The Educator

RESEARCH
IN VISUAL IMPAIRMENT

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RNIB LAUNCHES NEW TACTILE ACCESSIBLE IMAGE BOOKS TO SUPPORT BLIND AND PARTIALLY SIGHTED CHILDREN'S EDUCATION

The Royal National Institute of Blind People (RNIB) has announced the launch of tactile educational image books to address the shortfall in suitable curriculum materials needed by blind and partially sighted children across the UK.

The number of blind and partially sighted young people aged between 6-25 years old in UK mainstream education currently exceeds 24,000. Nevertheless, there is no national co-ordinated system of providing suitable textbooks and learning materials for blind and partially sighted students. With funding from Qualcomm Incorporated, the world leader in next-generation mobile technologies, RNIB has produced 20 books of accessible images. Each book contains tactile illustrations with braille labels and large print colour images with large print labels, all of which support the national curriculum.

Subjects such as geography and science can be challenging for blind and partially sighted pupils because they contain graphically rich materials such as photographs, maps and illustrations. The new tactile educational image books will provide teachers and learning support staff with the necessary resources to help give pupils the same understanding of these topics as their sighted peers.

Each book is easily accessible through central and promoted channels and covers a range of different subjects such as GCSE key stage 4 biology, physics, geography, mathematics, chemistry, food technology, information technology and physical education.

Richard, 15, a pupil at New College Worcester who is registered blind, said: "Tactile images are extremely useful, particularly in exams where I am answering the same questions as other people. They mean that I have exactly the same diagram as everyone else. The books are easy to read and I can use them whenever I want."

Caroline Walker, Assistant Development Officer at RNIB, said: "We often hear from teachers and support assistants who don't have the time needed to create accessible images from learning/curriculum materials on demand. These books have been specifically designed with advice from education professionals and tested by blind and partially sighted pupils to ensure they compliment the national curriculum. They will enable young people with sight problems to have equal and independent learning opportunities, where they are not excluded and have access to the same information as their sighted peers."

The books of images are available from RNIB's online shop at **www.rnib.org.uk/shop** at cost, priced from **£16.50**.

For more information contact **Stacey Kerr**, Senior Media Officer at RNIB on **020 7391 2290** or email **stacey.kerr@rnib.org.uk**

Global Campaign on Education For All Children with Visual Impairment (EFA-VI)

Existing Focus Countries

Proposed Focus Countries

Fiji

Papua New Guinea

Vietnam

Laos

Cambodia

China

Bangladesh

Nepal

Pakistan

Sri Lanka

Tajikistan

Palestine

Kenya

Uganda

Rwanda

Ethiopia

Malawi

Mozambique

Mali

Burkina Faso

Ghana

The Dominican Republic

Honduras

Paraguay

Guatemala

El salvador

Nicaragua

Ecuador

Peru

Bolivia

Chile

AFPB

cbm

ONCE

PERKINS
SCHOOL FOR THE BLIND

RNIB

Sightsavers

The Norwegian Association of the
Blind and Partially Sighted

ufa
UNION FRANCOPHONE
DES AVEUGLES

vision
australia
blindness and low vision services

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Guest Editor : **Kay Alicyn Ferrell**

Message from the President

I am very conscious of the honour done me by the General Assembly in electing me as President of ICEVI when it met in London at the beginning of December. Some may consider this a rash decision. It was certainly a decision taken by quite a small number - scarcely more than 40 people - so I am glad to have this opportunity of addressing the whole of ICEVI as its President and telling you a little about myself.

From the profile which appears elsewhere in this issue you will see that I have been totally blind since the age of three. I received a fairly traditional western-style education in residential schools for blind children - first in Edinburgh, Scotland, where I was born, and then at the well-known RNIB school, Worcester College for the Blind in England. I am always very glad to have had my primary education in Scotland, where they taught you things like grammar and spelling - things which people don't seem to believe in any longer. I also learned Latin, which I think provides a very good discipline for thinking and writing.

My career has been divided between the academic world (where I taught Law and Criminology and did research on theories of disability) and policy development and service provision in an equal opportunities framework in the field of disability. At the same time I have done a lot of work on government bodies concerned with disability and held a range of voluntary positions in organisations concerned with blindness and disability, which I regard as my natural home and the quarter of the disability movement from which I come. Initially these

were, in the familiar distinction, organisations "of" the blind, run by people who were blind themselves. One of these, which I helped to found, was an association of blind and partially sighted teachers and students. Another type of organisation with which I have been closely associated is the small information and advocacy organisation. One of these, which I also helped to found, was the National Bureau for Students with Disabilities.

But for the last 35 years the organisation with which I have been most closely connected is the RNIB. In the familiar distinction, this was traditionally an organisation "for" the blind, but in recent years it has changed its constitution, and even its name, so as to become the Royal National Institute of Blind People, an organisation "of" the blind, with its Board and membership comprising a majority of blind people. For 12 years I was Chair of its Education Committee, before becoming Chair of the whole organisation from 2000 to 2009. In recent years, too, I have been heavily engaged in international work as President of the European Blind Union (EBU), which makes me also an officer of the World Blind Union (WBU).

So you can see that the policy area with which I have been most concerned all my life has been education. For many years I was closely associated with campaigns to promote the development of inclusive education in the UK. Traditionally the standard model of provision had been the residential special school. I still believe that the placement of choice should be an

inclusive one, especially for those whose sole or main handicap is blindness, but I have always seen the need to retain a specialist option for those less able to cope with mainstream, mostly on account of their additional disabilities. I have been quite consistent about this over the years, but maybe stress the need to retain a specialist option a little more these days, as the frequency and severity of additional disabilities increases, and calls to dismantle specialist provision become more strident. Initially the need was to defend inclusion against a special education establishment on the right. Now it is rather to defend a mixed economy of provision against those on the left who would dismantle specialist provision entirely.

People ask me about my PLANS, or my VISION, for ICEVI. Sometimes they ask what do I intend to do with ICEVI or where do I plan to take it. But I have to say I don't quite see it like that. I don't see ICEVI as a top-down, command and control sort of organisation. I see it as a team effort. It has to be with so many of those who work for it working in a purely voluntary capacity. I also don't see the need for a major change in direction. As Larry made clear at the very successful review and planning meeting which took place in London at the beginning of December, a great deal has been achieved in the last ten years. Our task is to build on that.

But the President can give leadership, and I intend to lead in the directions identified at the London meeting as the directions in which ICEVI needs to go -

- Strengthening the regions and regional committees so that they are enabled to play their full part in ICEVI's work, including our EFA-VI committees;

- Enabling more of our conference activity to take place at regional level where more people can get to them, freeing up the

global conference to work in new and innovative ways with the international agencies and our international partners;

- Drawing more fully on the pool of talent which exists for carrying the work of ICEVI forward into the future, so as to broaden our base of support and ensure the work does not fall on too few shoulders;

- Strengthening relationships, particularly at regional level, with our international partners, particularly the WBU and the International Agency for the Prevention of Blindness (IAPB), our partners in the Vision Alliance; and

- Implementing a Joint Strategy with WBU to take the EFA-VI campaign to the next stage by persuading national governments to make proper provision in national EFA plans for children with visual impairment and seeking funding to extend the campaign to more focus countries.

I thank you for the trust you have placed in me in electing me as your President. I shall do my best to be worthy of it and I greatly look forward to working with you all and to meeting more of you as the months go by.

C. M. Low
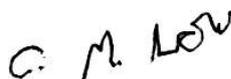
Colin Low

Message from the Editor

Dear reader,

In the July 2010 issue of The Educator I said thank you and goodbye as the editor. When the World Conference and General Assembly in August 2010 couldn't be held as planned, myself as well as the other members of the Publications Committee felt we must continue the work until new Principal Officers were elected and a new committee was appointed.

At the last meeting the Publications Committee decided that research should be the theme for the January 2011 issue. We also immediately identified a person capable to serve as the guest editor.

It was a relief for all of us when we received a positive response from the person we wanted – Dr Kay Ferrell. Dr Ferrell must be well-known to most of you through her extensive research in education of children and young people with visual impairment.

The role as an editor is to support the guest editor. This time I wasn't able to do so for personal reasons. Dr Cay Holbrook, member of the Publications Committee, did what I was supposed to do. However, most of what you will read in this issue is the result of Dr Ferrell's work to make an interesting issue of The Educator.

At a first glimpse you may say that research is not for me when my primary responsibility is teaching children and young people with visual impairment. You are wrong! Your intention is perhaps not to achieve a doctorial degree, but using the way a researcher works will certainly help you to understand what is happening in your classroom, how your effort is received by the pupils, and it will give you strength when talking to your superiors about resources that are required to do a good job. A research-like approach can strengthen you in the daily work.

Harry Svensson

Message from the Guest Editor

It was an honor to serve as guest editor for this issue of the Educator and to be able to collaborate with this issue's authors. We have created an issue meant to be informative as well as provocative, and we hope that you will find inspiration to continue the search for new and better practices for educating infants, children, and youth with visual impairments.

Research is often a two-edged sword: Sometimes it gives us answers, while at other times it either gives the wrong answer (or the answer we did not want to hear) or leads to even more questions. This issue addresses both sides of the question, beginning with my article about the meta-analyses on the research literature in literacy and mathematics, conducted at the National Center for Severe and Sensory Disabilities. Applying the standards for scientific evidence generally adopted for educational research, the article suggests that at least in literacy and mathematics, our field lacks sufficient evidence to establish "best practices" in educating students with visual impairments. The article concludes with a discussion of "promising practices" – strategies and interventions that do not yet meet the evidence standards, but nonetheless may be valuable – and calls for replication of research studies by both established and emerging authors.

Michael Tobin, in "Is research necessary," places research in the context of the evolving economic times and discussions about the why, how, and who does research in visual impairment. He discusses some of the difficulties inherent in research with low-prevalence disabilities such as blindness, and proposes the "information concept" as an organizer for future research.

Sunhi Bak then provides an overview of the major types of research design: qualitative, quantitative, and teacher action research. She discusses the relative values of each type. This article is followed by Silvia Correa-Torres' discussion of the principles of research ethics and the protection of human subjects. She analyzes how the principles of respect, beneficence, and justice for participants in research evolved in the United States and how those principles are currently applied by institutional review boards (IRBs), the "gatekeepers" of research ethics. While these IRBs are often seen as hurdles that researchers must jump through, Correa-Torres points out that these procedures have resulted in greater protections for research participants in general and children with disabilities in particular.

Kim Zebehazy expands on the value of action research and calls on all of us to begin documenting what we are doing with students and to share that information with others. Zebehazy assures us that we are all researchers, and she provides step-by-step directions on how to turn everyday teaching activities into action research that will benefit all of us in formulating best practice.

This series of articles ends with a description of the resources located at the American Printing House for the Blind (APH). Michael Hudson and Julia Myers detail the materials currently available at APH and how they can be accessed. APH recently acquired several sets of archives, including the M. C. Migel Library (formerly at the American Foundation for the Blind), and is in the process of making those materials available online.

