

INTRODUCTION

by László Norbert Nemes

Dear Reader!

Eight months ago, I wrote my first recommendation for Teréz Tóth's excellent contribution to publish the work of ethnomusicologist and music pedagogue, Dr Chong Pek Lin, which was followed by another publication on the Asian Kodály Music Academy Online Symposium in August by Albert Tay. It is a great pleasure to see that the writings of Teréz Tóth have now grown into a series. Thousands of thanks to the author and the editorial staff of Parlando respectively.

This paper, similarly to the publicist's previous writings and translations enriches the Hungarian literature on international Kodály adaptation with new topics. The significance of this, as I mentioned earlier, that we, Hungarians can get new, fresh impulses viewing the new horizons of Kodály's epoch-making conception in the current music pedagogical aspirations in the world. They turn our attention to seemingly neglected areas such as for example, voice training for adolescent boys. I have been following Anthony Young's work myself for about ten years now, and every time I hear "his boys" sing, I wonder how unfortunate it is that we don't have more people at home with his knowledge that empowers adolescent boys struggling with lots of inhibition and the hatred of singing so as to stimulate and help them survive a critical period of mutation.

Why is that? Well, so that we can hear more about the high school community singing with great joy, and so that secondary classroom music education will not be exhausted with passing a bit of ounce of music history and music theory to young people, but finally the subject of music education should be about active music making in the spirit of Kodály's pedagogy.

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FOREWORD FOR PAPER FOR ANTHONY YOUNG'S PAPER

The Kodaly Approach to Music Education is built on embedded processes of singing; it is understood that singing has a direct impact on the development and refinement of music thinking and intelligence. However, participation and learning in music can be hampered for many boys due to the changes – physical, social, personal – associated with maturation. In this paper, Dr Young interrogates historical perspectives on boys' singing in a manner which allows educators to more fully understand inherited attitudes and values. The author then carefully evaluates relevant contemporary research and thinking in this area and offers a clear summary of practical points for music educators, particularly within the school context. Among other ideas, kinaesthetic practices, the learning environment, the role of social learning and an understanding of preferred learning styles are identified as key methodological considerations to support boys' learning throughout the period of vocal transformation. Dr Young emphasises the role of the educator in student learning: "It is imperative that the teacher who wishes students to use their voices possesses the skills to empower them to use their voices successfully". This is a succinct and clearly written paper with important messages for all who use the human singing voice in education and learning.

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THE ADOLESCENT MALE CHANGING VOICE: PHYSIOLOGICAL, PSYCHOLOGICAL AND PRACTICAL CONSIDERATIONS FOR CLASSROOM MUSIC TEACHERS

ANTHONY YOUNG



Abstract: This paper provides practical suggestions for teachers working with changing voice boys in Australia, the United States and England after summarising historical approaches and discussing the physiological and sociological challenges inherent in this area.

Kodály said, “if one were to attempt to express the essence of this education in one word, it could only be – singing” (Kodály, 1974, p. 206). Singing remains a core tenet of Kodály inspired music instruction (Cuskelly, 2008, p. 27). While singing is an acceptable means of expression in many cultures, in others, notably, the United States, the United Kingdom and Australia, adolescent boys have resisted singing for many years. (Harrison, Engaging boys in a sequential, voice-based music program, 2006, p. 6) (Swanson, 1960; Freer, 2007; Ashley, 2009). The author, a teacher in an all boys secondary school, has investigated the reasons behind this resistance in order to attempt to find ways to encourage boys to sing, thereby enabling them to enjoy the musical education Kodály envisaged.

Physiological challenges to adolescent male singers **Historical Development; the ‘Broken’ voice vs. the “Changing” voice**

Adolescent boys were actively discouraged from singing by teachers for many years. (Friar, 1999, p. 26). Manuel Garcia, in the late 19th century “proposed that the voice should be rested during its time of change” (Cooksey, 2000, p. 719). Garcia’s view was persistent in the United Kingdom in the 1920s (Richards, 1922, pp. 43,44).

Teachers in the United States had to teach boys through the voice change because of the development of middle school curriculum choirs “so these teachers learned to adapt their teaching to the students’ needs” (Friar, 1999, p. 27). This practice of singing ‘through the change’ was influential on English authorities over time and by 1933, Cooksey reports that the London County City Schools issued a statement that “a boy’s voice never breaks” and that “singing and speaking are essentially the same process” (Cooksey, 2000, p. 217).

While singing through the voice change was slowly becoming accepted, a number of approaches emerged, none of which seemed to deal satisfactorily with the experiences of all teachers and boys. Duncan McKenzie introduced his ‘alto –tenor plan’ (Brinson, 1996, p. 217). Irvin Cooper developed the ‘*Cambiata* plan’ in the 1950s (Ashley, 2009, p. 49). Frederick Swanston’s work was also influential following his initial experiments with his students in the mid 1960s (Brinson, 1996, p. 217).

