

Introduction:

This is a live recording of Voice Workshop's 'Life Cycle of the Voice' day, written and delivered by leading expert Dr Jenevora Williams. This day forms part of the MA Professional Practice (Voice Pedagogy) run in association with University of Wales Trinity St David. The lecture day is based on extensive research and a list of the research is included in full for each chapter. These films provide an excellent introduction for any singing teacher or choral conductor to an area that can then be studied further in greater detail.

Recommended Reading:

Abitbol, J. (2006). Odyssey of the Voice. San Diego, Plural Publishing.

Brunssen, K. (2018). The Evolving Singing Voice. San Diego, CA, Plural Publishing inc.

McPherson, G., Ed. (2006). The Child as Musician, Oxford University Press.

Williams, J. (2nd Ed 2018). Teaching singing to children and young adults. Oxford, Compton Publishing Ltd.

Film 1: General Background

This film uses a number of perceptual tests to allow you to consider the differences between male and female voices from birth through to adolescence. It begins to challenge the myths as to whether we should teach singing to children.

References:

Moore, R. and J. Killian (2000). "Perceived gender differences and preferences of solo and group treble singers by American and English children and adults." Bulletin of the Council for Research in Music Education 147: 138-144.

Sargeant, D., Sjölander, P., & Welch, G. (2005). Listeners' identification of gender differences in children's singing. Research Studies in Music Education, 24, 28-39

Film 2: Where it starts (babies)

This film contrasts the adult vocal apparatus with an infant. It provides an exploration of the larynx and the lungs. It also considers the purpose of infant vocalisation.

References:

Slides: Infant and adult larynx/lung capacity: Images by Harvey Taylor taken from Williams, J (2018) Teaching Singing to Children and Young Adults, Compton Publishing

Edwin, R. (1990). Out of the mouths of babes. The NATS Journal, 46 (3), 38.

Williams, Jenevora; (2010) The implications of intensive singing training on the vocal health and development of boy choristers in an English cathedral choir. Doctoral thesis, Institute of Education, University of London.

Film 3: Children Pre-school Singing

This film explores singing with children under the age of four years. This covers pitch range, teaching rhythm and pitch, boosting language learning and group co-operation.

References:

Atterbury, B. W., & Silcox, L. (1993a). The effect of piano accompaniment on kindergartners' developmental singing ability. Journal of Research in Music Education, 41(1), 40-47.

Atterbury, B. W. & Silcox, L. (1993b). *A comparison of home musical environment and musical aptitude in kindergarten students. Update: Applications of Research in Music Education*, 11(2), 18-21.

Barrett, M S (2012) *Oxford Handbook of Music Education volume 1*, ed McPerson, G and Welch, G. Part 2, *Music learning and teaching in infancy and early childhood*

Boardman, E. L. (1964). *An investigation of the effect of preschool training on the development of vocal accuracy in young children (Doctoral dissertation, University of Illinois). Dissertation Abstracts*, 25, 1245.

Overy, K 2015, 'Musical outgroups and the paradox of social bonding: Comment on "Music, Empathy, and Cultural Understanding" by E. Clark et al.' *Physics of Life Reviews*. DOI: 10.1016/j.plev.2015.11.001

Trehub, S. E. (2006). *Infants as musical connoisseurs. The Child as Musician: a handbook of musical development*. G. McPherson. Oxford. UK, OUP.

Film 4: Children 4 to 7 Years

Here we look at both the vocal possibilities and limitations of young voices aged 4 to 7 years. It explains what we can and cannot teach them.

References

Edwin, Robert (1987) *The Care and Feeding of Young Voices, Journal of Singing, March/April, Vol. 43 (3), p. 44.*

Rutkowski, J. (1996). *The effectiveness of individual/small group singing activities on kindergartners' use of singing voice and developmental music aptitude. Journal of Research in Music Education*, 44(4), 353-368.

Rutkowski, J. & Miller, M. S. (2003b). *The effectiveness of instruction and individual/small group singing activities on first graders' use of singing voice and developmental music aptitude. Contributions to Music Education*, 30(1), 23-28.

