Vision Impairment Education: What should we do as a field? Creating a ‘clear vision’ of the role of the specialist educator in a complex and changing world

Graeme Douglas and Mike McLinden
Vision Impairment Centre for Teaching and Research (VICTAR)
University of Birmingham, UK

UNIVERSITY OF BIRMINGHAM | SCHOOL OF EDUCATION

Overview

- Introduction
- **Part 1** – Our complex and changing world
- **Part 2** – Future role of ‘specialist educator’
- **Part 3** –What we can draw on from the literature: practice and theory
- Concluding thoughts

Introduction

- Reminder of key messages from Keynote 1
- Consider our response as a field to our complex and changing world – and hopefully allow us to end the conference on an optimistic note with a ‘clear vision’ for the future!
- Reminder of the allocated task for those who attended the session (researcher-practitioner)

Specialist educator as a researcher-practitioner / agent of change

(1) Practitioner toolkit

- Subject knowledge
- Approaches and interventions
- Technical knowledge
- Pedagogical knowledge, charm

(2) Researcher toolkit

- Assessment tools
- Systematic approaches to trying things out
- Data on progress

(3) Part of a collaborative team

- class teachers, parents, TAs, habilitation workers
- young people themselves, peers.

(4) Theory

- Fills in the gaps
- Gives direction and purpose
- Reminds us ‘why’
- Helps us navigate dilemmas

PART 1 – A complex and changing world?

What's complex and changing?

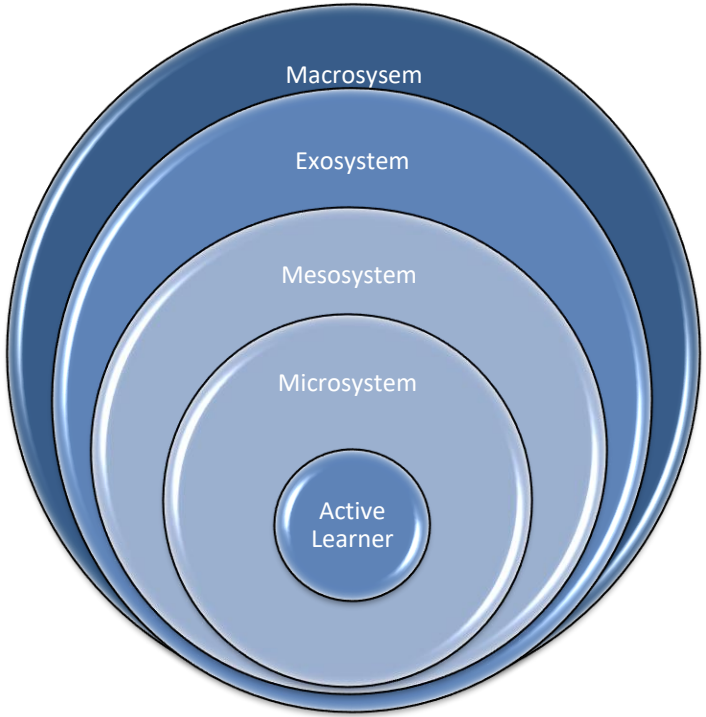
- Interactive activity:
  - Project forward to 2030 (SDGs)
  - What might we expect in terms of changes in the context in which the 'specialist educator' of CYP with vision impairment works?
  - Discuss with a neighbour then we can share five examples as a group
- We will then compare with our thoughts….

What's complex and changing?

VICTAR 'plus' activity:

- We drew on a systems model to illustrate current situation (2019-20) in UK and with consideration to international drivers
- Projected forward to 2030- to identify possible changes to population/pupils, provision, policy, people – plus mapped out new 'possibilities'
- Draw on this analysis and related framework for our planning – new book, programme focus, research direction etc.

Bronfenbrenner: Bioecological Systems Theory



Population: Learner

Provision: Proximal systems

Policy: Distal systems

Possibilities

People (e.g. special educator)

2020 - 2030

Population

- Significant changes in relation to how the population is changing / or identification of CYP with VI will have changed:
  - In the UK, % with complex needs / co-morbities
  - In the UK, high percentages (above the national profile) of CYP with VI from BME backgrounds and cultures
  - In the UK, increased number of CYP diagnosed with ‘CVI’
  - What will be the changes in other national contexts: ‘health and wealth’?

