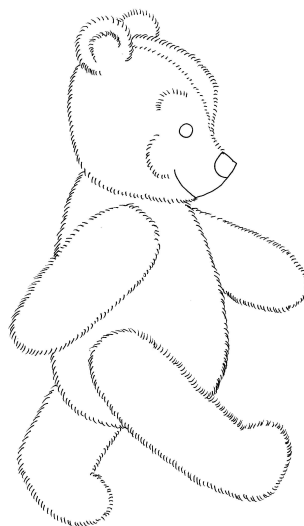


# Building Early Language Patterns: Successful sentences in your language



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# A case study of an innovation

- **The drivers**
- **The resources**
- **The aims**
- **The innovation**
- **The implementation**



Evaluation



Efficacy & Efficiency

# Background

- SLT service in the NW of England
- High levels of deprivation

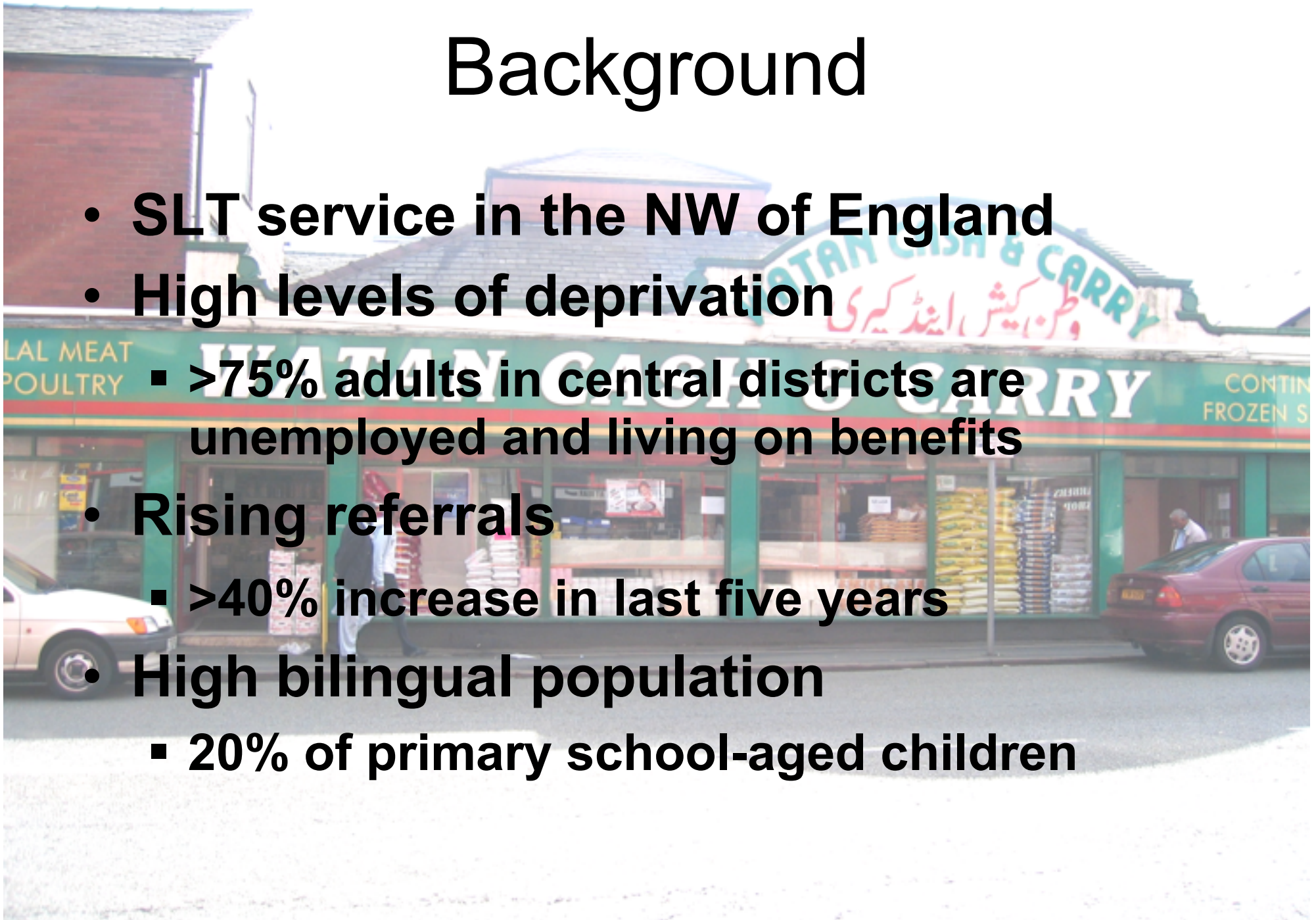
- >75% adults in central districts are unemployed and living on benefits

