Promoting a balanced early years curriculum for young children with vision impairment

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**Promoting a balanced early years curriculum for young children with vision
impairment: Developing and sustaining personal agency through a bioecological
systems perspective**

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Abstract

Through the use of their developing vision young children develop increasingly sophisticated ways of establishing control within different learning environments, thereby helping them to exert influence as active ‘agents’. Vision impairment can present significant barriers to a child developing personal agency through reducing access to visual information. In this article we present the parameters of a conceptual framework to inform the design of intervention approaches that can reduce these barriers. We draw on a dual model of ‘access’, contextualised within a bioecological systems perspective, to examine how young children with vision impairment can establish increasing personal agency through intervention approaches that promote progressive independence access skills within an ‘ethos of empowerment’. In presenting new conceptual foundations for examining the development of personal agency in young children with vision impairment, the paper has significance for research, policy and practice in vision impairment education and offers a theoretical reference point for related areas of early childhood inclusive education.

Key words: vision impairment, early intervention, personal agency, access, bioecological systems framework

1.0 Introduction

Through the use of their developing vision, young children evolve increasingly sophisticated ways of establishing control within different learning environments, thereby helping them to exert influence as an active ‘agent’ (Nolan, Kilderry and O’Grady 2006). Vision impairment can present significant barriers to a child developing such agency through reducing ‘access’ to sensory information (Douglas and McLinden, 2011; McLinden & Douglas 2014), potentially resulting in the child becoming increasingly reliant on other individuals for

support (Webster and Roe, 1998). Research highlights the importance of promoting distinctive independence access skills to maximise a child's ability to develop as an 'independent' learner within a given educational context (e.g. Douglas and McLinden, 2011; McLinden et al. 2017). Further, recent work in this area highlights the significance of these independence access skills being suitably developed to enable successful transition from compulsory school education into independent adulthood (e.g. Hewett et al. 2017; Douglas et al. 2019).

A key challenge for educators, therefore, is how to ensure an early year's curriculum is structured so as to support a young child's emerging personal agency which can then be sustained throughout the child's educational pathway. In this paper we outline the parameters of a conceptual framework that can be drawn upon as an educational response to this challenge to show how young children with vision impairment can establish increasing control of their lives within an environment that promotes an 'ethos of empowerment' (Sadan, 1997, p.16). Our analysis is structured around a dual model of access for learners with vision impairment ('access to learning' and 'learning to access') and contextualised within a bioecological systems perspective of human development. We propose that this holistic framework offers a suitable vocabulary and developmental route map to examine the function, nature and role of the distinctive early intervention strategies required to promote *and* sustain equitable curriculum access within a given educational pathway for young children with vision impairment in different educational contexts and settings.

For the purpose of this paper, we define early intervention broadly as incorporating services and programs that facilitate the development of young children (i.e. aged between the ages of 0-5) who have vision impairment, and who as a result, may be at risk of developmental delay

given that they may not meet recognised developmental milestones (e.g. Dale and Sonksen, 2002; Sonksen and Dale, 2002, Tadic, Pring and Dale, 2009, Dale et al 2019). We argue that to maximise the ability of these children to mature as increasingly independent and ‘active’ learners, an ‘ethos of empowerment’ should have a focus on:

- Ensuring these young children have equitable and optimised access to an appropriate curriculum balance;
- Structured opportunities within this balance to develop their personal agency as ‘active agents’ through emphasising distinctive and progressive independence access skills;
- Sustaining the development of their personal agency through promoting ‘progressive’ and ‘mutual’ accommodation throughout a given educational pathway.

We start the article with an analysis of issues relating to early years curriculum ‘access’ for children with vision impairment. This is a deceptively complex term and we draw on the terms ‘access to learning’ and ‘learning to access’ to emphasise the careful balance required in ensuring young children have fair and optimised access to an early years curriculum, complemented with structured opportunities to develop distinctive early independence access skills. We examine how a bioecological perspective has informed an examination of this balance with respect to curriculum access within school and higher education in different national contexts but to date, with limited explicit consideration of early intervention settings. We review how the related concepts of ‘empowerment’ and ‘personal agency’ are described in the literature, drawing attention to the distinction between empowering ‘process’ and ‘outcome’, and illustrate how these terms can be usefully applied to areas of a specialist curriculum for learners with vision impairment. We then outline the parameters of a

1 bioecological systems perspective within which to contextualise the dual-access model, and
2 through this holistic framework explore the development of personal agency for young
3 children with vision impairment. We provide insights into how such agency can be sustained
4 within an ‘ethos of empowerment’ in order to optimise future success and propose indicators
5 that can be drawn upon to evidence the extent to which such an ethos can guide early
6 intervention with respect to the ecological systems surrounding the young child. We discuss
7 three limitations of the analysis presented in the paper and outline key implications for
8 practice. We conclude the paper by emphasising that promoting an ‘ethos of empowerment’
9 within a right-based early years education should seek to support a child’s progression
10 through the development of longer term independence outcomes so as to ensure learners with
11 vision impairments can be *actively* involved in shaping their own future.

