sing?*) and personal website may be helpful.

Age Phase	Stages with Age Span	Speaking Pitch	Vocal Quality
7-11 Primary School	0 Age 7 -11	220- 261 Hz	Soprano phase Child like. Boys and girls very similar in speech and singing. Boy's singing voice can be ' Full, rich soprano-like quality, reaches its pinnacle of beauty, power and intensity' (Cooksey).
	1 Age 11-12	220-247Hz	
11-14 Lower Secondary School	1 Age 11-12	220-247Hz	Cambiata phase Boy and girl voices begin to diverge. Both sexes lose child-like quality. Untrained listeners increasingly successful at identifying sex of speaking voice. Late maturing boys retain high singing voice throughout this period. Trained singers can produce powerful soprano up to end of stage 3 but most boys would give up singing in woman's range as speaking pitch falls below 185 Hz during this stage. Early maturers sound low but very immature tone compared to adult voice.
	2 Age 12 -13	196-233Hz	
	3 Age 13 -15	174-185 Hz	
	4 Age 13-15+	131-165 Hz	
15 -18 Upper School	3 Age 13 -15	174-185 Hz	New baritone phase Most boys now have speaking voice clearly different to girl or child. Singing voice roughly in baritone range but not yet settled and sounds weak and adolescent-like compared to adult voice. Exceptionally, late maturing boys may still sing soprano. Early maturing boys may begin to develop some qualities of the full adult voice.
	4 Age 13-15+	131-165 Hz	
	5 Age 14 - 15+	110-139 Hz	

The table on the right is from Willis & Kenny (2008). It shows six Cooksey derived stages, numbered 0–5. (sometimes they're numbered 1–6!) Midvoice is an alternative term for cambiata.

Stage	Classification	Speaking fundamental
0	Unchanged	220 – 260 Hz (A3 –C4)
1	Midvoice I	220 – 247 Hz (A3 – B3)
2	Midvoice II	196 – 233 Hz (G3 – A3)
3	Midvoice IIA	175 –185 Hz (F3 – F#3)
4	Newvoice	131 – 165 Hz (C3 – E3)
5	Emerging Adult Voice	110- 139 Hz (A2 – C#3)

Appendix Three: Further reading and subject knowledge

This section says a little bit more about each of the sources quoted in the green research bitesize boxes.

For the really deep level of knowledge you'll need to do your MA, MTL or even EdD (which we hope you will!) you'll need of course to consult the sources themselves!

Your Larynx

Many primary schoolchildren wrongly thought that accomplished high voice singing by boys was "unnatural" or "weird", often because of a belief that "boys can't sing". The singing referred to here was mostly by boys with chorister training who had recorded "crossover" albums in their trained "head voice". This was received with incredulity by primary school children and led me to conclude early on that such singing could not serve as a role model for ten year olds. There is an attempt to explain this to boys in the What Works for Boys' Voices .pdf

Ashley, M. (2008) Teaching Singing to Boys and Teenagers. Lampeter: Mellen. Pp 128 - 147.

Most untrained listeners begin to recognise masculinity in a boy's speaking voice due to a fall in pitch from about age 10 upwards—but many boys will continue to sing in a high register for three or more further years. You can hear this clearly for yourself through the clips on the home page. Most lay people would say that the voice "breaks" when you get to the fourth cartoon. But the third cartoon does not sound at all like a primary aged child when you compare them. This is what makes it all so interesting—and KS3 boy so special!

Sederhom, E. (1998) Perception of gender in ten year old children's voices, Logopedics Phoniatrics Vocology, 23 (2), 65 — 68.

Changing Size

Six stages of voice change have been recognised, which approximately correspond to the stages of puberty. This is absolutely seminal and if you're serious about boys' singing, you really need to get Cooksey's book! Not a lot more I can say!

Cooksey, J. (1999) Working with the adolescent voice. St Louis MO: Concordia.

The cambiata voice is well established in the United States where music is specifically arranged and published for it. It's true! In choral and vocal education for 10—14 year old boys the US is well ahead of the UK. Don Collins is another leading exponent and more directly associated with cambiata than Cooksey. He runs the Cambiata Vocal Institute of America which publishes arrangements for changing voices. You should check out their website. www.cambiatapress.com

Collins, D. (1999) Teaching Choral Music. Upper Saddle River, NJ: Prentice Hall.

Boy singers who have recorded albums consistently report that the audience for their work is "grannies". There is a problem with "cute". Yes there is! I need to say that this is what boys tell me consistently, and "grannies" is absolutely their word, not mine! In the fewest words possible, singing classical sacred music in the high treble voice is OK because it's an established genre but as soon as boys stray into Danny Boy territory, there's dead trouble.

Ashley, M. (2009) How High should boys sing? Aldershot: Ashgate.

You should also look at Sheelagh Whiteley's work in this connection.

Whiteley, S. (2005) Too Much Too Young; popular music, age and gender. Abingdon: Routledge.

