

**A school based intervention to promote positive attitudes
towards and social inclusion of children with intellectual
disabilities: A feasibility and pilot study**

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Thesis declaration form

I confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

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Overview

This thesis is presented in three parts. The overall focus of the thesis is on improving children's attitudes towards intellectual disabilities.

Part one presents a literature review exploring articles describing interventions aimed at improving children's attitudes towards intellectual disabilities, how they were evaluated, and their outcomes. The review concluded that interventions involving contact that were generally longer in length were effective in improving attitudes. However, the conclusions drawn are limited by methodological issues such as the lack of randomisation and use of outdated measures.

Part two is an empirical paper evaluating the feasibility of an intervention to improve attitudes of primary school children towards peers with intellectual disabilities. The intervention comprised of multiple components focusing on improving the cognitive, affective and behavioural domains of attitudes. The paper concludes that the implementation of intervention was feasible, and based on qualitative feedback, requires further development. Preliminary outcomes were also assessed, and findings indicate modest changes were not sustained over time.

Part three is a critical appraisal that examines the thesis from a disability narrative framework and reflects on various process issues arising during its completion.

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Part One: Literature Review

**Evidence based interventions to improve attitudes towards
children with intellectual disabilities: A literature review**

Abstract

Aims: This literature review set out to examine what interventions have been used to improve attitudes towards peers with intellectual disabilities in schools, how they were evaluated and how effective they were in improving attitudes towards intellectual disabilities.

Methods: A systematic search was carried out to identify literature from 2000 to 2015 describing interventions designed to improve children's attitudes towards peers with intellectual disabilities. Studies were included on the basis of having used formal methods of evaluation using quantitative methodology, where change was assessed either through longitudinal measurement or comparison with a control group.

Results: The review identified ten papers that fit the inclusion criteria. Effective interventions involved direct contact where children worked collaboratively with their peers with intellectual disabilities, and were generally of extended duration.

Conclusions: A number of methodological issues limit this body of evidence, including use of outdated measures and lack of randomisation. Consensus is necessary in the use of questionnaires to ensure adequate measurement of attitudes and comparison between interventions.

Introduction

Inclusive environments have been described as those where “all children and young people, despite different cultural, social and learning backgrounds...have equivalent learning opportunities in all kinds of schools” (UNESCO: Acedo, Amadio & Operti, 2009, p. 9). They are becoming increasingly common with the passing of various legislation (UNESCO, 1994; Special Educational Needs and Disability Act 2001; Department for Education, 2014). However, despite the promotion of inclusive education, children with special educational needs and disabilities (SEND), including those with intellectual disabilities, schooled in such settings experience greater difficulties in their social interactions than their typically developing peers and are less accepted within social groups (Koster, Pijl, Nakken & Van Houten, 2010). Furthermore, these children are more likely to experience bullying and social isolation (Carter, Sisco, Chung & Stanton-Chapman, 2010; Frederickson, 2010). There is a greater prevalence of mental health difficulties in children with intellectual disabilities than their typically developing peers, which is exacerbated by social exclusion (Emerson, 2003; Emerson, Einfeld & Stancliffe, 2010).

Much of the discrepancy between expectations of inclusive education in improving the quality of life of children with intellectual disabilities and the reality of the social exclusion they experience is the result of negative attitudes (Milsom, 2006). Typically developing children prefer to socialise with children without disabilities as a result of biases in attitudes (Nowicki & Sandieson, 2002), with this preference more pronounced when socialising outside of school (Siperstein, Parker, Bardon & Widaman, 2007). Improving attitudes could result in more positive experiences for children with disabilities and requires intervention within schools (Milsom, 2006). A number of studies have implemented programmes and

interventions designed to improve attitudes towards children with intellectual disabilities (Lindsay & Edwards, 2013). These interventions tend to involve social contact, multi-media elements, and multi-component approaches involving stories, class based activities, and discussions that helped break down stereotypes and create awareness of the barriers people with disabilities face. Many of the studies reviewed by Lindsay and Edwards focused on general disability or physical disabilities rather than intellectual disabilities. It has been suggested that individuals with intellectual disabilities have increased vulnerability of social exclusion and mistreatment due to greater negative attitudes towards intellectual disabilities than physical disabilities (Werner, 2015).

There is little evidence summarising the effectiveness of interventions designed to improve attitudes towards intellectual disabilities. Furthermore, there is limited research employing rigorous research designs in evaluating these interventions (Scior & Werner, 2015; Werner & Scior, 2016). Effective evaluation of interventions requires adequate measurement of constructs that are expected or hypothesised to change. Such measurements will either need to be collected longitudinally to assess whether any change has occurred over time, and/or compared to a group who did not receive the intervention to differentiate between naturally occurring changes and those resulting from direct implementation of the intervention, or ideally both in the form of a randomised controlled trial.

Aims and Objectives

This review set out to summarise the findings of studies designed to improve attitudes towards persons with intellectual disabilities. The review examined:

1. What interventions have been used to improve children's attitudes towards peers with intellectual disabilities?
2. How were these interventions evaluated?
3. Did they succeed in improving attitudes?

Methods

Search Strategy

A systematic search of the literature was undertaken to identify studies to include in this review. Studies published between 2000 and 2015 were identified through the following databases: PsycINFO, Web of Science, British Education Index and SCOPUS. Search terms focused on intellectual disability, attitudes, intervention, schools and evaluation (see Table 1); they were combined using Boolean terms. Reference lists of studies meeting the inclusion criteria were also checked for further articles that may have been missed through the database search. Additionally, studies referenced in recently published reviews by Lindsay and Edwards (2013) and Liegers and Myers (2015) were also examined to ensure a thorough search of the literature.

Definition of intellectual disabilities. Intellectual disabilities are defined as significant limitations both in intellectual functioning and in adaptive behaviour as expressed in conceptual, social and practical adaptive skills (American Association on Intellectual and Developmental Disabilities, 2010). Functioning is considered within the person's context. The use of the term intellectual disabilities has been in use since the early 2000s, with the term 'mental retardation' heavily in use internationally prior to this and in continued use in some countries, despite it now widely considered derogatory. The term 'learning disability' is also used particularly

in the UK, which becomes somewhat confusing as this term in some countries refers to specific learning difficulties, such as dyslexia and dyspraxia. Thus for the current review, in order to ensure a systematic search of the literature, the term ‘intellectual disability’ was used in conjunction with ‘mental retardation’, ‘learning disability’ and ‘special needs’ to identify the relevant literature.

Table 1: Terms used in database searches

<i>Intellectual disability</i>	<i>Attitudes</i>	<i>Intervention</i>	<i>Sample</i>	<i>Effect</i>
Intellectual disab*	Attitude*	Intervention	School	Effect
Learning disab*	Aware*	Training	Student*	Evaluat*
Special need*	Stigma	Inclusion	Child*	Outcome
SEN	Acceptance	Teaching	Class*	Change
SEND	Belief	Program*	Education	Impact
Mental retard*	Knowledg*	Experience	Pupil*	
		Interact	Young person	
			Young people	
			Youth	

* indicates terms that were truncated to allow for multiple endings of the word

Inclusion and Exclusion Criteria

Selection of studies for the review was subject to stringent inclusion and exclusion criteria.

Inclusion Criteria. The following criteria were used to determine which studies to include in the review:

- Published between 2000 and 2015
- Published in full in a peer reviewed journal

- Participants were school aged children
- The intervention in question had a focus on intellectual disabilities
- There was clear evidence of formal evaluation of the intervention's outcomes
- Published in the English language

Evidence of formal evaluation was limited to articles using repeated measures designs (pre and post measurement) or a comparison group (control). Limits to publication dates were applied to ensure the relevance of papers to current practice, and also as papers published prior to 2000 have been previously reviewed by Lindsay and Edwards (2013).