- Rising referrals

- >40% increase in last five years

- High bilingual population

- 20% of primary school-aged children



# Drivers

## NHS commissioners

- Evidence for effective pathways required

## NHS provider

- Children aged 2;06 – 6; 00 severe language difficulties
- Large demand for therapy
- Language therapy groups in clinics
- Package delivered English & other languages

## Current evidence

- Sparse evidence base
- Little or no high quality research
- Where evidence exists highly resource intensive or not accessible to all.

# Resources

## Specialist service

- Specialist provision & expertise in working with families in a number of languages

## Culture of quality improvement

- NHS service with a culture where audit and research activity are seen as central activities at all levels

## Partnership

- Existing partnerships between Newcastle University and Rochdale therapists creating opportunities for shared learning and collaboration

# Aims of intervention

To create an **effective**, **efficient** and accessible early language intervention for children with severe language difficulties in a number of languages

To be **efficient** it must :

- Do this more rapidly and more reliably than current practice (cost-effectiveness analysis)
- Prevent later long term problems and so create savings (cost-benefit analysis)
- Be deliverable by the full skill mix in the service (cost-effectiveness)

# Intervention development: best practice

- “Best practice is to develop interventions systematically, using the **best available evidence** and **appropriate theory**, then to test them using a carefully **phased approach**”
  - *MRC 2008:8*

# Building Early Language Patterns: successful sentences in your language

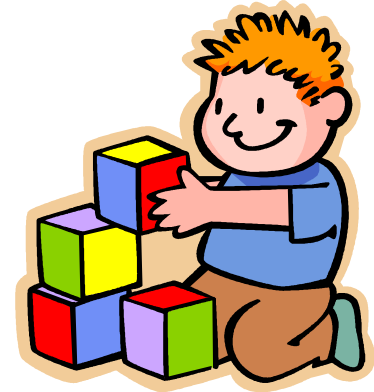
1. Evidence based
2. Theoretically motivated
3. Robustly evaluated through a phased approach








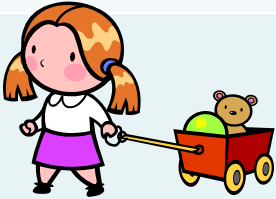


# Innovation: BELP

- Theoretically motivated package
- Constructivist approach: children “build” language knowledge (Tomasello 2006)
- Based on observations of typically developing children
- Harness “cognitive toolkit” of the child
- Common processes of language acquisition – applies to all languages
- System-wide effect – not the learning of a particular language structure



# Cognitive toolkit harnessed by BELP



<b>Input</b>		Children learn what they hear frequently.
<b>Analogy</b>		Children abstract rules by aligning two similar constructions & finding the commonalities
<b>Morphology</b>		Recognition of morphemes helps children abstract patterns
<b>The “event”</b>		Seeing an event happen supports learning of the thematic roles.
<b>Build on existing Knowledge</b>		Children build complexity incrementally.
<b>Semantics</b>		Knowing what the words mean helps abstract the grammar from the event.

