

First Wheels Project Evaluation of Pre School Mobility



www.wizzybug.org.uk
www.bime.org.uk

September 2007

Who took part?

- 7 families (2 girls / 6 boys
- Youngest 22 months / eldest 28 months
- 4 children had cerebral palsy / 3 had spinal muscular atrophy / 1 spina bifida
- All children needed support when sitting

Where was Wizzybug used?

One Wizzybug was used in a nursery

Two Wizzybugs were used at home

How was Wizzybug used?



Don't expect the child to use Wizzybug for long periods little and often is ok

– create real opportunities to use – build up use"

Quote from therapist



What was the First Wheels Project about?

The First Wheels project was to see if the design of a new pre-school mobility vehicle called "Wizzybug" met user requirements. The original requirements were identified by therapists through a survey (BIME / Whizz-kidz 2003) We also wanted to find out about how often small children used Wizzybug and what they did. The process and outcomes are to assist us to complete the design process enabling BIME to progress the "Wizzybug" to a production level. BIME is a charity and can manufacture low volumes of specialist equipment on a not for profit basis. In addition the approach and experiences of this evaluation may be of interest to therapists and families who are reflecting on whether or not to try powered mobility with very young children.

The structure of the programme

BIME manufactured 3 pre production prototype Wizzybugs. These were evaluated under the supervision of 3 specialist Occupational Therapists based in Nottingham, Derby and Bath. The programme involved setting goals, recording usage and activities by using a log book and disposable camera over an 8 week period. This was followed by a postal questionnaire which sought more feedback and reflection on the experience of using Wizzybug.

How frequently was Wizzybug used?

The children at home had more opportunity to use Wizzybug daily. Children at nursery had a maximum opportunity of 2 sessions per week. Sessions were between 20 and 60 minutes.

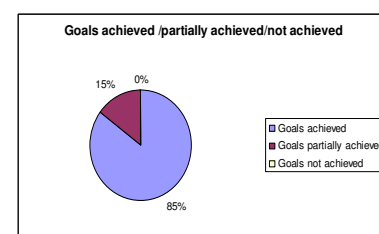
One child (at home) used it for 5 sessions on several days and an average of 2.6 sessions daily.

No child used it every day. **The most usage was 79% or on 44 of the 56 days available. The least usage was 7% or 4 out of 56 days.**

Illness / hospital admission affected 5 out of the 7 children.

Were goals achieved / partially achieved or not achieved?

In all 30 goals were set, 26 were judged as achieved, and 4 as partially achieved. Judgement about the extent to which goals were met, was made by the parents and therapists jointly.



All children made progress within a short timescale, including those children who were only able to use Wizzybug at nursery and those who had limited time due to illness.

Examples of goals

- To choose to go outside
- Understanding stop /go
- To go to the park to feed the ducks



"Ignoring them was the best strategy they had to learn that they could seek out things rather than people and things going to them"
"Quote from therapist"

Manoeuvrability seen as an improvement on the original BIME buggy

What did the children think?

"My son cannot speak but he was very excited to go on the bug"

"she enjoyed going through the woods", "Going outside and exploring flowers and plants"

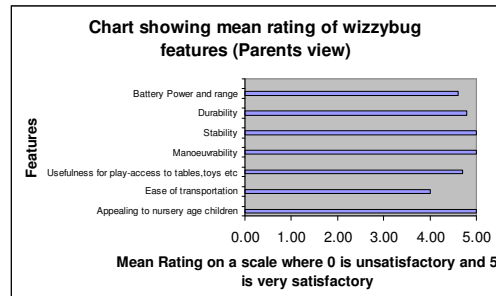
"she enjoyed the Wizzybug and learned to control the Wizzybug quickly – she didn't need any encouragement"

Quotes from parents
Thank you to our postal & family focus groups. And to Anne Harris, Eric Lucas and Jan Nicholson for being specialist advisors during the design process & First Wheels evaluation programme.
Thank you to all the parents and children who took part in the evaluation

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Log books 8 log books contained 97 comments, one diary was very comprehensive with 39 comments and the briefest had 4 comments. The average was 12 comments. Of these 38 (40%) related to the **development of skills**, 19 (20%) to observations about **exercising choice** and 39 (40%) about **enjoyment**

How did parents rate the features of Wizzybug ?



Slow speed was seen as positive for early experiences but also became frustrating once the child became very mobile. This underlines Wizzybug's role as a starter experience of powered mobility

What activities / techniques did you use to encourage your child to move?

Parents suggestions were about allowing experimentation or encouraging play
"Putting the TV on or they would follow me"
Quote from parent



Did seeing your child mobile on Wizzybug change your view of how you saw your child? and if so in what way? Parents commented that seeing their child mobile using Wizzybug allowed their child to develop some independence. They also expressed surprise and pride in seeing

their children enjoying being mobile. *"Yes I always wanted him to walk, but seeing him mobile on the bug and enjoying the independence it bought let me see that using the bug encourages him to be more independent and mobile"* *"was surprised that children so young could operate Wizzybug"*
Quotes from parents

What would you tell other parents to try or not do?

There was positive encouragement from parents for other families to try powered mobility with this age group. They advised to let the children experiment whilst closely supervised to ensure safety. *"We chose to let her enjoy getting about. We were just there to point out any hazards"* *Quote from parent*

Conclusions

- Features identified by the original BIME / Whizz Kidz survey (2003) are rated as satisfactory by a user group of parents and children
- Evaluation has highlighted areas of the design where review / minor modifications are needed. BIME has started production of Wizzybug
- Wizzybug is not used daily. This pattern of intermittent, sessional use is a closer match to how tricycles and toy battery cars are used rather than wheelchair use.
- 85% of goals were judged as achieved – this represented progress for all children within a short timescale of 8 weeks
- Diary and pictorial records reflect on making choices, developing independence and gaining mobility skills
- Positive encouragement to other families to try powered mobility with very young children.