Film 5 - Children 7 to 11 years

Here we begin to expand the repertoire of what can be taught to this age group. This includes a range of tips on how to teach singing.

References

Cooper, N. A. (1995). *Children's singing accuracy as a function of grade level, gender, and individual versus unison singing. Journal of Research in Music Education*, 43(3), 222-231.

Edwin, R. (1992). *Kids are singers, too. The NATS Journal*, 50 (2), 51-52.

Goetze, M. (1985/1986). *Factors affecting accuracy in children's singing (Doctoral dissertation, University of Colorado at Boulder). Dissertation Abstracts 5 International*, 46, 2955A

Green, G. (1990). *The effects of vocal modeling on pitch-matching accuracy of elementary school children. Journal of Research in Music Education*, 38(3), 225-231.

Marsh, K (2012) *Part 3: Music Learning and Teaching during childhood Oxford Handbook of Music Education*

Phillips, Kenneth H. (1985) *Training the Child Voice. Music Educator's Journal. December, Vol. 72, No. 4 pp.19-22+57-58.*

Phillips, K. H., et al. (2012). *The Young Singer. Oxford Handbook of Music Education*. G. McPherson, OUP.

Welch, G. (2009). *Evidence of the development of vocal pitch matching ability in children. Japanese Journal of Music Education*, 39(1), 38-47.

Film 6 - Adolescent singers - What is happening?

This film explores the key difference between male and female voices during the onset of puberty. This involves observable, measurable differences between the two.

References:

- Barlow, C. A., & Howard, D. (2002). *Voice source changes of child and adolescent subjects undergoing singing training - a preliminary study*. *Logopedics Phoniatrics Vocology*, 27, 66-73
- Barlow, C. A., & Howard, D. (2005). *Electrolaryngographically derived voice source changes of child and adolescent singers*. *Logopedics Phoniatrics Vocology*, 30(3-4), 147-157.
- Blatt, I. M. (1983). *Training singing children during the phases of voice mutation*. *Annals of Otology, Rhinology, Laryngology*, 92, 462-468
- Boltežar, IH, Burger, ZR and Žargi, M (1996) *Instability of Voice in Adolescence: Pathological Condition or Normal Developmental Variation? Submitted at Mediterranean Meeting of Child Neurology, Portorož, Slovenia, October 1995*
- Titze, Ingo R. (2001) *Should Vocal Training Follow Vocal Development in Childhood? Journal of Singing*. Nov/Dec. Vol.58, (2) pp. 161-162.
- Welch, G.F. (2006) *Singing and Vocal Development*. In G.McPherson (Ed.), *The Child as Musician, a handbook of musical development*. (pp.311-329). New York: Oxford University Press.

Film 7 - Adolescent Girls

What are the differences in female voices during adolescence? Jenevora examines hormonal changes, glottal chinks, breathiness and potential solutions.

References:

- Abitol, J., Abitol, P., Abitol, B. (1999) *Sex Hormones and the Female Voice*, *Journal of Voice*, Vol. 13 (3), pp. 424-446.
- American Academy of Teachers of Singing (2003) *Teaching children to sing*. *Journal of Singing*, May/June, Vol. 59, (5), pp. 377-378.
- Ayres, Louisa Y., Roduner, Kenneth (1942) *Adolescent Voice Ranges and Materials Published for Adolescent Voice Ranges*, <https://babel.hathitrust.org/cgi/pt?id=mdp.39015074132831;view=1up;seq=13>
- Gackle, Lynn (2014) *Adolescent Girl's Singing Development*, *The Oxford Handbook of Singing*. Edited by Graham Welch, David M. Howard, and John Nix. August Oxford Handbooks online.
- Gackle, M. L. (2006) *Finding Ophelia's voice: The female voice during adolescence*. *Choral Journal*, Vol. 45, (5), 28-37.
- Huff-Gackle, Lynn (1985) *The Young Adolescent Female Voice (Ages 11-15): Classification, Placement, and Development of Tone*. https://acda.org/files/choral_journals/April_1985_Gackle_L.pdf [Accessed 6/1/2018]
- Miller, Richard (1995), *Breathy Young Female Voices*. *Journal of Singing*. Vol. 5, (2) pp. 37-39.
- Monks, S. (2003) *Adolescent singers and perceptions of vocal identity*. *British Journal of Music Education* 20 (3): 243-56.
- Siple, Kenneth L. (1995) *The Adolescent Female Voice: a review of the literature*. onlinefiles.eric.ed.gov/fulltext/ED391703.pdf [accessed 28/12/17]
- Sweet, Bridget (2015) *The Adolescent Female Changing Voice*, *Journal of Research in Music Education*, Vol. 63, (1) pp.70-88.