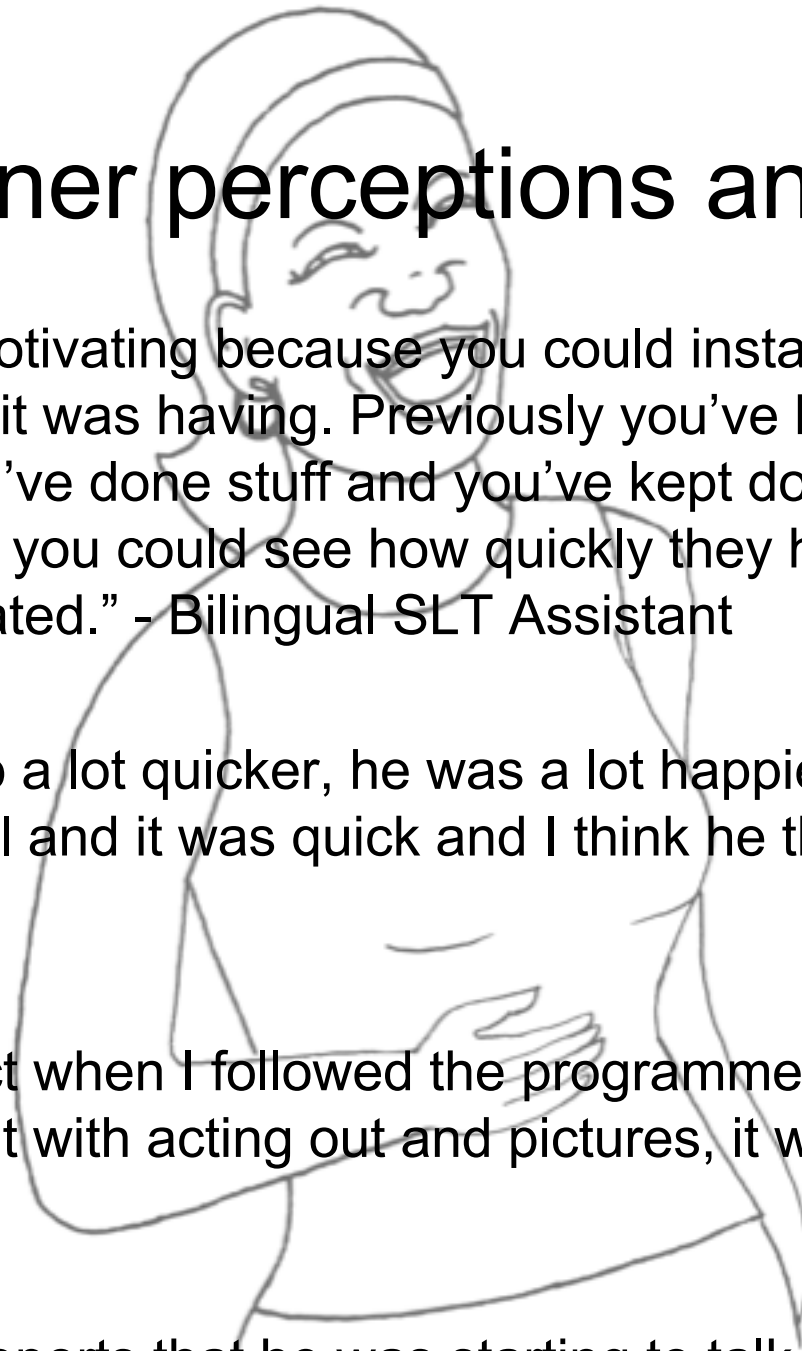
# Implementation & evaluation

- “Best practice is... starting with a series of pilot studies targeted at each of the key uncertainties in the design and moving on to an exploratory and then a definitive evaluation.”
  - Medical Research Council (2008: 8)
- Robey 2004 proposes a V-Phase model of evaluation for clinical interventions
  - I. Discovery development & piloting
  - II. Feasibility & Refinement
  - III. Early efficacy
  - IV. Later efficacy
  - V. Effectiveness (includes efficiency)

One slide here with an example  
of a child's progress & range of  
languages piloted in???

