Using photographs to scaffold literacy activities with young adults with Down syndrome

Karen B Moni and Anne Jobling

This article describes how photographs have been used in literacy activities for young adults with Down syndrome participating in a post-school literacy programme. We describe how the principled use of photographs in literacy teaching can: scaffold literacy learning, specifically in the writing of stories and recounts; support writing about abstract concepts, and support extended autobiographical writing with learners who have diverse literacy strengths and needs. Photographs are intrinsically interesting resources for developing literacy because they are actual representations of important known events in young adults' lives. Thus in talking and writing about photographs, these young adults are motivated to construct extended texts that have relevance to their own lives. The learners' developed written texts can be used as more accessible reading material.

A day in the life: Using photographs to scaffold literacy activities for young adults with Down syndrome

In our post-school literacy programme for young adults with Down syndrome established at The University of Queensland and now operating in a community-based service organisation, we have adopted a balanced approach to literacy instruction[1-4]. The young adults, who attended the programme for two days a week over two years, bring diverse literacy skills and educational experiences and have a range of Down syndrome that impact on their learning in different ways. The challenge for us has been to develop and implement integrated activities across all aspects of literacy that meet the needs of these learners. In addition, the post-school context of the programme is significant as it necessitates planning and teaching literacy activities that are both age and interest appropriate, and enable learners to develop their literacy skills across a range of adult contexts. Four research-based key principles have underpinned our planning and teaching.

The first principle is that activities are authentic or life-like[5,6]. This means that there are connections between what the learners read, write and discuss in class and their worlds beyond the pro-

gramme. Such activities may include writing a shopping list, organising a social event, writing a birthday greeting, making a speech on a birthday, sending an email to a friend, or looking a up the web page for a favourite TV show or movie actor.

The second principle is that there are genuine outcomes and real audiences for the learners' work[6]. For example, one major ongoing project in the programme is the publication of a newsletter, which is mailed to the local community, local schools, educational institutions and professional associations in Australia and overseas. The newsletter provides an authentic outlet for learners' work and demonstrates that their ideas and language contributions are valued. Through the newsletter we are also able build on the learners' interests, to introduce them to a broader range of genres, and to challenge them to write about new experiences and topics.

The third principle is that we need to shape teaching and learning activities to engage the learners by focusing on their interests and social purposes for using literacy[7,8,9]. For example, at the start of the year the learners establish personal goals for their reading, writing, speaking and Internet use. These goals are used to develop each semester's activities within the general programme framework and enable us to link activities with their interests and with their lives

The School of Education
The University of Queensland

Correspondence to Karen B Moni, The School of Education, The University of Queensland, 4072 Australia • tel: 07-3365-6872 • fax: 07-3365-7199 • email: k.moni@uq.edu.au

outside the classroom.

Many of the topics that learners want to read, write, and talk about are related to their own life experiences and interests such as being with their families, looking after their pets, playing computer games, participating in drama or dance, playing the piano, tinkering with electronic gadgets, going on vacation, and going to the movies. It has long been known that concrete materials such as pictures, objects and photographs are useful in eliciting extended oral language, in particular, oral re-tellings of narrative and life experiences[10,11], and in supporting reading comprehension in learners with learning difficulties and Down syndrome[7,12,13]. The findings from this research, our own research, and teaching within this post-school programme, have demonstrated that photographs are effective teaching tools and supports for learning literacy[14].

The fourth principle is that literacy instruction for young adults with Down syndrome needs to be broadened to encompass contemporary understandings of literacy that recognise that learners need to engage with texts in print, oral, and multi-media domains in a wide range of contexts [2,3,14,15]. The widespread availability of affordable digital cameras means that there many opportunities for learners to take photographs and to use them to illustrate their own print texts, and to create their own multimedia texts.

In the next section we describe three strategies we have used in the programme based on these principles that include photographs in ways that support and enrich literacy learning.

Life stories

The learners undertook a major project that continued throughout the year, culminating in the compilation of their life stories to be presented to their parents and friends on graduation night. During their work on this project the learners were positioned as experts in their own lives. While the teaching staff provided a framework for the learners to complete the project, for example by suggesting chapter headings, research questions, writing activities and writing scaffolds, the learners drove the project and actively selected their own resources and topics. In addition, they were also responsible for making final decisions about what is included in their life story folio.