13 **2.0 Vision impairment education and curriculum access**

14 As reported by Douglas et al. (2018), vision impairment education has traditionally focussed
15 upon two broad areas of intervention and targeted educational outcomes:

- 17 1. Ensuring children have fair and optimised access to the curriculum.
- 18 2. Ensuring children have opportunities to develop their independence and social
19 inclusion.

21 The second area is partly linked to maximising children’s ability to develop as independent
22 learners within education, but is also part of a broader agenda about empowering children for
23 adult life, independent living and employment through promoting personal agency (e.g.
24 Hewett et al. 2017, Douglas et al. 2018, Hewett et al. 2018; Opie, 2018). The philosophy
25 underpinning this distinction is to some extent based on a ‘rights’ agenda which demands fair

1 and equal access to education for all children, as well as a concern that an individual child
2 should have structured opportunities to develop their independence to whatever extent is
3 possible (Douglas et al. 2018). The distinction between the two broad areas has been
4 articulated in a variety of ways, reflecting particular perspectives about the nature and role of
5 intervention for children with vision impairment (e.g. desired educational outcomes, the
6 conception of the curriculum, the provision of inclusive/specialist services and the training of
7 professionals), and has recently been examined through reference to the notion of ‘access to
8 learning’ and ‘learning to access’ (e.g. Douglas et al. 2018, Hewett et al. 2017, McLinden et
9 al, 2016).

- 11 • *Access to learning*: inclusive practice and differentiation ensuring that the child’s
12 environment is structured and modified to promote inclusion, learning and access to
13 the ‘core’ or national curriculum, the culture of the educational setting and broader
14 social inclusion.
- 16 • *Learning to access*: teaching provision which supports the child to learn independence
17 skills and develop agency in order to afford more independent learning and social
18 inclusion.

20 Although the distinction has been presented primarily with a particular focus on ‘school’
21 education, it also provides a suitable framework and vocabulary through which different
22 programs and targeted educational outcomes can be aligned within early intervention (e.g.
23 McLinden et al. 2018). Thus, the early intervention approaches (and associated targeted
24 educational outcomes) in relation to ‘access to learning’ can be closely aligned with what can
25 be described as ‘inclusive’ practice and modifications for young children with vision

1 impairments (i.e. adaptations made to the core curriculum to facilitate access) (Douglas et al.
2 2018). The particular early intervention programs (and associated targeted educational
3 outcomes) in relation to ‘learning to access’ would be more closely aligned to areas of the
4 ‘distinctive’ or ‘additional’ need (e.g. Mason and McCall, 1997; Sapp and Hatlan, 2010) and
5 may not typically be taught in a context as part of a ‘core’ or national curriculum. These areas
6 include for example, the teaching of early compensatory skills that facilitate learning through
7 touch, early mobility and independent living skills, the use of specialist equipment; social
8 communication and early pragmatic language skills. In the USA, the curriculum areas that are
9 considered to be distinctive to vision impairment education are described as forming part of
10 an ‘expanded core curriculum’ (ECC) and refer to the knowledge, concepts, and skills
11 typically learned incidentally by sighted students but which must be sequentially presented to
12 the student who has vision impairment (e.g. Sapp and Hatlen, 2010; Allman and Lewis,
13 2014). A summary of the curriculum areas of the ECC is presented in Figure 1.

14
15
16 *Insert Figure 1*

17
18
19 In emphasising the importance of an early focus on the ECC, Allman and Lewis (2014) report
20 that this curriculum should begin at ages 0-3 through exposure to a wealth of experiences that
21 ‘lay the groundwork for learning the multiple skills that students who are visually impaired
22 will need to be ready for learning in school, and ultimately, to become successful and happy
23 adults.’ (n.p.) They argue that for this reason it is important for teachers of children with
24 vision impairments and ‘early interventionists’ to work with the families of young children to
25 provide and expand appropriate experiences and learning opportunities.

1
2 Similar frameworks to the ECC have been developed for use in other national contexts. A
3 notable example, in the context of England is the ‘Learner Outcomes Framework’ (LOF) for
4 children and young people with vision impairment which accounts for both short to medium
5 term outcomes that are specific to the individual learner, as well as longer term outcomes that
6 aim to prepare the individual for independent adulthood (Keil, 2016). The LOF is organised
7 around eight outcome categories, which map onto the ECC, covering skills that learners with
8 vision impairment are considered to need in order to enable them to take part in lessons with
9 increasing independence.

