

J Knowles¹, T Hudson², J Tomlinson³, K Ainsworth³, D Aswani⁴, K Price¹

¹Sheffield Children's Hospital UK, ²Sheffield Hallam University, ³Lytham Hall Park Primary School, ⁴Derbyshire Children's Hospital



Resources used by all ages



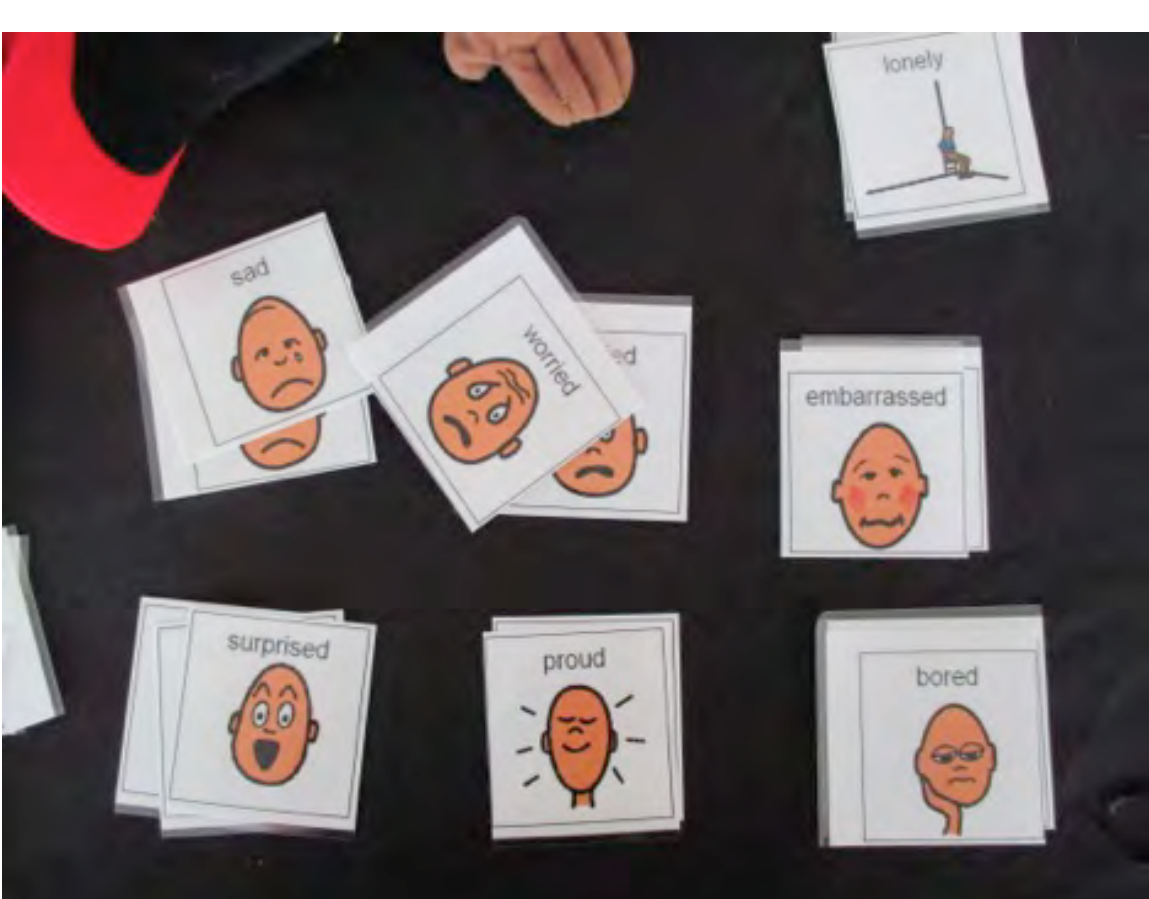
Tree of life demonstrating rewards and participation

[Name] School	Strong	Apparent	Not apparent
Lesson Observation Notes / Self-Appraisal Checklist			
1. The teacher plans effectively and sets clear objectives that are understood			
a) Objectives are communicated clearly at the start of the lesson			
b) Materials are ready			
c) There is good structure to the lesson			
d) The lesson is reviewed at the end			
e) The learning needs of those with IEPs are incorporated into lesson planning			
2. The teacher shows good knowledge and understanding			
a) Teacher has a thorough knowledge of the subject content covered in lesson			
b) Subject material was appropriate for the lesson			
c) Knowledge is made relevant and interesting for pupils			
3. The teaching methods used enable all pupils to learn effectively			
a) The lesson is linked to previous teaching or learning			
b) The ideas and experiences of pupils is drawn upon			
c) A variety of activities and questioning techniques is used			
d) Instructions and explanations are clear and specific			
e) The teacher involves all pupils, listens to them and responds appropriately			
f) High standards of effort, accuracy and presentation are encouraged			
4. Pupils are well managed and high standards of behaviour are insisted upon			
a) Pupils are praised regularly for their good effort and achievement			
b) Prompt action is taken to address poor behaviour			
c) All pupils are treated fairly with an equal emphasis on the work of boys and girls and all ability groups			
5. Pupils' work is assessed thoroughly			
a) Pupil understanding is assessed throughout the lesson by use of teachers' questions			
b) Mistakes and misconceptions are recognised by the teacher and used constructively to facilitate learning			
c) Pupils' written work is assessed regularly and accurately			
6. Pupils achieve productive outcomes			
a) Pupils remain fully engaged throughout the lesson and make good progress in the lesson			
b) Pupils understand what work is expected of them during the lesson			
c) The pupil outcomes of the lesson are consistent with the objectives set at the beginning of the lesson			
d) The teacher and pupils work at a good pace			
7. The teacher makes effective use of time and resources			
a) Time is well utilised and the learning is maintained for the full time available			
b) A good pace is maintained throughout the lesson			
c) Good use is made of any support available, e.g. LSAs or older pupils			
d) Appropriate learning resources are used, inc. ICT where appropriate			
8. Homework is used effectively to reinforce and extend learning			
a) Homework set is appropriate			
b) The learning objectives are explicit and relate to the work in progress			
c) Homework is followed up if it has been set previously			

