

LSE Research Online

Simon Hayhoe

Multi-modal creative practice in an early years setting: theory and practice

Keynote presentation

Original citation:

Originally presented at Hayhoe, Simon (2014) *Multi-modal creative practice in an early years* setting: theory and practice. In: Making a Difference When it Matters Most, 12 Jul 2014, Medway, UK.

This version available at: hhttp://eprints.lse.ac.uk/59353/

Available in LSE Research Online: September 2014

© 2014 The Author

LSE has developed LSE Research Online so that users may access research output of the School. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Users may download and/or print one copy of any article(s) in LSE Research Online to facilitate their private study or for non-commercial research. You may not engage in further distribution of the material or use it for any profit-making activities or any commercial gain. You may freely distribute the URL (http://eprints.lse.ac.uk) of the LSE Research Online website.

Multi-Modal Creative Practice in an Early Years Setting: Theory into Practice

Presentation to the Making a Difference Workshop Day, Canterbury Christ Church University (Medway Campus), UK, Saturday July 12th 2014

> Simon Hayhoe, Childhood and Educational Sciences Canterbury Christ Church University, UK

Structure of the presentation

- A question: What is possible?
- What perceptual impairments are
 - Blindness
 - Deafness
- How perception works what we know now
- Cross modal teaching strategies in the classroom
- Questions

What can people understand? What don't people understand?

A QUESTION: WHAT IS POSSIBLE?

Traditional Images of Early Creativity





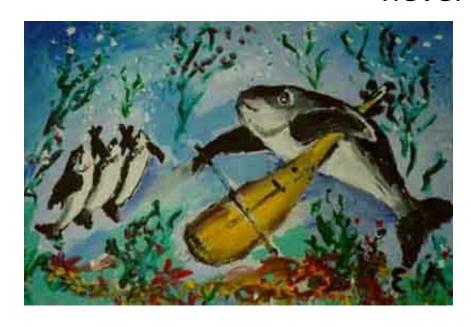




What I research

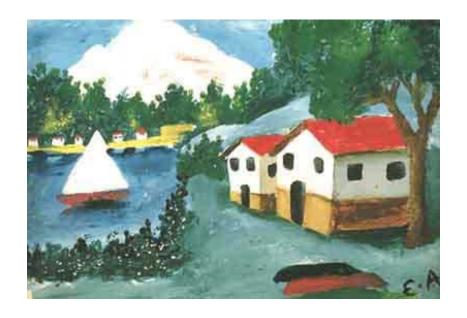
- My main research specialism is based on mythologies about disability
 - The gap between what is possible, and what we think is possible
- In particular, I am interested in blindness
- The largest and most largely held belief about blind people is that they are not capable of understanding art, or capable of developing an understanding of visual concepts
- So...

Could you explain these images to a person who has never seen?



Fish playing a violin? Colours? Perspective? What can a blind person understand of this painting?

Houses in front of eachother? Shadows? The wind in the trees? What can a blind person understand in this painting?

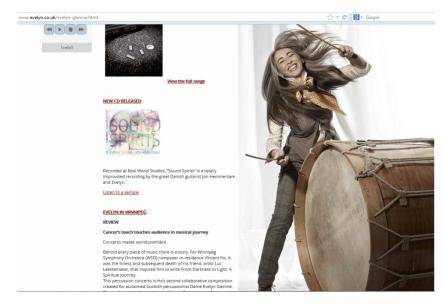


Esref Armagan and Evelyn Glennie



Evelyn Glennie is a profoundly deaf British musician, who started losing her hearing at 8 years of age, and lost it entirely at 12 years of age. She is the first full time solo percussionist in the world, and graduated with an honours degree from the Royal Academy of Music, London, in 1985 at the age of 19

Esref Armagan is a Turkish man, who was born without eyes. Thus he has no *visual* imagination or experience. He is responsible for the paintings on the previous slide, and was met by Sheikh Mohammed last year when he visited Dubai for a sale of his works at Bonhams.



