

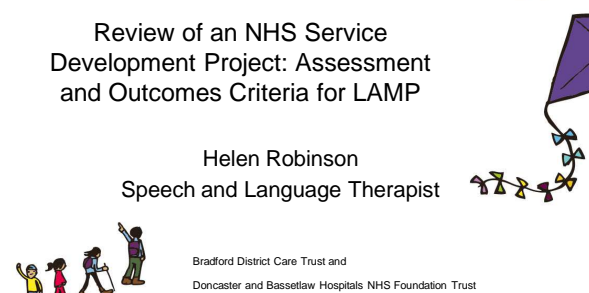


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## Review of an NHS Service Development Project: Assessment and Outcomes Criteria for LAMP

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Bradford District Care Trust and  
Doncaster and Bassetlaw Hospitals NHS Foundation Trust

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## Aims for today


- To share our LAMP Service Development Project
- To share our LAMP pilot project
- To share our future plans

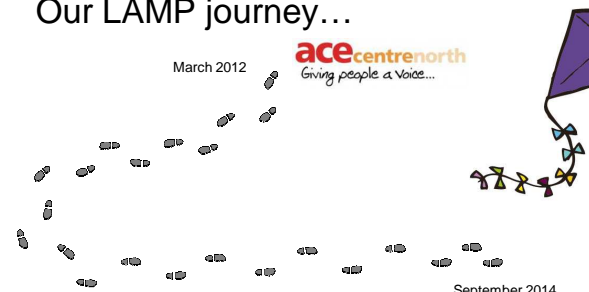


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## Our LAMP journey...

March 2012   
Giving people a voice...




September 2014

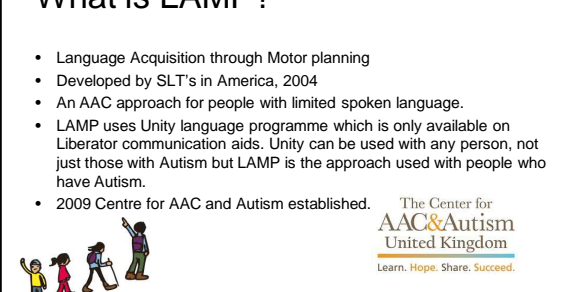
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## What is LAMP?

- Language Acquisition through Motor planning
- Developed by SLT's in America, 2004
- An AAC approach for people with limited spoken language.
- LAMP uses Unity language programme which is only available on Liberator communication aids. Unity can be used with any person, not just those with Autism but LAMP is the approach used with people who have Autism.
- 2009 Centre for AAC and Autism established.

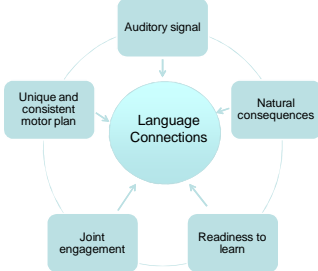
  
The Center for AAC&Autism United Kingdom  
 Learn. Hope. Share. Succeed.





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## The key components to LAMP

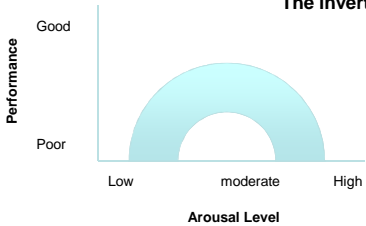


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## Readiness to learn

### The inverted U Principle





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## The research

- Collender and LoStracco (2011). 28 children using LAMP- all children showed increase in MLU using SGD. 4 children became completely verbal.
- Thunberg et al (2009). Variable results but all children showed improved communication.
- Beck et al (2008) variable results
- Schlosser et al (2007) Variable results.







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## Who is LAMP for?

- Assume competence!







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## Our ideas....

- Could the type and severity of a child's sensory difficulties influence their ability to use LAMP? And to develop speech?