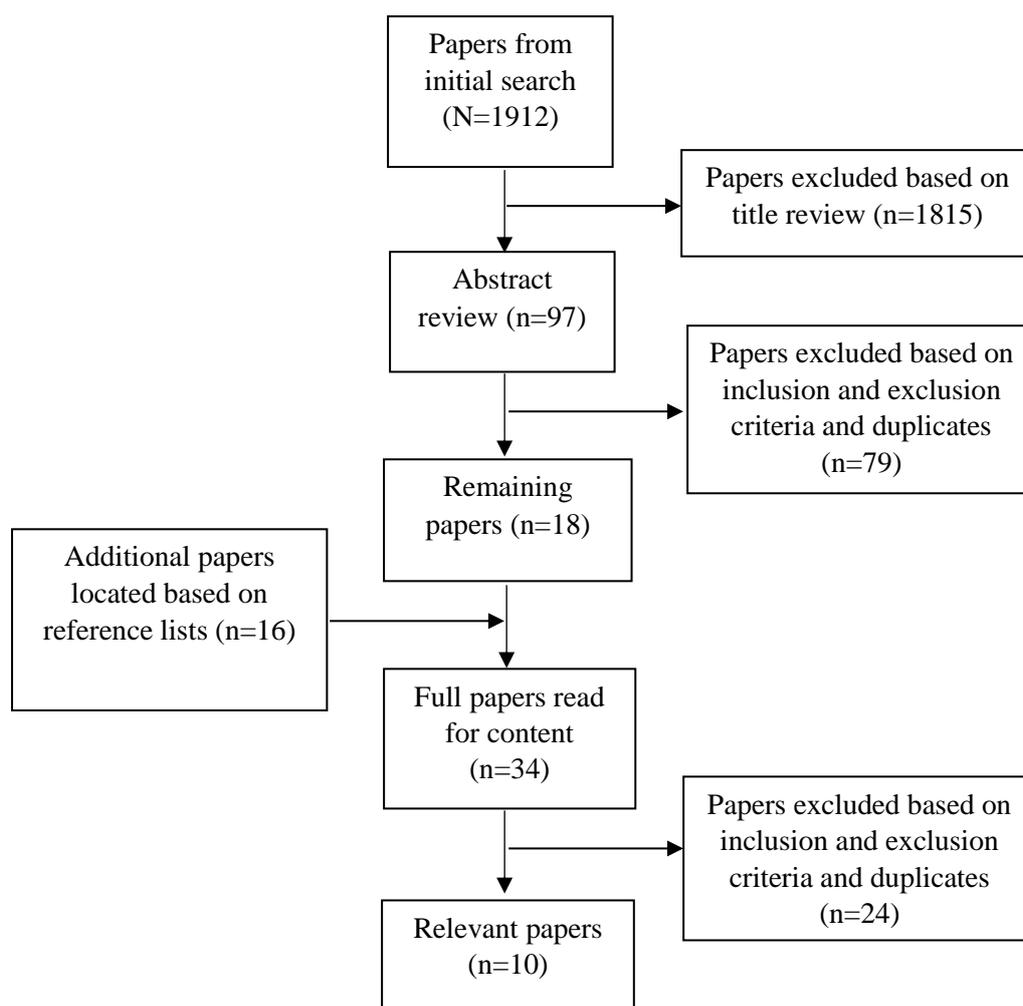
Exclusion criteria. Papers were excluded from the review based on the following criteria:

- Published in the grey literature (e.g. unpublished dissertations, conference papers)
- No aspect of the intervention focused specifically on intellectual disabilities
- The intervention in question targeted attitudes to autism

Selection of Articles

Initial database searches resulted in identification of almost 2000 papers. These were pared down based on initially reviewing titles, then reviewing abstracts and finally reading through the remaining studies. The process of selecting the articles is illustrated in Figure 1.

Figure 1: Flow chart depicting process of selecting articles



Results

The systematic search identified ten studies that met the inclusion criteria. See Table 2 for a summary of all articles included. The papers represented a variety of high income countries. Sample sizes ranged from 58 to 271 children, with a fairly equal ratio of boys and girls participating, apart from Moore and Nettelbeck (2013) whose entire sample was male, and Castagno (2001) who had only one female participant. Few studies included children with intellectual disabilities in their sample who also completed the measures, although peers with intellectual disabilities were involved in some of the interventions. Participating pupils' ages ranged from 4 to around 15 years.

Table 2: Articles included in the review

<u>Author (Date) and Country</u>	<u>Design</u>	<u>Sample</u>	<u>Intervention</u>	<u>Measure</u>	<u>Results summary</u>
Cameron & Rutland (2006) UK	Comparison to baseline using a 3x2x3 design	67 children Male: 27 Female: 40 Age range: 5-10 years	Indirect contact <ul style="list-style-type: none"> • Six sessions over six weeks • Story based where the characters had various disabilities, followed by a discussion 	<ul style="list-style-type: none"> • Intergroup attitude measure (modified version of MRA measure, (Aboud, 2003; Doyle & Aboud, 1995)) • Intended behaviour measure 	Post-intervention outgroup attitudes higher than pre-intervention outgroup attitudes. Extended contact through storytelling does improve attitudes towards outgroups.
Cameron, Rutland & Brown, (2007) UK	Comparison to control using a 3x3 design	71 children Male: 35 Female: 36 Age range: 6-9 years	Indirect contact <ul style="list-style-type: none"> • Six sessions over six weeks • Story reading compared to multiple classification training 	<ul style="list-style-type: none"> • Intergroup attitude measure • Intended behaviour measure 	Extended contact through storytelling resulted in more positive attitudes toward outgroup individuals than the multiple classification intervention and control group. Intended behaviour was also significantly higher in the extended contact group.
Castagno (2001) USA	Comparison to baseline	58 children Male: 57 Female: 1 Age range: 11 to 14 years (grades 6-8)	Direct contact <ul style="list-style-type: none"> • 24 sessions over eight weeks • Typically developing children engaged in basketball games with peers with intellectual disabilities with instruction from coaches 	<ul style="list-style-type: none"> • Adjective Checklist (Siperstein, 1980) • Friendship Activity Scale (Siperstein 1980) 	Significant change in use of positive adjectives. Friendship activity scale also showed significant results.

de Boer, Pijl, Minnaert & Post (2014) Netherlands	Comparison to baseline and control groups with follow-up	271 children Male: 121 Female: 150 Age range: 4-12 years	Indirect contact <ul style="list-style-type: none"> • Six sessions over three weeks • Story based • Books for younger children and videos for older children • All stories followed by discussion 	<ul style="list-style-type: none"> • Acceptance Scale for Kindergarten-revised (ASK-R), (Favazza & Odom 1996) • Attitude Survey Towards Inclusive Education (ASIE) (De Boer et al., 2012) 	Improvement in younger children's attitudes at post-intervention when compared to control group. Change was not sustained over time at follow-up with no significant difference when compared to control group. No significant differences in attitudes of older children when compared to control.
Gannon & McGilloway (2009) UK	Comparison to baseline	118 children Male: 54 Female: 64 Age range: 8-11 years	Indirect contact <ul style="list-style-type: none"> • Single session • 10-minute video excerpt about children with Down syndrome 	<ul style="list-style-type: none"> • Attitude Questionnaire (modified version of Gash, 1993) 	No overall change in attitudes. Significant change on sociability subscale of measure but not on inclusion subscale. Older female children held most positive attitudes.
Marom, Cohen, & Naon (2007) Israel	Comparison to baseline and control groups	206 No information on gender Age range: 8-14 years	Direct contact <ul style="list-style-type: none"> • Year-long intervention • Weekly or fortnightly joint activities (e.g. sports, music, art, social games) with students with intellectual disabilities • Mean of 16.75 direct contact meetings per participant 	<ul style="list-style-type: none"> • Attitudes Towards Children with Disabilities (ATCD) (based on Siller, Ferguson, Vann, & Holland, 1967) • Children's self-efficacy (adapted from Bandura, 1989) 	Attitudes were significantly higher at post-intervention stage in the experimental condition than the control condition. Self-efficacy also increased in the experimental condition at post-intervention stage than the control group.

Martinez & Carspecken (2007) USA	Comparison to baseline and control groups	78 (Latino background) Male: 34 Female: 44 Age range: 8-10 (grades 3 & 4)	Indirect contact <ul style="list-style-type: none"> • Six sessions over five weeks • Story based • Followed by discussion 	<ul style="list-style-type: none"> • Acceptance scale: Elementary Level (Meyer, 1994) 	Significant difference in experimental condition compared to the control, indicating higher acceptance scores. Girls had more favourable attitudes compared to boys.
Moore & Nettelbeck (2013) Australia	Comparison to baseline and control groups with follow-up	156 children All male Age range: 11-15 years	Indirect contact <ul style="list-style-type: none"> • Four sessions over four weeks • Disability Awareness Program which included presentations, discussions, videos, guest speakers (including individual with intellectual disabilities) and disability simulation activity 	<ul style="list-style-type: none"> • Chedoke–McMaster Attitudes Towards Children with Handicaps Scale (CATCH; Rosenbaum, Armstrong, & King, 1986) • 'Just Like You' Scale (Ison et al., 2010). 	CATCH scores significantly improved over time. Scores on the "Just Like You" scale improved over time.
Piercy, Wilton & Townsend (2002) New Zealand	Comparison to baseline and control group with a 3x2 design	51 children Male: 29 Female: 22 Age range: 5 to 7 years	Direct contact <ul style="list-style-type: none"> • 20 sessions over 10 weeks • Three groups: cooperative learning (CL); social contact (SC); control • CL: children engaged in activities with peers with intellectual disabilities in a collaborative way • SC: children engaged in activities but independently of one another • Control: Usual classroom activities 	<ul style="list-style-type: none"> • Peer Acceptance Scale (Adapted from Moe, Nacoste, & Insko, 1981) • Popularity Index • Social Distance Scale (Adapted from Fenrick & Petersen, 1984) • Behavioural observations 	Peer acceptance scores increased significantly over time. CL group showed improvements in attitudes as reflected in significant changes in all three measures. No significant changes on any measures for SC or control groups. CL group had more positively rated interactions than the other two groups.