Provision

- International drivers for inclusion will alter the education provision landscape
- Changing role of specialist ‘school/college’ – ‘in-reach’ /’outreach’/ intensive blocks of input
- Changing nature of itinerant service provision (traded services, impact measures)
- Specialist services increasingly required to articulate their ‘offer’, and schools are able to purchase these services (or not).
- Schools as budget holders – less reliance on Local Authority service provision

Policy: changes and emphases

- In line with international drivers, policies place greater emphasis upon independence outcomes for CYP with disabilities/SEND.
- National drivers - England and Wales used to have aligned educational systems – devolved governments means this is changing rapidly (e.g. different terminology is emerging).
- Increasing emphasis on transition to adulthood – e.g. from 2014, England extended educational provision for CYP with SEND to 0-25 years.
- Funding to local authority services is reduced, instead funding is going more directly to schools (in some areas there has been an increase in special school uptake – the first time in many years).
- Continue to need a strong rationale for maintaining specialist training courses aligned to HE – ‘research-informed’ teaching.

Possibilities

- Exciting medical advances
- The march of technology
  - miniaturisation and speed; internet; maps; social media which has populated the maps; fast mobile data and wifi;
  - US legislation – requirements for technology is accessible(-ish);
    => Access to Learning
- Mobile technology is changing the ways young people access information and communicate:
  - All participants were using (mainstream) mobile phones; Half also used other mainstream mobile devices (Hewett et al, 2015; Longitudinal Transitions Study)

"I use an iPad in my placement for my notes. You can adjust the brightness and the darkness. Can enlarge things when they need enlarging. You can do all kinds of things with it – it's the best thing I've ever had."