How Esref draws and paints



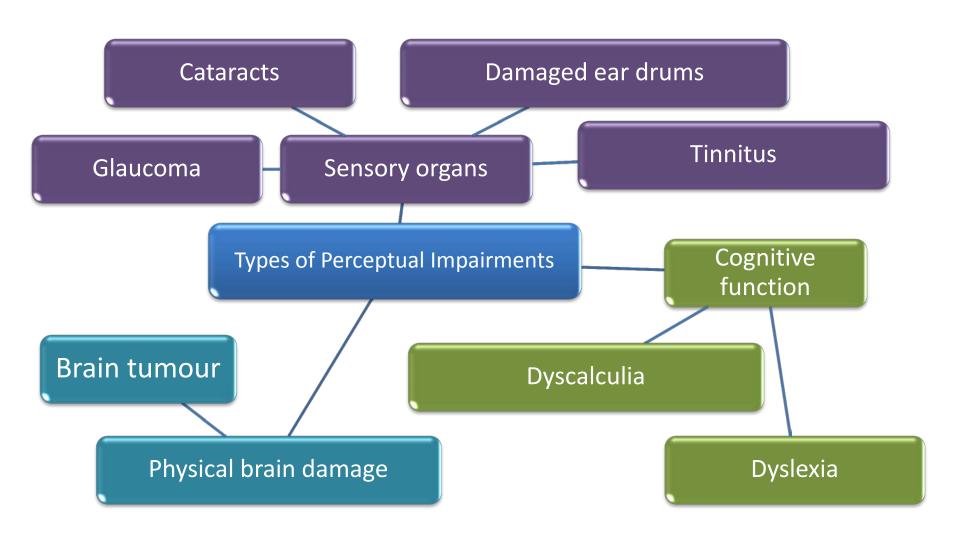
How did Esref learn to draw and paint?

- He was born without eyes into an under-educated family
- He was not sent to school
 - He was not told he could not draw or paint
- He sat around because there was nothing else to do
 - He became bored and asked people what was around him
- He drew items on card to understand them
 - Drawing on card gave him a tactile line
- He asked people about the visual elements of the things that he drew
 - He incorporated these things into his drawings
- He was told about colour, shade and perspective
 - He began to incorporate these into his paintings and images

Who has them, and how does it affect them?

WHAT PERCEPTUAL IMPAIRMENTS ARE

Types of perceptual disability



What does it sound like to lose your hearing?



Oliver Sacks on face blindness – a related cognitive form of blindness



Factors involved in perceptual disability

Disability of:

- External information information deficit
 - Literature, graphics, presentations, didactic instruction, etc.
 - Social and behavioural information
 - Gestures and inflexion in speech and presentation –
 particularly people with early and congenital disabilities
- Internal information information deficit
 - Balance perceptual impairments can affect stability and even inner ear problems
 - Awareness of surroundings

Psychology

- Many people born blind and deaf have no oral or visual imagination
- Tiredness and stress
 - not being able to judge your surroundings
 - the mind having to work twice as hard whilst interpreting other sensory information
- In extreme cases this can cause visual and audible hallucinations
 - The most notable case of this is Charles Bonnet Syndrome (Sacks, 2012)
- Stigma and shame
 - Cultural factors
 - Peer pressure and resistance

Disability dependent on age and strength of blindness and deafness

CLASSIFICATIONS OF MEMORY:

- No visual/aural memory blind or deaf from birth or very early blind, 0-4 years
- Assimilated deafness / blindness deaf / blind from mid to late childhood, 4-18 years, educated in older schools for the blind, primarily non-visual/non-aural
- Visual / aural memory deaf / blind in adulthood, 18+ years

CLASSIFICATIONS OF BLINDNESS:

- Total deafness / blindness no audio / light perception
- Minimal light / audio perception some audio / light perception, but little enough to be usable
- Distorted hearing / vision audio / light perception, highly distorted but still registered blind or deaf; e.g. achromatism, tinnitus, tunnel or no central vision, lost frequencies in hearing

What Can Hearing Impairments Teach Us

- If we understand impairments such as blindness and deafness:
 - we can work with people with impairments in the classroom
 - we can understand more about perceptions in general
- We can design curricula around an understanding of multi-modal perceptions
- We can develop ways of utilising multiple perceptions
- We can understand people with disabilities more

The scientific thinking on perception

HOW PERCEPTION WORKS – WHAT WE KNOW NOW

What do we know about perception?

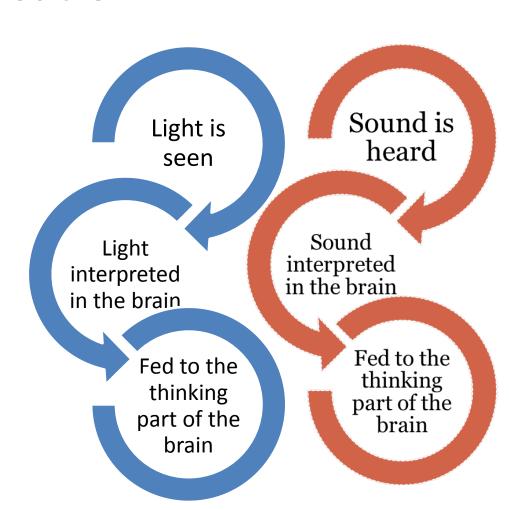
- In 1690, John Locke discussed understanding one perception through another's
- This was later tested in 1705 by Bishop George Berkeley (Hayhoe, 2003, 2008)
- However, we thought all perceptions were discrete stood by themselves (on blindness see Hayhoe, 2003, 2008)
- Many educational strategies for blind and deaf students were based on this assumption (on blindness see Hayhoe, 2008)