Rillotta &
Nettelbeck
(2007)
Australia

Comparison to
control group with
follow-up

259 children
Male: 116
Female: 143
Approx. Age range:
11-14

Direct contact

- Offered as three or eight weekly sessions
- Awareness of Disability Programme (ADP)
- ADP included contact with peers with intellectual disabilities, videos, presentations, and independent learning for the longer intervention
- Students who had participated in a similar programme that lasted 10 sessions eight years prior to the study, were also invited to complete questionnaires

- Attitudes Toward Persons with an Intellectual Disability Questionnaire – 31 item attitude measure (Based on Down, 1996; Nickson, 2001; and Bailey, 2004)

Students who received the 8 session ADP reported significantly more positive attitudes than control group. The longitudinal follow-up group held as favourable attitudes as those completing the ADP at the time of the study. Participation in the three session ADP students did not significantly differ from control group scores.

Table 3: Quality ratings of reviewed papers

	Cameron & Rutland (2006)	Cameron, et al, (2007)	Castagno (2001)	de Boer, et al. (2014)	Gannon & McGilloway (2009)	Marom, et al (2007)	Martinez & Carspecken (2007)	Moore & Nettelbeck (2013)	Piercy, et al (2002)	Rillotta & Nettelbeck (2007)	Total score
1. Question/objective sufficiently described?	2	1	2	2	2	2	2	2	2	2	19
2. Study design evident and appropriate?	2	1	2	2	2	2	2	2	2	1	18
3. Method of subject/comparison group selection or source of information/input variables described and appropriate?	2	1	1	2	2	1	1	1	1	1	13
4. Subject (and comparison group, if applicable) characteristics sufficiently described?	2	2	1	2	2	1	2	2	2	2	18
5. If interventional and random allocation was possible, was it described?	1	1	-	0	-	0	1	0	1	0	4
6. If interventional and blinding of investigators was possible, was it reported?	-	-	-	-	-	-	-	-	-	-	0
7. If interventional and blinding of subjects was possible, was it reported?	0	0	-	-	-	-	-	0	0	-	0

8. Outcome and (if applicable) exposure measure(s) well defined and robust to measurement / misclassification bias? Means of assessment reported?	2	2	2	2	2	2	2	2	2	1	19
9. Sample size appropriate?	1	1	0	2	2	2	2	2	1	2	15
10. Analytic methods described/justified and appropriate?	2	2	2	2	2	2	2	1	2	0	17
11. Some estimate of variance is reported for the main results?	0	0	0	0	0	0	0	0	0	0	0
12. Controlled for confounding?	-	-	-	0	-	0	1	-	0	-	1
13. Results reported in sufficient detail?	2	2	2	2	2	2	1	2	1	1	17
14. Conclusions supported by the results?	2	2	1	2	2	2	2	1	2	2	18
Total sum	18	15	13	18	18	16	18	15	16	12	
Total possible score	24	24	20	24	20	24	24	24	24	22	
Summary score*	0.75 ^a	0.63 ^b	0.65 ^b	0.75 ^a	0.90 ^a	0.67 ^b	0.75 ^a	0.63 ^b	0.67 ^b	0.55 ^b	

* Summary score calculated by summing the total score obtained across items and dividing by the total possible score

2 = Yes, 1 = Partial, 0 = No, - = N/A, a = High quality, b = medium quality

Quality Rating

The studies selected for the review were subjected to quality rating using the Kmet, Lee and Cook (2004) rating scale. Table 3 presents summary quality ratings, with scores closer to one indicating higher quality. Overall the quality of the studies ranged from good to excellent, four papers were rated of high quality and the remaining six were rated of medium quality. Only one study receiving a rating indicating overall excellence (Gannon & McGilloy, 2009). Given that the other nine papers were rated of broadly comparable quality, the summary of the results presented hereafter will note limitations that apply to individual or several studies.

Almost all studies performed poorly on the following aspects: random allocation, blinding of researchers and participants, reporting variances, and controlling for confounds. Whilst these are generally criteria found in RCTs that are difficult to implement in school based interventions, particularly blinding of participants and researchers, they suggest the need for more rigorous methods in designing and evaluating interventions.

What Interventions Have Been Used to Improve Children's Attitudes towards Peers with Intellectual Disabilities?

The studies included in the review measured changes in attitudes towards children with intellectual disabilities. Six of the studies specifically focused on designing and evaluating the effects of a programme aimed at improving attitudes. Of the remaining four, two evaluated existing programmes (Castagno, 2001; Rillotta & Nettelbeck, 2007), the other two were exploratory in nature, primarily gauging attitudes in their sample population whilst also exploring whether their target

intervention could improve attitudes (Gannon & McGilloway, 2009; Martinez & Carspecken, 2007).

All studies reviewed incorporated elements of contact in their intervention. Whether this was through stories (Cameron & Rutland, 2006; Cameron, Rutland & Brown, 2007; Martinez & Carspecken, 2007), videos (Gannon & McGilloway, 2009), a combination of stories and videos (de Boer, Pijl, Minnaert, & Post, 2014), sporting activities (Castagno, 2001), or direct contact with individuals with intellectual disabilities (Marom, Cohen, & Naon, 2007; Piercy, Wilton, & Townsend, 2002). The remaining studies tested multicomponent interventions that included elements of contact (Moore & Nettelbeck, 2013; Rillotta & Nettelbeck, 2007). The two main forms of contact in the interventions were direct contact, where children engaged in activities with peers with intellectual disabilities, and indirect contact, where children experience contact with individuals with intellectual disabilities vicariously.

Direct contact. All direct contact interventions involved cooperative joint working, where each child was in an equal partnership with their peer. Children engaged in a variety of activities and the interventions tended to be of longer duration. In total, only four studies had tested interventions that used direct contact with peers with intellectual disabilities. Castagno (2001), whose study was of medium quality, used the Special Olympics as a framework for the intervention that engaged children in basketball with peers with intellectual disabilities. The intervention involved an intense programme spanning eight weeks with 24 sessions in total that taught basketball skills and engaged both children with intellectual disabilities and their typically developing peers.

Type of contact and the nature of interaction was investigated by Piercy et al. (2002), whose study was of medium quality. Their study compared cooperative learning with social contact. In the cooperative learning condition, children worked collaboratively in lessons with peers with intellectual disabilities. In the social contact condition, children worked independently of one another in a class with peers with intellectual disabilities. The social contact group was reflective of a typical inclusive class environment. The programme was delivered in 20 sessions over 10 weeks.

Whilst the above study compared the effects of different types of contact, Rillotta & Nettelbeck (2007) examined length of multicomponent interventions that involved cooperative learning in relation to outcome. Their study was rated as medium quality. The study evaluated the participating school's existing Awareness of Disability Program (ADP), which had previously been offered in ten sessions, to the eight and three session format used at the time of evaluation. All programmes, regardless of length, involved contact with peers with intellectual disabilities who attended the school's special unit. The longer programme involved independent study and research on intellectual disabilities that required exploring attitudes in greater depth.

The intervention used by Marom et al. (2007) was the longest of all the studies reviewed and was of medium quality. It lasted a year and involved weekly or fortnightly meetings between pupils with and without intellectual disabilities engaging in joint activities including sports, art and social games. Severity of intellectual disabilities was specifically investigated by two papers, both of which were contact based and involved interactions with children with moderate to severe

intellectual disabilities (Marom et al., 2007; Piercy et al., 2002). Both were longer interventions, lasting ten weeks to a year.

Indirect contact. Six of the ten studies reviewed used indirect contact through stories and videos. Cameron and Rutland (2006), which was rated of high quality, and Cameron et al. (2007), which was rated of medium quality, used stories of children with physical disabilities, intellectual disabilities and no disabilities. The former compared different types of extended contact (neutral, decategorisation, where the individual identities of characters were emphasised rather than their disability, and intergroup, where their disability and typicality received equal attention). Whilst the latter compared extended contact through the use of stories to multiple classification skills training, which is a method of accelerating children's ability to classify members of an out-group to differing categories. Both studies used stories that focused on close friendships between a typically developing child and a child with a disability, presented in a positive light. The stories were followed by discussion of the content to allow the pupils to expand their knowledge and understanding of the target disability.

Similarly, Martinez and Carspecken (2007), whose study was rated of high quality, also used stories of children with intellectual disabilities to improve attitudes in their sample of Latino children. The stories had a main character with a disability, who was portrayed in a positive and realistic light. Each story was preceded with a brief description and facts about the disability, and followed by a discussion. All three story-based interventions lasted six sessions and incorporated discussions. Using a different means for indirect contact, Gannon & McGilloway (2009), whose study received the highest quality rating, showed video footage of children with

Down syndrome engaged in day to day activities. This was part of a one-off intervention, and was not followed by any discussion of the content.

Stories and videos were combined in the study by de Boer et al. (2014), whose study was rated of high quality, with each medium aimed at a specific target age group. Stories were used with younger children, and movies and video footage with older children. The stories and videos focused on physical, intellectual, or a combination of both disabilities. The intervention was delivered by teachers and two sessions were dedicated to each disability, with a total of six, one for viewing the video and the other to discuss the specific disability.