10
11 A bioecological perspective has been drawn upon to examine the proximal (i.e. close to the
12 learner) and distal (i.e. at a distance from the learner) influences on promoting curriculum
13 access within school and post education contexts (e.g. Douglas et al. 2018, Hewett et al.,
14 2017, McLinden et al. 2016). This perspective makes reference to Bronfenbrenner’s
15 bioecological systems theory (e.g. Bronfenbrenner, 2005) and is illustrated as a series of
16 concentric circles situated around a developing individual with each circle referring to nested
17 but separate ‘systems’ (*micro*-, *meso*-, *exo*- and *macro*-) that reflect a complex and evolving
18 ecology of human development (e.g. Shea and Bauer, 1994). The temporal dimension of
19 development is represented by the *chronosystem* which was introduced by Bronfenbrenner to
20 show the changing nature of the learner over time as well as the changes in the proximal
21 learning environment and the distal influences. Through this framework the nature of
22 intervention has been highlighted as seeking to promote ‘progressive, mutual
23 accommodation’ (Bronfenbrenner, 2005, p107) between the growing individual and the
24 changing characteristics of the immediate settings in which the child with vision impairment
25 develops (e.g. McLinden et al. 2016). As such the framework offers scope to examine the

1 complexity and multi-dimensional nature of influences on promoting particular areas of
2 curriculum access and the distinctive nature of specialist input throughout an educational
3 pathway (e.g. McLinden et al. 2018). To date however, there has not been an analysis of how
4 such a perspective can be applied to early intervention approaches that promote progressive
5 and mutual accommodation within an ‘ethos of empowerment’ stemming from a rights based
6 approach.

7 **3.0 Early childhood rights, empowerment and personal agency**

9 Woodhead (2005) argues that ‘a right to development’ can be traced back to the Geneva
10 Declaration of the Rights of the Child, adopted by The League of Nations in 1924 and
11 including the statement and this in turn eventually fed into the UN Declaration of the Rights
12 of the Child (1959) and the UN Convention of the Rights of the Child, 1989. Article 6: in the
13 convention directly states that ‘Parties shall ensure to the maximum extent possible the
14 survival and development of the child’, (UNCRC, 1989, Article 6). There are a further series
15 of articles that relate holistically to development of the child (Article 2, 3, 5, 12, 18, 24,
16 28,29, 32) and when viewed ensure early childhood intervention strategies or approaches
17 must heed these rights. More recently, the Sustainable Development Goals (SDGs) have
18 offered a framework of 17 goals and 169 targets across social, economic and environmental
19 areas of sustainable development, which United Nations Member States have committed to
20 making a reality. Of particular relevance to this review is SDG Target 4.2 which states that by
21 2030 countries should: ‘ensure that all girls and boys have access to quality early childhood
22 development, care and pre-primary education so that they are ready for primary
23 education’....and are ‘developmentally appropriate’ respecting children’s rights, needs,
24 capacities, interests and ways of learning at each stage of their early lives; recognising the

interdependencies between nutrition, health, care and education, from the ‘first 1000 days’ onwards. (Young Lives Policy Brief, 2016)

Unlike the clear statements of rights found in the UNCRC and the SDGs the concept of empowerment has had many definitions and transformations. For example, Ibrahim and Alkire (2007) suggest that the concept of *empowerment* ‘is related to terms such as agency, autonomy, self-direction, self-determination, liberation, participation, mobilisation and self-confidence. Kellet (2010) notes that our knowledge around empowerment is consistently changing and that children have taught us that listening and participative processes should not only inform research, but significantly, enable them to change their lives:

As we move into the second decade of the 21st century, it is apparent that children’s agency and voice are going to preoccupy children’s agendas in a way that listening and participating dominated the first decade...Establishing methods for hearing children’s research voices... providing powerful dissemination platforms are central tenets of this process (Kellett, 2010, p.217).

A particular challenge is that young children with disabilities may need more support from professionals than children without disabilities, and as Whitburn (2013) highlights, paraprofessionals who provide ‘heavy’ support can severely reduce the students’ agency no matter the rights based lens they are working from. Given the potential implications of vision impairment for the development of personal agency, it is crucial therefore for young children to have opportunities to make choices, have control over their environment to promote independence and avoid passivity.

1
2 With reference to the work of Rappoport (1984), Page and Czuba (1999) note that it is easy to
3 define empowerment by its absence but difficult to define in action as it takes on different
4 forms for different people and contexts. They argue therefore that a common understanding
5 of empowerment is required to establish how it is acted out in practice and for evaluating
6 programs. At a basic level the concept of empowerment can be described as being about
7 'power' relationships at different levels that enable individuals to assume control of their
8 lives. Again this is captured succinctly by Page and Czuba (1999) in proposing that
9 empowerment is a 'multi-dimensional' and 'social process' that helps people gain control
10 over their own lives, arguing that at the core of the concept is the idea of 'power', and with
11 the possibility of *empowerment* depending on two notions:

- 12
13 • That the power relationships can change - if power cannot change then it is argued
14 that empowerment is not possible, nor is empowerment conceivable in any
15 meaningful way. Conversely, if power can change, then *empowerment* is possible.
- 16 • That power can expand.