Film 8 - Technique for teenagers - Part 1

This film explores the versatility of teenage voices and the training implications for different voice qualities.

Film 9 - Technique for teenagers - Part 2

Here we explore 'resonance skills'. Topics include higher frequencies, working with nasality, deconstriction and emotions.

References:

- McKenzie, D. (1956). *Training the Boy's Changing Voice*. London: Faber and Faber Ltd.
- Blatt, I. M. (1983). *Training singing children during the phases of voice mutation*. *Annals of Otolaryngology, Rhinology, Laryngology*, 92, 462-468.
- Cooksey, J. M. & Welch, G. F. (1998). *Adolescence, singing development and national curricula design*. *British Journal of Music Education*, 15(1)
- Williams, J. (2nd Ed 2018). *Teaching singing to children and young adults*. Oxford, Compton Publishing Ltd.

Film 10 - Adolescent boys: Assessing voice change

This film looks into the stages of male adolescence and explores the research of Tanner and Cooksey. It gives essential guidance of how to work with the voice during this developmental stage.

References:

- Adler, A. (1999). *A survey of teacher practices in working with male singers before and during the voice change*. *Canadian Journal of Research in Music Education*
- Barlow, C. A., & Howard, D. (2005). *Electrolaryngographically derived voice source changes of child and adolescent singers*. *Logopedics Phoniatrics Vocology*, 30
- Barlow, C. A., & Howard, D. (2002). *Voice source changes of child and adolescent subjects undergoing singing training - a preliminary study*. *Logopedics Phoniatrics Vocology*, 27, 66-73.
- Cartei, Valentina, Bond, Rod and Reby, David (2014) *What makes a voice masculine: physiological and acoustical correlates of women's ratings of men's vocal masculinity*. *Hormones and Behavior*, 66 (4). pp. 569-576.
- Cooksey, JM, (1999) *Working with Adolescent Voices*, Concordia Publishing, St Louis, MO
- Cooksey, JM (2000a) *Voice Transformation in Male Adolescents*, In Thurman L & Welch, G (Eds) (2000) *Bodymind and Voice: Foundations of Voice Education*, The VoiceCare Network, National Centre for Voice and Speech, www.voicecarenetwork.org
- Cooksey, JM (2000b) *Male Adolescent Transforming Voices: Voice Classification, Voice Skill Development and Music Literature Selection*, In Thurman L & Welch, G(Eds) (2000) *Bodymind and Voice: Foundations of Voice Education*, The VoiceCare Network, National Centre for Voice and Speech, www.voicecarenetwork.org
- Cooksey, JM & Welch, G (1998) *Adolescence, Singing Development and National Curricula Design*, *British Journal of Music Education*, Volume 15, Issue 1
- Mayer, F. D. and Sacher, J. (n.d.) *The changing voice*. Minneapolis: Augsburg.
- Tanner, JM (1962) *Growth at Adolescence*, Blackwell Scientific Publishers, Oxford

Thurman, L. (2000). *Highlights of physical growth and function of voices from pre-birth to age 21*. In L. Thurman & G. Welch (Eds.), *Bodymind and Voice* (2 ed., Vol. 4, pp. 696-703). Minnesota, USA: The VoiceCare Network.

Vale, W. S. (1932). *The Training of Boys' Voices*. London: The Faith Press

Film 11 - Adolescent boys: Hearing voice change

As the adolescent male voice experiences significant changes, this section traces the development of the voice by listening to recordings of boys' voices throughout puberty.