The second issue in this series will examine the research that is currently underway in ICEVI's regions and will, among other discussions, propose the concept of wisdom-based practice, under discussion in the field of early childhood special education, as another way of implementing best educational practice. We hope you, too, will look forward to the next issue!

Kay Alicyn Ferrell

Profiles of Principal Officers

Lord Low of Dalston
President

Colin Low has been a lifetime campaigner for the rights of blind and disabled people, especially in the field of education. He has been a member of the ExCo of ICEVI since 1987. He has been President of the European Blind Union (EBU) since 2003 and is a Vice-President of the Royal National Institute of Blind People (RNIB), having held the position of Chair from 2000-2009.

Having been appointed to the UK House of Lords in May 2006 for his work as Chairman of RNIB and as a long-time campaigner for disability rights, he is now much in demand as President of organisations he helped to found in the 1970s, such as SKILL (the National Bureau for Students with Disabilities) and the Disability Alliance, which works to combat poverty amongst disabled people. He has also undertaken important roles in a wide range of other organisations, including the National Federation of the Blind of the UK, the Special Educational Needs and Disability Tribunal and the Disability Rights Commission.

Colin was born in Edinburgh in 1942 and has been totally blind since the age of three. He was educated at Worcester College for the Blind and at Oxford and Cambridge Universities. He taught Law and Criminology for 16 years from 1968-84 at Leeds University, before moving to London as Director of the Disability Resource Team, an organisation providing advice and services on disability. He then went on to become Senior Research Fellow at City University, London, where he carried out research on theories of disability, retiring in 2000.

He was made a Companion of the Order of the British Empire (CBE) for services to RNIB and disabled people's rights in January 2000.

Lawrence F. Campbell
Immediate Past President

Born in USA, Lawrence F. Campbell, popularly known as "Larry" throughout the world is one of the architects of ICEVI in recent times. He took over as President of ICEVI in 2002 and served for 10 years as its President. ICEVI witnessed significant growth during his tenure and he was instrumental in introducing the Global Campaign on Education for All Children with Visual Impairment (EFA-VI) acting in partnership with the World Blind Union. He is an able administrator, a great friend of persons with visual impairment throughout the world and a visionary. He was conferred Honorary Doctorate by the Salus University and he has won many international awards for his exemplary services in the disability sector. His involvement in ICEVI in the capacity of Immediate Past-President will provide special impetus for the growth of the organisation.

Prof. Jill Keeffe
First Vice President

Professor Dr. Jill Keeffe from the Centre for Eye Research Australia (CERA) is a world renowned expert in the education of low vision children. She is also serving as an Advisor for the Lions Clubs International and closely associated with ICEVI for over 20 years. She served as the Chairperson of ICEVI Pacific region and currently serving as the First Vice-President of ICEVI. With a strong background in research, Dr. Jill Keeffe has prepared a number of assessment tools for teachers to use. The baseline survey template developed by her recently helps countries to project number of visually impaired persons in order to plan intervention services. She is the head of the Research Team at ICEVI and her wide international experience brings a lot of value to ICEVI.

Hans Welling
Second Vice President

Hans Welling from the Royal Visio, The Netherlands is associated with the ICEVI for many decades. He was the Chairperson of the Host Committee which organised the Golden Jubilee Conference of ICEVI in the Netherlands in 2002. Hans is also currently serving as the Regional Chairperson of the ICEVI Europe region. He is on the members of the Resource Mobilisation Committee of ICEVI, which generates resources to expand EFA-VI Global Campaign activities. Hans has also worked in many developing nations of the world and his rich experience will augment ICEVI activities in the years to come.

Nandini Rawal
Treasurer

Nandini Rawal, the Treasurer of ICEVI since 2006 is a product of one of the prestigious Management Institutes of India, the Indian Institute of Management, Ahmedabad, India. She is currently serving as the Project Director of Blind People's Association, Ahmedabad, a reputed organisation offering multifarious services for persons with visual impairment and other disabilities. Her eloquence and depth in subject won her many laurels. She is also serving as one of the advisors of CBM and travelled widely in connection with professional work. She brings significant administrative and management experience to ICEVI.

ICEVI welcomes all Principal Officers and wish them great success in the fast growing ICEVI.

Meet our Regional Chairs
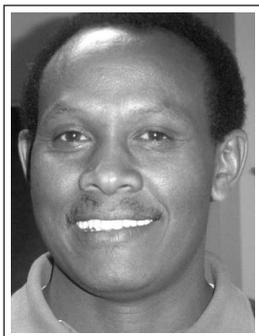
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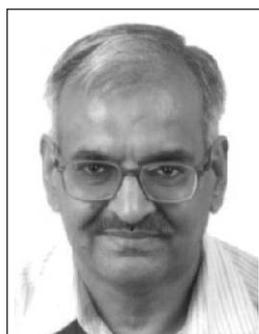
Bhushan Punani
Regional Chairperson
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ICEVI – EXCO Meeting

2 December 2010 ☌ RNIB, London

Strategic Update

The last meeting of ICEVI Executive Committee for the quadrennium 2006-2010 was held at the Royal National Institute of Blind People, London on 2nd December 2010. The following brief strategic update of the meeting is presented below for the benefit of ICEVI Constituency.

1. There is a need for developing regional strategies for ICEVI regions for the scaling up of EFA-VI Global campaign activities.

2. Majority of the members of the executive committee suggested that more regional conferences would be relevant and therefore it was resolved that ICEVI should explore the possibility of organising the General Assembly with larger participation of a "Think Tank" consisting of professionals to plan the work of ICEVI for the quadrennium and strengthen regional events. EXCO fully endorsed the exploration of an alternative for 2012 and gave the Principal Officers that authority to move ahead with this exploration. Progress in this front will be reported back to the EXCO.

3. The Francophone Blind Union (FBU) will take lead in initiating campaign activities in the French speaking African countries.

4. Members suggested that the Vision Alliance should be strengthened in all EFA-VI Focus countries and also promoted at the global events of IAPB, ICEVI and the WBU.

5. The Perkins School for the Blind has agreed to coordinate the editorial work of The Educator in collaboration with the ICEVI Secretariat.

6. Members appreciated the success of the Higher Education project being implemented by ICEVI in Cambodia, Indonesia, The Philippines and Vietnam in collaboration with the Nippon Foundation. It was also suggested that an application for extension of the project for the year 2011-12 should be prepared and submitted shortly.

7. The EXCO suggested the following amendment to Article 8 of the Constitution with regard to postal ballots which was endorsed by the General Assembly held on the 3rd December:

"8.1 With the prior agreement of the President, a member of any organ of the Council may validly participate in a meeting of that body through the medium of telephone or video conference or any other form of electronic communication equipment, provided that all persons participating in the meeting are able to hear and speak to each other throughout such meeting. A person so participating shall be deemed to be present at the meeting and shall accordingly be counted in the quorum and be entitled to vote. A resolution passed at any meeting held in such manner and signed by the Chair of the meeting shall be valid and effective as if it had been passed at a meeting of that body duly convened and held.

8.2 A postal ballot may be used for deciding any question which requires decision within any organ of the Council. Ballot papers, clearly stating the proposal to be voted on, shall be sent to all persons entitled to vote on the matter in question. All means of written communication may be used."

8. Members of the Executive Committee applauded Larry Campbell for the laurels he brought to ICEVI in his stint as the President for a decade through his visionary and inspiring leadership. They also placed on record their deep appreciation for his leadership provided in the EFA-VI campaign as the Chairman of the Global Task Force.

9. Members thanked Harry Svensson for his contribution as the Vice-President of the organisation and editor of The Educator and wished him a peaceful retired life.

ICEVI Strategic Review Meeting

3-4 December 2010 Ⱶ RNIB, London

The ICEVI conducted a Strategic Review meeting at the Royal National Institute of Blind People, London on 3-4 December 2010 to revisit the goals of ICEVI in the light of its successes and challenges. The meeting was attended by the full executive committee and two delegates from each of the seven regions of ICEVI. The following salient recommendations emerged from discussions:-

1. ICEVI and the World Blind Union should develop joint strategies at the global, regional and national levels to scale up the implementation of the Global Campaign on Education for All Children with Visual Impairment (EFA-VI).

2. The following four committees will assist ICEVI in planning, monitoring and evaluation of the campaign activities in the future:

    • Global Advocacy and Networking
    • Media and Materials
    • Programme Review (including research and monitoring)
    • Resource Mobilisation

3. There is a need to identify global partners involved in Education For All initiatives and integrate the EFA-VI Global Campaign in them.

4. The EFA-VI concept should not be limited to focus countries alone. Though specific activities are planned in the focus countries, the campaign as such should be popularised in non-focus countries too through seminars, conferences, networks, etc.

5. Research should become an integral part of the EFA-VI campaign in order to document good practices.

6. A thorough mapping of the existing and proposed focus countries with that of the services and priorities of International Non-Governmental Organisations should be made to nurture partnership at the regional and national levels.

7. Strategies have to be developed for each region of ICEVI to nurture regional development and local leadership.

8. ICEVI should document innovative practices and also prepare human interest stories for advocacy.

9. The advocacy materials have to be translated into national languages of the focus countries so that language does not become a barrier for participation.

10. The ICEVI website needs to be used as an effective tool and the need for accessible format should be emphasized in materials development. The ICEVI regions should be encouraged to use the ICEVI website effectively to post news on regions. Social interactive sites may also be used for posting information on ICEVI.

11. ICEVI's Strategic Plan should emerge as a development plan to guide the work of the regions.

12. Human resource development work at the regional level should be given priority and effective regional committees may be formed for strengthening ICEVI in regions.

The full Strategic Review document will be posted on ICEVI website (**www.icevi.org**) soon.

World Blind Union

On behalf of members and friends of the World Blind Union, I would like to thank Larry Campbell for a lifetime of hard work in making a difference in the lives of many persons who are blind or partially sighted. Larry we have all enjoyed working with you and learned a great deal from you. I wish you every happiness in retirement and look forward to staying in touch over the coming years.

The Vision Alliance continues to develop and grow as we work together to bring the initiative to life. At the December 2010 meeting held immediately prior to the ICEVI executive Committee meeting we identified the following priorities where will collaborate together: EFAVI, WIPO treaty and low vision.

Both WBU and ICEVI executive committees met late 2010 and adopted a resolution "**joint ICEVI-WBU ADVOCACY FOR EFA-VI**". We are working together to develop an advocacy strategy for this resolution. We will keep you in touch as this is developed and implemented.

2011 is really important in our work with WIPO to achieve a treaty for the cross border sharing of published works. We will be working hard to progress this initiative with all stakeholders and are hopeful that there will be a call for a diplomatic conference to be held by WIPO in 2012.

ICEVI, WBU and IAPB are working together to establish a working group on low vision. Each organisation is concerned with this issue and over many years have had a committee to address this issue. We believe there is a great deal we can learn from each other adding value to the work done by each. We will provide further details of this as they develop.

I look forward to another year of hard work in our collaborations with ICEVI and IABP to ensure there are good pathways from eye care health to education and rehabilitation to empowerment of people who are blind or partially sighted.