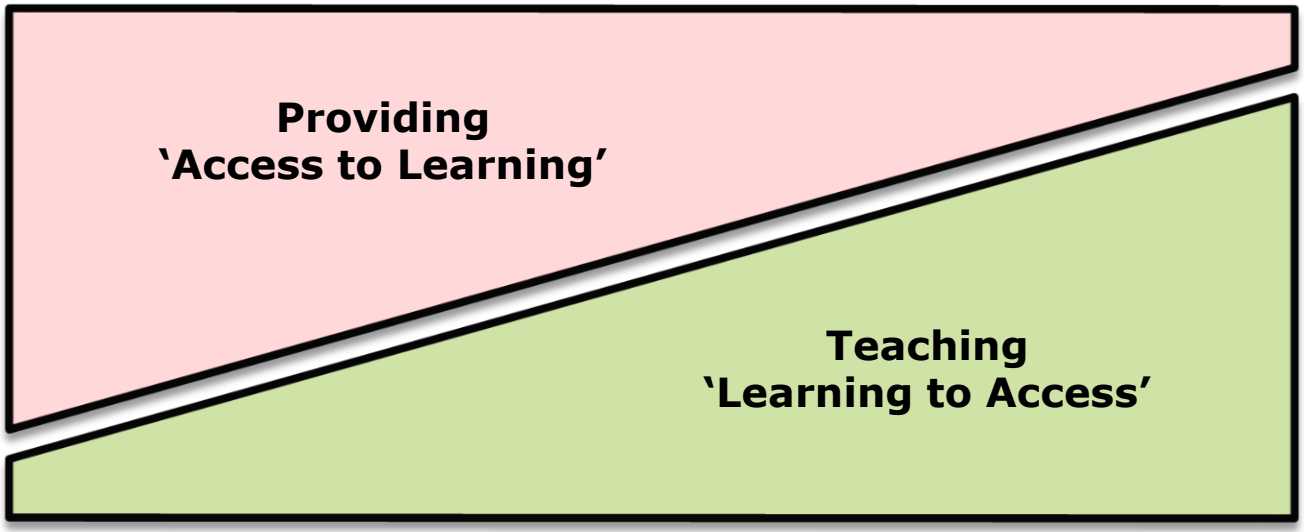
UNIVERSITY OF BIRMINGHAM

Priestley Smith School

Summing Up

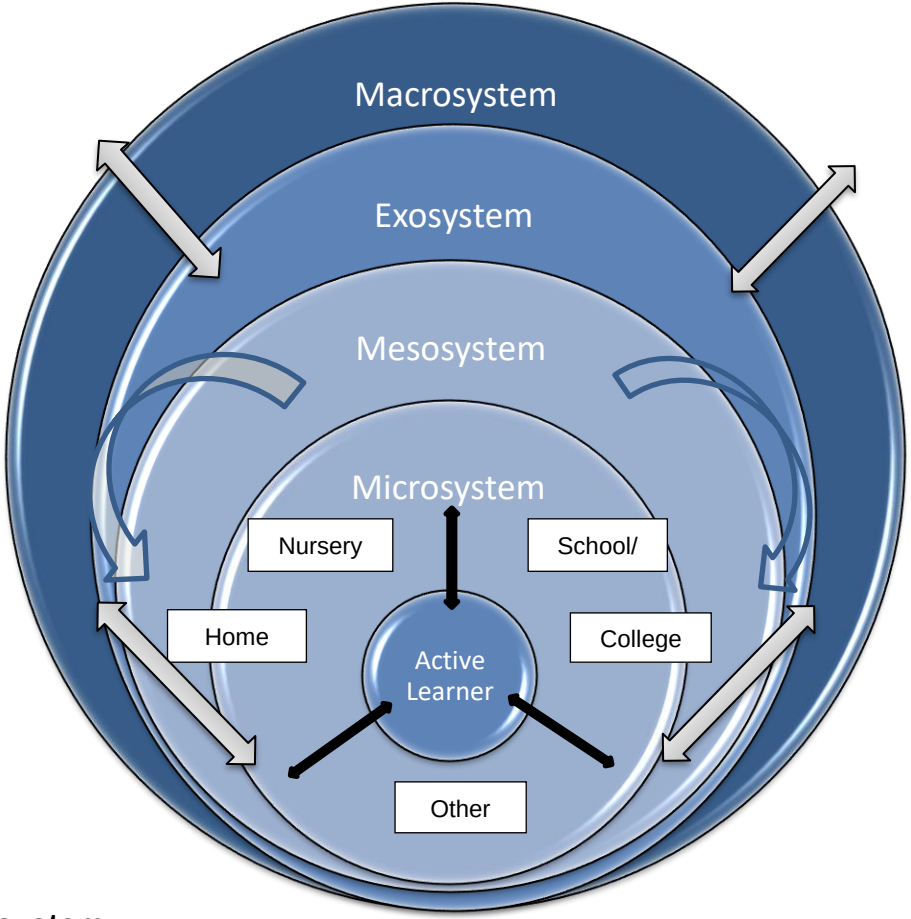
- The world of the educator is always going to be ‘complex and changing’ – because the world continues to change and CYP develop (and need to develop appropriate skills).
- Some models of disability can serve to simplify the access needs of CYP - focus either on what is wrong/deficit or what needs to change in the world.
- The “Learning to Access / Access to Learning” model and Bioecological Systems Theory (BST) seek to capture the complexity and dynamic of human development of people with vision impairment throughout a given educational pathway.
- Can therefore be helpful in thinking about the future role of the specialist educator (**People**) in a given national context.

Child's age / developmental level (Time)



Increased independence;
Emphasis upon additional curriculum

Distinctive role of specialist educator through a bioecological systems based perspective



(adapted from McLinden, Douglas et al., 2016)

Chronosystem

Early Years → **Primary** → **Secondary** → **Further** → **Higher**

UNIVERSITY OF BIRMINGHAM

PART 2 – Role of specialist educator?

- Ins

Defining what makes a specialist educator…

- We will use QTVI as example but acknowledge this is just one of many roles
- Group activity

QTVIs' role:

'Advocates of fair access'

or

'Teachers of access/independence skills'

or

'Practitioner-Researcher'

or

'Agent of (inclusive transformational) change'

or….

QTVIs' role:

'Advocates of fair access'

and

'Teachers of access/independnce skills'

and

'Practitioner-Researcher'

and

'Agent of (inclusive transformational) change'

and….

Specialist educator as a researcher-practitioner / agent of change

(1) Practitioner toolkit

- Subject knowledge
- Approaches and interventions
- Technical knowledge
- Pedagogical knowledge, charm

(2) Researcher toolkit

- Assessment tools
- Systematic approaches to trying things out
- Data on progress

(3) Part of a collaborative team

- class teachers, parents, TAs, habilitation workers
- young people themselves, peers.

(4) Theory

- Fills in the gaps
- Gives direction and purpose
- Reminds us ‘why’
- Helps us navigate dilemmas

The QTVI – is it a given?