17
18 They argue therefore that three components are considered to be basic to any understanding
19 of empowerment, namely that it is 'multi-dimensional', 'social', and a 'process':

- 20
21 1. It is multi-dimensional in that it occurs within sociological, psychological, economic,
22 and other dimensions. Empowerment also occurs at various levels, such as individual,
23 group, and community.
- 24 2. Empowerment, by definition, is a social process, since it occurs in relationship to
25 others.

1 3. Empowerment is a process that is similar to a path or journey, one that develops as we
2 work through it.

3
4 Whilst other aspects of empowerment may vary according to the specific context and people
5 involved, Page and Czuba (1999) argue that these components remain constant.

6
7 The notion of empowerment as an ongoing *process* is supported by Zimmerman (2000) who
8 makes reference to the concept as a process in which ‘efforts to exert control are central’, and
9 argues that ‘actions, activities, or structures may be empowering, and that the outcome of
10 such processes result in a level of being empowered’ (p.45). This line of argument is
11 supported by Staples (1990) in noting that empowerment relates to both a ‘process’ and an
12 ‘outcome’, namely, an attempt to obtain a degree of ability so as to influence the world.

13 Zimmerman reports that such a process can be considered to be ‘empowering’ if it helps
14 people develop skills so that they can become independent problem-solvers and decision
15 makers. Further, he notes that empowerment outcomes refer to the operationalisation of
16 empowerment so it is possible to study the effects of interventions that have been designed to
17 empower participants.

18
19 Sadan (1997, p.13) makes reference to this process as one of a transition ‘from a state of
20 relatively powerlessness to a state of more control over one’s life, fate, and environment’,
21 arguing that empowerment ‘expresses an ongoing social process, not a one-time occurrence’
22 (p.15) and highlights the importance of creating ‘an *ethos* of empowerment’ (p.16, italics
23 added). The process of *empowerment* is considered by Sadan (1997) to be an active one with
24 its particular form determined by ‘the circumstances and the events, but its essence is human
25 activity in the direction of change from a passive state to an active one’ (p.76). It is argued

1 therefore that an empowering process brings about ‘an integration of self-acceptance and self-
2 confidence, social and political understanding, and a personal ability to take a significant part
3 in decision-making and in control over resources in the environment.’ (p.76).

4
5 The concept of ‘agency’ is commonly drawn upon to describe an individual’s perception that
6 they have control over their life in order to influence events. As noted by Aubrey et al.
7 (2006), the child can be considered as an agent of its own and the world’s construction, but
8 whose agency develops in the context of an unchanging social and historical praxis, which
9 includes the ‘constraints and potentialities of nature, and the action of other agents’ (pp.202–
10 203). In proposing a framework of outcomes for young people with an emphasis on
11 empowering providers and commissioners to articulate and demonstrate impact in improving
12 outcomes, McNeil et al (2012) define agency succinctly as being ‘A feeling that you are
13 actively in control of your life’ (p.53). The notion of agency is also linked to the individual as
14 an ‘agent’ who is able to influence his or her environment. This is captured by Sadan (1997)
15 who notes that ‘To be an agent is to influence intentionally one’s functioning and life
16 circumstances.’ Citing the work of Giddens, 1984, Sadan (1997) examines agency in relation
17 to what it is to be a human noting that: ‘A human agency ceases to be such if it loses the
18 ability to influence the world in some way....To be a human being in the full sense of the
19 word, then, means to carry out intentional acts in order to achieve defined goals, that is to
20 say, to influence the environment, to be able to bring about change.’ (p.146).

21
22 This brief review of literature indicates that the concept of ‘empowerment’ is broad ranging
23 but in essence can be viewed as being a process of transition from a state of being relatively
24 powerless (in terms of influencing one environment) to a ‘a state of relative control over
25 one’s life, destiny, and environment. This transition can manifest itself in an improvement in

the perceived ability to control, as well as in an improvement in the actual ability to control.’ (Sadan, 1997, p.144) At its core is the notion of ‘power’ and ‘power relationships’ and crucially, the fact that power can both ‘change’ *and* ‘expand’ through an active process of transition that supports and promotes the development of personal agency. The review suggests therefore, that in order for young children with vision impairment to be empowered (i.e. from relatively passive to relatively active) there needs to be built in to intervention approaches scope for expansion (i.e. the young children being able to draw on and express their ‘power’ in a wider range of contexts). The notion of *empowerment*, or of becoming empowered, therefore indicates a process of *empowering* that involves a complex interaction between the young child and their learning environments with appropriate opportunities afforded for the development and expansion of such agency within an ‘ethos of empowerment’ underpinned by the legislative acts of children’s rights. This suggests an important distinction therefore between the process of *empowerment* (*empowering process*) and the nature of the particular intervention procedures that are drawn upon as a child seeks to establish control of his or her learning environment (*empowered outcomes*) through the development and expansion of the child’s personal agency.