News from **Deafblind International**

Stan Munroe, DbI Information Officer

Dear Friends,

We were pleased to hear that you appear to be getting back on track without losing your focus following your setback last year regarding your conference. We will keep our fingers crossed as we plan our big conference event during uncertain times.

Our conference planners in Brazil are forging ahead full steam in anticipation of a successful XV DbI World Conference in Sao Paulo, September 27-October 01, 2011. The conference setting is at the Bourbon Convention Centre, Ibirapuera, Sao Paulo City, Brazil. The area around the hotel is very safe and there are many nice shops and restaurants.

The theme for the conference is 'Inclusion for a Lifetime of Opportunities', with January 31, 2011 as the deadline for the call for papers. For more information on the conference, check out the conference website www.dbi2011.com.br.

Three of our Networks (Acquired Deafblindness, Communications, and Usher Syndrome) organized successful major events this past year. The Communications Network Conference "The Magic of Dialogue" was held near Paris, France June 22-25, 2010 while the Acquired Deafblindness Network (ADBN) Conference "Building Bridges-connecting people" was held 27 September – 3 October, in Aalborg, Denmark. Prior to the ADBN conference, the Usher Syndrome group held its 2 day seminar in Aalborg. These DbI Network events contribute significantly towards promoting best practices and communicating the latest science to professionals working with individuals who are deafblind. Check out the DbI website (www.deafblindinternational.org) to learn more about these successful events.

The Management Committee and Council continue to work on the DbI strategic plan. Over the past four years progress has been made in these major goals:

1. Enhance the organizational capacity to meet the needs of deafblind people.
2. Influence the development of services for the benefit of deafblind people and their families around the world.
3. Encourage improvements in practice and creation of new knowledge by facilitation, improved communication and networking.

Again we congratulate you for your continued efforts in the "Education for All" program. It was very interesting to read Larry Campbell's article in our January – December 2011 edition of DbI Review about the possibility that the needs of children with deafblindness will be addressed in The Philippines and Cambodia, through ICEVI collaboration with Perkins International.

Here's wishing all the best success to ICEVI in the coming year.

WHAT DO WE KNOW, AND HOW DO WE KNOW IT?

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In the field of education in recent years there has been increased attention not only to the effectiveness of research, but also to the quality of the research. From this movement have emerged (a) the Cochran Collaboration, established in 1993 to examine research in health care (**http://www.cochrane.org**/); (b) the Campbell Collaboration, established in 1999, to examine research evidence in the behavioral and social sciences (**http://www.campbellcollaboration.org**/); and (c) the Norwegian Center for the Health Sciences, established in 2004, also to examine evidence for health care (**http://www.kunnskappssenteret.no**). These organizations work together in various ways, including with the What Works Clearinghouse (**http://ies.ed.gov/ncee/wwc**/) in the United States. The What Works Clearinghouse was established by the Institute for Education Sciences in the US Department of Education in 2002, specifically to examine research in education. These organizations conduct systematic reviews on specific topics, such as reading programs, the efficacy of early childhood, and other relevant educational topics, utilizing peer review to conduct a meta-analysis of the research on that topic.

Only the Cochrane Collaboration has investigated topics related to blindness and visual impairment, but the reviews have focused primarily on different visual disorders, as would be expected for a group examining health care. The Cochrane Collaboration does include reviews in rehabilitation, specifically a review of orientation and mobility training in adults.

It seemed unlikely that the What Works Clearinghouse (WWC) in the United States would pay much attention to low-prevalence disabilities like visual impairment and blindness, and in fact, the WWC has produced no reviews in visual impairment and only a few that involve children with disabilities at all. Accordingly, the National Center on Severe and Sensory Disabilities at the University of Northern Colorado examined the educational literature in literacy and mathematics to determine what we know about what and how we are teaching students with visual impairments in the United States.

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Why Does It Matter?

We had two reasons for conducting these reviews: (1) legislation in the US mandated the use of research-based practices in the schools; and (2) we did not know if that mandate could be met, when it came to students with visual impairments. The legislation (the No Child Left Behind Act of 2002) defined scientific research as:

(A) research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs; and

(B) includes research that—

   (i)   employs systematic, empirical methods that draw on observation or experiment;

   (ii)   involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;

   (iii)   relies on measurements or observational methods that provide reliable and valid data across evaluators and observers, across multiple measurements and observations, and across studies by the same or different investigators;

   (iv)   is evaluated using experimental or quasi-experimental designs in which individuals, entities, programs, or activities are assigned to different conditions and with appropriate controls to evaluate the effects of the condition of interest, with a preference for random-assignment experiments, or other designs to the extent that those designs contain within-condition or across-condition controls;

   (v)   ensures that experimental studies are presented in sufficient detail and clarity to allow for replication or, at a minimum, offer the opportunity to build systematically on their findings; and

   (vi)   has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.

(20 U.S.C. 7801, Section 9101(37))

If this is the definition of scientific research that is required to establish research-based practice, we feared that we had little hard evidence to support the methodologies and practices currently implemented on a daily basis, whether it was braille instruction or reading instruction with low vision devices. Most of our research seemed to be built on case studies, anecdotal reports, individual philosophies, common sense, intuition, clinical practice, and word-of-mouth. While these traditions are valuable, they seemed insufficient for today's educational environment. "We are often left with best practices that are more philosophical than proven, more descriptive than empirical, and more antiquated than modern" (Ferrell, 2007).

The Reviews

We conducted our reviews using the same procedures used by the WWC. We sought research studies that included participants who were blind and visually impaired and between the ages of 3 and 21 years; that investigated an intervention; and that included a control or comparison group of some type (participants could be their own controls). If the comparison group was children without visual impairment, we excluded it from review as an inappropriate comparison. We conducted multiple searches over a period of months to find peer-reviewed articles (published in English). In the mathematics review, we also included dissertations and theses, since these had been subject to an expert review by university faculty.

Similar to all of the organizations listed above, we also utilized meta-analysis procedures to conduct our reviews. Meta-analysis is a statistical procedure used to identify trends in the statistical results of a set of existing studies examining the same research problem (Gall, Borg, & Gall, 2003). Through such a procedure, effects, which are difficult or impossible to discern in the original studies because the sample sizes are too small, can be made visible, as the meta-analysis is equivalent to a single study with the combined size of all original studies. Meta-analytic reviews go beyond narrative reviews, because they are systematic, explicit, and utilize quantitative methods of analysis (Rosenthal, 1984). Because of these features, meta-analytic reviews are considered to provide more thorough, comprehensive, and precise summative evaluations that entail greater objectivity than narrative reviews.

EVIDENCE FOR LITERACY PRACTICES

The literacy review covered 40 years of research, from 1964-2004. We observed that the quality of research had changed over the years. In the 1960s and 1970s, the American Printing House for the Blind was conducting most of the research in literacy and was utilizing rigorous research designs, primarily in specialized schools. Over time the research had evolved into qualitative studies and single subject designs that made generalization to a larger population difficult, if not impossible. Of the 652 articles initially located and reviewed, only 231 turned out to be actual research articles, and only 32 met the criteria of having both an intervention and a comparison group. Approximately 40 studies were excluded because the comparison group was between individuals with and without visual impairment.

Ten of those 32 research studies reported insufficient data with which to conduct an effect size, an important component of meta-analysis that measures the relative size the impact of the results within the general population, and two of the 32 research articles drew conclusions that were contrary to the data presented (that is, if the study asserted that the intervention produced a positive effect on student achievement, the data reported indicated there was a negative effect).

These 20 qualifying articles examined 20 different interventions and judged their success through 20 different outcome measures. There was no replication (a component of scientifically-based research). While we sought to determine best practices in educating students with visual impairments, we were forced to identify *promising practices*, because the evidence was simply not strong enough to call them "best." Identifying promising practices from a diverse group of studies that have never been replicated is risky. Nevertheless, they do suggest that the following practices *may* be effective in teaching students with visual impairments:

- Braille readers may be better able to process oral information than large print readers (Brothers, 1971).

- Haptic perception is sustained over time (Anater, 1980), suggesting that concrete hands-on experiences might enhance learning.

- Reading braille with the left hand may be more effective than with the right hand (Hermelin & O'Conner, 1971).

- Reducing the number of words in a braille reading passage may not result in increased speed or comprehension (Martin & Bassin, 1977).

- Poor braille quality can slow down reading rate and accuracy (Miller, 1977, 1987).

- Leaving out words might decrease the amount of time it takes to read, but it does not increase comprehension (although it has a greater impact on news passages than it does on science or fiction passages) (Martin & Bassin, 1977).

- Drill and practice in braille can lead to increased reading achievement, faster silent and oral reading rates, fewer reading errors, and greater comprehension (Flanagan, 1966; Flanagan & Joslin, 1969; Kederis, Nolan, & Morris, 1967; Layton & Koenig, 1998; Mangold, 1978; Umsted, 1972).

- Braille reading comprehension is decreased when other stimuli compete for the student's attention (Millar, 1988, 1990).

- Training in and use of low vision devices increases oral comprehension reading speed (oral and silent), and the amount of reading accomplished (Corn, Wall, & Bell, 2001; LaGrow, 1981; Lackey, Efron, & Rowls, 1982; Smith & Erin, 2002)

<div align="right">(Ferrell, Mason, Young, & Cooney, 2006, p. 12)</div>

The complete review on forty years of literacy research can be found on the National Center's website, at **http://www.unco.edu/ncssd/research/literacy_meta_analyses.shtml**.

EVIDENCE FOR MATHEMATICS INSTRUCTIONAL PRACTICES

The American Printing House for the Blind commissioned a meta-analysis of research in mathematics teaching (Ferrell, Buettell, Sebald, & Pearson, 2006). Utilizing the same criteria as

the literacy meta-analysis, we found similar results: 125 articles were located, but only 10 qualified under the criteria utilized by the WWC. One of these 10 studies did not report enough data to compute an effect size. Once again, each study utilized a unique intervention strategy, and each study reported a different outcome measure. Meta-analysis procedures could not be conducted, but we again take the risk of generalizing the following *promising practices*:

- Concrete mathematics aids can increase computation accuracy (Belcastro, 1993; Champion, 1977; Hatlen, 1977).

- Comprehension of mathematics concepts can be increased with use of the Talking Calculator (Champion, 1977).

- Instruction in fingermath may increase computation accuracy (Maddux, Cates, & Sowell, 1984).

- There is conflicting evidence for the effectiveness of the abacus (Kapperman, 1974, Nolan & Morris, 1964).

<div align="right">(Ferrell, Buettel, Sebald, & Pearson, 2006, p. 16)</div>

The complete review of mathematics research from 1955 to 2005 can be found at **http://www.unco.edu/ncssd/research/math_meta_analysis.shtml**.

Conclusions

In a sense, our reviews met our original goals, and demonstrated that we indeed did not have a body of research that could stand up to the requirements of the No Child Left Behind Act. But we were also disappointed in the lack of a methical and well organized approach to research, where a number of different research questions seem to be examined once, but never replicated and thereby never verified, even by the same investigator. Ideally, researchers would replicate promising practices with different groups of children in different placements in different parts of the country, but the field is constrained by a changing population (with growing proportions of children with additional disabilities), conflicting faculty responsibilities (limiting the time available for research), and the economics of higher education (where class sizes are rising as state budgets for higher education falter).