Photos were used in every stage of the project (refer to APPENDIX A). Using photos to scaffold learning gave learners opportunities to practise writing in genres where they were familiar with the content. For example, using photos as a concrete prompt they wrote descriptions of members of their families, they also used a series of photos to write about how to look after their

pets, and wrote about their favourite vacation destinations. Photos also allowed us to introduce new genres in an environment where the learners were motivated by the content, and so were more likely to take risks with their literacy in different ways. For example, the learners were asked to bring in photos of themselves as babies and toddlers to help frame questions to ask their parents about their babyhood. The learners had difficulty generating questions and were resistant to the activity at first. However, the photos helped them to create the questions in class, which they then took home to their families. They enjoyed sharing the tapes of their interviews in class and were motivated to conduct further interviews with other family members and friends. These interviews were written up for their yearbooks and illustrated with the relevant photos.

This project also facilitated flexible and responsive teaching. For example, whole group approaches were used to explicitly teach new genres. Writing scaffolds related to looking at photos were prepared for learners to use independently when they were writing in familiar genres. Mini-lessons in small groups were conducted when two or more learners were working on the same part of their life stories. Some texts were also jointly constructed or scribed according to learners' individual needs.

A day in the life: Photoessay and Exhibition

This project comprised four stages that we undertook over a four week period. For our purposes, the day in the life was that of a student attending the post school programme. However, the project could be adapted to any social or educational context. In stage 1, to assist them in their planning, we brainstormed with the whole group all the activities they undertook in the programme and all of places they went to on the university campus. Then, each student had to select eight photos they wanted to take that would show how they spent their day at the university. They could include any aspect of the day such as how they travelled to the campus, or going to the cafeteria for lunch, meeting friends, as well as classroom activities. Next they had to answer the following questions - Where will you go first? Where will you go next? Where will you go finally? This task proved challenging for some learners as they had to organise their photos into a sequence, and use maps of the campus so that they used the available time to shoot their photos efficiently and effectively. Sammie's planning sheets with her annotations is reproduced in APPENDIX B.

Stage 2 was the actual photo shoot. This took place one week later with learners following their

Scaffold 1: Friends	Scaffold 2: At Uni
Who is in the photos? Where are you in the photos? What are you doing in the photos? What makes a good friend? What do you do with your friends at Latch-On? I think that my friends are cool special great close happy because …	At Uni I see … At Uni I like … At Uni I enjoy… In Latch-On I learn about … At Latch-On I like … My favourite part of Latch-On is …
Scaffold 3: Places	**Scaffold 4: Best day**
This is … I go here to … I like … When I get here I … When I am here I …	Write about your best day at Latch-On First Next Then After Finally

Figure 1 | **These are four simple scaffolds for the Photo Essay and Exhibition.** Learners chose photos to go with their writing: Each scaffold was presented on a separate worksheet in 16 pt font with space between each prompt for learners to write.

plan and moving around the campus to take their photos. Some learners were able to complete this stage with minimum monitoring. One of the teaching staff had copies of the learners' plans and met individual learners at specific spots on campus to monitor their progress. Other learners, who needed support navigating their way across the campus, or in taking photos, completed their photo shoot in pairs or threes accompanied by a member of the teaching staff.

The third stage was writing their photo essays. A variety of scaffolds were developed to allow learners with a range of skills to complete the task (see FIGURE 1). For example, learners with emergent literacy skills could use Scaffold 2 (At uni) or Scaffold 3 (Places). These two scaffolds provided a stem so that learners could complete a sentence using a word or phrase related to their photos. Scaffold 1 (Friends) posed a series of questions for learners to answer about their photos. Learners who required less support were able to use this scaffold. Scaffold 4 (Best day) provided a sequence of prompts that learners, who were independent writers, could use to structure their writing. Some learners used all of the scaffolds and completed three or four of pieces of writing, which then became part of their Life Stories.

In the final stage, the learners shared their work and read their photo essays to each other. The final photo essays became a permanent part of classroom reading materials that learners repeatedly returned to as they were reading about themselves. We also made the essays into a photographic exhibition that was displayed in the halls of the School of Education, and on graduation night.

