



‘Speech Bubbles’ Drama Intervention Programme¹ Preliminary² Executive Summary of Effectiveness

Key Findings

- Children who received the ‘*Speech Bubbles*’ drama intervention in selected Southwark schools in 2015-16 **made very good progress** in their speech, language and communication development as independently measured by researchers³ using the Communication Trust’s Primary Speech, Language and Communication progression tool for the Key Stage One age group⁴
- In most cases, **the progress made lifted the children's performance out of categories that would indicate cause for concern** in relation to speech and language development
- In five out of six of the categories tested using the progression tool (understanding spoken language; understanding and using vocabulary; sentence building; storytelling and narrative; social interaction) **the children receiving the intervention made better progress than a ‘control’ group** of Key Stage One children from the same schools who had been identified with similar speech, language and communication needs⁵
- The comparatively better progress made by the children receiving the intervention in 2015-16 was found to be **statistically significant in three out of six of the categories tested** using the progression tool (**understanding spoken language; storytelling and narrative; social interaction**)

The independent screening and analysis programme undertaken by researchers at the University of East London for the London Bubble Theatre Company shows there are clear benefits to children's speech, language and communication development as a result of them having participated in a ‘*Speech Bubbles*’ drama programme.

It is therefore a **highly valuable intervention**.

¹ ‘*Speech Bubbles*’ is a social franchise run by the London Bubble Theatre Company - <http://www.londonbubble.org.uk/projectpage/speech-bubbles/> (accessed on 18/10/16)

² This is an initial summary of findings; the data obtained includes demographic information, and observational measures from at least one school; these data sources are yet to be analysed.

³ The evaluation of the *Speech Bubbles* Programme in the London Borough of Southwark was conducted by Dr Heather Price, Psychosocial Research Group, UEL, with statistical analysis undertaken by Eric Ansong, School of Social Sciences, UEL. It was commissioned and funded by the London Bubble Theatre Company.

⁴ Available at <https://www.thecommunicationtrust.org.uk/resources/resources/resources-for-practitioners/progression-tools-primary/> (accessed on 18/10/16)

⁵ These children are receiving the intervention in 2016-17.