The test of any intervention or procedure is *evidence* – not "whatever works," but "*what works*." It seems absurd that there is more information about the effectiveness of various consumer products than there is about the methods we use to teach children with visual impairments.

Educational research on students with visual impairments is difficult to conduct. The population is geographically dispersed, making it difficult to identify an adequate group of study participants without considerable expense. Participants who are identified are often extremely

heterogeneous and exhibit a range of visual disorders.   Specialized schools, once the greatest source of research samples, no longer offer the homogeneous population and curriculum they once did, as the largest proportion of students with visual impairments in the United States (86.55%) now attend general education classes in public schools (U.S. Department of Education, 2005, p. 169). Yet, local school districts are reluctant to consent to research because it takes away from other instruction.

Research is also constrained by the economics of the amount of funding available for special education research. A recent study sponsored by the National Eye Institute (NEI), for example (Convergence Insufficiency Treatment Trial Study Group, 2008), devoted $6.1 million to the study of 221 children over a four year period, where each subject received a 12-week training program. In contrast, Project Prism, a developmental study of children ages birth to 5 years, was funded at 12% of the medical study ($750,000) for five years and involved 202 subjects who received extensive testing every six months (Ferrell, 1998). Both studies involved multiple sites and minimal risk to subjects. Until society values educational research as much as it values medical research, little progress can be made in either changing the research culture or obtaining answers to pressing and often perplexing issues.

We think we know what we need to do, but we do not always know why we need to do it, or even if it is in the best interests of the children we serve. We remain almost a folk art, working in isolation in what might be called a cultural tradition based on intuition and clinical practice, when we need to continuously renew our practice by pursuing new knowledge and creating a research-based practice.

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IS RESEARCH NECESSARY?

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INTRODUCTION

The very title of this paper is deliberately provocative. The intention is to restart, in a wide public forum such as the ICEVI's *Educator,* a discussion about the *what,* the *why,* and the *how* of research activities in the field of visual impairment. Although by no means the only important issue, it must necessarily be a matter of concern that on a global basis there are severe financial challenges confronting charitable and other bodies that have an interest in the well-being of severely visually impaired people as these bodies seek to support their clients to realise their full human potential and to compete and co-operate with their fully sighted peers. In a time of a worldwide economic depression, these institutions have to prioritise their activities, and inevitably research is an area of work that has to justify its place alongside a multitude of other demands and activities. This can be seen in Great Britain, where in 2006 a "collaborative workshop" was held under the aegis of "charitable partners who commission social research in the sector," "to discuss social research priorities on visual impairment" (Brace, Herriotts, McCullagh, & Nzegwu, 2007, p. 178). In that workshop, finance was not the overtly dominant issue, but it ran through the various symposia sessions as a kind of underlying theme or motif, expressed most clearly in the emphasis on the practical and useable results of research.

Researchers themselves have similar practical, "applied" concerns, but some of them have interests in quite other aspects of the aims and justifications of research into the non-physical/non-medical/non-physiological sides of visual impairment. These interests might be, for example, in the kinds of research that could tell us about human psychological development in general: How investigating the absence of one sensory modality, such as vision, might enable us to generate knowledge and then deepen our insights into how as a species we come to understand our physical world. This is by no means new, and its modern formulation can be seen in the arguments put forward by, to give but one example, Lewis and Collis (1997). Their proposition is stated thus: A general reason for studying a disability such as blindness in children is that advances in our knowledge of their particular developmental progression "should feed back

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into our understanding of more general issues in psychological development (Lewis & Collins, 1997, p. 2).

What has been until recently a matter of little concern is the question as to who does the research. In most areas of scholarship and research, the "doer" is rarely of major concern. He or she is the person with the requisite training and skills. However, in the disability arena, this is now becoming an issue of interest within the broader context of equality, social exclusion/inclusion, emancipation, and empowerment. The shift in orientation can perhaps best be evidenced by the arguments adduced by Duckett and Pratt (2007), who had been commissioned by a charitable body, the Thomas Pocklington Trust, to "explore the opinions of visually impaired people on visual impairment research" (p. 5). Such surveys of client opinion are not new. What was new was that their findings revealed that "people wanted greater inclusion of visually impaired people in such research" (p. 5). The authors inferred that for their respondents a priority was research that was "participatory, empowering and emancipatory" (p. 14). Is this to be a new pattern, a new paradigm, for the initiating, the content, and the management of research?

RESEARCH COMMONALITIES

Whatever the genesis and the subject matter of research, there are technical research procedures that are common to all investigations involving low-prevalence conditions such as blindness. Editors of journals who use a peer-review process before accepting and publishing a paper require the reviewers to evaluate the extent to which the researchers have adequately described their group of participants, their "sample:" the number of subjects; their ages and age range; the nature, causation, and degree of the visual impairment; the age of onset of the condition; the presence and nature of additional disabilities; and the aims and methodology of the work. Even with a low-prevalence impairment, the requirement for the recruitment of the whole population of subjects or even a randomly-drawn sample can be difficult if not impossible to meet. All too often, it is the case that the availability of possible and willing participants is the determining factor. The researcher has to make do with a sample that cannot meet all these criteria, and the validity and generalisability of the findings may be undermined. Fortunately, failure to achieve this degree of rigour will not always make the work trivial or of little use. Certainly, new researchers must not be discouraged from attempting research because they fear they can not meet scientific demands of this level of rigour. Other researchers can learn from their attempts, replicate them with appropriate modifications and new samples, and thus enlarge the global data-base, with the likelihood that our knowledge-base will have been extended and advanced.

But even if most of the research design requirements have indeed been met, it still remains that what we have is a single sample, seen on a single, particular historical occasion. What was

happening in the wider political, social, and economic world at that moment in time can make that sample unique and particular in ways external to the research design itself. We must be alert, therefore, to the fact that even perfect designs are set in their own time contexts.

One alternative recommended by design methodologists to reduce some of the possible defects of single-occasion, cross-sectional, investigations is the longitudinal study in which the same group of participants is seen on a regular basis over a prolonged period of time. Some of the ever-changing influential factors may be evened out over the time period, thus making it reasonable to make claims about the reliability, validity and, importantly, the generalisability of the findings. The research literature does contain examples of such longer-term monitoring of development in blind children. Among them are those described in reports by Norris, Spaulding, and Brodie (1957), Fraiberg (1977), and Ferrell (2000). One that examines issues of concern to adventitiously and congenitally blind and partially sighted adults is that of Douglas, Corcoran, & Pavey (2006), with a sample of hundreds. Currently, too, the present author is writing up the findings on reading and other associated cognitive development factors over a ten year period in a group of blind and partially sighted children studied since entry to primary school.

While longitudinal studies help to uncover valuable data on a group of subjects over a prolonged period of time, there is also the potential value of the single in-depth case-study. This can be especially useful if the findings are counter-intuitive or counter to previous findings. (A single instance can be all that is needed to refute a theory; for instance, a finding that would throw the whole of modern physics into meltdown would be the report of a feather and cannonball falling at different speeds in a vacuum!) Single-case research can also handle in a completely objective, scientific manner, by the use of time and event sampling techniques, precisely-focussed problems like the elimination of stereotypic behaviours or the encouragement of skills in mobility and independence for one particular person. Whole populations of subjects or validly assembled random or representative samples are not therefore essential for a project to constitute a scientifically valid piece of work. For the teacher or rehabilitation specialist, these kinds of single-case designs can produce solutions to highly specific problems. They offer, too, the opportunity for these practitioners to conduct their own researches. "Practitioner research," the kind of research carried out by professionals in their workplaces, is surely well worth encouraging, putting research into and alongside their everyday activities rather than separate and remote.

No matter which research methodology we adopt, what would be most profitable would be the existence of a theory or a set of theories that could generate hypotheses that could be put to experimental test. So far, we are somewhat lacking in these kinds of over-arching theories or models in the field of visual impairment.

MODELS, STRATEGIES, AND THEORIES TO GUIDE RESEARCH

It may be that visual impairment is too vast and heterogeneous an area of study for a single over-arching theory or model to be envisaged or practicable. Would it be even possible to subsume in one conceptualisation such diverse entities as levels of vision, age, age of onset and duration of the impairment, congenital and adventitious causations, the presence of multiple disabilities, family and social conditions, and so forth? Probably not. However, it may be possible to deal with these variables within linked sets or groups, and then proceed to ask questions as to the kind of theories that might be worth exploring. We do already have available many scores of published reports on these various themes; they are available in the corpus of research literature, and over the past 60 years we have seen comprehensive listings of them, for example, those of the American Foundation for the Blind (Lende, 1953), the American Printing House for the Blind (Morris & Nolan, 1972), and The Temple University Press (Bauman, 1976). With these, a series of meta-analyses of the methodology, the data, and the interpretations and conclusions might lead to the formulation of persuasive theories capable of testing.

In one attack on the problem, there is Warren's finely detailed "A research model for the future" (Warren, 1984, pp. 317-320).   It is described as "a hierarchical model" in which a factor, a variable, is not to be measured independently, but rather in its wider psychological and social contexts and in the context of its development and evolution over time. It is a model bound up to a strategy. A strategy is a plan for action; that is it sets out, in this case, what is to be done to amass "an integrated body of knowledge about blind children." Warren makes several claims for this approach. One is that by gathering information about the child's environment (its sensory, learning, language, and social aspects), specific characteristics (sex, intelligence, residual vision, age, etc.), and acquired characteristics, other researchers would have a comparative base against which to plan and place their own new investigations and to evaluate their data. The overall purpose would be to develop "a systematized and growing body of information about blind children." A plan, a strategy, of this nature would be equally applicable, of course, to visually impaired adults and to developing our understanding of their and our needs. Such needs would encompass educational, emotional, employment, psychological, rehabilitational, and technological support. Warren's approach is therefore a model for action and can stand alone as a self-contained, defensible strategy. It can also fit into what is to be discussed now: an over-arching theory.

A strategy is not a model in the sense of a theory upon which to conceptualise what visual impairment entails. If it were feasible to outline a theory, or a set of theories covering discrete sub-groups of factors, researchers would be in a position to provide potential financing bodies with a prioritising framework, and then a comprehensive and hierarchical strategy such as Warren's could serve to guide the content and the conduct of the work. Often current practice in the research community is set in motion by the curiosity and interest of an academic researcher,

or by the wishes for solutions to problems of professional workers (teachers, rehabilitation officers), or the pressures on institutions to provide improvements in their services. These driving motivations will, quite rightly, continue to be the source of new initiatives, but the argument for a theory-led orientation is worth making.