- Example: Ireland Review

- Example (England) – National Sensory Impairment Partnership (NatSIP): Future of the sector analysis (commissioned by DfE)
  - A key conclusion is that specialists – particularly specialist services and specialist schools – need to articulate and demonstrate their unique offer and the value they add. (Lamb, 2017)

- Example: England are currently reviewing the QTVI (QTMSI, ToD) training standards?

Articulating the role of specialist educators

- The role needs articulating, before someone else attempts to…
- This is why ‘what matters’ is so important
- <u>Examples:</u>

Example: Learner outcomes project

- Making the service position clear – The ‘offer’
- Keil (2016) – A toolkit to assist visiting teacher services to design their services around broad educational outcomes (with Brent LA and RNIB) at https://www.natsip.org.uk
- Brent LA VTS – 8 outcomes
  - Learning to access
  - Use of equipment
  - Independence and negotiation skills
  - Participation
  - Meeting others
  - Getting around
  - Looking after him/herself
  - Life after school

Example: Protecting specialist services

- Young Vision Alliance campaign: alliance of 11 charities and families
- Published ‘Our Future Matters’ campaign report, which highlighted:
  - 1 in 3 local authorities cut their spending on services for children and young people with vision impairment over a 12-month period from 2016/17 to 2017/18*
  - Over a third of local authorities who had provided comparable data for 2017 to 2018 saw a decrease in the number of qualified teachers of children and young people with vision impairment (QTVIs).
- Drew on evidence from Longitudinal Transitions Study to argue:
  - The impact of not having the right support can be profound:
  - Young people with vision impairment are twice as likely to not be in employment, education or training as their non-disabled peers

Example: UK Specialist VI curriculum

- The importance of a specialist curriculum is supported by the vision impairment education literature, and access to it should be seen as a right and entitlement for all children and young people with VI. However, it is evident that the current approach to educational provision for children and young people with VI is not working. In essence, children and young people with VI are being let down by an education system which fails to understand and prioritise their true needs.
- The situation is not helped by the fact that there are several specialist curricula and outcomes frameworks for children and young people with VI being used in the UK, none of which has any statutory status. Having a range of curricula and outcomes frameworks can lead to a lack of clarity about what should be taught, when and by whom.

Example: UK Specialist VI curriculum

- Given the widening differences in education policy and terminology relating to special education and disability across the UK, having a unifying framework that enables a consistent approach to the education of children and young people with VI is particularly important.
- It is proposed that the new UK curriculum should have a clear conceptual framework based on the concept of 'access to learning/learning to access' and an agreed set of outcomes and approach to intervention that guides professional practice in teaching and habilitation from early years through to higher education and/or vocational training.
- *VIEW Discussion Paper*, (Keil and Cobb 2018) https://viewweb.org.uk/specialistcurriculum/

Example: UK Specialist VI curriculum

- A joint project […] to establish a UK wide specialist curriculum for children and young people with vision impairment (VI) is to be launched in April 2020.
- This follows the publication in April 2019, of a discussion paper that outlined why a UK wide specialist VI curriculum is needed
- The 2-year project, funded by RNIB, will draw on extensive consultation across the VI sector to provide a single, unifying framework for VI education, that will give clarity, consistency of provision for children and young people, and a shared vocabulary for non-specialists and VI specialist education professionals.
- It will be informed by existing frameworks […], have a strong theoretical underpinning, and specify outcomes that are relevant to the developmental and learning needs of children and young people with VI.
- Formalising the specialist curriculum in this way will also strengthen our chances of getting it recognised as a statutory entitlement for children and young people with vision impairment in future.

Part 3 – Examples from the literature and practice

- Example analyses
  - Example: Mobility and orientation
  - Example: Braille literacy
  - Example: Inclusive practice and teacher support
  - Example: Communication (objects of reference)

Source: Douglas, McLinden et al, 2019; Welsh Government, 2019.

Background: Mobility and orientation

- The ability to move efficiently and safely around your environment, is recognised as important e.g.
  - Long cane skills to enable a young person to navigate independently inside a building or though their wider community
  - Use of residual vision, sound
  - Use of technology
  - Specialist mobility and navigation techniques to keep safe (e.g. road crossing, ‘squaring off’, finding shoreline)

- Again: argued that children must be taught these skills, or variations of them, to be independently mobile.
- Very few quality studies found.