Friar states “choral educators of the 1970s needed more empirical evidence of the value of the new approach(es)” and the most influential researcher in this era was John Cooksey (Friar, 1999, p. 28). Cooksey’s work reconciled earlier approaches. He found that the voices went

through six sequential stages of development, namely, Premutational, Midvoice I (beginning of change), Midvoice II (middle of change), Midvoice IIA (climax of change) New Baritone (tapering period) and Settling Period (expansion development) (Cooksey, Voice Transformation in Male Adolescents, 2000, pp. 721, 733).

By 1977, Cooksey claimed that:

- 1) Pubertal stages of development closely parallel the stages of voice mutation. Singing is most limited at the climax of puberty.
- 2) Voice mutation proceeds at various rates through sequential stages which affect singing differently in each stage. The onset of voice transformation is variable.
- 3) Mutation can start as early as age 12 and end as late as 17.
- 4) The first stage of voice mutation is indicated by an increase in "breathiness and strain" in the upper registers.
- 5) The lower register is generally more stable throughout the mutation than the upper.
- 6) The most noticeable changes occur in the Midvoice I, Midvoice II and Midvoice IIA stages.
- 7) Register definitions (modal, falsetto, whistle) become clear during the high mutational period.
- 8) Age and grade level are not reliable criteria for voice classification.
- 9) The average speaking fundamental frequency lies near the bottom of the voice pitch range.

Between 1977 and 1980, Cooksey, Beckett and Wiseman used sonographic analysis to investigate the area. Groom and Baressi and Bless carried out further work in 1984. Later, the London Oratory School Study (1992 – 1994) and the Cambridge Study (1996) were undertaken (Cooksey, Voice Transformation in Male Adolescents, 2000, pp. 723-734).

Cooksey alleges that these studies have largely validated his claims and that they support the following additional observations:

- 1) Total pitch range compass is the most important vocal criterion in determining voice maturation stage.
- 2) Other criteria include tessitura, voice quality (increased breathiness and constriction in the Midvoice IIA stage), register development and average speaking fundamental frequency.
- 3) Adult voice quality should not be expected from the early adolescent male voice, even after the Settling Baritone classification has been reached.
- 4) The width of the comfortable singing pitch range (tessitura) remains fairly stable throughout the

stages of voice change.

5) Increase in height seems related to the most extensive voice maturation stages while increase in weight accompanies the settling baritone classification.

In spite of his very comprehensive work, Cooksey's view that there are fixed stages of vocal development is not completely uncontested. White and White quote Sataloff and Speigel who claim the voice can change in four different ways but agree that "despite the nature of the change, the young male is still capable of free natural singing throughout puberty, provided he receives encouragement, good training and the opportunity to sing appropriate literature" (White & White, 2001, p. 41).

Physiological description of voice change during adolescence

White and White efficiently summarise the physiological changes that occur to cause the speaking voice to drop approximately one octave.

The muscles and cartilage of the larynx change in position, size, strength and texture; accordingly, the singing voice changes in range, power and tone". "At the onset of puberty....physiological changes occur in the organs, muscles, cartilage, and bones that support the phonatory process. The epiglottis grows, flattens and ascends, the neck usually lengthens. The chest cavity grows larger, especially in males. As the skeletal structure of the head grows, the resonating cavities increase in size and change in shape. More important, the larynx grows at different rates and in different directions according to gender. The male larynx grows primarily in the anterior - posterior (front-to-back) direction, leading to the angular projection of the thyroid cartilage, the Adam's apple, a visible indication of the impending voice change. In fact, the male's vocal folds lengthen four to eight millimeters (White & White, 2001, pp. 39-40). This description aligns with that of Thurman and Klitzke (Thurman & Klitzke, 2000, pp. 697-701) and Ashley (2009, p. 42).

Ashley's work in England noted a strong correlation between a "rapid increase in lung volume and weight" and the "end of the treble career" (Ashley, 2009, p. 44). He says:

Boys experience increasing muscular difficulty in controlling their voices at around age thirteen or fourteen. This is fundamentally no different to general adolescent clumsiness and the difficulty

some boys have at the same age of controlling limbs that have suddenly changed length. The vocal folds at this stage become quite rapidly more massive...and this change outpaces the boy's ability to adjust the way he controls their movement. The result is not infrequently a flip between child and emergent adolescent pitch during speech, the 'cracking' or 'squeaky' voice that can embarrass boys at this age" (Ashley, 2009, p. 47).

Cookey's description is similar; "when a young man sings in his upper range, then, his vocal folds cannot thin out as much as before, but his habitual prepubertal brain program will lengthen them for those pitches anyway." "If male voices shift suddenly from lower or upper registers to the falsetto" boys "commonly shut off their voices" and say that their voice "cracked" or "broke" (Cooksey, 2000, pp. 827-828).

Cooksey attacks the term "broken voice". He explains that during puberty "voice function... becomes "confused", and unintended "surprise" sounds and out-of-tune singing can be expected in boys" who are vocally inexperienced (and) continue to use "prepubertal brain programs". (Cooksey, 2000, pp. 827-828).