Indirect contact was also used as part of a multicomponent intervention that targeted attitudes in boys (Moore & Nettelbeck, 2013), which was rated as medium quality. The intervention was delivered in four sessions and used multiple methods of contact. The content consisted of presentations about disability, discussions, information on use of language, multimedia components, guest speakers and disability simulations.

All six studies that used indirect contact interventions depicted disability in a positive and realistic light to give an accurate account of the lived experience of children with intellectual disabilities. Apart from one study (Gannon & McGilloway, 2009), all interventions lasted at least four sessions or more and incorporated discussion about intellectual disabilities. Interestingly, four of the six studies involving indirect contact were rated of high quality, whilst the studies with direct contact were all rated as medium quality. This suggests that perhaps there is greater difficulty in evaluating interventions involving direct contact.

How Were These Interventions Evaluated?

All studies included in the review were evaluated either by comparison to a baseline or control group, and used questionnaires as their method of data collection.

Research design. All studies in the review had experimental designs, apart from Castagno (2001) who described an evaluation study. Comparison of scores over time with baseline measurement was used in three studies (Cameron & Rutland, 2006; Castagno, 2001; Gannon & McGilloway, 2009). Whilst comparison to a control group condition was used in two studies (Cameron et al., 2007; Rillotta & Nettelbeck, 2007). The remaining five studies used both baseline and control group comparison to evaluate their intervention (de Boer et al., 2014; Marom et al., 2007; Martinez & Carspecken, 2007; Moore & Nettelbeck, 2013; Piercy et al., 2002).

Barring the intervention by Rillotta and Nettelbeck (2007), none of the seven studies which used comparison to control groups had matched controls, instead they used unmatched comparison groups. The difficulty with non-equivalent groups is that it is impossible to confidently conclude that any changes can be attributed to the intervention, rather than perhaps from confounded factors that were not controlled for. Of these seven studies, only two explicitly reported randomisation of participants to conditions (Cameron et al., 2007; Piercy et al., 2002), and one randomly assigned whole classrooms to conditions rather than individual pupils (Martinez & Carspecken, 2007). Whilst random allocation to conditions can be very difficult within a school setting, its absence can create biases that require addressing. For example, one participating class may have more positive attitudes to begin with and may conceivably show a ceiling effect in attitude scores prior to the intervention. If

this is taken into consideration, the conclusions drawn from the results of the evaluation will lack robustness.

Of the eight papers reporting comparison to baseline, follow-up of participants was only reported by three (de Boer et al., 2014; Moore & Nettelbeck, 2013; Rillotta & Nettelbeck, 2007). The shortest follow-up time was one month, the longest eight years. The benefit of follow-ups is to determine whether any changes are sustained over time. Measurements taken purely pre and post intervention are susceptible to biases. Comparison to baseline limits the extent to which conclusions can be drawn confidently regarding the effect of the intervention (Barker, Pistrang & Elliott, 2002) and can threaten internal validity.

Incorporating qualitative methodology alongside quantitative methods allows for data to be contextualised and provides a complete picture of the construct being measured (Kelle, 2006). Although the use of quantitative means for data collection was an inclusion criterion for this review, it is noteworthy that very few studies incorporated qualitative methodologies in their design. Only one study (Martinez & Carspacken, 2007) interviewed participants to gauge their opinions of the intervention and explore their attitudes, which expanded on the findings from the quantitative data.

None of the papers reported a randomised control trial (RCT). Whilst randomised designs allow inferences to be made more confidently than non-randomised designs, they are still not without limitations. Within a school setting, which most of the studies in this review were, there are risks of leakage between conditions. Children may engage with others across classrooms and year groups during break and play times, and so the possibility of sharing information about what

they have learnt with their peers who may not be in the intervention condition cannot be ruled out.

Measures. All studies reviewed used questionnaire measures to evaluate the effect of their intervention. The questionnaires were mostly self-report, with the exception of Piercy et al. (2002) who also used behavioural observations. Three studies administered measures through an interview format (Cameron & Rutland, 2006; Cameron et al., 2007; Piercy et al., 2002). This method of data collection can be beneficial in ensuring complete responses on all questions; at the same time, it is problematic in that it may magnify social desirability biases due to the child providing responses in the presence of the researcher. None of the aforementioned studies reported steps taken to control for social desirability.

Questionnaires intended to measure attitudes covered various constructs from peer acceptance to beliefs and knowledge. Attitudes are a complex construct, with multiple theories of its formation and change. Although much of the research on attitudes in intellectual disabilities has focused on Triandis' (1971) theory of attitudes comprising affective, behavioural and cognitive components, little information has been provided about the theory informing the instruments used within the reviewed articles. An attempt to measure the interventions' effects on children's actual behaviour (Piercy et al., 2002) or, more commonly, on their behavioural intentions (Cameron & Rutland, 2006; Cameron et al., 2007; Gannon & McGilloway, 2009; Marom et al., 2007), or reporting on friendship and social groups (Castagno, 2001) were included in six of the ten studies. The remaining four studies used only attitudinal measures. One of the attitude measures used, the CATCH, does incorporate behavioural components, but this was assessed within the overall construct of attitudes (Moore & Nettelbeck, 2013).

Other than two studies by the same lead author whereby one study (Cameron et al., 2007) was a follow-up of an earlier study (Cameron & Rutland, 2006), none of the articles reviewed used the same sets of measures. This creates difficulties in comparing effectiveness of interventions as although the measures used are all focusing on attitudes and behaviour, they all interpret these constructs differently.

Furthermore, most were adapted from previous measures, many of which are outdated, with the earliest dating from 1967. Nomenclature, theories and ideas within the field have been continuously evolving. These changes are not adequately reflected in dated measures, regardless of their adaptation. Adding to this difficulty is that psychometric properties for adapted measures were not always presented in the reviewed papers. Whilst Cronbach's alphas were reported for most of the measures used, further reliability statistics, namely test-retest, were only provided by two (Martinez & Carspecken, 2007; Moore & Nettelbeck, 2013). This is concerning as without knowing whether the measure is replicable over time, threats to the internal and external validity of the measures remain untested in parallel, rendering conclusions drawn not robust. Internal consistency of the questionnaires where Cronbach's alphas were reported ranged from .64 to .93 indicating acceptable to high levels of internal reliability.

Validity was difficult to assess across all articles as very few provided the questionnaire used in the study in full, or even at all. Whilst it may be claimed that a questionnaire measures attitudes or behavioural intentions, without access to the actual measure used it is difficult to assess such claims. Measures used in four studies had good validity and reliability as reported by the original authors of the scales used. Two of these studies had adapted the original questionnaire and failed to provide any reports of validity for the adapted version (Gannon & McGilloway,

2009; Rillotta & Nettelbeck, 2007). Threats to validity and the effect of this on results were only reported by Marom et al. (2007).

Did the Interventions Succeed in Improving Attitudes?

All interventions found some improvements in attitudes, but there were variations in the extent of the change and the ability to sustain improvements over time. Eight interventions found significant improvements in attitudes (Cameron & Rutland, 2006; Cameron et al., 2007; Castagno, 2001; Marom et al., 2007; Martinez & Carspecken, 2007; Moore & Nettelbeck, 2013; Piercy et al., 2002; Rillotta & Nettelbeck, 2007). The remaining two found some significant changes, but these were either not sustained over time (de Boer et al., 2014), or occurred in some domains but not others (Gannon & McGilloway, 2009). The latter study used a questionnaire with sub-scales measuring sociability (intentions to interact) and inclusion of children with Down syndrome and did not find significant changes in overall attitudes. They found attitudes towards inclusion did not improve following their video based intervention, but there was a significant improvement in attitudes towards sociability of children with Down syndrome. The intervention involved a one-off showing of a video featuring children with Down syndrome engaged in day to day activities, and was the shortest intervention in the entire review. The primary aim of the study was to gauge attitudes towards Down syndrome in rural schools in Ireland, with a secondary aim to investigate whether a brief ten-minute video could change attitudes. Considering the aims and brevity of the intervention, it is unsurprising that significant changes in overall attitudes were not found. Furthermore, having children complete the baseline and post-intervention measures so close to one another is problematic for a number of reasons, including learning effects, reactivity of measurement and social desirability. The authors also noted that

there was not much change in attitude scores for the small number of children who knew someone with Down syndrome. This is once again unsurprising as the depiction of children with Down syndrome in the video did not appear to be vastly different from what one would assume would be their personal experiences with an individual with Down syndrome.