One fledgling essay at a theory of this kind is already in the public domain as formulated by Tobin (2008). Information is proposed as a concept explaining that "delays and barriers experienced by blind people have as their causation the lack, the inadequacy or the inaccessibility of information" (p. 119). The wide-ranging scope of the concept is illustrated by examples of information lack or paucity in early childhood, where the failure of baby and mother to be able to monitor each other's line of sight robs them of information about the other's thinking and feelings and can therefore interfere with emotional bonding and with the baby's learning. The sighted mother and baby dyad can know each other's focus of attention at any given moment, and long before the emergence of spoken language in the baby. This sharing of line of gaze by the dyad can lead to turn-taking in their mutual, non-verbal behaviour, and this later becomes a part of everyday spoken conversation. Lack of visual information of what is in the near physical environment may also lead to delays in crawling and walking. The absence of visual lures to entice the infant to reach out, touch, and grasp can result in delays in developing motor and locomotor skills and thus deprive blind infants of an understanding of their physical world: its shape, size, texture, manipulability, and its safety and dangers. Lowenfeld (1948) set out what he saw as the three main restrictions on development caused by blindness: namely lack of ease and freedom of movement, the limited range and variety of experiences, and difficulty in controlling the environment. Perhaps these can all be attributed to information lack.

The applicability of the information concept (lack of, paucity of, inaccessibility of, slowness of pick-up of information) is further exemplified in Tobin's (2008) paper by references to aspects of later cognitive development, reading, tactile graphics, and navigating a route through the near environment. It is maintained, no doubt too ambitiously, that it is a theory "for predicting and explaining all the apparently differing challenges and problems that confront blind people as they strive to understand their physical and psychological worlds" (p. 126). In identifying these challenges, it is also claimed that their identification and formulation in operational terms could lead on to programmes of intervention in teaching and rehabilitation. Perhaps finally we are returning to the theme of the wider relevance of visual impairment research to developing a better understanding of how sighted people come to understand the world.

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TYPES OF RESEARCH: QUANTITATIVE, QUALITATIVE, MIXED METHODS, AND TEACHER ACTION

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Research is the work that involves studying to discover facts about something. Educators in the field of visual impairment are concerned about knowing the effectiveness of education programs, practices, and policies that help students with visual impairments achieve the goals of improving learning. There has been a call for the greater use of research-based best instructional practices in the field of visual impairment. In reality, there is a dearth of research in the field of visual impairment from which to draw best practices (Wild & Allen, 2009).

Given this emphasis on scientifically based research, the one research model that the U. S. Department of Education seems to promote, is randomized clinical trials, which are a type of experimental design testing formal hypotheses. Kirchner (2003) pointed out that this model seemed to be promoted as the only way to do "scientific" research to be used in evidence-based policy. However, there are several ways of doing scientifically based research available for educators. This paper is designed to review quantitative, qualitative, and mixed research methods as scientifically based researches in the field of visual impairment and to suggest teacher action research for the best research practices.

Trends in Research Design

The quality and relevance of research have been emphasized in developing instructional strategies, and professional development must be grounded in scientifically based research in education (Dynarski, 2009). Wild and Allen (2009) define scientifically based research as "rigorous; systematic; objective; and able to present findings, analyze data, use reliable methods to collect data, make claims of causal relationships, obtain acceptance by peers, and use appropriate research designs"(p. 113).

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There are two kinds of scientifically based research methods: qualitative and quantitative. Because the two methods involve different strengths and weaknesses, they compose alternative, but not exclusive, strategies for research (Gerber, 2009). Qualitative and quantitative methods offer their own aims, appropriate research questions, or hypotheses and evaluation criteria for the two approaches (Borreg, Douglas, & Amelink, 2009). The goal of both methods is to provide convincing evidence sufficient to answer the research questions. Evaluation of quantitative and qualitative research methods has similar aims, although the details differ.

QUALITATIVE RESEARCH

Qualitative research is defined as "a set of research techniques in which data is obtained from a relatively small group of respondents and not analyzed with statistical techniques." (Wikipedia). Qualitative research is characterized by the collection and analysis of textual data (surveys, interviews, focus groups, conversational analysis, observation, ethnographies (Olds et al., 2005), and by its emphasis on the context within which the study occurs. Case studies, as one qualitative research method, are particularly useful when one needs to understand some special group of people, a particular problem, or a unique situation in great depth, and when one can identify cases rich in information (Gerber, 2009).

Wild and Allen (2009) proposed that qualitative methods are acceptable methods for scientific research to gain a better understanding of the needs of students who are visually impaired. They emphasized that qualitative methods allow educators to learn by asking students questions, making observations, and analyzing documents. They believe that educators and researchers will "gain a deeper understanding of the students' learning process than by using many standardized instruments"(p. 114).

In the field of visual impairment, much of the research reflects a qualitative methodology (e.g., Griffin-Shirley et al., 2009; Smith, 2008). Kirchner (2003) reported that research in the field of visual impairment relies heavily on qualitative and exploratory methods—for example, case studies or surveys. She surmises that this reliance on qualitative methods occurs because of the difficulties in conducting quantitative research in low-prevalence populations that are visually impaired.

There were 47 qualitative research articles published in the Journal of Visual Impairment & Blindness in the last ten years. As one example of a qualitative study, Griffin-Shirley et al. (2009) used a three-phase qualitative study to develop a comprehensive understanding of the roles and responsibilities of vision education professionals who are dual-certified as teachers of students with visual impairments and orientation and mobility specialists. Through three phases, the study combined interviews and observations of the vision professionals with interviews with their administrators.

In Smith's (2008) studyX

sensitivity, disability glare sensitivity, glare recovery, stereo acuity, and visual fields of 900 elderly persons. Brabyn et al. concluded that two conditions under low luminance or glare conditions dramatically increased in the prevalence of legal blindness and low vision. They discussed the practical implications of these findings.

MIXED METHODS RESEARCH

Studies in the field of visual impairment have relied on both qualitative and quantitative studies to assess the effectiveness of education programs, practices, and policies that help students with visual impairments achieve the goals of improving learning over the last ten years. There appears to be a new trend toward the use of mixed method designs in the field of visual impairments.

Mixed methods has been described as the third type of research. Creswell et al. (2003) define a mixed methods study as follows:

> A mixed methods study involves the collection or analysis of both quantitative and/or qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process of research. (p. 212)

In the field of visual impairment, there is a mixed research study which collected data and analyzed both quantitative and qualitative data in a single study (Sacks, Kamei-Hannan, Erin, Barclay & Sitar, 2009). Sacks et al. (2009) used a mixed-methods design to investigate the social experiences of beginning braille readers who were initially taught contracted or alphabetic braille in literacy activities. Sacks et al found there were no differences in the quality or quantity of social experiences between the two groups. Sacks et al. concluded that the choice of instruction in alphabetic braille or contracted braille did not influence the social interactions of emergent braille readers in literacy activities.

TEACHER ACTION RESEARCH

In spite of the current emphasis on research-based practices and the use of scientifically-based research, Wild and Allen (2009) point out that there is a dearth of research in the field of visual impairment from which to draw best practices. Not only is it necessary to increase the number of researchers who study visual impairments, but the assistance of educators of students with visual impairments, related service providers, students with visual impairments, and parents should be enlisted (Wild & Allen). The synergy that results from the involvement of people closest to the students who are blind or visually impaired themselves can produce creative solutions by those who provide direct educational services to them. Teacher action research is discussed in more detail in the article by Zebahazy in this issue.

Conclusion

Research practices should more clearly explicate the conceptual and methodological foundations for the use of quantitative, qualitative and mixed methods research (Drisko, 2008). Educators need to affirm the worth and merit of quantitative, qualitative and mixed research methods in providing an understanding of a scientific, analytical, and ethical approach to building knowledge for practice. Service providers in the field of visual impairment come from diverse backgrounds (e.g., teachers of students who are visually impaired, orientation and mobility instructors, braille instructors, assistive technology specialists), each of which has its own issues encountered daily in practice. Researchers, service providers, families, and individuals with visual impairment need to work together to identify what is important, to investigate these issues, and to build a body of best practices that can lead to improved outcomes for students.

Judgment about which research method is best should depend on the nature of the questions being asked and the extent of prior knowledge on the topic (Creswell, 2002; Gerber, 2009; Kirchner, 2003). Creswell lists three criteria for selecting from among quantitative, qualitative and mixed methods approaches: (a) the research problem, (b) the personal experiences of the researcher, and (c) the audience (who will utilize the research when completed). Utilizing mixed methods designs may prove to be the type of research that can answer the questions and overcome the limitations of a low-prevalence population.

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The **London Declaration** issued by the ICEVI and the DAISY Consortium on December 4, 2010

"Recalling the productive relationship which has traditionally existed between the goals of ICEVI and the efforts of the DAISY Consortium, the two organisations welcome and support the following as ways to implement the UN Convention on the Rights of Persons with Disabilities in relation to access to information ..."

1. The integration of the DAISY standard with mainstream publishing systems;

2. Accessible publishing directly by publishers via EPUB and similar accessible electronic publishing solutions;

3. The creation of an accessible digital version of all published materials, utilising solutions such as the "save as DAISY" option in Open office, Microsoft word, Adobe InDesign etc.;

4. The adoption by Publishers of the use of a single electronic source file from which all formats, including accessible versions, can be simply created;

5. Development of the DAISY standards to encompass file-formats which enables the easy production of electronic and hard-copy braille;

6. International inter-operable standards for access to information;

7. The ability to exchange information across national boundaries unhindered by copyright restrictions;

8. A network of trusted intermediaries which publishers can use, recognising that the flow of files from publishers to trusted intermediaries is essential to reduce costs and increase speed of publication;

9. A copyright exception to cater for publishers who will not create a licence for a worldwide trusted intermediary network;

10. Capacity Building in Developing Countries for production and distribution of accessible books using DAISY Standards based tools and systems and availability of affordable assistive technology for end users to access such books.

ETHICS IN EDUCATIONAL RESEARCH AND THE PROTECTION OF HUMAN SUBJECTS

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When talking about research, what many people think of first are studies or investigations conducted in the medical field. Even though traditional research is usually thought to be mostly in the science areas, research is conducted in many more areas (social and educational research), and in different forms (e.g., quantitative, qualitative, and mixed methodologies). Quantitative research can be defined as a methodical investigation conducted to test a theory, gain conclusions, and to contribute to the common knowledge in the area where the study is conducted. Even though qualitative research is different from what is previously described, this type of investigation also involves "drawing conclusions and contributing to generalizable knowledge" (Sharbek, Henry, & Parish, 2006, p. 26). Both forms of research are valid and have as the main goal the quest for answers or new information that will contribute to a body of knowledge in any specific area.

Social research encompasses more than "finding out" (Sullivan, 2009). The goal of social research is to learn and comprehend "how and why things are as they are in society" (Sullivan, 2009, p.69). In the field of education, research is done essentially to investigate and identify best teaching practices, to make suggestions to teacher preparation programs, and to "contribute to the improvement of educational practices and policies, as well as better treatment of students" (Howe & Moses, 1999, p. 26). Because of the nature of what is studied in the education field, including special education, human subjects or participants, such as students, teachers, school personnel, and family members, are often the main focus of the research. When working with human subjects or research participants, it is imperative for researchers to act ethically by

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following guidelines and standards of conduct, and knowing and complying with relevant regulations.