Clearly, voices change dramatically, and perhaps erratically, through a set of predictable stages during adolescence. Continuing to sing during the voice change is not inherently dangerous (Phillips, 1996, pp. 67-87). Cooksey claims, "the extent and vigour of speaking activities has the greater potential for the development of voice disorders". Any teacher who has heard students yelling at a sporting match or a school dance, will agree that those activities are far more damaging. Accordingly "if the capabilities and limitations of changing voices are taken into account, singing can be an exciting and healthy activity. Voices ...used in a (sic) efficient, expressive and healthy way are much more likely to continue expressive speaking and singing for the rest of their lives" (Cooksey, 2000, p. 833). Phillips and Aitchison assert that "singing is a learned behaviour and can be effectively taught as a developmental skill" and "total range may be improved with instruction, especially for boys" (Phillips & Aitchison, 1997, p. 195).

The reassurance of Phillips and Aitchison is encouraging but the fact remains that boys at the peak of vocal mutation, unsure of what sounds their voice will make, have good physiological reasons to be reluctant to sing.

Social and Sociological Challenges to Adolescent Male Singers

A growing dislike of singing in both genders

Sociological issues that are not gender specific compound this reluctance. In the United Kingdom, Graham Welch has investigated whether attitudes to school singing and singing ability are improving as a result of the 'Sing Up' program. He found "girls consistently tend to have more positive attitudes towards singing than boys" and "younger children tend to be more positive than their older peers". "As children get older, they get more competent at singing, but appear to like it less". He claims that this "relates to changes in their musical identity, which often becomes much more peer focused. Singing in school becomes a less 'cool' thing to do as children are increasingly influenced by popular music culture" (Welch, 2010). Elsewhere he states "as they become older, both sexes have less positive attitudes towards singing in school, socially and in the home. Older children of both sexes engage with singing more at a personal (private) level, suggesting that it may be something to do with singing in school ('school music') and/or singing related to a childhood identity that creates increased negativity" (Welch).

In the United Kingdom at least, it appears that children like to sing less as they grow up and that boys are even less likely to want to sing. Teachers may not get to nurture changing male voices because the boys will have decided not to sing at school at all. Ashley suggests that the boys' attitude to singing "a social decision about how to sing" is more influential, perhaps, than physiological factors. (Ashley, 2009, p. 44).

Boys not wanting to sound like girls

Ashley states, in the current social climate, courage is required for a boy to sing as a treble with the fluty, feminine head voice, also described as 'thin fold' vocal production which has been advocated by educators for more than a century. For the purposes of this article, 'head voice' is defined as vocal production in which the 'lengthener" muscles of the larynx are predominantly used. They have to "defy peer proscription to sing in a high voice". A high voice is seen as feminine and a social "compulsory heterosexuality" in childhood (Ashley, 2009, p. 89), stems from a "hegemonic masculinity" which has created "the idea that sounding like a girl is in any case a terrible thing". "Whatever the reasons might be, it is undeniable that for most ten to fourteen-year-old boys, a degree of socio-cultural distance from girls is as fundamental an element of young male identity as there can be" (Ashley, 2009, p. 58).

He postulates that in the early 1900s, boys “had a much more deferential relation to adults and would not question the order to sound like a woman in the way that boys would today” (Ashley, 2009, p. 58,59). Modern boys are much less malleable because of the “rise in youth cultural taste and the children’s rights movement” (iAshley, 2009, p.59).

Ashley has done considerable research in this area and notes the development of the ‘Continental’ treble sound first promoted at Westminster Cathedral in London by organist George Malcolm. “The term refers to a hard edged, ‘reedy’ sound and contrasted with what was then a more traditional, softer and flutier ‘English’ sound” (Ashley, 2009, p. 59). The sound was described in unmistakably male terms. Ashley quotes Malcolm who claimed “Boys will be boys....they are expected to sound like boys and are not taught to produce an uncharacteristic quality of tone, remotely unlike that of the voices with which they talk, or laugh, or cheer at a football match”. George Guest, who also taught John Scott, Sir David Lumsden and Stephen Cleobury introduced the “Continental” sound into St. John’s College Cambridge and it was a boys’ choral sound which was “Benjamin Britten’s clearly stated preference” (ibid p 59,60). Ashley’s material suggests that English Cathedral organists have developed this more ‘boyish’ choral sound to better differentiate boys’ singing from female singing, thereby making it more socially acceptable for the boys.