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## Project aim

- To establish a set of criteria for assessment using the LAMP approach i.e. *when we meet a non-verbal child with Autism, what are the indicators that LAMP will work for them?*






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## The participants

- Less than ten functional words
- A diagnosis of Autism
- We wanted 8 and we got 8 replies (from 30 invitations)
- Male, aged 5-8
- 7 had Autism in the absence of any other condition
- 1 had Autism and another condition






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## Before the trials...

- Parents completed questionnaires about their child's sensory preferences, functional language, communicative behaviours and motivating items/activities.
- We were looking for a clear distinction between hyposensitive and hypersensitive children but most had mixed sensory profiles.






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## The trials

- 7 children attended six 30 minute sessions over two weeks.
- 1 child attended 4 sessions.
- Parents completed an additional questionnaire about sensory difficulties.







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## Measuring progress

- Child looks at the communication aid
- Child touches the communication aid without communicative intent
- Child touches the communication aid with communicative intent
- Full physical assistance from adult (hand over hand)
- Partial physical assistance (touching of elbow or shoulder)
- Adult models use of communication aid
- Adult gestures to communication aid
- Direct verbal cue given (e.g. "do you want to 'eat.?'")
- Indirect verbal cue given (e.g. "what now?")
- Situational cue (e.g. toy placed out of reach)
- Independent use of the communication aid







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### Information about each child was collated:



- Level of social engagement (using the Intensive Interaction Framework, G Firth- 2004)
- Level of comprehension (reported by parents and informally observed during the sessions)
- Greatest area of sensory processing difficulty (touch, taste, auditory, visual, movement, sleep, smell)
- Overall sensory processing score (total of all positive responses on sensory questionnaire)

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- Overall sensory state (hyper, hypo, mixed)
- Prior success with Picture Exchange Communication System (PECS)
- Number/range of motivators
- Persistence to get what they want
- Ability to point
- Current communicative behaviours

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### Ultimately, a successful trial was judged to be one where the child:

- Showed consistent independent use of the communication aid
- Used the communication aid across a range of activities






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### Factors influencing success

- Level of social engagement at involvement stage or higher (Intensive Interaction Framework)
- Level of comprehension
- Success with PECS
- Persistence to get a desired outcome
- Able to focus on a screen.
- Ability to point






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## Factors not influencing success

- Area of greatest sensory need (movement, smell, touch etc.)
- Overall sensory state (i.e. Hypo or hyper)
- *However* participants with a high overall sensory score that also had all the indicators of success struggled to extend the use of LAMP beyond one activity.






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## The LAMP Pilot project

- Why do we need a pilot?
- Meeting with commissioners and Autism Support Team Sept 2013
- LAMP pilot project Jan 14-15
- How much work will this generate? (how many children fit the criteria?) What will it cost?
- Final report and recommendations to commissioners Spring 2015


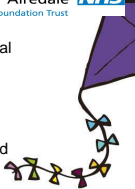
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## Assessment Criteria for LAMP Pilot Project



- The person makes active efforts to reach out, consistently join in, or even comment some way on an interaction. (Social engagement at the 'Involvement' stage of the intensive interaction framework, Firth, G, 2004)
- The person demonstrates persistence to get a desired outcome.
- The person has the ability to look at a screen for a sustained period.



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- The person's comprehension is in advance of their functional expressive language
- The person must have shown success at Phase 3 of PECS or be using a variety of symbols spontaneously to request.
- In addition to these criteria, it is felt that having the ability to point and using echolalia (copying words without communicative intent) may be potential indicators of success with LAMP.



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## Criteria for success with LAMP

Following 4 assessment sessions with a Speech and Language Therapist the person must:



- Have demonstrated functional use of the communication aid across 2 or more contexts. E.g. To request more food and make the toy go.
- Demonstrate an understanding of the different functions of at least 2 words E.g. Saying 'eat' gets them more food but saying 'go' makes a toy work.