The Evolution of Research Ethics

Ethical concerns about the rights of participants in research studies can be traced to unethical practices that have taken place in the past, when the rights and safety of human subjects has not been considered or respected by researchers. There are several well-known cases in history in which unethical research practices were utilized. One such case is the "Nuremberg trials," during which Nazi physicians conducted cruel medical experiments and abused members of marginalized groups during World War II, resulting in psychological trauma, physical injury, and even death in some instances. These events led to the 1947 development of the first set of principles for researchers to adhere to when conducting research with human subjects, known as "The Nuremberg Code" (Dinwall, 2006; Lahman, Geist, Rodriguez, Graglia, & DeRoche, 2010).

Despite the efforts to implement ethical guidelines in modern research, more examples of unethical research practices can be found, in which the harm done to participants outweighed the benefits of the study. Some examples are the Tuskegee Syphilis study (African-American males infected with syphilis and not treated), Milgram's investigations of obedience (Howe & Moses, 1999), and the Laud Humphrey "Tearoom Sex" study (study of men and impersonal sexual gratification) among others. An example of a historical case of unethical research conducted with a participant who experienced disabilities is the Willowbrook study, which took place in the second part of the 1960s. This study involved students with cognitive disabilities at a residential facility, the Willowbrook State Hospital in Staten Island, New York. As part of this experiment, children in the Willowbrook facility were intentionally infected with hepatitis. The goal of the study was to determine what happened if the disease was not treated, and to evaluate the effects of a protein as therapeutic intervention. As a result of these and other examples of unethical practices, the federal government developed and published a set of ethical guidelines in 1979, the "Belmont Report".

In its report, titled *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research* **(http://ohsr.od.nih.gov/guidelines/belmont.html)**, the National Commission on the Protection of Human Subjects of Biomedical and Behavioral Research proposes three basic principles to follow as the most important for research ethics when working with human subjects: the respect of persons, beneficence, and justice. These three principles are comprehensive and relevant when conducting research with human subjects.

RESPECT

Participation in any study should be voluntary. Human subjects participating in a research project should be provided with adequate information so they can make an informed decision whether or not they are interested in being part of the study. Respect for persons involved in research is based on two ethical principles. The first principle establishes that research participants should be treated as autonomous agents, and that individuals should be able to decide and act on the deliberation of personal goals. The second principle involves the protection of individuals with reduced autonomy. Because not every person is capable of self-determination (e.g., children, persons with disabilities, ill individuals, and incarcerated persons) respect may require protecting their rights and safety until they mature or are capable or making their own decisions.

BENEFICENCE

In the Belmont Report, beneficence is defined as the obligation of the researcher to protect human subjects involved in research from any harm; participants must be protected against any injury. There are two general rules under the beneficence principle that a researcher must follow: (a) do no harm and (b) maximize possible benefits and minimize possible harms.

JUSTICE

The last principle relevant to research involving human subjects is justice. To ensure that procedures are administered fairly, researchers should answer the following questions: Who will benefit from the research? Who will bear the burdens of the research? In studies involving human subjects, burdens and benefits should be distributed equally. Injustice may occur when some individuals receive benefits, but others are denied them without a reason.

The Belmont Report also suggests three ways to apply the principles suggested above (Kennedy, 2005):

1. Informed consent to ensure human subjects that participation is voluntary and to provide full disclosure and information on the study's benefits and risks;

2. Research risks and benefits of the research should be considered in full by the researcher;

3. Use of fair selection protocols in the selection of human subjects.

Institutional review boards use these guidelines to help in their review of applications submitted by researchers.

Institutional Review Boards (IRBs) and the Protection of Human Subjects

Howe and Moses (1999) suggested three different ways in which educational researchers could engage in research misconduct: (a) plagiarism, (b) data fabrication or misrepresentation, and (c) pressure on researchers. Nowadays, institutional review boards (IRBs) monitor research for ethical purposes to avoid research misconduct, and to guarantee the rights and safety of participants. Faculty members and researchers do the majority of research conducted in the field of special education in higher education institutions. In many universities or colleges, before conducting research with human subjects, the researcher is required to request and obtain permission from the institution's IRB. The IRB is a group of individuals, who may or may not be affiliated with the institution, who have expertise in different areas of research, and who will make sure the rights and safety of human participants are protected (Chadwick & Dunn, 2000; Sharbek, Henry, & Parish, 2006). When reviewing IRB applications and protocols, these individuals are expected to be familiar with institution policies, research participant protection issues, and research design, in order to properly apply ethical principles and decisions (Wichman, Kalyan, Abbott, Wesley, & Sandler, 2006).

Researchers' perceptions of the IRB and its protocols and procedures at institutions of higher education is often negative (De Wet, 2010; Millium & Menikoff, 2010), and described as "tedious" and "irritating" (Lahman, Geist, Rodriguez, Graglia, & DeRoche, 2010). While the IRB might seem strict and unfamiliar to researchers who are proposing studies, the IRB helps to ensure that ethical standards are adopted. Consequently, the IRB shares responsibility for the protection of human participants, investigators, and the institutions to which they belong. In addition, the IRB is committed to carrying out this charge in a manner that will support and assist researchers. According to De Wet (2010), concerns about the subject of research ethics are not only restricted to protecting participants, they extend to "respecting participants, minimising harm, ensuring confidentiality to the greatest degree, and engaging in meaningful and authentic informed consent" (p. 303). Contrary to what some may believe, the goal of the IRB is not to obstruct the research, but to create a more efficient and straightforward process for the researchers (Kennedy, 2005).

Ethics and Disability Research

Advances in the understanding of disabilities and how to better serve individuals who experience a disability are based on the work done by an institution's researchers. Similar to research in other areas, awareness of what comprises ethical disability research has grown considerably in recent years (Barnes, 2009; Sullivan, 2009). Questions of who should conduct disability research and how the research should be conducted started to emerge after the social model of disability was developed. Sullivan (2009) stated that, in the past, research conducted in the different disability areas made little to no contribution to the lives of people with disabilities, especially those living in institutions. The main beneficiaries seemed to be the researchers, who

used these studies and the outcomes to advance their careers. According to Sullivan (2009), a new model on disability research developed as a result of the "Emancipatory Paradigm," which not only examines the world, but also suggests making changes to it. This new paradigm also changed the relationship between researcher and research participant, and gave people with a disability a more active voice during the research process (Sullivan, 2009).

Educational researchers, especially those conducting research that involves individuals from vulnerable populations and those who are unable to provide informed consent (e.g., children and individuals with disabilities) may be confronted with a variety of challenges when seeking IRB approval. Consistent with the principles of the Belmont Project, selection of human subjects for disability research must respect participants, protect them from any harm, and be fair in how they are selected, so that participants are not exploited. As stated before, informed consent is an essential element of ethical research. However, in the case of disability research, especially with children, deciding who will provide the consent may not always be an easy task. The parents or legal guardians of children, including those with disabilities, are the ones who will primarily authorize or give permission for their children to participate in any study. It is important to note that federal regulations require that, if capable, children should be given the opportunity to provide assent (U.S. Department of Health and Human Services, 2001). It is critical that researchers in the different disability areas and those working with children are informed of participants' rights and research ethics so that they can meet IRB requirements and obtain research approval.

Final Thoughts

Concerns about research ethics have facilitated the development of principles and guidelines to protect human subjects. The implementation of institutional review boards has resulted in making researchers more aware of participants' rights and creating a more competent research process. Although researchers may have a negative view of the procedures, the IRB ethical review process serves as a safeguard instrument, critical for researchers and research participants. Among the many who have benefited from the creation of research ethic standards are children and individuals who experience disabilities. Learning about possible issues and challenges, as well as human subjects' rights and IRB protocols, is crucial to the progress of social, educational, and disability research, that may lead to more relevant contributions to the field.

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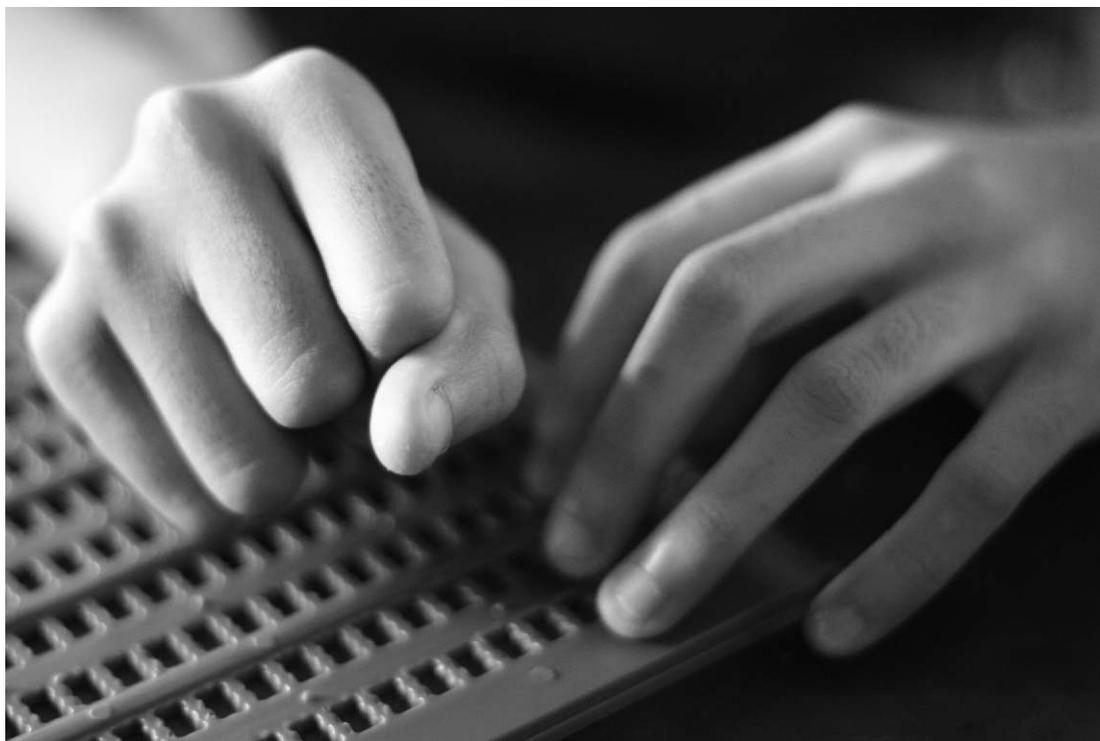
CALL TO ACTION: CONTRIBUTING TO RESEARCH THROUGH YOUR EVERYDAY TEACHING EXPERIENCES

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We Need You!

As professionals who work with students who are blind or visually impaired, we are creative and innovative! Not a teaching day probably goes by that you are not solving a new problem, contemplating how to best help your students improve their skills, or figuring out a new way to provide equal access. Your creative teaching ideas and experiences with students (children or adults) who are blind or visually impaired can make a significant contribution to our knowledge base about best practices in education. Despite our different regions, and unique challenges, we also share commonalities in our efforts to provide effective and quality education.

You probably already engage in discussions with other professionals about what is working or not working when trying to help students reach their full learning potential. This can be a beneficial exercise in coming up with new ideas, trying out teaching strategies and supporting each other. But, how do you determine if the strategies you are using are working as well as you hoped? And how can you contribute to best practice by spreading the word about your teaching successes in a format that helps professionals in other settings consider how your idea might work with their students? The answer to all of these questions is: Action Research!