In the United States, Cooper concurs suggesting that thin fold, head voice should be used only in a closed community such as a boy choir away from the influence of other boys who do not sing. Ashley relates “it is other young people outside this community who will say that the higher voices ‘sound like girls’ and, in such circumstances, Collins’ recommendation is that a limited tessitura, based upon modal range should be adapted (Ashley, 2009, p.68). For the purposes of this article, modal means vocal production with the ‘shortener’ muscles, those used for speech, being predominant in producing sound. English trebles seem to consider that their performances are aimed at older audiences and never for peers. Ashley quotes an eleven-year-old singer who was shown a performance by a boy band comprised of cathedral singers, (ibid p. 75). The boy said, “old people and grannies will love them and they might appeal to very young boys, but no way to me. It was no longer “cool” for young boys to sing just to “please mummy” (Ashley, 2009, p. 96). While it is admirable for students to sing for “old people and grannies” it is clear that performances for peers may not be valued and

may in fact damage a child’s social capital in the playground. This material suggests that teachers need to exercise care and make careful judgements when considering whether to have boys sing in their head voices in front of some peer groups.

The foregoing overly simplifies the complex sociological issue of singing and identity for boys and the reader is recommended to consult Ashley *How High Should Boys Sing* for a more detailed treatment of the subject in the English context.

Boys wanting to be ‘real’ boys and ‘real’ boys don’t sing

In the secondary school, when the voice change occurs, boys are said to be under intense pressure to conform to narrow conceptions of masculinity which often exclude singing. Swain in 2003 found that “the pupil peer group” has “a fundamental influence on the construction of masculine identities”. “It provides boys with a series of collective meanings of what it is to be a boy, and there is constant pressure on individuals to perform and behave to the expected group norms”. “It is the peer group, rather than individual boys, that is the bearer of gender definitions”. Boys need to gain “power” and “status” through “intense manoeuvring” “through negotiation” and this power is sustained through “physical performance” (Swain, 2003, p. 302).

Swain examined constructions of male identity in three English schools; one upper-middle class, one middle class and one working class (Swain 2003,. p 301). Unsurprisingly, Swain found “the boys defined their masculinity through action, and the most esteemed and prevalent resource that the boys drew on across all three schools to gain status was physicality /athleticism, which was inextricably linked to the body in the form of strength, power, skill, fitness and speed”. “The best athletes were generally the most popular in their class and school year”. “Boys are strongly encouraged to be active, physical, competitive, aggressive, and so on, and it is seen by many as an entry into the world of men” (Swain, 2003, p. 303).

The control by the peer group even extended to mandating what “trainers” (shoes) and other clothing could be worn. “There were serious risks involved for anyone not conforming to the group norms” and there was a need to dress “in order to be safe” and to avoid “rejection and/or peer-group ostracism”. (Swain, 2003, p 308). The “dominant bodies were invariably heterosexual bodies, for masculinity and heterosexuality are entwined and to be a ‘real’ boy (or girl) is to be heterosexual. Thus, the boys at the

bottom of the pupil hierarchy were often positioned and controlled by feminising them and by using the strategy of homophobic abuse" (Swain, 2003, p 309). Clearly, Swain's study has serious implications for the emotional and intellectual growth of boys generally; none of the peer groups seemed to privilege academic achievement, decency, reliability, compassion, understanding or honour. For the music teacher, the study is particularly depressing, as singing would almost certainly be excluded from the definition of 'real boy'.

The construction of masculinity as being anti-intellectual is as problematic as the construction being anti-singing and it is a construction of long standing. Freer refers to John Locke complaining in 1695 about "the failure of boys to concentrate on their Latin studies" (Freer, 2007, p. 29). Mills observes that in Australia, "there is a valorisation within many schools of boys who perform well at sport". "Accompanying this is often a denigration of boys who reject sport, especially if this rejection is not replaced by another masculinised activity, for example, an interest in motorbikes". Like Swain, Mills found that "denigration is often delivered through misogynist and homophobic discourses and the deployment of terms such as 'girl' and 'poofter' to marginalise boys whose behaviours do not accord with expected forms of masculinity". Mills also found these issues in "most schools, elite and poor" (Mills, 2009, p. 18).

Mills found that "within some communities there is a construction of schoolwork as feminine, and some subjects more than others, for example, dance, music, English and drama". As such, he found that "one of the contributing factors in the lower achievement levels of boys...is an avoidance of all things feminine (Mills, 2009, p. 19).

Mills alleges that successful teachers in this context have "rejected notions of a 'true masculinity' and encouraged boys to see that there were multiple ways of being a man" (Mills, 2009, p. 19). This is indeed a laudable aim and successful teachers of male singing are indeed able to broaden the concept of maleness and hopefully, as a result of the thoughtful modelling of appropriate behaviour develop more inclusive, healthy constructions of masculinity. However, it is submitted that in the face of substantial sociological barriers, it might be more efficient to subvert the dominant paradigm from within.