We illustrate this distinction through reference to areas of the ECC to show examples of ‘empowered’ outcomes (i.e. outcomes that the child might be expected to demonstrate on completion of a particular phase of education), the nature of an ‘empowering’ process (i.e. the intervention approaches drawn upon to support the development of empowered outcomes), and examples of the particular support strategies that can be drawn upon to promote curriculum access within each area of the ECC (see Table 1).

1 *Insert Table 1*

2
3
4 We examine next the parameters of a bioecological systems framework through which to
5 contextualise the development of personal agency for young children with vision impairment.
6 Through this holistic perspective we illustrate how these learners can be suitably
7 ‘empowered’ over a given timeframe and propose provisional indicators that can be drawn
8 upon to evidence the extent to which an ‘empowering ethos’ can guide early intervention
9 with respect to the various systems surrounding the young child.
10

11 **4.0 Examining the development of personal agency through a bioecological perspective**

12

13 Through a bioecological perspective, the young child with vision impairment is viewed as
14 being a potentially active ‘agent’ at the centre of a multilayered and complex ecology. Given
15 the limitations and implications arising from reduced access to visual information however,
16 he or she will require appropriate opportunities within different environments to access the
17 world through a curriculum balance that seeks to emphasise *and* sustain personal agency
18 through promoting independence access skills. The *microsystem* surrounds the child and in
19 the home environment, as noted by Shea and Bauer (1994), includes relationships between
20 the parents and the child, the child and each sibling, and between other family members.
21 Within an early childhood context, this system includes the relationships between the child
22 and teacher as well as the child and his or her peers. Factors within this system that can
23 influence the development of personal agency include the relationships with those involved in
24 the child’s education – including peers, friends, practitioners, families and other individuals.
25 The quality of practitioner involvement can also influence personal agency in these

environments, requiring adults to effectively interpret the young child's attempts to exert control on his or her environment.

The *mesosystem* represents the interrelations among two or more settings (i.e. microsystems) in which the individual child actively functions (e.g. Bronfenbrenner, 2005; Shea and Bauer, 1994). Factors within this system that can influence the development of personal agency include the interrelations between home and school, home and the various agencies, home and the child's immediate neighbourhood, and school and peer group (Shea and Bauer (1994). It also includes parent-teacher collaboration and family-community service involvement as well as a 'consideration of 'transitions' or the movement of the learner with disabilities from one microsystem to another' (Shea and Bauer, 1994, p.11). Other factors within this system include the structures to support inclusive learning activities (e.g. coordination between different professionals, home-centre links etc.) as well as the training of practitioners who support the child's care and learning. As noted by Shea and Bauer (1994), the *exosystem* represents 'those settings that do not involve the individual directly. However, events occurring within the exosystem affect, or are affected by, what happens in settings (microsystems) in which the individual functions.' (p.11). Factors in the *exosystem* that can influence the development of personal agency include the early years curriculum structures, inclusive curriculum policies as well as funding allocation for inclusive policies.

The *macrosystem* includes the varying contexts in which early years provision exists including pre-school education systems and agendas. Factors within this system that can influence the development of personal agency include the key drivers for early child development and inclusive education at national and/or international levels, including the implementation of Article 24 of the UN convention for the Rights of Persons with Disabilities

(CRPD), UNICEF resources promoting more integrated early childhood development (e.g. WHO and UNICEF, 2012) as well as internationally agreed Sustainable Development Goals (United Nations, 2015). As an example, the right of children to appropriate support in making their voices heard is emphasised in both article 7 and article 24 of the Convention on the rights of Persons with disabilities (CRC) (UNICEF, 2006). Finally, the timeline is illustrated through the *chronosystem* which equates with the different phases of education in the context of a given national context (e.g. early years, primary, secondary). Factors within this system that can influence the development of personal agency include the approaches taken to facilitate transition between different educational phases/settings of education, thereby resonating with Bronfenbrenner's notion of 'ecological transitions' (Bronfenbrenner, 2005) as young children move from one educational setting to another (e.g. home to early years provision and then to primary school) throughout a given educational pathway.

5.0 Discussion

We have argued in this paper that a dual-model of access, contextualised within a bioecological perspective, offers a holistic unit of analysis through which to explore the development of personal agency for young children with vision impairment, and provides insights into how such agency can be sustained within 'ethos of empowerment' in order to optimise future success. The significance of focusing on promoting such an ethos *throughout* a learner's educational pathway can be illustrated through research with older learners highlighting the potential barriers to development that can result from vision impairment. This work emphasises the importance of ensuring learners with vision impairments have opportunities to develop their independence access skills from an early age and throughout their educational pathway, to suitably prepare them for adulthood (e.g. Hewett et al. 2017; Douglas et al. 2018).