Evidence: Mobility and orientation

- Early pre-school holistic intervention with parents and families
  - which highlights a broad range of activities and interaction strategies to be undertaken with young children with vision impairment to encourage mobility and independence.
- Interventions should be combined with attention to general adjustments to the environment, as well as specific adjustments to specific activities to ensure they are accessible.
- As an extension of this point, the use of specialist rooms / multi-sensory environments
  - may provide particularly accessible and stimulating opportunities for young and developmentally young children, in particular those with additional disabilities.
- Mobility instruction for older children who are learning to move around the outside environment (e.g. learning to cross roads)
  - should take place in those authentic environments
  - precise situated instruction involving verbal rehearsal before actions and practice appears to lead to successful learning

Implications: Mobility and orientation

- Little evidence of successful interventions… but:
  - **starting interventions as early as possible is beneficial** (e.g. to develop independent mobility, dressing, food preparation), with no obvious disadvantages
  - **recognise that mobility and independence is both possible and desirable**
  - **maximising mobility and independence before children enter secondary school** has (at least) practical advantages

Background: Braille literacy

- Much evidence associated with ***need*** – reading speed, accuracy, comprehension is commonly delayed (print and braille).
- The most researched area in vision impairment education (mainly *reading*).

Evidence: Braille literacy

- No evidence that using speech technology will hinder braille learning.
- No evidence that first learning uncontracted braille will hinder later learning of contracted braille.
- High levels of teaching input appears key.
- Introducing braille without contractions (e.g. linking with reading schemes of sighted peers) seems justifiable
- Successful tactics, although only moderate evidence:
  - focussing upon associating braille letters and letter clusters with phonemes
  - using teaching materials and activities based upon highly motivating words and content
  - tracking and discrimination-type activities
- Refreshable braille technology has not been investigated – but logic suggests its practical value

Background: Inclusive practice and teacher support

- To create an inclusive (and enabling) learning environment:
  - environmental adjustments (or inclusively design); peer, teacher, and parental training
- Environmental audits.
  - physical adjustments include: management of lighting ; use of tactile signage (e.g. braille labels on doors)
  - social adjustments include: general procedures and approaches to behaviours to avoid potential physical hazards (e.g. always tidying, never leaving chairs in corridors / on routes); consistent use of accessible file formats; policies which highlight tolerance of difference.
- Training of peers, staff and parents.
  - many may have little knowledge about vision impairment.
  - ‘visual awareness training’ to promote inclusive behaviours and positive attitudes.
- Teacher support – e.g. Teaching Assistants

Evidence: Inclusive practice and teacher support

- **One study** identified: *no evidence of positive impact* of the training of pre-service teachers to improve their attitude towards teaching pupils with vision impairment in their classroom.
- **No studies** were identified which systematically investigated the impact of environmental audits or peers awareness training.
- No educational interventions in relation to teaching support were identified.
  - Particularly surprising given the common use of teaching assistants in the support and education of children with vision impairment.

Background: Communication (objects of reference)

- Tangible symbols include three-dimensional cards embedded with whole or partial objects to represent a person, place, activity, object, idea, or action.
- The approach has been used to support communication development for young and developmentally young people with vision impairment.
- The terms ‘objects of reference’ and ‘object symbols’ are often used in a similar way.

Evidence: Communication (objects of reference)

- There is a ‘moderately strong’ evidence base that **tangible symbols** (or **objects of reference**), which are specifically designed to maximise access by children with vision impairment, can have a positive impact on the development of communication.
- Of importance:
  - selecting and designing appropriate symbols,
  - structured and consistent use
  - most effective when associated with communicating relevant and motivating topics – e.g. linked to singing, sensory play, and juice.

Concluding Thoughts

Concluding Thoughts

In Keynote 1 we explored

- **What matters?** Considered what we might value as a field
- **What works?** Examined the nature of evidence and evidence-based practice
- Considered how we can think about **balancing** curriculum access to ensure learner is developing personal agency