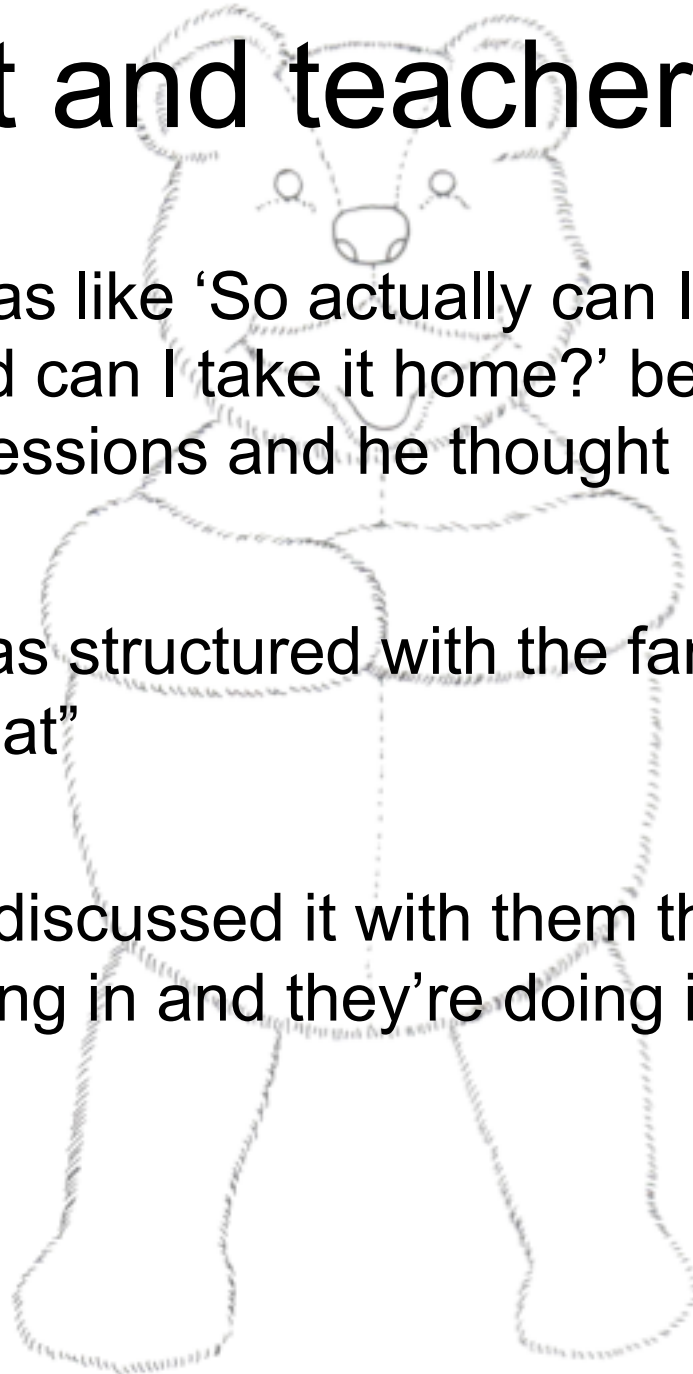
# Practitioner perceptions and 'buy-in'

- “It was really motivating because you could instantly see the results and the impact it was having. Previously you’ve been running groups and you’ve done stuff and you’ve kept doing the same stuff...Because you could see how quickly they have grasped it, it kept you motivated.” - Bilingual SLT Assistant
- “He picked it up a lot quicker, he was a lot happier doing it ‘cos it was quite visual and it was quick and I think he thought he could achieve it”
- “The first impact when I followed the programme that Sean laid out for me and did it with acting out and pictures, it was fantastic. It was really amazing”
- “I was getting reports that he was starting to talk to his parents...within a few weeks he was creating his own sentences”



# Parent and teacher 'buy in'

- "...and Dad was like 'So actually can I have some homework and can I take it home?' because he saw him achieving in sessions and he thought I can do that"
- "Because it was structured with the family they appreciated that"
- "The minute I discussed it with them they've got the teachers coming in and they're doing it in circle time"



# Building Early Language Patterns

- Shows promise as an intervention which could be **effective & efficient**:

- Promote change in children's language skills
- Promote parent/carer 'buy-in'
- Promote SLT team 'buy-in'
- Promote SLT team treatment fidelity
- Promote use in a range of clinical contexts
- Be applicable in a number of languages
- Do this more rapidly and more reliably than current practice (cost-effectiveness analysis)
- And/or prevent later long term problems and so create savings (cost-benefit analysis)
- Be deliverable by the full skill mix in the service (cost-effectiveness)

# “Now is not the time to cut research funding”

(Head of NW Region SHA, 2009)

Effective interventions lead to better outcomes, fewer episodes of care and therefore quicker remediation (leading to increased service capacity)

Many interventions are unproven or have limited evidence of application **across different client groups** (what exactly do we mean by ‘evidence based practice’)

Research, often thought to be a luxury could be at risk at times of economic contraction

Only properly researched interventions give us confidence that we are delivering the best possible care with the limited resources we have available



# The future



- As with most SLT interventions and innovations further work is needed to make robust claims for effectiveness & efficiency
- If we are to meet the challenges of the coming years as a profession we need to learn to love *robust evaluation* as much as we love *innovation*

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