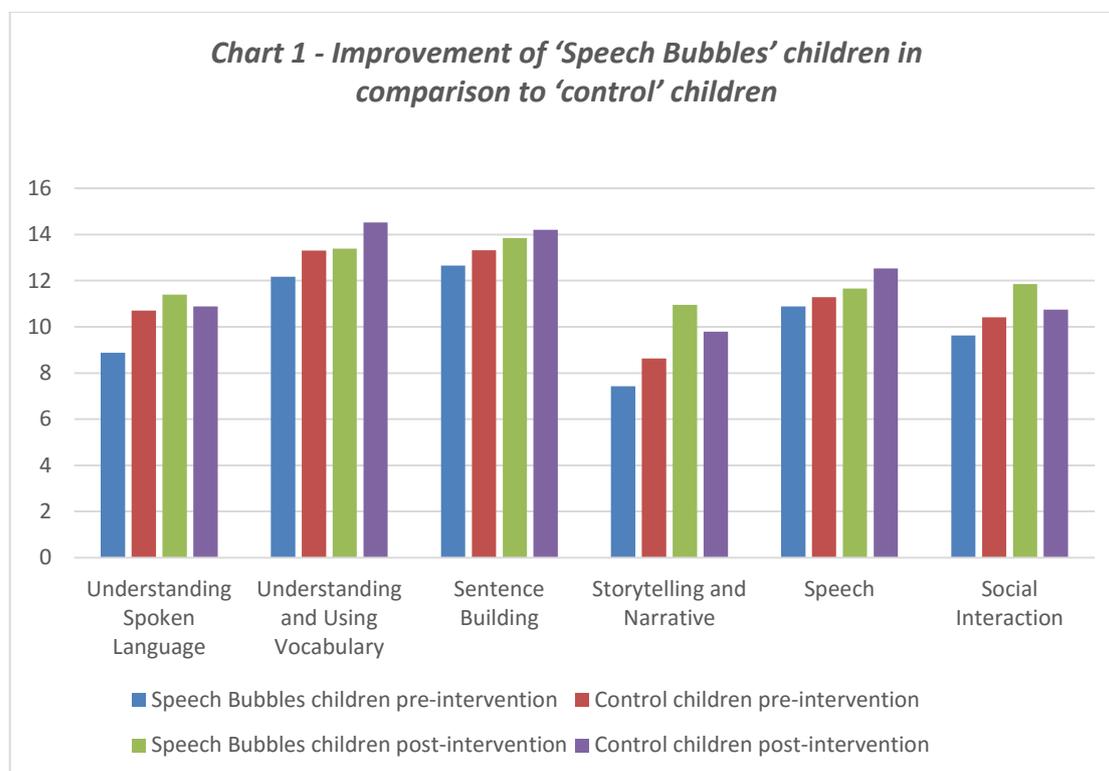
Background

The London Bubble Theatre Company's 'Speech Bubbles' Programme is a drama-oriented school-based intervention for children with identified speech, language and communication needs⁶ in Key Stage One. It is distinctive in working with the whole body, putting children's own narrated stories at the centre of the workshops and building young children's confidence without immediate pressure to speak. It runs weekly for 24 weeks within schools in disadvantaged areas, using trained drama practitioners paired with the schools' own familiar learning support staff.

Research indicates that up to 50% of children in poorer neighbourhoods can be identified as having speech, language and communication (SLC) difficulties (Dockrell, Ricketts and Lindsay, 2012). This has damaging effects on social interaction and emotional well-being (Snowling et al, 2006) and particularly disadvantages boys from the early years onwards (Moss and Washbrook, 2016).

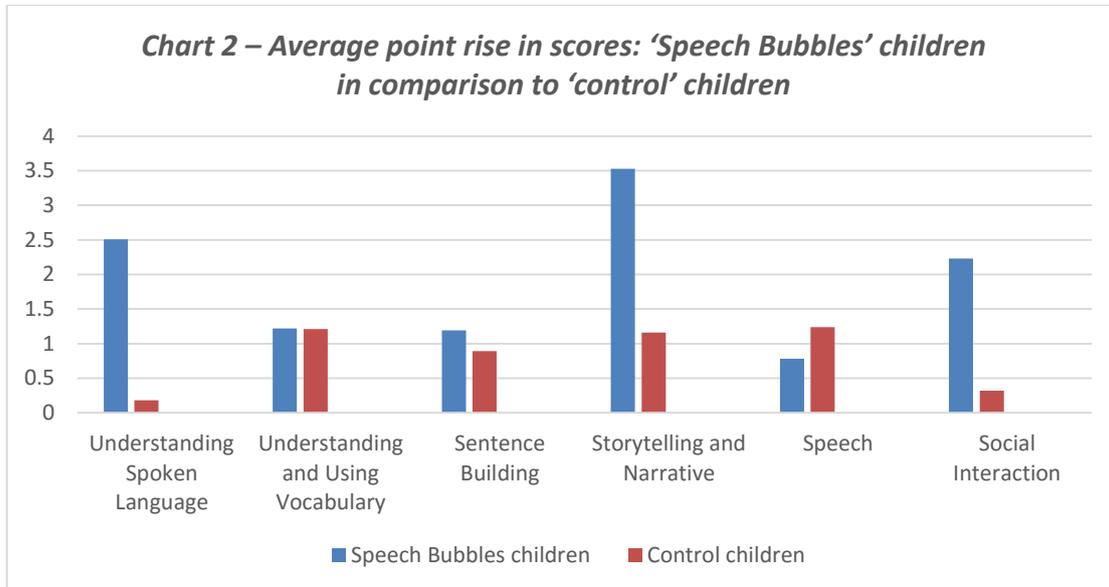
The independent evaluation undertaken by researchers at the University of East London used the Communication Trust's Primary Speech, Language and Communication progression tool (ages 5-6 yrs) and measures were obtained both before and after the intervention⁷. The measures were compared to those achieved by a 'control' group of children from the same classes who had been identified as having the same SLC needs. Ethical consent for the evaluation was obtained from the University of East London's Ethics Committee and ethical conduct of the study was in line with the National Children's Bureau guidelines for ethical social research with child subjects.

Results



⁶ This includes the need to develop pro-social behaviour, confidence and self-esteem.

⁷ There was a 10 month interval between pre- and post- testing.



Statistical significance

The study used linear regression with the difference-in-differences (DiD) estimator to model the treatment effect⁸.