1
2 In support of recent theoretical work in this area the analysis presented in this paper
3 highlights the significance of interactions between the developing learner with vision
4 impairment and the changing educational ‘ecology’ in which such development occurs over a
5 given timeframe (e.g. Hewett et al. 2016; McLinden et al. 2017, Douglas et al. 2018). As
6 noted by McLinden et al. (2017) a central issue is that the nature and complexity of children’s
7 environments change with transitions across the different stages of development (e.g. infancy,
8 early childhood, middle childhood and adolescence). As such, the developmental timeframe
9 is of particular significance as it allows practitioners to maintain a focus on current, as well as
10 medium and longer term outcomes, and factor into the intervention key transition points
11 within and between educational phases. The complex interaction between the individual and
12 their changing learning environments over time is captured succinctly by Bandura (2006) in
13 noting that, ‘People do not operate as autonomous agents. Nor is their behaviour wholly
14 determined by situational influences. Rather, human functioning is a product of a reciprocal
15 interplay of intrapersonal, behavioural, and environmental determinants.’ (p.165)

16
17 We end the discussion by proposing provisional indicators of ‘possible exercises of agency’
18 (Ibrahim and Alkire, 2007) that can be drawn upon to examine an ‘ethos of empowerment’
19 through a bioecological perspective within early years contexts. These indicators focus on
20 conceptualising such an ethos as the ‘expansion of agency’ (Ibrahim and Alkire, 2007),
21 which is sustained through emphasising progressive independence access skills throughout a
22 given education pathway. Through a bioecological perspective therefore, indicators of an
23 ‘ethos of empowerment’ within early intervention contexts can be characterised as including:

24
25 *Individual child*

- An ‘active’ young child who is learning to use personal agency in order to influence a given learning environment to bring about desirable change.

Microsystem

- ‘Empowering learning environments’ that afford opportunities for the development and expansion of personal agency through a suitably ‘balanced curriculum’ that promotes progressive independence access skills.
- ‘Empowering people’ who understand the development implications of vision impairment and afford opportunities for the development and expansion of personal agency through a suitably ‘balanced curriculum’ that promotes progressive independence access skills
- ‘Empowering intervention procedures’ that are designed to afford opportunities for the development of personal agency through a suitably ‘balanced curriculum’ that promotes progressive independence access skills

Mesosystem

- Relationships and structures and that afford opportunities for the development and expansion of personal agency through supporting a suitably ‘balanced curriculum’ that promotes progressive independence access skills

Exosystem

- Educational systems and curriculum policies that afford opportunities for the development and expansion of personal agency through supporting a suitably ‘balanced curriculum’ that promotes progressive independence access skills

Macrosystem

- Early child development and inclusive education policies and structures at national and/or international levels that afford opportunities for the development and expansion of personal agency through supporting a suitably ‘balanced curriculum’ that promotes progressive independence access skills.

Chronosystem

- Measurable levels of individual activity over time that indicate progress with respect to a child developing personal agency so as to be able to influence the environment to bring about desirable change (e.g. ‘empowered outcomes’).

We propose that these provisional indicators offer a basis for a holistic evaluation of early intervention for young children with vision impairment through providing a means of identifying evidence of the extent to which personal agency is being developed and promoted within an ‘ethos of empowerment’ (see Table 2).

Insert Table 2 here

6.0 Limitations

This is the first analysis we have identified which examines the development of personal agency in young children with vision impairment through a systems-based perspective. We outline what we view as being three main limitations of the paper. First, as a conceptual analysis it is limited given its wider application remains untested in authentic settings through reference to young children in different types of educational settings. This would provide the

1 field with a valuable direction for future research and further work is planned to develop this
2 focus. Second, the paper is currently illustrated through reference to only one commonly
3 used curriculum model (i.e. ECC) and its application could therefore be examined in future
4 work through drawing on curricula frameworks in other national settings and cultural
5 contexts. Finally, and perhaps of greater interest in terms of a future research focus, are
6 issues relating to limitations of the analysis with respect to the power dynamics assumed
7 within the conceptual perspective presented in the paper. Whilst we as professionals engaged
8 in education seek to acknowledge that we are working within a child-centred, approach, in
9 practice we may not actually be paying full attention to the ‘transformative’ impact of
10 children and young people’s voices. It is possible therefore that we can become deceived in
11 thinking that we have actually positioned children at the forefront of our work as a
12 bioecological model suggests, and in practice we may not actually be doing so. Indeed, a
13 recent movement that is gaining in impetus, known broadly as a ‘living right’ agenda (e.g.
14 Hanson and Nieuwenhuys, 2013) suggests how we may be deceived in the sense that
15 individualised approaches to childhood still involve children being judged against normative
16 criteria, and deceived in the sense that working collaboratively within ecological frameworks
17 may lull us into thinking we are actually listening to children and young people with vision
18 impairment when we are not. This notion of focusing on a local level – living rights-
19 challenges the idea that children are ‘granted’ agency because of universal international
20 institutions. Living rights is therefore not only a theoretical concept, because it takes into
21 account this power dynamic of a global perspective and a local concern of what children’s
22 rights should be but also a methodological one, one that ensures the rights of children within
23 different cultural and sociological concepts and spheres of influences, but also allows for the
24 rights to be constantly changing, incomplete and being reinvented. In other words they should