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- Show some independent use of the communication aid to communicate (i.e. the person goes to the device and spontaneously uses a word functionally to get a direct outcome)

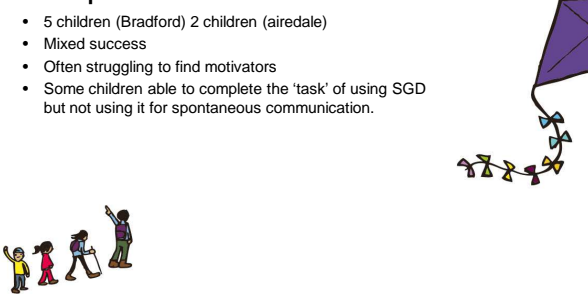



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**The pilot so far...**

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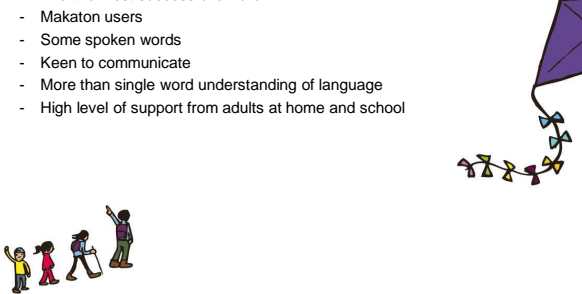
- 5 children (Bradford) 2 children (airedale)
- Mixed success
- Often struggling to find motivators
- Some children able to complete the 'task' of using SGD but not using it for spontaneous communication.



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**The two most successful children:**

- Makaton users
- Some spoken words
- Keen to communicate
- More than single word understanding of language
- High level of support from adults at home and school

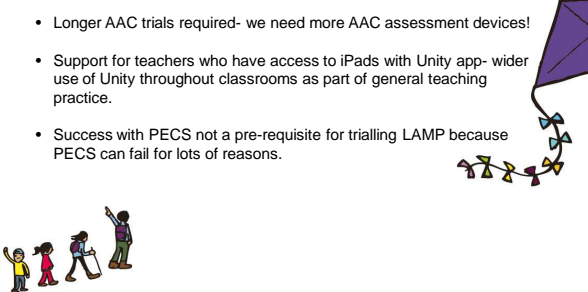


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**Our thoughts for after the pilot...**

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- Longer AAC trials required- we need more AAC assessment devices!
- Support for teachers who have access to iPads with Unity app- wider use of Unity throughout classrooms as part of general teaching practice.
- Success with PECS not a pre-requisite for trialling LAMP because PECS can fail for lots of reasons.




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**Questions?**

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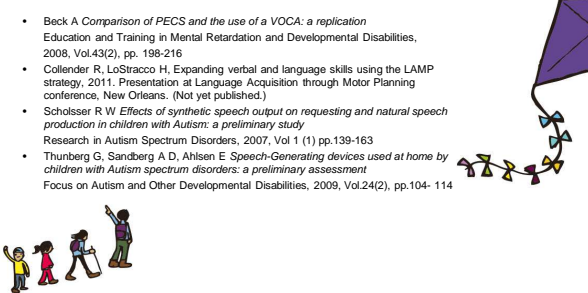


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**References**

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- Beck A *Comparison of PECS and the use of a VOCA: a replication* Education and Training in Mental Retardation and Developmental Disabilities, 2008, Vol.43(2), pp. 198-216
- Collender R, LoStracco H, Expanding verbal and language skills using the LAMP strategy, 2011. Presentation at Language Acquisition through Motor Planning conference, New Orleans. (Not yet published.)
- Scholsser R W *Effects of synthetic speech output on requesting and natural speech production in children with Autism: a preliminary study* Research in Autism Spectrum Disorders, 2007, Vol 1 (1) pp.139-163
- Thunberg G, Sandberg A D, Ahlsen E *Speech-Generating devices used at home by children with Autism spectrum disorders: a preliminary assessment* Focus on Autism and Other Developmental Disabilities, 2009, Vol.24(2), pp.104- 114



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