The study by de Boer et al. (2014) found changes in attitudes amongst nursery-age children post-intervention, but these were not sustained at follow-up one year later. No significant changes were found in attitudes of older children at any stage of the intervention. The intervention was story-based, using books and videos to increase children's knowledge about the needs of peers with severe intellectual disabilities. The authors suggested that widening the scope of the intervention might result in improved and sustained changes in attitudes. The lack of meaningful change in attitude could be attributed to the small sample size, the focus on severe intellectual disabilities with a population who had no prior experience of any disabilities in a country where inclusion in nursery education is a developing area, and the limited scope of the intervention in focusing on knowledge alone. Furthermore, although the reported Cronbach's alpha suggested good internal consistency, reliability of the measures when used longitudinally was not reported. Interestingly, the studies by de Boer et al. (2014) and Gannon and McGilloway (2009) were the only studies in the review that specifically examined attitudes in a rural population, and both found their interventions were not effective in improving attitudes. This brings to question whether attitudes towards intellectual disabilities differ in rural settings compared to urban settings, suggesting the need to tailor interventions based on an ecological model (Simplican, Leader, Kosciulek & Leahy, 2015).

Of the four indirect contact based interventions that found significant changes in attitudes, three showed distinct similarities (Cameron & Rutland, 2006; Cameron et al., 2007; Martinez & Carspecken, 2007). All three had small sample sizes, although Martinez and Carspecken (2007) reported a large effect size whilst the other two failed to report effect size. All three implemented a story based intervention spread over six sessions, and none of them followed-up participants after measurements had been taken at the end of the intervention. The lack of follow-up means it is difficult to ascertain whether the improved attitudes were sustained over time, much like the findings from de Boer et al. (2014) where any improvements observed post-intervention were not maintained at follow-up. However, the inclusion of qualitative data in the paper by Martinez & Carspecken (2007) provided greater understanding of the results. They found through interviews with the children that female students were more likely to want to befriend a character in the story books with a disability than male students. Furthermore, friendship intentions were greater when there was more emphasis on character attributes that were unrelated to the disability. This demonstrates that although there were overall significant changes in attitudes, this was perhaps mediated by the way in which the information about the characters was presented, and as such affected behavioural intentions to act towards peers with disabilities.

Whilst Moore & Nettelbeck's (2013) intervention was relatively short, spanning four weeks, it had multiple components and included a variety of engaging activities and tasks, including guest speakers with intellectual disabilities. The intervention was also staggered in its delivery, thus ensuring children in the control groups also benefitted from it, as a result of which it was possible to gather follow-up data from the group who received the intervention in the first round of

implementation. Two measures were used, both attitude based, one of which was from a recent study implementing a general disability awareness intervention (Ison et al., 2010), and the other which was almost 30 years old (CATCH, Rosenbaum et al., 1986). Although both measures had high internal consistency and good test-retest reliability, the use of the dated measure could pose problems with interpretation of the data.

All of the contact based studies were successful in improving attitudes over the course of the intervention. All had elements of cooperative learning where children worked collaboratively with their peers with intellectual disabilities in an array of activities. These interventions were also longer in duration when compared to indirect contact interventions, with the shortest eight weeks long, and the longest a year. The longer duration would allow typically developing children to build meaningful relationships and bond with their peers with intellectual disabilities. Sample sizes and designs used varied between the studies, with only one reporting follow-up data (Rillotta & Nettelbeck, 2007).

Discussion

The review identified a number of studies that delivered and evaluated interventions designed to improve attitudes across a small number of high income countries. Many of the interventions that were successful involved direct contact with children with intellectual disabilities over a longer period of time. This finding is in line with a meta-analysis of intergroup contact theory which concluded that contact was effective in improving outgroup attitudes regardless of the target group (Pettigrew & Tropp, 2006). Few studies employ adequate research design and rigorous methods to formally evaluate interventions to improve attitudes towards

intellectual disabilities, which this review highlights. Implementing and evaluating interventions that challenge negative attitudes and promote social inclusion of children with intellectual disabilities is a difficult task, yet papers reviewed here demonstrate that this is possible.

Methodological Issues

The most significant limitations of the evidence base identified in the process of reviewing this body of evidence concern a) the limited number of interventions designed to improve attitudes towards intellectual disabilities; and b) the lack of evidence of formal evaluation of interventions. A number of papers were excluded either because they focused on general disability rather than intellectual disabilities, or because they did not use comparison to either baseline or a control or comparison group to evaluate the effectiveness of the intervention. Further still, only one of the studies included in this review used qualitative methodology to expand on their findings and help develop a greater understanding of the nature of attitudes within their sample. None of the studies included in the review were RCTs, although some did randomise their participants to conditions.

One of the biggest challenges for this literature is measurement. Each study used different sets of measures for attitudes and behavioural intentions to previous studies (with the exception of one essentially follow-up study). This creates problems with comparing interventions and identifying which elements of the intervention are important in changing attitudes. Further adding to the difficulty, all the studies adapted their own measures and provided incomplete information on psychometric properties. Many of the papers used self-report measures, which can elicit respondents' views but suffer from problems with validity. Within the context of interventions designed to improve attitudes, participants may become aware of the

aim of the intervention and provide responses in accordance with what they think is expected of them. The measures themselves might not adequately capture the target construct, thus creating meaningless data. Whilst one study reviewed used behavioural observations to measure changes in social interactions (Piercy et al., 2002), this methodology is also susceptible to bias as observations are subject to the interpretations of the observer, and can be influenced by the observer's own attitudes and beliefs. In the case of the researcher themselves carrying out the observations, their own hypotheses of the outcome of the intervention may interfere with their ability to remain objective.

Limitations of the Review

Quality ratings of studies were not weighted heavily in the evaluation of studies included in the review. This was partly due to the studies being quality rated by a single rater due to limited resources, and as such they lacked inter-rater reliability.

The lack of international consensus on nomenclature within the field created difficulties in identifying appropriate papers to include in the review. Many papers continue to use the terms 'mental retardation' and 'learning disabilities', with some also referring to intellectual disabilities as 'learning difficulties'. A number of prominent authors and papers were excluded due to either their focus on general disability rather than intellectual disabilities (Ison et al., 2010), or because they presented no formal evaluation in line with the inclusion criteria (Siperstein, Glick & Parker, 2009).

Future Research

The results of the review have a number of implications for future research within the area of attitude interventions amongst a school-based population. There is a desperate need for consensus on the use of standardised measures of attitudes specific to intellectual disabilities. This will allow for valid comparisons to be made between interventions. Furthermore, measures of behavioural intentions and changes in behaviour are needed to ensure that any attitude change is translated to positive actions that are socially inclusive of children with intellectual disabilities.

Contact based interventions were most successful in improving children's attitudes towards peers with intellectual disabilities. Whilst it is understandable that contact with children with intellectual disabilities can be difficult to achieve, there needs to be greater consideration of other methods of contact. One possible suggestion is to invite guest speakers with intellectual disabilities to share their stories and engage and interact with children as part of a multicomponent intervention as implemented by Moore and Nettelbeck (2013). In line with a previous review (Liegiers & Myers, 2015), the current review found longer interventions appeared generally more successful than shorter ones. Thus future studies aiming to improve attitudes will need to consider length of intervention carefully, although at present it is impossible to say what the relationship between 'dose' and effect is and what an ideal length for a discrete intervention might be.

Most importantly methods for evaluating the effectiveness of interventions need to be rigorous by making use of longitudinal measurement, comparison with control groups, and follow-up. Wherever possible, randomisation to conditions, either on an individual basis or classroom level should also be considered, and

particular attention paid to reduce the effect of confounding variables, and to maintain both internal and external validity.

Clinical Implications

As children with intellectual disabilities are more likely to be socially excluded, suffer bullying and are at greater risk of developing mental health problems (Emerson & Hatton, 2014), it is vital to focus on their social inclusion and acceptance in schools, which one hopes would promote their emotional wellbeing.

This review highlights the inherent difficulties in changing children's attitudes, as well as the difficulties in implementing and evaluating interventions designed to promote positive attitudes among them. The review provides suggestions for improving the evaluation of such programmes to ensure their effectiveness, which could stand to benefit children with intellectual disabilities by ensuring they are integrated within their school environments and encouraging the formation of meaningful social relationships.

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Part two: Empirical Paper

A School Based Intervention to Promote Positive Attitudes Towards and Social Inclusion of Children With Intellectual Disabilities: A Feasibility and Pilot Study

Abstract

Aims: The present study aimed to develop a complex intervention to change attitudes towards and improve social inclusion of children with SEND; evaluate the feasibility of implementing the proposed intervention in a primary school setting; and explore the process of implementing the intervention, including identifying barriers to facilitation.

Method: The intervention was delivered to 117 children across four classes in a primary school over five weeks. The children engaged in activities that helped raise their awareness of intellectual disabilities, develop empathy, and build their confidence and self-efficacy. Measures of peer-acceptance, self-efficacy and peer interaction networks were completed at baseline, post intervention, and a two-month follow-up. Interviews were also conducted with teachers alongside classroom discussions to gain feedback on the intervention.

Results: The intervention was deemed feasible as determined through recruitment and retention of the pupils, and completion of measures. Preliminary outcomes using repeated measures ANOVA and independent t-tests found no changes on the self-efficacy scale, and modest changes on the peer acceptance scale which were not sustained at follow-up. Qualitative interviews with teachers found the intervention challenged perceptions but required further revision to improve effectiveness including delivery by teachers that would allow scope for sharing personal stories. Analysis of classroom discussions showed children enjoyed the opportunities for active learning and learned valuable lessons, but would welcome greater variety and more opportunities for joint working.