Often we base our decisions of student success on professional observation and sometimes gut feelings. Our perceptions of teaching successes become stronger and more applicable to other professionals when we have data supporting our feelings. By being systematic in planning our teaching interventions and collecting data on those interventions, we can contribute to the research base in the field of visual impairment, help other professionals working on similar problems, and inform our own practice at the same time. In fact, action research is not very

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different from being a reflective and diagnostic teacher. You may discover you are already an action researcher!

What is Action Research?

Action research is the systematic process of investigating a question you have related to teaching your own students and can be conducted on a single student or a group of students. It begins with you, the practitioner, identifying a question or a situation that you want to answer or improve. These questions come from your reflective teaching practice. How much impact is your instruction having on student improvement or what challenges do your students face in the learning environment? For example, you may be noticing that your student is not reading braille as fluently as he should, and you want to do something to change that. You notice that his hand movements seem smooth, but that he does a lot of backtracking over words that cannot be sounded out.

After identifying the problem or situation, the next step is to come up with a plan. What action will you take? For the braille student, you may decide to create a warm-up sheet or set of flashcards for the student that contain thirty or forty words that frequently occur when reading, but cannot be sounded out. Your action plan drives the research question: Does daily exposure to flashcards of frequently occurring words improve my student's fluency when reading?

The key to turning teaching into action research requires that you are very systematic in the third step: Evaluation. How will you know if your action plan is working? Coming up with a clear plan for collecting data that will answer the research question will keep your research strong and will help you make decisions about your instruction. For the braille student who is warming up every day with the flashcards, you might decide to take a reading rate from the book the student is currently reading every third day in order to collect data on improvement of fluency. And, since fluency involves more than just speed, but also expression, you may also decide to make some qualitative observations on expression using a checklist you made. You should also have in mind how long you will collect data before evaluating if the action plan is working. Depending on the intervention and the data collection methods, different research questions will need different amounts of time before a change would be expected.

The following graphic (Figure 1) shows how the process of action research is circular (adapted from Hendricks, 2006). You reflect and identify a need, take action by creating a plan and formulating the research question, evaluate the action by collecting meaningful data, and then return to reflecting. How well did it all work? Did the student improve his fluency in braille? If yes, will you continue the intervention of the flashcards? If no, will you add something onto the flashcard intervention or try something different? Whatever the decision, collecting data to document progress or what happens when changes are made is important.
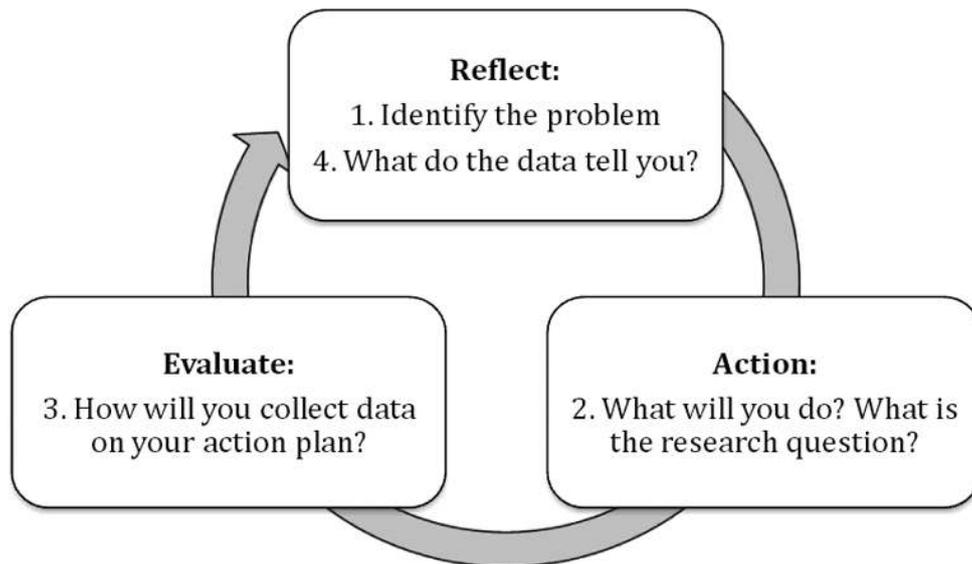
Figure 1 : Action Research Process

Tips for Success: Setting up an Action Research Project:

In addition to the general process of doing action research, there are some specific tips you should keep in mind when setting up your own action research project in order to ensure success (see also Figure 1):

1. **Take baseline data before beginning!** The data you collect to answer your question will provide better insight if you know where the student started from, or know what the starting conditions are of the situation you are investigating. For the braille student working on fluency, the teacher would want to have taken several days of reading rates that establish a pattern (or an average) from where the student is starting. If the expression checklist is also going to be used, it should be filled out along with those initial reading rates in order to have comparison data once the intervention starts.

2. **Be sure to formulate an actual research question before selecting your data collection methods.** It is important to match the data collection to the question you are trying to answer. Having that question in mind will help with your selection process.

3. **Pick data collection methods that are meaningful, but also doable!** You are a busy teacher, make sure what you choose to do is something you can actually do systematically.

4. **Consider ways you can get reliable data.** For some types of data collection measures in particular, such as observational checklists (for behavior, etc.), having a second person also fill out the checklist for at least some of the data collection sessions will give you information on how reliable the observation data is (meaning that you get the same answer every time you collect the data). This is called inter-rater reliability, or inter-observer agreement. Do both you and the other person observe the same thing? If yes, then the measure shows strength in

being reliable. If not, consider what might be the reasons and change your procedure accordingly.

5. **Keep other factors constant!** When you are investigating whether a certain intervention, teaching strategy or environmental change creates improvement, it is important not to change other things at the same time or midway through your data collection. It will be hard to know if the data are related to the intervention you are investigating if other changes are also occurring. If you decide to do a couple of things at the same time, then be sure to note that it is the combination of strategies you are investigating.

Along with the above tips, in order to make the research you do interpretable for other practitioners, it is important to be specific about the student and the context in which the research is taking place. Since action research with your own students is within the context of your teaching environment, it may be more applicable to some practitioners than others, depending on their own teaching context and the characteristics of their students. The strength of action research comes from being specific about context so that others can judge how well the same intervention might work for their situation. If you write up your action research to share with others, or just talk about it with others, be sure to include information about the following:

1. **Student characteristics** (without using the student name or other identifying information, of course!). For example: What level of vision does the student have? What educational background does the student have? Does the student have additional disabilities beyond having a visual impairment? Think about the characteristics that are important to the research project.

2. **Instructional environment.** For example: Where is the research taking place? Is the student working one-on-one with you? Is the student in an inclusive setting with a classroom of peers? When does the intervention take place? What materials and supports are available related to the research?

3. **Information about how well the plan was carried out.** Action research is subject to glitches. Students can be absent; an emergency situation might lead to a change in data collection schedule. While you want to be as systematic as possible, things happen. It is important to note deviations from your research if they do occur. These details will be useful to you and to others who are interpreting your results and considering your methodology from the perspective of their own teaching environment.

An Action Research Example

Mrs. Sanchez teaches at a school for the blind and has one student who is congenitally blind, Olivia, who attends morning classes across the street at the local elementary school before

coming to her in the afternoon. She has worked with the classroom teacher at the elementary school to help make adaptations to the curriculum so that Olivia can participate meaningfully. What Mrs. Sanchez is noticing, however, is that Olivia is not very motivated to attend the other school, because she complains that the students just ignore her. Mrs. Sanchez wants to improve the social situation for Olivia and decides to do some action research. After speaking with Olivia, some of her peers, and the classroom teacher, Mrs. Sanchez reflects on what might be the major factors contributing to Olivia's feeling of social isolation. Among other factors, Olivia's peers expressed that they did not think Olivia could do anything they were interested in, and Olivia expressed being afraid to ask to participate with her peers because they might say no. Mrs. Sanchez decides to focus on these two aspects to start. She does some reading about strategies for social inclusion and decides to try a combined intervention that focuses on peer awareness and social strategies for Olivia.

Mrs. Sanchez's action plan is to hold an inservice for Olivia's peers with Olivia participating. Part of the inservice will be to highlight Olivia's interests and have her demonstrate how she plays games and other skills when adaptations are needed. Mrs. Sanchez hopes that this portion of the intervention will help peers be more open to Olivia participating with them because they see that she can indeed do things. Mrs. Sanchez also will work with Olivia by practicing strategies for initiating social interaction with her peers. She will teach strategies through role playing and have Olivia create a list to remind her of these strategies. Based on her action plan, Mrs. Sanchez identifies the following research question: After conducting a peer inservice and practicing strategies with Olivia, do peers initiate interaction with Olivia more frequently and does Olivia also increase her attempts at initiating interaction?

Taking into account her research question and the type of data that she needs, Mrs. Sanchez decides on a data collection procedure that Olivia can do herself. She wants to see an increase in the number of interactions that occur both when peers approach Olivia and Olivia approaches her peers. She realizes that each day may have different opportunities for interaction (some days more than others), so just counting the number of interactions each day might not give an accurate account and may also be difficult to do consistently. So, Mrs. Sanchez decides that she will record the data each week, with at least one interaction per day being a success. Per week, then, there could be up to five days when peers initiated interactions and up to five days when Olivia initiated interactions. Mrs. Sanchez gets a jar and some popsicle sticks. She cuts some of the popsicle sticks in half and labels them "friend" in braille. She leaves some popsicle sticks whole and labels them "Olivia." For data collection, Olivia, at the end of each morning, will put a "friend" stick in the jar if one of her peers initiated an interaction with her at least once during the morning. Olivia will also put an "Olivia" stick in the jar if she initiated at least one interaction with her peers. At the end of the week, Mrs. Sanchez and Olivia will count the sticks and graph the

number of interactions by peers and Olivia separately. Mrs. Sanchez has also made a checklist for the classroom teacher to record the same information at least twice during the week for reliability information.

Prior to beginning the intervention (peer inservice and role-playing strategies), three weeks of interaction data were taken by the classroom teacher as baseline. After the peer inservice was conducted and the role-playing sessions were finished with Olivia, Mrs. Sanchez had Olivia start to keep track of her interactions with peers using the popsicle stick system. Mrs. Sanchez set a six-week mark for when she would first analyze the data to see how things were going.