be ‘living’ (Hanson and Nieuwenhuys, 2013) by making the most of their daily living situation. Further work is planned to examine this complex area further.

7.0 Implications for practice

Children and young people with vision impairment constitute a heterogeneous group within which there is a wide spectrum of characteristics, abilities and educational support needs. Vision impairment is associated with significant barriers to curriculum access that can result in developmental delay and increasing dependence on others. Distinctive input, in early childhood, is considered integral to ensuring there is *equitable* curriculum access throughout different educational phases. The conceptual and empirical evidence suggests that distinctive and effective educational input tends to be in two inter-related forms:

- inclusive practice and environmental adjustments (providing a child with *access to learning*);
- teaching provision supporting the child to learn independence skills and develop agency to facilitate independent learning and social inclusion (e.g. promoting *learning to access* independence skills).

Clearly, this does not depend on one person or a key worker within the early years setting but to ensure a ‘balanced curriculum’ collaborative approaches between the professionals, children and their families/carers are necessary throughout a given education pathway to ensure the young learner can develop the educational outcomes required to succeed within the early years setting and be suitably prepared for future phases of education. Such a balance acknowledges that while facilitating access to areas of a ‘core’ academic curriculum is important (*access to learning*), consideration also needs to be given to promoting areas of a

1 'specialist', or 'expanded core curriculum', from an early age (*learning to access*). The
2 balance will be progressive and as such will develop and change throughout the time the
3 learner is in education. In this article we have outlined how such a balance can be promoted
4 within the early phases of an educational pathway to ensure there is equitable curriculum
5 access for the young learners with vision impairment that can then be sustained throughout
6 the pathway.

7 **8.0 Conclusion**

8 Much of the literature to date on intervention in the early years of childhood for children with
9 vision impairment has focused on early intervention strategies that are designed to develop
10 the young child's particular abilities, with limited work on the nature of the interaction
11 between the developing young child, the changing environments in which such learning takes
12 place and the longer term outcomes of early intervention. A dual model of access highlights
13 the need to ensure there is an emphasis on sustaining an appropriate curriculum balance
14 throughout an educational pathway with an emphasis on *learning to access* skills.

15 Contextualising this model within a bioecological systems perspective highlights the
16 significance of acknowledging the child as an 'active agent' in development, the
17 'interrelatedness' between the active child and the learning environment and therefore the
18 need for early intervention approaches to focus not just on the learner, the environment or
19 indeed each in isolation, but rather the changing relationships between these over a given
20 period of time and across different settings within a given educational pathway (e.g.
21 McLinden et al. 2018). This is captured succinctly by Bronfenbrenner (2005) in making
22 reference to the notion of 'progressive and mutual accommodation' over a given timeframe.

23
24 As Sadan (1997) argues, the potential for empowerment, 'like one's very humanity, exists in
25 everyone, and the ability to make a difference is a component of human existence. Systematic

1 and permanent limitation of one's ability to exert power is a negation of one's very
2 humanity.' (p 146). Promoting an 'ethos of empowerment' should therefore ultimately
3 support the development of longer term independence outcomes to ensure children and young
4 people with vision impairments can exert their 'power' through expressing personal agency
5 in order to influence their environments and ultimately help to *actively* shape their own
6 future.

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Figure 1. Areas of the Expanded Core Curriculum (adapted from Sapp and Hatlan, 2010)

(Alternative text. The figure shows a circle in the centre with the words 'areas of expanded core curriculum' surrounded by eight smaller circles to illustrate each area. In sequence working clockwise from the top these areas are listed as: assistive technology, career education, compensatory/functional skills, sensory efficiency, independent living skills, orientation and mobility skills, social interaction skills, self-determination.)