Conclusions: The present study successfully designed a complex intervention, the implementation of which was feasible. Although the preliminary findings showed modest change was not sustained over time, a number of process issues were identified to aid further development. Limitations and suggestions for future research are discussed.

Introduction

Children with special educational needs and disabilities (SEND) and intellectual disabilities experience greater difficulties in their social interactions compared to their typically developing peers, are less accepted within social groups (Koster, Pijl, Nakken & Van Houten, 2010), and are more likely to experience bullying and social isolation (Frederickson, 2010; Carter, Sisco & Stanton-Chapman, 2010). The prevalence of mental health difficulties is also higher in children and adolescents with intellectual disabilities than their typically developing peers, with increased psychosocial disadvantage serving as a risk factor (Emerson & Hatton, 2007). Furthermore, individuals with intellectual disabilities are subjected to greater stigma and negative attitudes than individuals with physical disabilities, with an accompanying lowered perception of their rights (Werner, 2015). They are more vulnerable to experiencing loneliness than the general population, which is perpetuated by stigmatisation that limits their opportunities, and are influenced by negative attitudes (Gilmore & Cuskelly, 2014). This is in line with recent conceptualisations of disability from a social model, which identifies the role of society in discriminating through negation of human rights (Gaskin, 2015).

Government legislations have aimed to reduce discrimination within the education sector by promoting inclusive education (UNESCO, 1994; Special Educational Needs and Disability Act 2001). In more recent years, the Department for Education (2014) published guidance for children with SEND, outlining the need for schools to not only support such children with learning programmes but to also help them with social interactions with other children in a classroom environment. The processes behind current inclusive education practices can be explained using contact theory (Allport, 1954; 1958). This proposes that reduced social distance and

closeness to peers with intellectual disabilities and SEND will encourage positive interactions and create more accepting attitudes. But despite the increased push towards promoting inclusive education, children with SEND continue to struggle to be socially integrated within the school environment (Siperstein, Parker, Bardon & Widaman, 2007; Odom, 2000). Evidence indicates contact through close proximity alone is insufficient in reducing stigma (Maras & Brown, 2000), and efforts to support students to make meaningful connections are necessary for inclusive environments to have a powerful effect on attitudes towards peers with SEND (Carter, Biggs & Blustein, 2016).

Schools have responded by introducing anti-bullying campaigns to counteract bullying behaviour by educating children and encouraging helping behaviours (Slee & Mohyla, 2007). But whilst school efforts to tackle bullying in the playground can reduce overt bullying and victimisation (Pryce & Frederickson, 2013), they do not appear to address social isolation and the absence of effective integration experienced by many children with SEND. In inclusive settings children's reported interactions with children with SEND are limited to what can only be described as superficial acts such as greeting their peers and sitting next to them at school, and with less engagement in meaningful activities that build close and intimate friendships, such as inviting them to their house to play (Laws & Kelly, 2005).

In contrast, Frederickson et al., (2007) found students with SEND who transferred from a special needs school to an inclusive one were as socially accepted after 18 months as their typically developing peers. This was attributed to increased knowledge and understanding of the students, their level of preparedness for the change, and increased help available in the classroom, all of which supported the transition. Unfortunately, the positive outcomes did not translate to children with

SEND already in the school who continued to be rejected and socially isolated. In some respects, this is promising as it demonstrates how appropriate intervention can encourage the social acceptance and integration of children with SEND. However, the findings are also alarming as it appears children who are high functioning enough to not warrant admission to a special needs school continue to struggle to be accepted by their peer group.

Within a school environment, a review of student attitudes towards peers with disabilities found students held neutral attitudes overall, which impacted on the quality of their social interaction with peers with disabilities as it affected friendship intentions (de Boer, Pijl, Post & Minnaert, 2012). On the whole students appear to be willing to engage in discussions about disability, despite having limited knowledge and understanding (Beckett, 2014), suggesting there is scope to open dialogue to challenge perceptions as negative attitudes can be a barrier to social integration of children with SEND in inclusive settings (McDougall, DeWit, King, Miller & Killip, 2004).

Triandis (1971) proposed a model of attitude change comprising three dimensions: (a) affective, (b) behavioural, and (c) cognitive. The affective component relates to the emotional capacity to feel towards another, the behavioural component relates to actual actions taken towards another, and the cognitive component involves the capacity to think, understand, and hold knowledge about another. It has been theorised that attitude change can be achieved through the presence and combination of these three domains. However, attitudes can be very difficult to shift and positive attitudes do not always translate to positive behaviour.

Schools have been identified as best placed for promoting inclusion and encouraging change (Beckett, 2009; 2014). However, children do not identify school as their primary source of information about disability; instead television has been a prominent source (Becket, 2014), alongside direct contact with individuals with disabilities. This may be explained by the lack of adequate teaching on disability awareness at schools with 57% of schools stating they could do more with regards to disability awareness, as well as teachers lacking confidence in being able to deliver appropriate lessons (Beckett & Buckner, 2012). This is surprising as numerous interventions have been designed and delivered internationally through schools aiming to improve attitudes towards disabilities, including intellectual disabilities and SEND, many of which have been found to improve attitudes (Lindsay & Edwards, 2013).

A recent systematic review examined 42 studies to identify common elements of current disability awareness interventions aimed at children and youths published between 1980 and 2011 (Lindsay and Edwards, 2013). Interventions focused on physical disabilities, mental health as well as intellectual disabilities; only three studies focused specifically on intellectual disabilities, none of which were UK based. Successful components of interventions identified in the review included social contact, class based activities, use of multi-media, multi-component approaches involving stories, and discussions that helped break down stereotypes and create awareness of the barriers people with disabilities experience. Unfortunately, there appears to be a lack of implementation of these interventions beyond the classroom, particularly within the UK where no single intervention has become a part of national standards in being delivered to schools across the country.

An alternative to contact based learning, where students simply share the same physical space with peers with intellectual disabilities, Piercy, Wilton and Townsend (2002) tested the efficacy of cooperative learning, which involves engaging in activities with peers with intellectual disabilities in a meaningful way, over a 10-week intervention. Students participating in the intervention were either assigned to a contact based learning group, cooperative learning group or a control group. They found significant changes in peer acceptance in the cooperative learning group, but no significant changes in the contact based learning and control groups. They concluded that inclusion modelled on contact based learning alone is insufficient in changing attitudes, and that children with SEND need to be integrated with and work together with their typically developing peers. Likewise, a year-long contact based intervention that focused on encouraging integration with shared distribution of responsibility for classroom tasks found self-efficacy improved over time (Marom, Cohen & Naon, 2007). A shorter intervention that combined interactive elements, contact based learning and videos found positive change in attitude scores following a four-week intervention (Moore & Nettelbeck, 2013).

A key intervention identified in the review by Lindsay and Edward (2013) included use of multimedia in delivering key messages. In an intervention aimed at improving attitudes towards Down syndrome, Gannon and McGilloway (2009) found showing excerpts of a documentary video with personal accounts of children with Down syndrome engaging in everyday school activities improved children's perception of the sociability of people with SEND. However, this was not followed by a discussion of the content which may explain why no changes in attitudes were found.

Another factor which determines the effectiveness of an intervention is its length. A review of 30 studies found longer interventions were linked with positive attitude change (Liegiers & Myers, 2015). In general, longer interventions had more time for detailed discussions to ensure learning was integrated. The interventions also went beyond providing practical knowledge and focused on elements that were important in raising self-efficacy. Longer interventions appeared to provide greater scope and opportunity for reflection and helped in understanding the feelings of peers with SEND. Furthermore, highlighting the similarities between typically developing children and those with SEND resulted in positive attitude change, possibly by reducing the social distance between them. Not only were longer interventions identified as being effective in improving attitudes, they also resulted in sustained longitudinal changes (Rillotta & Nettelbeck, 2007).

Attitudes are acquired through experience and sociocultural context (Antonak & Livneh, 2000). Children can learn prejudiced beliefs through attitudes of parents, peers and teachers (de Boer, Pijl, Post & Minnaert, 2012). In particular, where mothers are the primary caregiver, their attitudes are heavily weighted in influencing those of their children (Roberts & Lindsell, 1997). Parents who hold more positive attitudes towards intellectual disabilities foster similarly positive attitudes in their children (de Boer, Pijl & Minnaert, 2012). Many of the interventions identified by Lindsay and Edwards (2013) targeted single classrooms and failed to take a systemic approach to tackling the issue. Additional parental involvement in conjunction with classroom based teaching may provide the optimal conditions for positive change in attitudes and behaviour, thus encouraging social inclusion and integration.