Concluding Thoughts

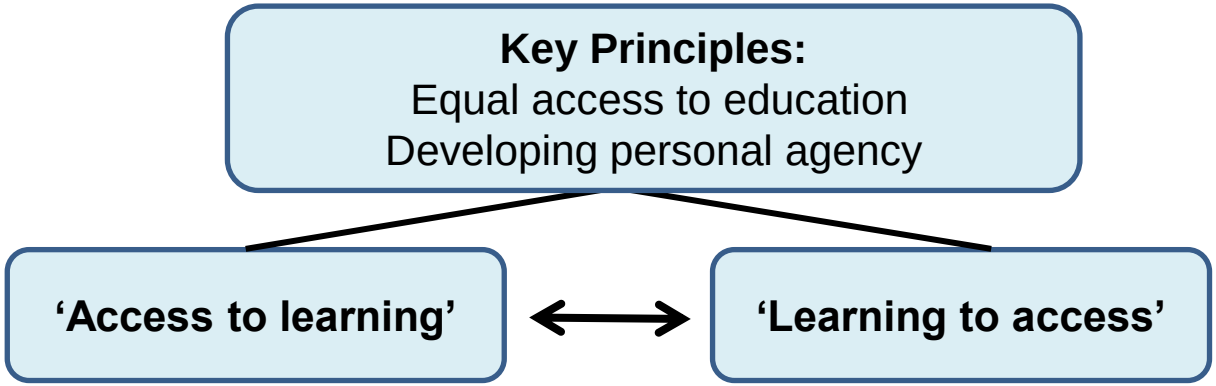
In Keynote 2 what we explored the significance of the specialist educators thinking in particular about their roles as:

- researcher practitioner;
- agents of change (working within and between systems);
- the national and cultural contexts in which education takes place.
- the evidence base informing such practice (practice and theory).

Concluding Thoughts

Welsh Government Teacher Guide, Douglas and McLinden 2019, p23:

- A challenge for the educators involved is deciding upon the appropriate combination of interventions and having the appropriate skills to implement them.
- The complexity of navigating this range of interventions requires multi-agency and collaborative working with the children vision impairment and their families.
- There can be tensions when making such decisions – which is why it is important to remember **What Matters!**



- Text modification print enlargement 'versus' development technology skills;
- Sighted guide 'versus' mobility teaching;
- Sighted reader 'versus' the use of computer technology;
- Anticipatory adjustments 'versus' teaching of self-advocacy skills.
- Ryan: "When I was 9 I hated braille. Now I'm 18, I love it."
- Primary teacher: "He doesn't need mobility yet […] – when he gets to secondary school…"
- "We don't use LVDs – I understand less well resourced places do, but we always prepare large print."

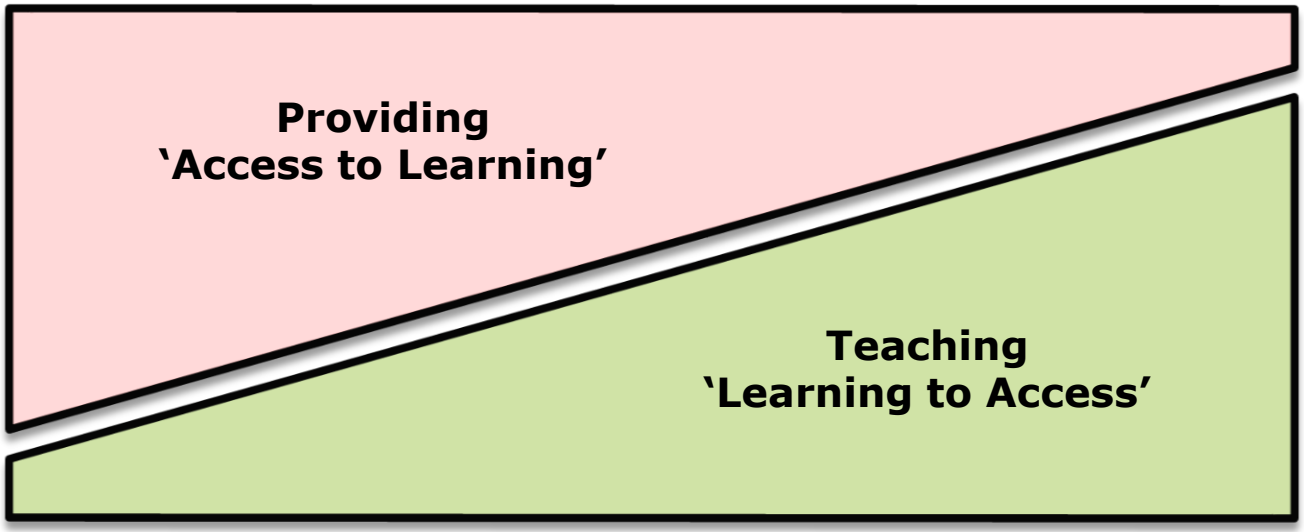
Concluding Thoughts

- Useful global reference in mapping out a Clear Vision for the Future is Sustainable Development Goal 4 - concerned with developing ‘inclusive and equitable quality education’.
- SDG4 aims to promote universal pre-primary, primary and secondary education leading to ‘effective and relevant learning outcomes’ for *all* children, youth and adults as a foundation for lifelong and life-wide learning, thereby ensuring equitable opportunities to education are provided through a holistic and lifelong learning perspective (UN, 2015).