ECC Curriculum Area	Example of ‘empowered’ outcome on completion of given phase of education for child with vision impairment (starting with the end point in mind)	‘Empowering’ process (broad intervention approaches drawn upon to support the development of empowered outcome for child with vision impairment)	Examples of support strategies to develop early independence access skills for child with vision impairment
EEC Area 1. Compensatory or functional skills needed to access the core (general) curriculum	Through learning to use his/her senses efficiently the child is able to access and participate in activities in education, home, and community environments.	Approaches designed to support a child learning efficient use of vision, hearing, touch, smell, and/or taste as well as the development of the proprioceptive, kinaesthetic, and vestibular systems.	<u>Early literacy activities</u> <ul style="list-style-type: none"> • Child has access to story bags and real object symbols as part of story time activity. • Opportunities are provided for child to systematically and increasingly independently, search for objects and real object symbols within story time activity.
EEC Area 2. Orientation and mobility	The child acquires independence to the greatest extent possible, based on his or individual needs and abilities.	Approaches designed to support the child in acquiring independence to the greatest extent possible, based on his or individual needs and abilities.	<u>Early mobility skills</u> <ul style="list-style-type: none"> • Child is provided with access to new classroom environment through adult facilitated tour. • Opportunities are provided for child to explore boundaries systematically to develop a mental map of classroom under supervision of adult.
EEC Area 3. Social interaction skills	The child acquires social interaction skills that lead to the formation of lasting friendships and a fully included member of their local community.	Approaches designed to support the development of social interaction skills as well as learning about interpersonal relationships, self-control, and human sexuality.	<u>Early social interaction skills</u> <ul style="list-style-type: none"> • Child learns about emotions through listening to stories. • Child develops learning about emotions through actively engaging in small group role play scenarios.

EEC Area 4. Assistive technology	The child acquires skills in using a range of assistive technology, selecting the appropriate tool for the task.	Approaches designed to support the development of skills in using a range of assistive technology, including switches, mobile devices, and portable notetakers; computer access such as magnification software, screen readers, and keyboards.	<u>Early low vision aid skills</u> <ul style="list-style-type: none"> • Child is taught how to use a small hand magnifier to access a print text book. • Child carries a small hand magnifier and uses this for a range of functional activities as part of his/her daily routine.
EEC Area 5. Independent living skills	At the appropriate age and stage of development, the child develops independent living skills that allows him/her to become an independent member of the family and later, able to live an independent life.	Approaches designed to develop skills that people perform in daily life to increase their independence and contribute to the family structure.	<u>Early independent livings skills</u> <ul style="list-style-type: none"> • Child is shown differences in commonly used coins through touch, drawing attention to size, shape and amount. • Child is provided with opportunities to locate and use commonly use commonly used coins through touch in class shopping activities.
EEC Area 6. Recreation and leisure skills	Participation in sporting activities supports physical and mental health and wellbeing.	Approaches designed to support the development of recreation and leisure skills to ensure that child has opportunities to explore, experience, and select leisure-time activities that they enjoy.	<u>Early recreational and leisure skills</u> <ul style="list-style-type: none"> • Child engages in a range of physical activities alongside sighted peers with adaptations made to the rules to facilitate participation. • Child visits a football stadium for a guided tour with a family member prior to attending an afternoon football match.
EEC Area 7. Career education	The young person has a plan for post-secondary education related to his/her vocational interests, abilities and values.	Approaches designed to support career education through providing opportunities to learn through authentic experiences about different jobs.	<u>Early career education skills</u> <ul style="list-style-type: none"> • Child participates in activities to explore what different people do in the early years setting. • Child engages in dressing up games wearing different uniforms of 'people who help us'.

EEC Area 8. Self-determination	The child is able to contribute to planning meetings and set goals.	Approaches designed to support decision making, self-advocacy and individual responsibility.	<u>Early self-determination skills</u> <ul style="list-style-type: none"> • Child helps to write a braille menu for use in the class and uses this to select drink options each day. • Child helps to write a braille menu for use in a local café and use this to select drink options with his/her family on a Saturday.
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Table 1. Promoting personal agency for young children with vision impairment within an ethos of empowerment: Examples are provided of ‘empowered’ outcomes, intervention approaches drawn upon within an ‘empowering’ process and ‘support strategies’ to develop early independence skills for areas of an Expanded Core Curriculum (ECC)

An empowered child	Evidence of an active young child who is able to use personal agency in a range of ways in order to influence the environment to bring about desirable change.
An Empowering people	Evidence of people who understand the development implications of vision impairment and afford opportunities for the development and expansion of personal agency through a suitably 'balanced curriculum' that promotes progressive independence access skills
Empowering learning environments	Evidence of learning environments and structures that afford opportunities for the development and expansion of personal agency through a suitably 'balanced curriculum' that promotes progressive independence access skills.
Empowering intervention approaches	Evidence of intervention approaches that are designed to afford opportunities for the development of personal agency through a suitably 'balanced curriculum' that promotes progressive independence access skills
Empowering outcomes	Evidence of measurable levels of individual activity over a specified timeframe that indicate progress and expansion with respect to a child being able to influence the environment to bring about desirable change (i.e. through use of his or her early independence access skills).

Table 2. Developing the personal agency of young children with vision impairment within an ethos of empowerment: Provisional indicators of exercises of agency