The current study set out to develop and assess the feasibility and preliminary outcomes of a classroom based intervention designed to increase positive attitudes in

primary school children towards peers with learning and social communication difficulties (including mild to moderate intellectual disabilities as this particular group are at greater risk of social rejection and difficulties in integrating with typically developing peer groups within mainstream schools (Hebron & Humphrey, 2013)). The intervention focused specifically on children in year's four to six in the British education system as they fall under Piaget's concrete operational stage of development. In this stage children have a greater ability to understand logical information and move away from being egocentric and are able to consider the viewpoint of others. They also have an increased capacity to understand complex information, are at the stage where they begin to focus on peer relationships and are better able to regulate their own emotions whilst being aware of the emotions of others. This is a crucial time point in their development that is susceptible to change.

Study Aims

1. Develop a complex intervention to change attitudes and improve social inclusion of children with SEND, including:
 - a. A combination of existing disability awareness and equality training elements aimed at primary school aged children, that was curriculum based, used multi-media components held over multiple sessions with involvement from teachers and parents;
 - b. Develop multimedia videos with personal testimonies of children and young people with learning, social and communication difficulties to foster empathy.
2. Gauge the feasibility of implementing the proposed intervention in a primary school setting by assessing the:
 - a. Recruitment and retention rates of schools and individual pupils;

- b. Feasibility of the measures including data collection and preliminary outcomes;
 - c. Implementation of the intervention and its acceptability.
- 3. Explore the process of implementing the intervention, including identifying barriers to facilitation by:
 - a. Understanding the experience of teachers in co-facilitating the intervention;
 - b. Understanding the experience of children taking part in the intervention.

Methods

The intervention outlined below drew on the MRC framework for developing and evaluating complex interventions. Specifically, the study falls under the stages of developing the intervention and assessing feasibility and piloting (Craig et al., 2008). This section contains an overview of the design, ethical issues taken into consideration relating to the sample population, basic demographic details of the participating school and children, details of measures developed and used, and process of developing the intervention, followed by an overview of methods employed to understand process issues, and an outline of the data analysis of the preliminary stages of piloting.

The proposed intervention met the criteria for being categorised as a complex intervention (Craig et al., 2008). It had multiple components addressing three separate dimensions of attitudes: affective, behavioural and cognitive. The implementation of the intervention involved participation from the individual (children) to the organisational level (school), as well as attempts to engage the wider

system (family and parents); and it was evaluated using three outcome measures addressing different aspects of the intervention.

Design

The study used a quasi-experimental mixed methods design, with pre and post intervention evaluation with a two-month follow-up. Both quantitative and qualitative methodology were used through questionnaires and interviews in order to understand the feasibility of the intervention and the set of measures, as suggested by the MRC in designing complex interventions as part of the feasibility and piloting stage (Craig et al., 2008).

Participants

School. Sixty-one mixed gender, non-denominational state schools across South London were invited via email to consider participating in the project (see appendix B). Wherever possible, the SEND Coordinator (SENDCO) and head teacher were contacted directly, inviting them to meet with the researchers to discuss the project. Initially an exclusion criterion was set to only recruit schools without a specialist unit. Responses were received from two schools, with the remaining schools not responding to the invitation. Meetings were held to discuss the programme and the possibility of the two schools participating. Both schools had active SENDCO's and specialist units for children with additional learning needs. It was not feasible to uphold the exclusion criterion, and the larger of the two schools was recruited to participate, as the smaller school was a single form entry and did not have enough classes to provide the required sample size. Meetings with the SENDCO and head teacher were arranged to finalise the details and the school completed consent forms to confirm their participation in the programme (see

appendices C & D). The school was in a predominantly middle-class area and had 100 children on the SEN register; of these 30 had statements of education and healthcare plans and 14 attended the specialist unit.

Classrooms. Each year group at the school had three classrooms. The SENDCO selected four classes from years four and six, two from each year, to participate in the programme based on their timetables matching the researcher's availability. Information sheets, with an accompanying cover letter from the school, were sent to parents of children in the participating classes at the start of the school year informing them of the programme and providing them with an opt-out clause if they did not agree with their child participating (see appendix E). Each class had 30 children, with a total of 120 children across the four classrooms. Parents of two children did not consent for participation citing additional homework as their reason, and one child was absent for all of the lessons, leaving 117 children (62 girls, 55 boys), aged from eight to 11 years. Table 1 provides further demographic details at each stage of data collection, which shows that there was a fairly even spread of gender across the classes. All but one class had a child with a statement of SEND.

The Intervention

The intervention was designed based on evidence that using multi-media, multi-component intervention conducted over several sessions was more effective than a one-off intervention (Lindsay & Edwards, 2013). The intervention comprised of six sessions, a summary of which are presented in Table 2.

Table 1: Participant demographics detailing number of children (N=117)

	Baseline	Post-intervention	Follow-up
Year 4	58	58	58
Year 6	56	56	51
Girls	61	60	55
Boys	53	54	54
Contact disability ^a	43	58	57
Contact ID ^b	22	38	37

^a *Prior contact with someone with a disability*

^b *Prior contact with someone with an intellectual disability*

Designing the intervention. The intervention focused on the three elements of attitude change as described by Triandis (1971), (1) developing knowledge and understanding of what an intellectual disability is (cognitive component), (2) raising empathy towards individuals with an intellectual disability (affective component) and (3) improving self-efficacy for interactions with peers with an intellectual disability (behavioural component). The intervention was designed by incorporating and integrating pre-existing disability awareness and equality training resources. An independent SENDCO and a prominent researcher on inclusive education and its effects on children with SEND were consulted on the intervention, and recommended changes were incorporated in the intervention plan.

Video material. A literature review of disability awareness interventions aimed at children and youth (Lindsay & Edwards, 2013) concluded successful interventions generally use engaging multi-media components. Additionally, the use of video materials has been found to improve positive attitudes and provide a feasible approach to increasing contact with individuals with intellectual disabilities (Walker

& Scior, 2013). Therefore, the current intervention used videos, both pre-existing ones as well as content newly created for the purpose of this study¹.

Table 2: Intervention overview

Session	Theme	Content
Session 1	Baseline	Complete baseline measures Discussion on “respecting difference” and “inclusion” Spinclusion game
Session 2	Knowledge	Differences and similarities What is a learning disability – video Difficulty understanding – class activity
Session 3	Empathy	Max – video What would you do – class activity True Colours – video
Session 4	Self-efficacy	What would you do – role plays Class discussions on role plays
Session 5	Post-intervention data collection	Complete measures Spinclusion game
Session 6	Follow-up	Complete measures Classroom discussions on the intervention as a whole

Two pre-existing videos were used, one in an edited form and the other in its original form. The first video by Mencap showed people with intellectual disabilities

¹ All videos can be viewed at the following link: <http://tinyurl.com/DClinPsyMQ>

talking about what their learning disability² meant to them. This video was edited to add images from recent Special Olympics games to demonstrate some abilities children with intellectual disabilities possess. The second video was a music video which had garnered successful “viral” status online showing a young girl with Down syndrome being excluded by her peers and the emotional effect this had on her. She was later asked to play by another young girl and was ultimately accepted into the friendship group. The video was accompanied by a rap song narrating the scenes, featuring her brother.

In addition to the existing videos, two further videos were developed specifically for the intervention depicting the personal story of a child with an intellectual disability and his parent. The videos aimed to portray a balanced perspective to demonstrate both positive and negative experiences related to attending an inclusive school. The main aim of these videos was to increase empathy towards other children with intellectual disabilities. A number of local charities were contacted to advertise for ‘actors’ to feature in the videos (see appendices F & G) as well as film-makers to volunteer their time (see appendix H). Responses were received from two interested parents, however one parent had a child with autism, which was part of the exclusion criteria for creating the video as well as the intervention, ultimately the video was created with the other parent-child pair, Jenny and Max (both of whom consented to being shown on video and identified by their real names, see appendix I for release forms). Max had Down syndrome and an intellectual disability and was attending an inclusive local primary school. The video was developed as a short interview in which Max was asked about his interests, hobbies, friends and life at school. He was also asked to talk about any difficult

² Learning disability is the term for ID commonly used within the UK

experiences at school and what that felt like for him. Max's mother Jenny was interviewed to specifically discuss issues resulting from Max attending an inclusive school and what more could have been done to improve the experience (see appendix J for interview questions).

Overview of sessions. The intervention comprised of multiple sessions using existing disability awareness resources which are outlined below. A detailed overview of the interventions as provided to teachers during training is provided in appendix L.

Baseline. The primary aim of the first session was to collect baseline data and basic demographics. The children then engaged in a discussion on inclusion and respecting difference. This particular task aimed to gauge the level of understanding and pre-existing knowledge within the class and to prime the children to consider inclusion and respecting differences throughout the intervention. The final task was the Spinclusion game which was designed by Community Living Toronto. The game was interactive and required children to work in small teams to answer a variety of questions about inclusion of peers.