Practical suggestions for assisting male adolescent singers

Dealing creatively with sociological realities; Turning singing into a sport

Given that constructions of maleness have been educationally problematic for hundreds of years, it is probably most useful to appropriate elements of hegemonic masculinity so as to effect change from within the discourse. The foregoing material clearly establishes that the dominant construction of masculinity is to be active and physical. Accordingly, recasting singing as a sport-like activity is a way forward. Harrison admits, "examples of effective practice in exploring the complementary nature of the two activities are scarce, but isolated instances can provide useful illustrations for... improving the plight of music in relation to status and participation" (Harrison, 2005, p. 56). Harrison wisely counsels, "sport can be harnessed as a motivational tool in music, but this needs to be executed with caution so as to avoid entrenching stereotypes" (Harrison, 2005, p.57). It is important that the music program does not become complicit in reinforcing some of the more unsavoury aspects of hegemonic masculinity.

In Australia, the structures of co-curricular music and sport are very similar. Sportsmen train and Musicians rehearse. Sport has games and Music has concerts. Cultivating an effective working relationship with the sport department can benefit all concerned. Roe advises "get the coach to back the choral program if you can" (Roe, 1983, p. 17). Ashley coached rugby himself (Ashley, 2009, p. 94). The boys in his choral outreach program "are content to go out to primary schools...as long as the lesson they are missing is not double sport". He advises "boys will sing provided they are not asked to choose between choir and sport, an unfair choice that youngsters should not have to make (Ashley, 2009, p. 103). Clever and complementary scheduling of singing and sporting activities is therefore essential.

The great vocal pedagogue Richard Miller recalls that his high school choral conductor "would identify leading athletes" and "convinced students that being a member of the choral group was as prestigious as being on an athletic team. Her logic was that well-developed bodies would produce relatively mature voices". "As a result, as an un-athletic fourteen-year-old my location in the concert choir was between the co-captain of the football team and a leading basketball player" (Miller, 2008, p. 18). Clearly, Miller's conductor was effectively recruiting influential sporting peers to the choral program so that it would be a socially acceptable activity. This

is an example of the broadening of the concept of masculinity advocated by Mills.

Incorporation of kinaesthetic learning

Sport-like, active music lessons and choral rehearsals can work very well. Voice pedagogues already use the term “vocal athlete”. Sessions that start with physical “warm ups” align well with physical education lessons. Indeed, Kodály believed “singing connected with movements and action is a much more ancient, and, at the same time, more complex phenomenon than is a simple song” (Kodály, 1974, p. 46).

Voice pedagogy and choral methodology support physical involvement in singing. Rodney Eichenberger’s work encourages the singers to move in rehearsal to assist with vocal technique and interpretation (Eichenberger, 2001). Castles claims “boys like action” (Castles, 2009, p. 40). The Kodály method encourages using the large limbs for the feeling the beat. Singing while walking the beat or dancing is a valuable way of developing a sense of the beat in singers while, at a technical level, encouraging them to keep their knees unlocked and their hips free. Cooksey recommends using “physical gestures that serve as a visual-kinaesthetic metaphor for some aspect of the vocal skill being targeted” such as “pretending to throw a Frisbee, spreading open arms down and away with voicing or turning hands in rapid circles in front of the abdomen” to encourage active breath support and healthy voice use. (Cooksey, 2000, p. 829). Clapped ostinati, games and the Curwen hand signs are also part of the stock in trade of the Kodály teacher and can make the music classroom and rehearsal room more sporty places. The author of this paper has incorporated considerably increased movement into his secondary classes and rehearsals and found this improves singing, attitudes to music and lesson effectiveness (Young, 2006, pp. 19, 74-75). Continuing Kodály games throughout schooling would further encourage the allying of sport and singing and Ashley validates the value of singing as “social play” (Ashley, 2009, p. 146).

The value of older peers as role models

Ashley also notes the sociological value of older peers singing as role models for younger students. Boys will look up to young men who are the age of their older brothers and will emulate their singing behaviour. He uses Mechling’s term “fratriarchy” “to reflect the fact that it is the community of older brothers rather than adults who are the main influences on boys’ identity and aspirations.” (Ashley, 2009, p. 156). Ashley notes younger boys

seek reassurance that plenty of other boys sing and that “those boys that do are ‘normal’ in the sense that they also play sport, fight each other, have a laugh and so on” (Ashley, 2009, p. 157).

Environment within the rehearsal or class

There is no point in recruiting young men to join choir rehearsals or music classes if the experience is unsatisfactory. Kodály exhorts us to “teach music and singing at school in such a way that it is not a torture but a joy for the pupil” (Kodály, 1974, p. 120). By contrast, Thurmann and Welch begin their text with some horrific vignettes. Here is one:

“As a child I loved to sing. I sang all the time. One day the music teacher at school had us all sing for her by ourselves, and she divided us up into two groups- the bluebirds and the crows.”

“I was a crow”

“Well, I grew up on a farm, and I knew what crows sounded like. I haven’t sung since”

(Thurman & Welch, 2000, p. xii)

Leon Thurman writes:

All human beings have experiences that are interpreted as threatening and we have experiences that we interpret as beneficial, and we evolve reactive behaviour patterns in response to them...The only way to change a protective-prominent ratio toward a constructive-prominent ratio is to create consistently safe surroundings. (Thurman, 2000, p. 25).