Peer review assessment form for educators



Learning together



Feeling cards

Introduction

Unlike school education, teaching within health care is an intermittent and transient experience for families who also have a choice whether to attend or not. It is therefore important to ensure that the diabetes education they receive addresses the complexities of how children learn at different developmental stages and is as engaging and effective as possible. Working with secondary school teachers proved very helpful in the development of KICK-OFF for 11-16 yr olds (Knowles et al, 2006) so a similar approach was taken when developing material for primary school aged children.

Objective

To work with primary school teachers to develop diabetes education curricula for children aged 4-11 years using recognised and age appropriate teaching methods and resources.

Method

- Primary school teachers and an educationalist participated in the development of curricula for Key Stage 1 (KS1 4-7 years) and Key Stage 2 (KS2 8-11 years)
- Lesson plans and resources were tested out within a primary school to classes of children aged 4-5 years, 6-7 years and 9-10 years. Teachers observed and gave feedback on these sessions
- Evaluation of the school sessions from both teachers and children influenced the Junior KICK-OFF curriculum prior to the feasibility study
- Parent sessions were developed to complement the children's activities with the aim of reinforcing learning within the home
- Educationalist observed and reported on courses delivered during the feasibility phase (see poster P5)

Results

Curriculum development:

The education profession influenced Junior KICK-OFF through guidance on:

- Duration and timing of activities
- The use of familiar school resources for diabetes education e.g.
 - ✓ Scales with an showing the effects of balance of insulin and food on blood glucose
 - ✓ Use of number lines to facilitate correction dose calculation
 - ✓ Visual display of learning (tree of life) used both as a reward system and to demonstrate learning or involvement within the course
 - ✓ Ground rules for KS2 i.e. I feel happiest when
 - ✓ Feeling cards used to facilitate discussion about emotions during the course
 - ✓ Puppets to act out diabetes information or feelings
 - ✓ Drawing and creating stories for feedback of learning and evaluation
 - ✓ Games and crafts i.e. snakes and ladders, food snap and sticker books, origami
- A peer review assessment system for quality assurance of courses

Resources for KS2 were also adapted for knowledge assessment pre and post course

Educationalist evaluation:

- ✓ Stimulating, enjoyable courses, delivered within a relaxed informal environment
- ✓ Level of language well matched, encouraging children to share experiences
- ✓ Objectives of the course and each day were highly appropriate
- ✓ Activities well selected and resources of a high quality
- ✓ Through observation, conversations with children, scrutiny of outcomes such as workbooks and evaluation activities there was evidence of learning taking place e.g. embracing new blood glucose targets, demonstrating new knowledge and skills, trying new injection sites

Key points for enhancing the curricula were:

- ✓ More emphasis on assessing individual progress
- ✓ More time for deeper thinking and talking to each other
- ✓ Use of ground rules for engaging dominant and quiet learners more effectively

Conclusion

Sharing expertise between the professions has produced age appropriate curricula across the ages of 4-11 years which aims to engage the children in a relaxed learning environment, with resources that are familiar to them from school. See poster P5 for results of the feasibility study.



Puppets used by all ages



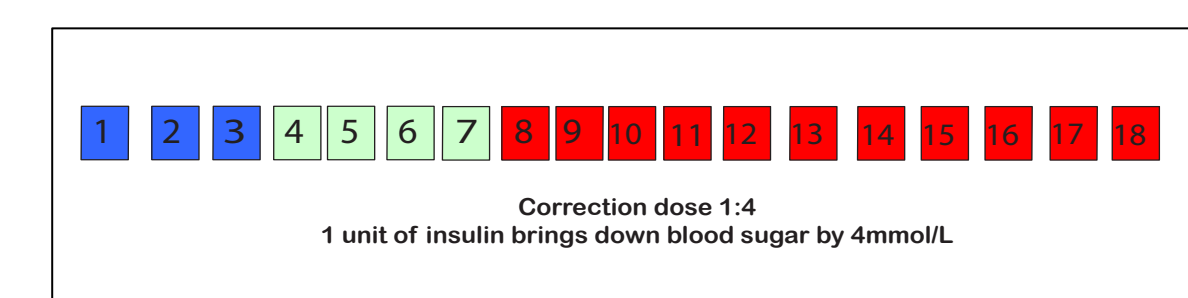
Understanding insulin and carbohydrate relationship



Food plate sticker books

Questions	Responses scores	Comments/expected answers
Ask: Do you know the name of your condition that means you have to inject insulin? Then prompt if needed by reading out the question below. Ask: Do you have type 1 diabetes?	3 = clear understanding of type 1 diabetes 2 = understanding that they have diabetes 1 = understand have an illness 0 = no understanding	Type 1 diabetes

Sample of knowledge assessment question for KS2



Math's tool (KS2) – for correction dose



Promoting a relaxed learning environment



Learning through art

This project has been funded by TOD and The Children's Hospital Charity. Grant number CA13001

Acknowledgements:

Special thanks to children and teachers at Lytham Hall Park Primary School and all the families who participated