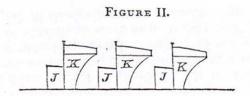


False assumptions in the history of education

- Although information could be substituted, perceptions could not. For example:
 - Speech for sign languages, such as ASL and BSL
 - Writing for touch languages, such as Braille
- Popper (1979) criticised this form of cognition in a similar manner in his empty bucket theory of thinking and learning
- We now know that this is a false assumption
 - Examples exist in the US education system in particular, where scientific theory was linked directly to learning theory
 - This science was also linked to morality stigma

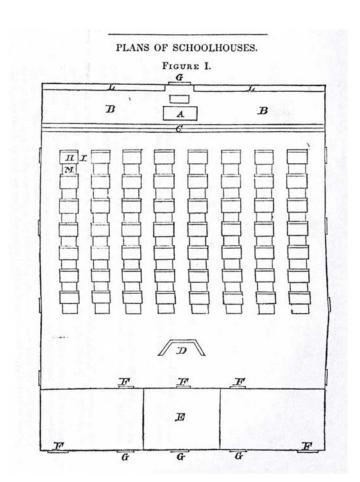


Foundation of contemporary public schools, 1839, USA – each one was to be as the other – to prevent blindness



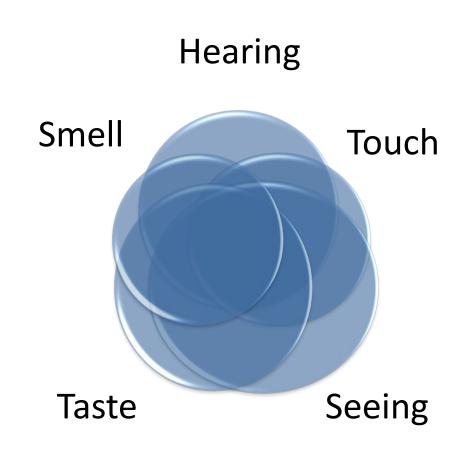
"We should never read but in the erect posture; we should never read but when the arterial system is in a state of high action... I believe an attention to the physiology and laws of vision, by parents and instructors, would be of great benefit to children, and diminish the number of opticians; for as surely as a stone thrown up will comedown, so surely the exposure to causes of evil, bring evil, at some time, in some way, upon somebody."

Mann, H. & Howe, S.G. (1839). Report of the secretary of the board of education on the subject of school houses, supplementary to his first annual report. *The Common School Journal 1/19*



From empty buckets to cross modal transfer

- Contemporary work by Charles Spence from Oxford University looks at the effect of the senses on each-other (Spence, 2010)
- His focus is on Cross Modal Transfer (CMT), first discovered by Gregory (1974) in the 1960s
- Spence's most interesting study was changing the flavour of Pringles by manipulating their crunch
 - He won an Ig Nobel Prize for this



Approaches and environmental needs in lesson periods and around the school

CROSS MODAL TEACHING STRATEGIES IN THE CLASSROOM

Structure to this Description

Background to the 4 Senses project

Timetable of the project

• The 4 Senses manifesto

The experiences of the 4 Senses project

Conclusions

Project & Exhibition Coordinators

Orchard House School (Mary West, Ralph Rolls & Simon Hayhoe)

/ Dorton House School for the Blind (Jo Wooltorton) / The

Victoria & Albert Museum (Barry Ginley)

NB: This project was conducted with the close co-operation of BlindArt (London), The Art Beyond Sight Collaborative (New York) and Art Education for the Blind (New York), three groups with established activities and expertise in this field.

Background to the project

Since Sunderland Art Gallery's project for the blind in 1913, there have been many art education exhibitions and shows in schools, colleges and museums, which have included students who are blind/visually impaired in viewings of artefacts.

However, all of these projects have educated students who are blind/visually impaired separately from their sighted peers. Or they have promoted art purely for people who are blind, usually reproduced from pieces meant primarily for vision (1 sense) to be represented through touch (1 other sense).