The following graph (Figure 2) shows how Mrs. Sanchez and Olivia recorded data for both baseline and then the first six weeks after the intervention. The dotted vertical line indicates the intervention, with baseline data indicated before the intervention. Two lines are shown on the graph, one for peer-initiated interactions (line marked by diamond-shaped data points) and one for Olivia-initiated interactions (line marked by square-shaped data points). The vertical y-axis ranges from 0-5 to indicate the number of days within a week when an interaction occurred. The horizontal x-axis shows the weeks. Based on the graph, Mrs. Sanchez is pleased to see for the first six weeks of data collection that there was an increase in interactions from baseline by both peers and Olivia, but notices that the interactions decrease a bit over time on part of the peers. Mrs. Sanchez will think about what might be the reasons and whether it is cause for concern or consideration of additional intervention. If Mrs. Sanchez decides to add another factor she'll put another dotted line on her graph to indicate that a change in intervention is occurring. She might also decide to continue collecting data for a few more weeks with the current intervention to see if interactions stabilize. Mrs. Sanchez will continue to be a reflective practitioner as part of her action research project.
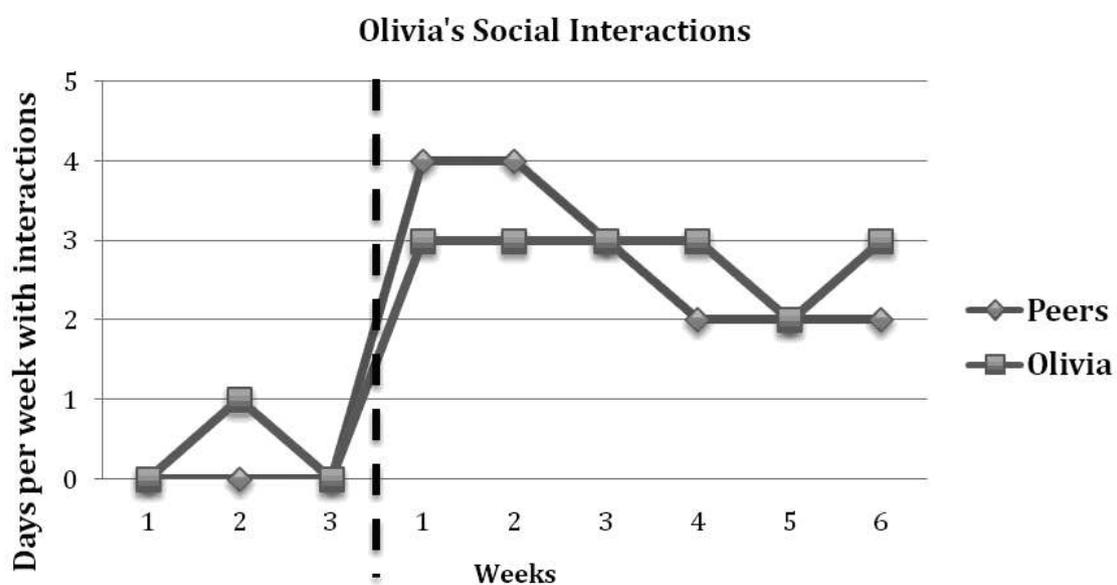

Figure 2 : Olivia's Social Interactions

Dissemination Ideas

Well-conducted action research has the power to help us all improve our instructional practices and success with students. It has the power to help us build evidence about best practices when working with students with visual impairments. The power is only there, however, if the information is disseminated! Sharing with your colleagues with whom you work is the first step, but the following are some ideas for reaching a broader audience:

1. **Present your project at conferences that professionals in visual impairment attend.** These could be local, regional, national or international conferences, including ICEVI conferences.

2. **Write an article about your project and submit it to a research to practice journal or magazine that practitioners in visual impairment read.** Some options might include the ICEVI *Educator*, The research report section of the *Journal of Visual Impairment & Blindness* (JVIB), the *British Journal of Visual Impairment*, and the Council for Exceptional Children's (CEC) Division of Visual Impairment (DVI) quarterly newsletter.

3. **Be creative in coming up with other means for dissemination.** Perhaps you can link up with your ICEVI regional chair to set-up an on-line means to interact with others in your region or across regions to share action research results. Your creativity can help generate ideas for dissemination!

Conclusion

Remember, *you are needed*. You know what is and is not working with your students, and that information can support teachers around the world. Action research is one method for creating evidence for a particular strategy that seems to work for you. Disseminating your action research contributes to best practice by spreading the word in a format that helps professionals in other settings consider how your idea might work with their own students. By being systematic in planning our teaching interventions and collecting data on those interventions, we can contribute to the research base in the field of visual impairment, help other professionals working on similar problems, and inform our own practice at the same time.

Reference

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RESEARCH OPPORTUNITIES AT THE AMERICAN PRINTING HOUSE FOR THE BLIND

Michael Hudson and **Julia Myers***
American Printing House for the Blind, USA

The American Printing House for the Blind has been a center for research on literacy and learning since its founding in Louisville, Kentucky in 1858. Over the last twenty years, the company has dramatically expanded its value for outside researchers. Scholars and teachers can take advantage of these resources both on-line and in person at the APH campus.

Barr Library

With the creation of its educational research division in 1950, the Printing House began accumulating reference materials in its specific areas of interest including tactile graphics, braille, low vision, early childhood development, technology, tests and assessments, adult life, and multiple disabilities. Much of the material is of an educational nature, such as in-service or teacher training material, as well as blindness-related research reports, periodicals, and pamphlets. In addition, the library serves as a depository for unpublished reports submitted by APH research staff, reprints of journal articles, and books and journals used by the APH research department. Researchers can access the collection in the lovely Barr Library Reading Room, which was recently remodeled as part of the Hall of Fame for Leaders and Legends of the Blindness Field. You can make an appointment to use the Barr by calling 800-223-1839 or by email at **resource@aph.org**.

Louis Database

APH maintains the Louis Database of Accessible Materials, named in honor of Louis Braille. Louis holds information on accessible print materials produced by about 160 organizations throughout the U.S., assisting educators, administrators and those who are visually impaired in locating accessible books and materials in an efficient manner. These materials include books in braille, large print, audio, and electronic file format. The database is available at **aph.org**.

***Mr. Hudson** can be contacted at **mhudson@aph.org**

Museum of the American Printing House for the Blind

The APH Museum was opened in 1994. Its accessible exhibits on first books, reading and writing, early printing and embossing machinery, braillewriters, orientation and mobility, talking books, and educational aids make it a "must visit" for anyone interested in education for people with vision loss. Behind the scenes, the museum has recently added the AER Orientation and Mobility Division Warren Bledsoe Archives, the Braille Authority of North America Archives, the John Milton Society/Society for Providing Evangelical Religious Literature for the Blind Papers, and numerous other resources. In addition, the APH corporate archives contain significant historical correspondence between APH and leaders across the blindness field. Researchers can access the collection by calling Anne Rich at 502-899-2364 or at **arich@aph.org**. Some materials are on-line at **aph.org/museum**.

M.C. Migel Memorial Library

The Migel Library was originally created in 1926 at the American Foundation for the Blind in New York. By the 1960s, it was considered one of the largest collections of material on non-medical aspects of blindness in the world. It moved to the APH campus in Louisville in 2009, marking a major new commitment by APH to blindness research.

The APH Migel Library catalog is now available on-line and open for business. Information on more than 14,000 titles is available at **migel.aph.org**. Users can search the collection, learn more about its history, read the library's use polices, make an appointment to visit the library, and follow links to other major collections that research the blindness field. In addition, you'll find links on hundreds of titles to accessible scans of the original book. You can also browse through titles from the Migel Library at Internet Archive: **www.archive.org/details/aphmigel**. In the coming months, titles will continue to be digitized, additional finding aids for subtopics such as orientation & mobility and deaf-blindness will be created, and cataloging information will continue to be added and refined. In addition, new titles are constantly being added to the database. For more information call 800-223-1839 or email **migel@aph.org**.

Parents' Column

National Chinese Parents' Association Founded

Susan LaVenture

I am pleased to announce that through the support of the Perkins International Program, the very first national meeting for parents of children with visual impairments was held in Beijing, China, in August 2010. I was honored to be invited by Peng Xiaguang, of the Department of Special Education of the China National Institute for Educational Research, to make a presentation about how our parents' association in the United States developed.

In my presentation I shared examples of parents' associations around the world and the tremendous work that has been accomplished by these groups. Parent groups have been significant in developing schools and special programs for blind and deaf-blind children, advocating for national policy and legislation of special education law, creating recreational opportunities for blind children, supporting families of newly diagnosed infants and children, providing parent education and connection to medical and rehabilitative serves, and much, much more.

For the very first time parents of blind, visually impaired, and deaf-blind children from 25 of the 30 provinces in China, rural and urban regions, had the opportunity to meet each other and network. You can imagine the excitement in the room, or may have experienced the feeling yourself when attending a NAPVI national or affiliate conference.

At the Inaugural Meeting of China Committee for Parents of Visually Impaired Children the founding committee of parents was elected and the newly founded organization was established. By becoming a member of NAPVI you will have a new connection with parents of visually impaired children throughout China!

Chinese parents are anxious to network with us and to learn more. Some parents speak English and some do not. They are aware of **www.FamilyConnect.org** so I encourage you to try to reach out to them through the FamilyConnect message board forums.

During my presentation about the purpose and mission of NAPVI, I explained how we work to support and educate parents so they can ensure that their child

can receive the special education and access to information and resources to prepare them for the future higher education and or employment.

When I made this comment I did not expect to hear a flood of responses and questions from the audience—the parents shouted, "you mean my child can have a future?" They were very curious about the various occupations and careers that individuals who are blind have in the United States as in China the only occupation expected for a blind person is to be a masseuse.

I explained that yes, in the United States people who are blind and other disabilities are employed in many types of professional careers although we still struggle in our country with the high unemployment rate of 70% of people who are blind. NAPVI has partnered with the National Industries for the Blind (NIB) to address this issue by organizing and hosting parent forums to discuss how to prepare their children for the future and employment options. This year we've held parent forums in Texas with the Texas Association for Parents of Children with Visual Impairments (TAPVI) and the NYC-NAPVI affiliate and ACB New York.

NIB and NAPVI are currently making plans for the next parents' forum that will be held in Seattle, Washington in March in conjunction with the Josephine Taylor Conference of the American Foundation for the Blind (AFB).

NAPVI's founding President Lee Robinson said, "Parents must regard themselves as the long lasting resource and the only consistent persons who continually have the child's interest at heart throughout their child's lifetime. NAPVI is a means to help them fulfill that function." Although there will be many special people that will touch your family's life, your role is the most important in your child's life. From nurturing your child from birth, to helping to see that your child receives the best education and access to information and resources, to ensuring your child learns the skills to prepare her for the future.

A New Era for Blind People in Israel: Accessible Electronic Library

Guila Seidel, President
Israel National Association of Parents of Visually Impaired Children

"Ofek Liyladenu" - Israel National Association of Parents of Visually Impaired Children has been concerned for years by the very partial availability of Braille books and text books in Hebrew. We have tried to force the Ministry of Education to take responsibility and to provide the books, we were even about to appeal to the High Court of Justice, but were advised to wait, as the Law for Equal Rights for People with Disabilities is in the process of being implemented. This process has been going on for months and the only thing we can advocate for is for speeding the process and being involved.

Shmuel Lederman, father of 21 years old blind twins Tal and Roy, could not wait any more and eight months ago built a new site, completely accessible for blind and visually impaired people. One can already find in it two daily newspapers (at 6 am every day!), and more than 200 books, which he gets from the publishers in their digital format.

Shmuel now directs this initiative within the other activities of "Ofek Liyladenu", and together we are working on increasing the number of publishers willing to provide their books to our site, on improving the site and its protection and of course in advocating for the passing in Parliament of a law similar to the Law in the US."