Understanding Spoken Language

A statistically significant regression equation was found ($F(3,174) = 8.64$, $p < 0.000$), with an R^2 of 0.130. The scores of pupils in the intervention increased by 2.04 ($p = 0.01$) compared to the control group.

Understanding and Using Vocabulary

A significant regression equation was found ($F(3,174) = 5.10$, $p < 0.002$), with an R^2 of 0.081. There was, however, no statistically significant increase in the vocabulary scores of pupils in the intervention ($b = 0.005$, $p = 0.99$) compared to the control group.

Sentence Building

A non-significant regression equation was found ($F(3,174) = 2.611$, $p = 0.05$), with an R^2 of 0.043. Therefore, there was no statistically significant increase in scores for sentence building of pupils in the intervention ($b = 0.28$, $p = 0.74$) compared to the control group.

Storytelling and Narrative

A significant regression equation was found ($F(3,174) = 10.19$, $p < 0.000$), with an R^2 of 0.149. There was a statistically significant increase in the storytelling and narrative scores of pupils in the intervention, with an increase of over one unit ($b = 2.37$, $p = 0.02$) compared to the control group.

Speech

A non-significant regression equation was found ($F(3,174) = 1.564$, $p = 0.200$), with an R^2 of 0.026. There was no statistically significant increase in the scores for speech of pupils in the intervention ($b = -0.27$, $p = 0.77$) compared to the control group.

Social Interaction

A significant regression equation was found ($F(3,174) = 7.26$, $p < 0.000$), with an R^2 of 0.111. The results show that the social interaction scores of pupils in the intervention increased by 1.85 ($p = 0.02$) compared to the control group.

⁸ This approach is one of the most popular tools for applied research in evaluating the effects of interventions on some relevant outcome variables (Abadie, 2005). Buckley and Shang (2003) see the difference-in-differences (DiD) approach as reliable for both applied quantitative education and public policy research studies. The use of DiD is especially relevant in quasi-experimental studies where professionals' selection for interventions may present some challenges.

Commentary

This evaluation did not attempt to capture the processes underpinning the *Speech Bubbles* intervention⁹, but to use an independently devised and administered screening tool to test whether or not it had significant outcomes. It is important that three of the six areas of questioning within the Communication Trust's Primary Speech, Language and Communication progression tool were relatively unstructured. They were also more dialogic and child-centred, giving the children scope to talk at length about topics of interest to them. In the 'Understanding Spoken Language' category, the children were asked to tell a well-known story, and asked about a character's motives. In the 'Storytelling and Narrative' category, they were asked about their weekend and their favourite stories and then given a chance to make up a 'Slimy Green Alien' story from an opening sentence. In the 'Social Interaction' category, children could comment on the games they liked to play, and their likes and dislikes at school. Throughout the test, the message was conveyed that it was okay to chat (and indeed, the competence of their conversations was one element scored). It was in these three areas that the *Speech Bubbles* children really shone, outstripping the 'control' children even though they started each time from a lower baseline. Their lively approach to these questions, as much as the scores they obtained, was suggestive of a change in the way they viewed themselves. They appeared as more competent, storytelling subjects with a perspective on their personal worlds. Hearing and telling stories has long been linked to success in literacy (Brice Heath, 1982; Pellegrini and Galda, 1993; Isbell et al, 2004). However, more recent research focusses on the benefits to mental health and emotional well-being of being able to mentalize, and to have a language for re-presenting one's experiences and feelings (Muller and Midgley, 2015). Storytelling provides a rich and creative symbolic language for doing this.

Limitations

This study approximates to a randomised controlled trial. The children were reasonably randomly distributed between conditions after meeting the criteria for participating in *Speech Bubbles*¹⁰. However, ideally, the child subjects would have been matched on a range of variables, including exact age in months rather than year group alone, ethnicity, gender and language spoken at home, and most importantly, pre-test score. As it is, it is testament to the *Speech Bubbles* children's development that despite being a younger group on average, and less able initially, they made more progress in three areas and pulled almost alongside the control group in two others.

⁹ But see Dr Jonathan Barnes' reports from the Sidney De Haan Research Centre for Arts and Health, Canterbury Christ Church University (Barnes, 2012; Barnes, 2015)

¹⁰ Despite being asked to allocate randomly, school staff understandably put children in greater need forward first for the intervention.

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Dr Heather Price,
Psychosocial Studies Research Group,
School of Social Sciences,
University of East London
Email: h.s.price@uel.ac.uk