This project took a different approach. Rather than producing / commissioning / choosing pieces of art purely for the use of people who are blind/visually impaired, this project gathered two groups of students who are sighted and blind/visually impaired to work *together* to produce artefacts that can be appreciated by all students, and emphasise the 4 senses they had in common. These artefacts were then displayed in an exhibition at the Royal College of Art.

Aims & Objectives

- The aim of this project was to gather students who are sighted and blind/visually impaired to work on an art project, producing artefacts primarily appreciable by all students' 4 non-visual senses.
- The objective of this project is to produce and exhibit artefacts that are appreciable by people who are sighted and those who are blind/visually impaired through the emphasis of the 4 non-visual senses.

Students Involved in the 4 Senses project

The project was conducted with UVI pupils with sight from Orchard House School (aged 10-11 years old) and final year GCSE pupils from Dorton House School for the Blind (Royal London Society for the Blind, Seven Oaks, Kent – aged 15-16 years old).

The Project's Timetable

The project was in 4 distinct phases, as follows:

- Phase One: In December, students from Orchard House Preparatory School were given art exercises in representing themselves non-visually. Furthermore, Sharareh Khayami from BlindArt came to the school and gave a presentation during these exercises, describing how they appreciate art.
- Phase Two: In January, students from Dorton House School met students from
 Orchard House Preparatory School at the V&A. During this visit, they were placed
 into mixed groups, 4 from Orchard House School for every 1 from Dorton House
 School. During this visit, the students chose pieces they wanted to represent
 emphasising 4 senses from the museum.
- Phase Three: In February, both groups of students met again over the period of a week to make 4 sense representations of pieces from the museum.
- Phase Four: In March, the finished pieces were exhibited at the prize giving exhibition of BlindArt in the Henry Moore Gallery, Royal College of Art.

4 Senses Learning Outcomes

The four senses genre of art challenges these starting points, and instead begins with the following 5 assumptions:

- Senses are not discrete, but work together to form a cohesive whole – such as when it is easier to hear when you lip read, as sight cues help fill in sound gaps.
- People who have debilitated perceptions, through for instance blindness or deafness, would receive more effective communication from an art work through an enhancement of the other 4 senses as a whole.
- Art can be communicated through indirect means such as verbal and written language.
- Although art favouring 4 senses is useful for people who have perceptual impairments, the 5th sense should be catered for to include the majority of people with full sensual perception, and also to enhance the 5th sense for those with a partial perceptual impairment.
- Art favouring 4 senses can provide the fully able bodied viewer with a different understanding of