Developing recounts and keeping records

One of the challenges in both talking and writing for many of our learners is recounting events in the correct sequence. We used photos of important events in their lives, or still shots from their favourite movies to explicitly teach the learners structures and vocabulary to help them with recounts. Using photos we could consistently teach the sequence of stem words first, next, after, then, finally, using a variety of content and contexts (see APPENDIX C). Photos also became an integral part of 'Hot Seat', a daily oral language activity in their literacy programme. During 'Hot Seat' volunteer learners talk about a recent event in their lives, or bring in something that was important to them to share with their peers. Learners often choose to share photos of their experiences and scaffold their talking around the photos. Added value was brought to this when the photos were passed around the group, because the listening learners paid more attention to photos and to the speaker when they were used, and were also able to generate questions using the photos as concrete prompts.

One of the aims of the post-school literacy programme was to develop learners' leisure interests. One of the weekly activities in the programme was a Friday afternoon gym session. In this session, following the ideas of Jobling[16], we wanted to help the learners use their literacy skills to become independent in going to the gym so we developed a gym book for each student. Each book contained a series of photos of the student using a piece of gym equipment correctly and in an appropriate sequence. Underneath each photo we developed a simple table where the learners could record details of their number of repetitions and weights. After explicitly teaching the learners how to use the equipment and how to record their activities, the learners could use these each week.

Student progress in writing was assessed using a broad range of assessment tools such as qualitative measures, classroom observations and systematic sampling of student engagement with writing during the programme. On entry into the programme, each student brought in a favourite photo and wrote a about this as part of preliminary assessments of their literacy. These brief pieces of writing provided baseline information about their abilities to write about a familiar topic, scaffolded by the photo. At the end of each semester we were able to compare the written pieces in their portfolios with this early piece and to identify changes in vocabulary, use of sentence structure, sequencing, use

of punctuation and abilities to write extended texts. At the end of each year, learners compiled their 'Yearbook' (showcase portfolio) or 'life story' as described above. This provided us with a more formal opportunity to assess their progress against their previous pieces of writing, and to report on changes in their writing to their parents. In addition, at the end of each semester, learners undertook self-evaluations of their writing identifying their 'favourite' and 'best pieces', and goals for their writing in the following semester.

Using photos as integral elements in our post-school programme has enabled us to meet some of the challenges of teaching literacy to young adults with Down syndrome. First, we used photos to build independence in literacy through integrated literacy activities. Second, we were able to overcome the limited availability of literacy resources that are age, interest and skills appropriate, through using the photos as resources, and the learners' created texts around those resources, as reading material. Third, we were able to build academic and social confidence by using photos to talk and write about experiences in which they were expert, and which they wanted to share with their peers. These benefits address the call in recent research for interventions and strategies that focus on motivating learners to engage in literacy activities by capitalising on both their experiences and areas of relative strength [17,18]. However, perhaps the most important outcome, for us as teachers, has been that using photos has enabled us to gain rich insights into the complex lives and experiences of our learners. We feel very privileged that they have shared so much with us through this medium.

1. Downing J. *Teaching literacy to learners with significant disabilities: Strategies for the K-12 inclusive classroom.* Thousand Oaks: Corwin Press; 2005.

2. Moni B, Jobling A. LATCH–ON: A literacy course for young adults with Down Syndrome. *Journal of Adolescent and Adult Literacy.* 2000;44(1):40-49.

3. Morgan M, Moni KB, Jobling, A. Code Breaker: Developing phonics with a young adult with an intellectual disability. *Journal of Adolescent and Adult Literacy.* 2006;50(1):52-65.

4. Pressley M, Roehrig A, Bogner K, Raphael LM, Dolezal S. Balanced literacy instruction. *Focus on Exceptional Children.* 2002, 34(5), 1-14.

5. Erikson KA, Koppenhaver DA, Yoder DE. *Literacy and adults with developmental disabilities.* Philadelphia: National Center on Adult Literacy;1994.

6. Pershey MG, Gilbert TW. Christine: A case study of literacy acquisition by an adult with developmental disabilities. *Mental Retardation.* 2002;40(3):219-234.

7. Guthrie JT, Davis MH. Motivating struggling readers in middle school through an engagement model of classroom practice. *Reading and Writing Quarterly.* 2003;19:59-85.