References:

Ashley, M (2011) *The angel enigma: experienced boy singers' perceptual judgements of changing voices*, *Music Education Research* Volume 13 No. 3

Ashley, M (2013a) *Broken Voices or a Broken Curriculum? The Impact of Research on UK School Choral Practice with Boys*, *British Journal of Music Education* 2013 30:3, Cambridge University Press

Cooksey, JM (2000a) *Voice Transformation in Male Adolescents*, In Thurman L & Welch, G (Eds) (2000) *Bodymind and Voice: Foundations of Voice Education*, The VoiceCare Network, National Centre for Voice and Speech, www.voicecarenetwork.org

Cooksey, JM (2000b) *Male Adolescent Transforming Voices: Voice Classification, Voice Skill Development and Music Literature Selection*, In Thurman L & Welch, G (Eds) (2000)

Bodymind and Voice: Foundations of Voice Education, The VoiceCare Network, National Centre for Voice and Speech, www.voicecarenetwork.org

Dilworth, R (2012) *Working with Male Adolescent Voices in the Choral Rehearsal: A Survey of Research-Based Strategies*, *Choral Journal*, Volume 52, Issue 9, Lawton, OK

Pearce, D. (2007). *Aspects of vocal function in male adolescent choristers*. University of London, unpublished PhD Thesis.

Vickers, D. (1990). *An acoustic study into singing in boys*. unpublished MA Thesis, University College, London

Demorest, S. M. (2001a). *Pitch-matching performance of junior high boys: A comparison of perception and production*. *Bulletin of the Council for Research in Music Education*, 151, 63-70.

Film 12 - Group singing for children

This film considers how to teach group singing, whether to separate boys from girls, and appropriate repertoire. During teenage years it addresses maintaining boys' interest in singing, the Cambiata Principle for boys' choirs, and the challenges found within girls' choirs.

References:

Ashley, M (2013b) *The English Choral Tradition and the Secular Trend in Boys' Pubertal Timing*, *International Journal of Research in Choral Singing*, Volume 4 No 1

Ashley, M (2014) *Contemporary Choral Work with Boys*, Compton Publishing, Oxford

Ashley, M (undated-1) *Putting the C in Cambiata: artistic considerations and changing voices*, published on www.martin-ashley.com

McRae, S. W. (1991). *Directing the children's choir*. New York: Schirmer Books

Monks, S (2003) *Adolescent Singers and Perceptions of Vocal Identity*, *British Journal of Music Education*, 2003 20:3, Cambridge University Press

Swanson, F. J. (1977). *The male singing voice ages eight to eighteen*. Cedar Rapids, IA: Ingram.

Stockton, PH (2015) *Irvin Cooper (1900-1971) and the Development of the Cambiata, Concept for Adolescent Changing Voices*, *Journal of Historical Research in Music Education* Volume 37(1)

Swears, L. (1985). *Teaching the elementary school chorus*. New Nyack, NY: Parker

Film 13 - Young adult singers

What are the issues that young adult singers face as the voice reaches full maturity.

Film 14 - Adult females

A look at the effects on the voice of hormone changes in adult females in the monthly cycle, during pregnancy and through the menopause.

References:

- Heman-Ackah, Y.D (2004) *Hormone Replacement Therapy: Implications of Women's Health Initiative for the Perimenopausal Singer*. *Journal of Singing* Vol 60 No 5 pp.471-475
- Heman-Ackah, Y.D., Sataloff, R.T. & Hawkshaw, M.J. (2008) *How do I Maintain the Longevity of my Voice*. *Journal of Singing* Vol. 64, No.4 pp.467-472
- Sataloff, R. T. (1996) *The Effects of the Menopause on the Singing Voice*. *Laryngo-scope in The Journal of Singing* March/April
- Smith, B. and Sataloff, R.T. (2012) *Choral Pedagogy and the Older Singer*. Oxford: Plural
- Tay, Evelyn Ya Lian., Phyland. D. J., & Oates. J. (2012) *The Effect of Vocal Function Exercises on the Voices of Aging Community Choral Singers*. *Journal of Voice* Vol.26, No.5, pp672e19-672e27

Film 15 - Wellbeing and causes of ageing

This explores the health benefits of singing throughout the lifespan and especially into senior years.