Oakes writes that it is “the confidence of each individual singer which must be carefully and consistently encouraged”. He says the teacher must “strive to maintain an environment that is a safe place to sing and experiment with the voice” (Oakes, 2008, p. 116). Cassidy Parker believes that the classroom should be a friendly place. She reports, “social interaction produced the highest levels of excitement in the students. Excitement led to intrinsic motivation. Therefore, we can conclude that if students are with friends in the choral classroom, they will have higher levels of excitement and in turn, develop greater intrinsic motivation.” Later she notes, “for many students, the school chorus becomes part of their social identity as the group’s social bonds grow”. She remarks “teens are vulnerable in the classroom” but “if an environment is deemed safe and trustworthy...the singing experience will be one that fosters growth of individuals and their voices” (Cassidy Parker, 2007, pp. 28-29). A supportive environment, where strong peer relationships can be forged, would enable students to sing through the voice change with

confidence. Creating this environment might require courage on the part of the teacher to demand and enforce interpersonal respect and the valuing of others as core attributes of classroom discourse (Young, 2009, pp. 75,76).

Research on boys' learning styles

Freer recommends "a change of activity focus or location in the room about every twelve or thirteen minutes". This accords with current Kodály teaching methodology, which recommends that lessons comprise a number of short focuses (Klinger, 1990). In addition, Freer suggests teachers "take advantage of research suggesting that competition and timed activities promote learning in male students" (Freer, 2007, p. 29).

Bromfman recommends repetition of activities with variety when explaining the "research in motor learning in relation to skill acquisition". He finds "for optimal physical learning to occur, repetition should ideally consist of a variety of similar tasks.....related to, but not an exact replication of the skill to be learned" (Bromfman, 2009, p. 61). Leon Thurman says the brain learns by "target practice" and the adolescent male needs opportunities for continual "target practice" throughout the voice change process. (Thurman, Human-Compatible Learning, 2000, p. 196). This approach also reflects the use of focus teaching in the Kodály method where each focus will usually end with a reinforcement stage, which is a repetition of the skill learned in a new way (Klinger, 1990, pp. 25-28). Similarly, the practice activities undertaken after a musical element has been "presented" or "made conscious" provide just the sort of "target practice" that Thurman recommends (Klinger, 1990, p. 57-61).

Separation of boys and girls during the voice mutation

The separation of male and female singers during voice change is recommended by a number of researchers (Freer, 2007; Brinson, 1996), so that boys are less self-conscious. This may not be possible in many circumstances. If so, students should be seated sensitively so that boy trebles are not placed with sopranos for example. Changing voice boys can sit together, male trebles in a separate group and the girls in another group again. The teacher can make clear the fact that a male treble singing in the same octave as a soprano is not automatically 'a girl' just as a trumpet playing in the same octave as a flute does not mean that the trumpet is a flute ('gendered' instruments are chosen here on purpose). This classroom arrangement worked for the author in a co-educational context in the past.

Modal and head voice

While professing a love of the sound of the Head Voice, Ashley suspects that "for boys who do not sing, I have reached the conclusion that an introduction to singing has to be through the modal voice" while the "boy voice, in its full range of capability from head/falsetto downwards" will become a "small specialist niche" for those boys who are interested in singing and want to extend themselves (Ashley, 2009, pp. 168-169). Ashley's finding is at variance with prevailing pedagogy. The author, continuing to work in an all boys' school, with perhaps the luxury of boys who are willing to experiment with their voices, continues to develop both head and chest adjustments of the voice. This follows Ancel's approach with the Australian Boys Choir. Ashley's material suggests, however, that the teacher needs to start by using whatever vocal register will work in his or her context.

Unison singing range and repertoire

Cooksey states "Unison singing is possible". He complains "most published unison songs have pitch ranges that are too wide or the appropriate ones are in keys that force many changing voices into pitch ranges that they are incapable of singing without excess vocal effort" (Cooksey, 2000, p. 824). This presents challenges for the Kodály teacher for whom unison singing of repertoire and scales is essential for teaching musicianship and music theory. In Queensland this problem is ameliorated by the Late Beginner sequence of concepts, which starts with restricted range (doh, re and mi) and builds gradually. The teacher will encounter students at different stages of voice mutation, but good voice teaching coupled with careful choice of keys should enable the teacher to accommodate most changing voice boys (Young, 2006, p. 20). Students with particularly unruly voices and restricted ranges can learn to swap octaves and still participate in tune in class activities without compromising their vocal comfort or development.

Exercises and the development of vocal technique

Cooksey does not seem to advocate intense vocal training and he reserves his technical advice for those boys who are having trouble singing through their range, in particular, having a 'hole' between C4 and F4. Like many other researchers, he recommends vocalising downward through the falsetto (Cooksey, 2000, p. 829). He states "physically efficient register transitions can be facilitated by vocalising from the upper range down-ward if falsetto (head voice) register can be produced with ease". "These register transition

processes can produce a very consistent, efficiently produced tone throughout the singer's pitch range" (Cooksey, 2000, p. 828). David Jorlett, Anton Armstrong, and Jerry Blackstone also support maintaining the Head Voice with Blackstone advocating extensive use of Head Voice for settling voices (Blackstone, 1998).