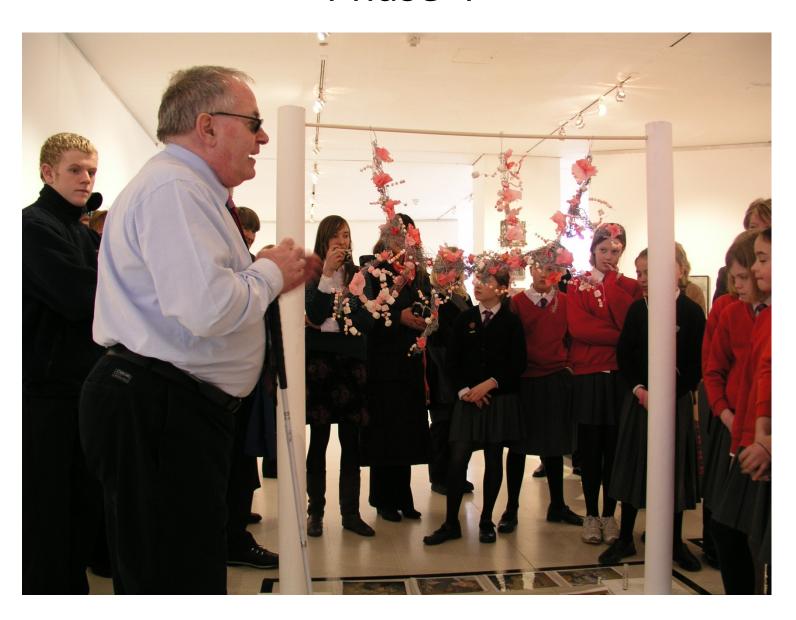




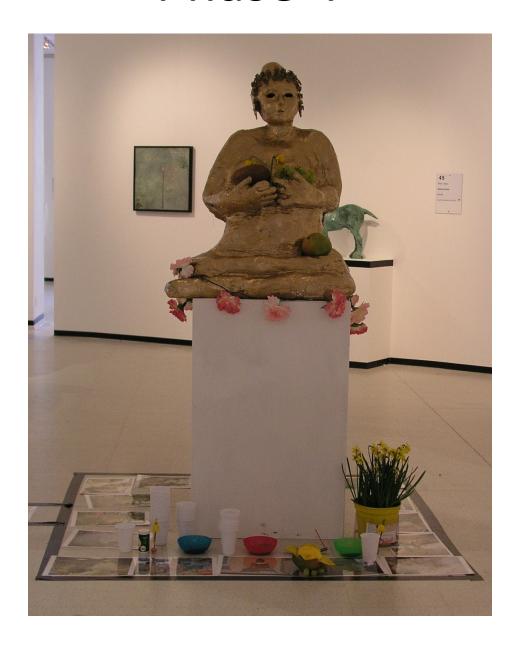












A Review of the Experience

- The students were initially reluctant to work together because of the age gap.
- It was thought initially unusual that students who were registered blind liked the Glass Gallery. However, their restricted vision made them more sensitive to the bright blocks of colour and direct simple shapes there.
- After discussing the subjects for a period, students found themselves building common frames of reference, discussing and agreeing with the form and function of their pieces.
- The students worked together well during the exercises, although the age difference still meant that students felt uneasy about mixing too freely.
- There was, surprisingly, a lack of enthusiasm and acceptance of the project by the schools' management. No senior managers turned up to the exhibition, and have since not allowed the sculptures to stay in their respective schools.
- The experience has been good not just in terms of artistic development but also in terms of disability awareness. Students from Orchard House have now gained a much greater awareness of blindness, and the structure of some disabilities.

Conclusion

- Aesthetics can provide an insight into the nature of disability in ways that other forms of education cannot do.
- Touch has become a cultural symbol of blindness, however employing the other senses appears to enhance the artistic experience.
- The process of the creation was more important than the eventual products, in terms of what the students learnt from their experiences.
- Students who were blind and visually impaired and involved with this project, still wanted to work with people from mainstream schools and function in mainstream society.
- The students found the gallery visit more stimulating because it had an artistic purpose and an end result.

References

Architectural and Transportation Barriers Compliance Board. (2000). Electronic and Information Technology Accessibility Standards (36 CFR Part 1194). Federal Register, 65, 246, 80500-80528.

Blank, M. & Bridger, W.H. (1966). Conceptual Cross-Modal Transfer in Deaf and Hearing Children. *Child Development*, 37, 1, 29-38.

Chen, D & Downing, J.E. (2006). *Tactile Strategies for Children Who Have Visual Impairments and Multiple Disabilities: Promoting Communication and Learning Skills*. New York: AFB Press.

Hayhoe, S. (2003). The Development of the Research in the Psychology of Visual Impairment in the Visual Arts, In E. Axel & N. Levent (Eds.). *Art Beyond Sight*. New York: The American Foundation for the Blind.

Hayhoe, S. (2008). God, Money & Politics: English attitudes to blindness and touch, from enlightenment to integration. Charlotte, North Carolina: Information Age Publishing.

Hayhoe, S. (2011). Non-Visual Programming, Perceptual Culture and Mulsemedia: Case studies of five blind computer programmers, In Ghinea G et. al. (Eds.). *Multiple Sensorial Media Advances and Applications: New Developments in MulSeMedia*. Hershey, Pennsylvania: IGI Global.

Hayhoe, S. (2011). Computing, Cognition, Culture and Blindness. In M. Bhattacharya et. al. (Eds.) *Emerging Technologies for Learning: Impacts on culture and cognition*. Chespeake, Virginia: AACE.

Hayhoe, S. (2012). *Grounded Theory and Disability Studies: Researching legacies of blindness*. Amherst, New York: Cambria Press.

Hayhoe, S. (2013) A review of the literature on the use of the iPad as an assistive devise for students with disabilities – with reference to the Persian Gulf. Paper presented at the Global Education Forum 2013, Dubai World Trade Centre, UAE, on the 5th March 2013.

Lowenfeld, B. (1981). *Berthold Lowenfeld on blindness and blind people: Selected papers*. New York: American Foundation for the Blind.

Popper, K. (1979). Objective knowledge: An evolutionary approach (Rev. ed.). Oxford: Clarendon Press.

Sacks, O. (2012). Hallucinations. London: Picador.

Spence, C. (2010). Cross modal attention. Scholarpedia, 5, 5, 6309.

Vygotsky, L.S. (1994). Principles of the social education of deaf and dumb children in Russia. In (Van der Veer R & Valsiner J Eds) *The Vygotsky Reader*. Oxford: Blackwell Publishers.

UAE Embassy in the US (2013) *Education in the UAE: Special Education*. Downloaded from http://www.uaecd.org/special-education on the 20th March 2013.