Concluding Thoughts

- How do we seek to ensure such *equitable* opportunities to education are provided?
- Given the widening differences in education policy and terminology relating to special education/disability nationally and globally, having a ‘unifying framework’ that enables a consistent approach to the education of children and young people with VI is particularly important. (e.g. Keil and Cobb 2018)
- We have outlined such a framework based on the concept of ‘access to learning/learning to access’.

Child's age / developmental level (Time)



Increased independence/personal agency;
Emphasis upon additional curriculum

Concluding Thoughts

- Our next step is to work together as a field to develop an agreed set of outcomes and approach to intervention that guides professional practice in teaching and habilitation from early years through to higher education and/or vocational training.
- To support SDG 4 in ensuring ‘inclusive and equitable quality education’ that leading to ‘effective and relevant learning outcomes’ for *all learners with vision impairment.*
- We look forward to working with you to develop such a framework and to **Create a Clear Vision for the Future**!

Final quote

“I have been blind since I was 5,

and I’m bloody good at being blind!

It’s something that I do every day!”

References

Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Thousand Oaks, CA: SAGE.

Douglas, G., McLinden, M., Ellis, L., Hewett, R., Hodges, L., Terlektsi, E., Wootten, A., Ware. J. and Williams, L. (2019). *A Rapid Evidence Assessment of the effectiveness of educational interventions to support children and young people with vision impairment.* Welsh Government.

Douglas, G., McLinden, M., Ellis, L., Hewett, R., Hodges, L., Terlektsi, E., Wootten, A., Ware. J. and Williams, L. (2019). *Support for children and young people with vision impairment in educational settings.* Welsh Government.

Hewett, R., Douglas, G., McLinden, M. & Keil, S. (2017) Developing an inclusive learning environment for students with visual impairment in higher education: progressive mutual accommodation and learner experiences in the United Kingdom. *European Journal of Special Needs Education. 32(1),* 89-109

Keil, S. (2019). Learner outcomes framework for VI children and young people: A framework for support for young people with vision impairment provided by a VI education service. DfE / NatSIP. https://www.natsip.org.uk

References

Keil, S. and Cobb, R. (2018). Why we need a new UK specialist curriculum to enable equitable participation in education for children and young people with vision impairment: VIEW Discussion Paper. https://viewweb.org.uk/specialistcurriculum/

Lamb, B. (2017). The role of sensory impairment support services and specialist teachers: The future of the sector. DfE / NatSIP. https://www.natsip.org.uk

McLinden, M. and Douglas, G. (2014) *Education of children with sensory needs: reducing barriers to learning for children with visual impairment.* In: A. Holliman (Ed), Educational Psychology: An International Perspective. Routledge. pp246-255

McLinden, M., Douglas, G., Hewett, R., Cobb, R. and Lynch, P. (2017). Facilitating Participation in Education: The Distinctive Role of the Specialist Teacher in Supporting Learners with Vision Impairment in Combination with Severe and Profound and Multiple Learning Difficulties*. Journal of Blindness, Innovation and Research, 7(2)*.

McLinden, M., Douglas, G., Cobb, R., Hewett, R. and Ravenscroft, J. (2016). Access to learning' and 'learning to access': Analysing the distinctive role of specialist teachers of children and young people with vision impairments in facilitating curriculum access through an ecological systems theory. *British Journal of Visual Impairment, 34(2)* 179–197.

References

McLinden, M., Douglas, G., Hewett, R., Lynch, P. and Thistlethwaite, J. (in press). Teaching learners with vision impairment: an analysis of evidence based practices. *Oxford Research Encyclopedia of Education*. Oxford University Press.

McLinden, M. and McCracken, W. (2016). Review of the visiting teachers service for children with hearing and visual impairment in supporting inclusive educational practice in Ireland: examining stakeholder feedback through an ecological systems theory. *European Journal of Special Needs Education, 31(4),* 472-488

Young Vision Alliance (2018) 'Our Future Matters' Campaign Report. Available at: https://www.pocklington-trust.org.uk/wp-content/uploads/2019/10/Our-Futures-Matter-Report-Final.pdf