References:

- Bailey, B. A. & Davidson, J. W. (2005) *Effects of group singing and performance for marginalized and middle-class singers*. *Psychology of Music*, 33, 269–303
- Beck, R. J., Cesario, T. C., Yousefi, A. & Enamoto, H. (2000) *Choral singing, performance perception, and immune system changes in salivary immunoglobulin A and cortisol*. *Music Perception*, 18, 87–106
- Beck, R. J., Gottfried, T. L., Hall, D. J., Cisler, C. A. & Bozeman, K. W. (2006) *Supporting the health of college solo singers: the relationship of positive emotions and stress to changes in salivary immunoglobulin A and cortisol during singing*. *Journal of Learning through the Arts: A Research Journal on Arts Integration in Schools and Communities*, 2, 1, article 19.
- Clift, S. M. & Hancox, G. (2001) *The perceived benefits of singing: findings from preliminary surveys of a university college choral society*. *Journal of the Royal Society for the Promotion of Health*, 121, 248–256.
- Clift, S., Hancox, G., Staricoff, R. & Whitmore, C. (2008) *Singing and health: a systematic mapping and review of non-clinical research*. Sidney De Haan Research Centre for Arts and Health. Canterbury Christ Church University.
- Grape, C., Sandgren, M., Hannson, L-O., Ericson, M. & Theorell, T. (2003) *Does singing promote well-being? An empirical study of professional and amateur singers during a singing lesson*. *Integrative Physiological and Behavioral Science*, 38, 65–74.
- Hillman, S. (2002) *Participatory singing for older people: a perception of benefit*. *Health Education*, 102, 163–171.
- Kreutz, G., Bongard S., Rohrmann S., Grebe, D., Bastian, H. G. & Hodapp, V. (2004) *Effects of choir singing or listening on secretory immunoglobulin A, cortisol and emotional state*. *Journal of Behavioral Medicine*, 27, 623–635.

Kuhn, D. (2002) *The effects of active and passive participation in musical activity on the immune system as measured by salivary immunoglobulin A (SigA)*. *Journal of Music Therapy*, 39, 30–39.

Symposium, York St. John University, York, 10 November 2009. [Google Scholar](#)

Mellor, L. (2009 b) *Singing, health and well-being: an investigation of group singing in educational and health environments, focusing on collaboration for creativity as inter-subjective, relational and emotional learning*. C4C CETL Creative Casebook. York: York St. John University. [Google Scholar](#)

Unwin, M. M., Kenny, D. T. & Davis, P. J. (2002) *The effects of group singing on Mood*. *Psychology of Music*, 30, 175–185. [CrossRef](#) | [Google Scholar](#)

Film 16 - Ageing singers: What happens to the voice?

This final film looks at the extent to which the voice declines as it ages and how to ensure longevity in the voices of older singers.

References:

David, M. (2015) *Teaching the Older Singer*. *Journal of Singing* Nov/Dec Vol 68. No.5

Heman-Ackah, Y.D., Sataloff, R.T. & Hawkshaw, M.J. (2008) *How do I Maintain the Longevity of my Voice*. *Journal of Singing* Vol. 64, No.4 pp.467-472

Linville, S, E. (2001) *Vocal Aging*. San Diego: Singular

Meredith, V. (2007) *Sing better as you Age: a comprehensive guide for adult choral singers*.

Santa Barbara: Santa Barbara Music Publishing

Sataloff, R.T. (1987) *The Ageing Voice Laryngo-scope in The Journal of Singing*. Jan /Feb

Sataloff, R.T. (2000) *The Aging Voice and its Medical Implications: what singing teachers should know parts 1 and 2*. *Journal of Singing* Vol 57 Nos 1 and 2

Smith, B. and Sataloff, R.T. (2012) *Choral Pedagogy and the Older Singer*. Oxford: Plural

Tay, Evelyn Ya Lian., Phyland. D. J., & Oates. J. (2012) *The Effect of Vocal Function Exercises on the Voices of Aging Community Choral Singers*. *Journal of Voice* Vol.26, No.5, pp672e19-672e27