Cooksey also recommends spoken sighs, which glide smoothly from head to chest (Cooksey, 2000, p. 829). These exercises are part of the voice development regime advocated by Westminster Choir College (Haasemann & Jordan, 1991, p. 62). Cooksey suggests these exercises be refined into descending 5 note and 3 passages as the voices develop. He also recommends imitation of teacher modelled sounds with various pitch inflections and voice qualities. The author has found all of these exercises very valuable.

In the quest for good intonation during the voice change, the author recommends viewing correct intonation as 'an achievable challenge rather than a quixotic goal.' The word 'closer' will be more encouraging and effective than 'wrong'. The teacher should have aural and vocal solutions for the hard working struggling student and also have motivating strategies for the less involved student (Young, 2006, p. 20). The teacher should also check all of the usual physical causes of out of tune singing, such as poor breath management, bad body alignment, tight jaw or tongue (Young, 2006). If the basic physical coordination of the student appears in order, then aural training will assist. Inner hearing and 'silent singing' are essential (Young, 2006). Again, inner hearing exercises are core activities in the Kodály method.

General voice teaching including training in voice production, resonance, breath management, diction, and body alignment also enhance good vocal coordination. Researchers and practitioners provide excellent exercises specifically for male changing voices. Ancel, who has had considerable success with changing voices, has developed the "loo law" exercise (Ancel, 2010). Similarly, White and White have developed excellent exercises, which take advantage of the vowel formants and vowel modification to assist in making the register shift of the voice more comfortable and less noticeable (2001). Once a teacher is aware of the physiology of singing, he or she can develop their own exercises and incorporate them into classes. Moreover, the repertoire of the method can be sung, for example, on fricative consonants (such as "th" voiced or unvoiced) to encourage engagement of lower abdominal support and release of the tongue.

It is imperative that the teacher who wishes students to use their voices possesses the skills to empower them to use their voices successfully.

Adolescent males can sing with more accuracy and vibrancy than is presently expected with diligent but not excessive training in a safe supportive environment. If classroom teachers are going to use the voice as the core means of music instruction, it follows that voice teaching should be incorporated intrinsically into teaching focuses. In the case of boys, this is necessary if the aural discovery of musical concepts is to be facilitated by the singing of material in which those concepts are found. Moreover, facility with the instrument will build confidence in learning, satisfaction in competent singing and joy in successful performance.

References

- Ancel, N. (2010). Building voices and concepts: Thirteen annotated vocal exercises for studio and choral rehearsal. In S. Harrison (Ed.), *Perspectives on Teaching singing: Australian vocal pedagogues sing their stories*. Bowen Hills. Queensland, Australia: Australian Academic Press.
- Ashley, M. (2009). *How high should boys sing? Gender; authenticity and credibility in the young male voice*. Farnham, Surrey, England: Ashgate Publishing Limited.
- Blackstone, J. (Writer), & Blackstone, J. (Director). (1998). *Working With Men's Voices* [Motion Picture]. Santa Barbara.
- Brinson, B.A. (1996). *Choral music: Methods and materials*. New York, United States: Schirmer Books.
- Bromfman, J. (2009). Repeating with variety: Implementing motor learning theory in the Middle School choral rehearsal. *The Choral Journal*, 50(1), 61-63.
- Cambiata Press. (n.d.). Cambiata Press. Retrieved April 19, 2011 from Cambiata Press: <http://www.cambiatapress.com/>
- Cassidy Parker, E. (2007). Intrapersonal and interpersonal growth in the school chorus. *The Choral Journal*, 48(26- 31).
- Castles, A. (2009). Oh Boy(s)! Ideas for engaging boys in music. *Music In Action*, 7(2), 40.
- Chapman, J., & Morris, R. (2006). Breathing and support (p. 52). In J. Chapman (Ed.), *Singing and teaching singing: A holistic approach*. San Diego, California, United States: Plural Publishing.
- Cooksey, J. (2000). Male adolescent transforming voices: voice classification, voice skill development, and music literature selection. In L. Thurman, G. Welch, & J. Ostrem (Eds.), *Bodymind and Voice* (Vol. 3, pp. 821-841). Minneapolis, Minnesota, United States: Fairview Voice Centre.
- Cooksey, J. (2000). Voice transformation in male adolescents. In L. Thurman, G. Welch, & J. Ostrem

(Eds.), *Bodymind and voice: Foundations of voice education* (Vol. 3, pp. 718 -738). Minneapolis, Minnesota, United States: Fairview Voice Centre.