8. Lingard T. Literacy acceleration: Enabling secondary-age learners to become literate. *Support for Learning.* 1996;11(1):25-31.

9. Vygotsky LS. *Mind in society: The development of higher psychological processes.* Cambridge MA: Harvard University Press;1978.

10. Hesketh LJ, Chapman RS. Verb use by individuals with Down syndrome. *American Journal on Mental Retardation.* 1998;103(3):288-304.

11. Loveland KA, McEvoy R, Tunali B. Narrative story-telling and autism and Down's syndrome. *British Journal of Developmental Psychology.* 1990;8:9-23.

12. Chapman RS. Language development in children and adolescents with Down syndrome. In: Miller JF, Leddy M, Leavitt LA, editors. *Improving communication of people with Down syndrome.* Baltimore: Paul H. Brookes Publishing; 1999: p.11-40.

13. Morgan MF. *An investigation of the use of specific teaching and learning strategies with the addition of rebuses, to enhance the reading comprehension of young adults with Down syndrome.* Unpublished Master of Philosophy thesis, The University of Queensland, Brisbane, Australia;2005.

14. Moni KB, Jobling A. Reading-related literacy learning of young adults with Down syndrome: Findings from a three year teaching and research program. *International Journal of Disability, Development and Education.* 2001;48:337-394.

15. Moni KB, Jobling A. A case for including popular culture in literacy education for young adults with Down syndrome. *Australian Journal of Language and Literacy.* 2008;31(3):261-277.

16. Jobling A. Life be in it: Lifestyle choices for active leisure. *Down Syndrome Research and Practice.* 2001;6(3):117-122. doi:10.3104/perspectives.102

17. Abbeduto L, Warren SF, Conners FA. Language development in Down syndrome: From the prelinguistic period to the acquisition of literacy. *Mental Retardation and Developmental Disabilities Research Reviews.* 2007;13:247-261.

18. Van den Boss KP, Nakken H, Nicolay PG, van Houten EJ. Adults with mild intellectual disabilities: Can their reading comprehension ability be improved? *Journal of Intellectual Disability Research.* 2007;51(11):835-849.

Appendix A

Using photographs to create life stories

Suggestions for chapters

Each chapter comprises a series of short pieces, so that each chapter is broken down into achievable pieces of writing

Use a variety of genres e.g. poetry, interviews, recounts, anecdotes, lists, narratives, recounts, maps, drawings

Include a mix of word processed and handwritten pieces

Baby days: poetry about babies, baby interviews, fact file

School Days: elementary – my favourite teacher; high – at school I was good at, my formal, my graduation

My most embarrassing stories

Family and Friends
Family tree, siblings, my pets

As I am now- Letter of introduction, resume, hobbies and interests, favourite movies, singers etc

Going on vacation

Important events in my life calendar

My hopes and dreams for the future

Teaching tips

Use photos as a stimulus for talking about chapters, to scaffold writing in each chapter, and to illustrate short pieces of writing.

Have a digital camera on hand at all times

When learners bring in photos, make colour photocopies so that precious originals can go home.

Ask learners to decide on font, layout, colour etc upfront and keep to a rough template (this makes it easier to make consistent changes later)

Recognise that learners may take several sessions to complete a piece of writing

Modularise into chapters so learners can leave a chapter and come back to it later without losing momentum or interest

Read models for each piece, or form of writing,

Use completed chapters as reading material throughout the year

Keep good records of chapters learners have completed, drafts and multiple copies of final written texts

Keep all completed texts in the classroom – photocopy any work learners want to take home

Allow plenty of time for final assembly

Appendix B

Stage 1: Planning the photo shoot: Sammie

What photos will you take?

> The swimming pool
> The CityCat ferry from the city
> The library
> The gym
> CD shop ~~plus the foodcourt~~
> The cafeteria
> The bus stop
> The classroom

Where will you go first? The pool
Where will you go next? The ferry
Where will you go finally? The classroom?

Appendix C

Scaffold for 'An important event'

An important event

Circle the important event

Party	Christmas	Birthday
Graduation	Reunion	Wedding
Barbecue	Birth	

Where are you?

Who is in the photo?

What are you doing?

What did you like?

Tell me more about …

What happened first?

What happened next?

What happened after?

What happened finally?