Appendix Three cont'd

Changing Gear

Listeners in perceptual tests were less able to tell boys' and girls' voices apart than they had imagined. The ability to do this is affected by the age of the singers, the experience of the listener, the acoustic environment and other factors including the sex of the conductor! The article by Welch & Howard, leading researchers in the perception of voice, created something of a furore in a tea room when it appeared because the introduction of girls to cathedral choirs was for some a very sensitive issue. My own research suggests that the people most concerned are traditionalist supporters of cathedral boys' choirs. Most boys themselves aren't that bothered and for as long as there are separate, single sex choirs in cathedrals, it's business as usual.

Welch, G. & Howard, D. (2002) *Gendered voice in the cathedral choir*, *Psychology of Music*, 30 (1), 102–20.

Adolescent boys face huge social pressures to avoid performances associated with femininity and demure singing is one of these. Yes! Boys are very bothered about this and there's a huge literature on it which you'll find cited in my own books. I've suggested you read Lucy Green because it's become a classic text. My own books, however, deal with the more specific issue of what singing by boys is to count as "demure". Anything in "top gear" does because the voice loses many of the upper harmonics that give it masculine edge when it goes into thin fold register. Choristers get away with this because it's said that this is how angels sing, the singing is "work" that choristers have to do and boys their own age don't listen to them anyway. You should also look at Scott Harrison's book.

See particularly Chapter 5 in *How High* and Chapters 6 & 7 in *Teaching Singing to Boys and Teenagers*.

Green, L. (1997) *Music, Gender, Education*. Cambridge: Cambridge University Press.

Harrison, S. (2008) *Masculinities and Music: engaging men and boys in making music*. Newcastle: Cambridge Scholars.

Joining In

*Schools need to tackle a macho culture which discourages boys' participation in the arts. Unfortunately, this remains very much the case as report after report confirms the general failure of schools to deal properly with homophobic bullying. The book by Salisbury and Jackson remains a classic text on how to develop the more sensitive side of boys' nature and should be read by every teacher (particularly males). Look also at my article in *Gender and Education* if you learn from cautionary tales and academic analysis of the dangers of populist policy.*

Salisbury, J. & Jackson, D. (1996) *Challenging Macho Values*. London: Falmer.

Ashley, M. (2010) 'Slappers who gouge your eyes': vocal performance as exemplification of disturbing inertia in gender equality, *Gender and Education*, 22 (1), 47-62.

Strategies based on same-gender teachers have wholly failed with boys because male to male bonding has reinforced laddishness. If neither of the above convince you, the QCA carried out a review of all the research into "boy friendly" strategies to address the alleged problem of boys' underachievement. That was their conclusion, one that owes a particular debt to the work of Warrington and Younger. The actor in our film is simply following the script provided by some of the classes noted in this research.

Pepper, D., May, T., Westmacott, K., & Leney, T. (2008) *The gender gap in attainment: a brief international comparative review*. London: QCA.

*Treble and cambiata voices do not work well for aggressive rock music. As far as I know, my own research into how peer audiences respond to fourteen year olds performing punk in an unchanged voice is unique. It's the source of the quotes in the .pdf and you'll find more similar ones and a lot more detail pp 216–225 of *Teaching Singing to Boys and Teenagers*. Of course boys want to sing rock, but they have to learn vocal patience and deferred gratification! And we have to develop suitably exciting cambiata singing opportunities and broaden horizons.*

Postscript

Thank you for being interested in this project and the very best of luck in your teaching or choir directing if you really are interested in *keeping boys singing*.

I'm not going to thank anybody here because they all get a mention in the credits of the D-book. Don't forget to look at that page because not only do the people who have helped get their recognition (and no way could I have done it without them!) but there are links to their websites if they have them. So please do have a look at these.

I don't feel comfortable promoting my own books and I've, as far as possible, encouraged you to refer to others' work. However, it's inescapable that this whole project has been based upon those books and if you really want to understand the reasoning behind the D-book thoroughly, you need to read them. They are rather expensive (I blame the publishers!) so why not consider getting your school or institution to buy a copy if you're not feeling wealthy?

The references are:

Ashley, M. (2009) *How High Should Boys Sing? gender, authenticity and credibility in the young male voice*. Aldershot: Ashgate.

Ashley, M. (2008) *Teaching Singing to Boys and Teenagers: the young male voice and the problem of masculinity*. Lewiston, NY: Edwin Mellen.

I hope you don't have problems with log-ins and passwords to our various sites. In theory, they should all link together and the same log-in should work for each of them. But that's IT theory! Here are the URLs

Main site: www.boys-keep-singing.org
D-book: www.singing-for-boys.com
Network: www.boys-keep-singing.ning.com

A reminder that you are welcome and encouraged to give your institutional log-in to boys at your school or in your choir, but that we ask you not to share it with anyone else on account of child protection.

If all else fails, you can e-mail me at: ashleym@edgehill.ac.uk

William Byrd should have the last word, I think.

"Since singing is so goode a thinge, I wish all men would learn to sing"

They start when they're boys!

Well, he almost had the last word!

Professor Martin Ashley
Edge Hill University
January 2010