Cuskelly, J. (2008). Singing for meaning: What the students have to say. *Bulletin of the International Kodaly Society*, 33(2), 21.

Eichenberger, R. (2001). *Enhancing musicality through movement*. Santa Barbara: Santa Barbara Publishing.

Freer, P.K. (2007). Between research and practice: How choral music loses boys in the middle. *Music Educators Journal*, 94(2).

Friar, K.K. (1999). Changing Voices, Changing Times Recent developments in changing-voice theory can help adolescent boys and girls sing "through the change". *Music Educators' Journal*, 86(3).

Haasemann, F., & Jordan, J. (1991). *Group vocal technique*. Chapel Hill, North Carolina, United States: Hinshaw Music Inc.

Harrison, S.D. (2006). Engaging boys in a sequential, voice-based music program. *Australian Kodály Bulletin*.

Harrison, S.D. (2005). Music versus sport: A new approach to scoring. *Australian Journal of Music Education*, (1), 56-61.

Klinger, R. (1990). *Lesson planning in a Kodály setting*. Clayfield, Queensland, Australia: Clayfield School of Music.

Kodály, Z. (1974). *The selected writings of Zoltan Kodály*. London, United Kingdom: Boosey and Hawkes.

Miller, R. (2008). Acknowledging and indebtedness. *Choral Journal*, 49(5), 16-22.

Mills, M. (2009). Teaching boys: Gender constructs in education. *Independent Education*, 39(2), 18-19.

Oakes, V. (2008, May). The developing male voice: Instilling confidence in the young male singer. *Choral Journal*, 116- 118.

Phillips, K. (1996). *Teaching kids to sing*. Belmont, California, United States: Schirmer.

Phillips, K., & Aithchison, R. (1997). Effects of psychomotor instruction on elementary general music students' singing performance. *Journal of Research in Music Education*, 45(2), 185-196.

Queensland Studies Authority. (2004). *The Senior Music syllabus*. Brisbane, QLD: The State of Queensland.

Richards, H. (1922). *Church choir training*. London, England: Joseph Williams Limited.

Roe, P.F. (1983). *Choral music education*. Englewood Cliffs, New Jersey, United States: Prentice-Hall Inc. .

Swain, J. (2003). How young schoolboys become somebody: The role of the body in the construction of masculinity. *British Journal of Sociology of Education*, 24(3), 299-314.

Swanson, F.J. (1960). When voices change: An experiment in Junior High School music. *Music Educators Journal*, 46(4), 50.

The Cambiata Institute of America for Early Adolescent

Vocal Music. (n.d.). The Cambiata concept. Retrieved from: <http://www.cambiatapress.com/CVMIA/TheCambiataConcept2.html>

Thurman, L. (2000). Human-compatible learning (pp. 188-301). In L. Thurman, G. Welch, & J. Ostrem (Eds.), *Bodymind and voice* (Vol. 1). Minneapolis, Minnesota, United States: Fairview Voice Centre.

Thurman, L. (2000). The astounding capabilities of human bodyminds (pp. 18-26). In L. Thurman, & G. Welch (Eds.), *Bodymind and voice: Foundations of voice education* (Vol. 1). Minneapolis, Minnesota, United States: Fairview Voice Centre.

Thurman, L., & Klitzke, C. (2000). Highlights of physical growth and function of voices from prebirth to age 21 (pp. 696-703). In L. Thurman, & W. Graham (Eds.), *Bodymind and voice: Foundations of voice education* (Vol. 3). Minneapolis, Minnesota, United States: Fairview Voice Centre.

Thurman, L., & Welch, G. (2000). Sunsets, elephants, vocal self-expression and lifelong learning (pp. xi-xxiv). In L. Thurman, & G. Welch (Eds.), *Bodymind and voice: Foundations of voice education* (Vol. 1). Minneapolis, Minnesota, United States: Fairview Voice Centre.

Welch, G. (1994). The assessment of singing. *Psychology of Music*, 22, 3-19.

Welch, G. (2000). The developing voice (pp. 704-717). In L. Thurman, G. Welch, & J. Ostrem (Ed.), *Bodymind and voice: Foundations of voice education*. Collegeville, Minnesota: Voicecare Network.

Welch, G. (n.d.). *The Sing Up survey*. Retrieved from: <http://www.singup.org/magazine/magazine-article/view/24-the-sing-up-survey/>

Welch, G. (2010). *Yes, we can!* Retrieved from: <http://www.singup.org/magazine/magazine-article/view/102-yes-we-can/>

White, C.D., & White, D.K. (2001, May). Commonsense training for changing male voices. *Music Educators Journal*, 39-43+53.

Young, A. (2006). Classroom strategies for changing voice boys. *Australian Kodaly Bulletin*, 17-23.

Young, A. (2009). The singing classroom: Singing in classroom music and its potential to transform school culture (pp. 62-78). In S.D. Harrison (Ed.), *Male voices: Stories of boys learning through making music*. Camberwell, Victoria, Australia: ACER Press.