Session 1. The first part of the intervention focused on developing awareness of intellectual disabilities and an understanding of similarities and differences. To begin the session, the children were asked a series of questions to illustrate the similarities and differences that existed within the classroom. They were asked to think about differences as being good and identified a commonality amongst the peer group; wanting to be heard and understood. The children were then introduced to the topic of intellectual disabilities by being shown the edited Mencap video "what is a learning disability", this was followed by a discussion of the content. The lesson finished with an active task where the children sat back-to-back with one another

trying to explain an abstract image to their partner whose task it was to draw the shape based on the description they received. This task set out to illustrate ways in which anyone can experience difficulty in understanding information and highlighted the importance of providing sufficient information and detail. Homework was set following the session to review and discuss what was covered with a parent using a worksheet which also doubled up as a measure of fidelity.

Session 2. This session formed the second part of the intervention focusing on empathy. The session started with a summary of the previous session and a brief discussion of the homework. The class was shown a video of “Max” which was followed by a detailed discussion of the content and how they felt towards Max. The classes were then split into smaller groups and given scenarios to discuss. The scenarios were taken from an Australian disability awareness and anti-bullying intervention programme (Disability ACT). Each scenario described a common situation where a classmate is excluded from a group activity. The children were instructed to describe how they thought the excluded child felt and what they could do to help. All the groups gave feedback to the class and shared what they had been discussing. The lesson ended with the final music video being shown followed by a discussion of its content, with particular focus on what they saw happening, how that affected the protagonist’s feelings and what help she received. Homework was set to watch videos of Max and Jenny at home with parents, both of which were provided as online links hosted on YouTube and on DVDs. A short worksheet was provided for children to complete, which acted as a fidelity measure.

Session 3. The final part of the intervention focused on self-efficacy. Once again the session started with a short quiz summarising the previous session as well as collecting and discussing the homework. The session was split into three parts, (1)

using the scenarios discussed the previous week, write and develop a short role play of a child being excluded from an activity and how they could be helped; (2) acting out the role plays in front of the class, and (3) discussion of what was learnt, how confident they felt to intervene, and what they would do if they came across a similar situation in the future. For the role plays each child was randomly assigned a role within their group which they picked out of a hat, however where this caused difficulty within the group, the teacher resolved any problems.

Session 4. Post-intervention data were collected during the session, which was preceded with a short quiz and summary of the previous session. Once the questionnaires were completed, the children once again played the Spinclusion game.

Follow-up. The final session had two purposes, (1) collect follow-up data and (2) audio record a classroom based discussion about the intervention as a whole to elicit feedback from the participating children which formed part of the assessment of feasibility.

Outcome Measures

Vignettes. Vignettes were used as a basis for the measures that followed. One of the challenges with asking about intellectual disabilities was to do so without priming the participating children to any elements of the intervention, whilst also gauging their understanding of the term. This was tackled by developing vignettes that depicted a balanced perspective of a child with a learning disability. Existing vignettes (Laws & Kelly, 2005) were modified and matching pictures from a stock image library were selected to accompany the written descriptions. A copy of the vignettes and measures are available in appendix K.

Peer Acceptance Scale (PAS). The PAS aimed to measure behavioural intentions (Piercy, Wilton & Townsend, 2002) and used a three-point Likert scale (yes, maybe, no). The original scale was adapted with the addition of two new questions.

Children's Self-Efficacy in Peer Interactions Scale (CSEPIS). The CSEPIS measured children's perceived ability in interacting with peers with learning and social communication difficulties (Marom, Cohen & Naon, 2007). Children were asked to rate their perceived difficulty in completing tasks with a child with learning and social communication difficulties using a four-point Likert scale (very easy, easy, hard, very hard).

Social Cognitive Mapping (SCM). This measure is used to map out peer networks and has been used as a measure of social closeness (Cairns & Cairns, 1994). Children were asked to generate a map of their peer groups within their class based on the question "Are there any children in your class who hang around together a lot? Who are they?" (Neal & Neal, 2013). An advantage of the SCM is that it asks about existing social networks within a child's system and so reduces the likelihood of children providing socially desirable responses. The measure has good test-retest reliability as well as predictive validity (Bacete & Perrin, 2013).

These measures have been used both individually and in various combinations in prior research, as outlined in a systematic review completed by Lindsay and Edwards (2013). However, the combination of the PAS, CSEPIS and SCM as described above has yet to be implemented. As all the classes had children of differing abilities and learning needs, the measures were read out by the researcher

at all three time points. The SCM measure was read out and illustrated with an example to ensure the children understood the different instructions.

Qualitative evaluation. Semi-structured interviews were held with the teachers and SENDCO immediately after the end of the intervention, but prior to the follow-up to gain their perspective on the intervention sessions, identifying any barriers to the implementation of the interventions, eliciting comments and criticisms as well as suggestions for future development and implementation. These helped to address questions relating to the feasibility of the intervention. The interview schedules are available in appendix M.

Classroom based discussions were held at the two-month follow-up to discuss the intervention process, what the children learned, and what was perceived as helpful and unhelpful (see appendix N for discussion guiding questions). They were encouraged to provide their honest opinions.

Piloting of Intervention Materials

The questionnaire and Spinclusion game were piloted prior to the start of the intervention with six children of the same age bracket as the sample. Completion of the measures took 20 minutes when read out at a steady pace. The Spinclusion game was initially piloted with children being assigned a number to indicate their place in the game and decide who would spin next. However, this was problematic as the children were distracted by the number tags they were given, and so tags were removed from the intervention.

Procedure

The intervention involved five classroom sessions comprising baseline data collection, three weekly sessions and post-intervention data collection, plus a sixth session for collecting follow-up data. The sessions were incorporated as part of the existing Personal, Social and Health Education (PSHE) curriculum. At the start of the school year, once parents had been contacted, two meetings were arranged with the teachers to provide training on the intervention. This involved providing an overview of the intervention, and emphasised the collaborative nature of the delivery of the intervention. This also gave the teachers an opportunity to identify any potential difficulties that might come up and problem-solve how these would be managed. All materials for the intervention were provided by the research team.

Following the training, the intervention was carried out in the order described above. Throughout the training, weekly emails were sent to the teachers and SENDCO updating them on the intervention and providing information for what was to come. This also provided the opportunity to identify areas that needed specific input from the teachers.

Data Analysis

Multiple analyses were carried out including repeated measures ANOVAs and ANCOVAs with prior contact with people with learning disabilities as a covariant. The qualitative interviews and classrooms discussions were analysed using thematic analysis.

Ethics

Ethical approval for the study was sought from the UCL Research Ethics Committee (see appendix A). Consent to participate in the intervention was

discussed at length with the school. Parents were sent consent-forms which were accompanied by a covering letter from the school, explaining the intervention. An opt-out clause was added to the consent forms - this gave parents the option to withdraw consent for their child participating in the intervention.

To ensure children were not adversely affected by the content of the intervention, teachers were briefed prior to the start of the intervention. Children who might find the content difficult or challenging were identified, and plans were put in place to manage potential distress by informing the respective children beforehand of any difficult subject matter arising in the lesson. Both the class teacher and researcher made themselves available for debriefing following the end of the lessons.

Initially the Chedoke–McMaster Attitudes towards Children with Handicaps (CATCH) scale (Rosenbaum, Armstrong & King, 1986), was intended to be used in the final questionnaire pack. This is a widely used measure that has been identified as one of the “most complete” tools for measuring attitudes towards children with disabilities (Vignes, Coley, Grandjean, Godeau & Arnaud, 2008). However, the measure did not hold up to scrutiny from the UCL ethics committee, raising concerns with regards to the content of the scale potentially reinforcing prejudice. This was worrying to note as it currently is a prominent measure within the field. Ultimately it was removed from the questionnaire pack.

Results

Presented below are the results relating to the feasibility of the intervention, preliminary outcomes from the pilot, and evaluation of process issues through qualitative analysis.

Feasibility

Assessment of the feasibility of the study was determined through recruitment and retention of the participating school and pupils, completion of measures and delivery of the intervention.

Recruitment and retention. Responses were received from 3% of schools contacted. One of the difficulties encountered in recruiting schools was the lack of direct contact details for SENDCO's and head teachers. Out of a possible 120 children, 117 took part in the intervention, and 104 children completed the measures at all three time points representing retention of 89% of the sample.

Completion of measures. The PAS was completed by 115 pupils at baseline, 114 at post-intervention and 109 at follow-up. The CSEPIS was completed by 114 at baseline, 114 at post-intervention and 109 at follow-up. Pupils on the whole answered all the questions for the measures, with little missing data. The entire pack of measures, including the SCM took around 20 minutes to complete. The SCM took seven minutes to complete for year four pupils and five minutes for year six pupils. This indicates that administering the measures in a manner designed to ensure reliability (i.e. reading each question aloud and proceeding at a pace that accommodate all children) was feasible.

Intervention implementation. Pupils engaged with the intervention and all attended at least two sessions. It was difficult to ascertain the exact number of children attending each session. Attendance sheets only indicated whether the child was present at school on the day and did not take into account whether they were present during the lesson. A number of children were called out of the class at various times either to participate in extra-curricular activities or due to other

circumstances. Engagement of teachers also varied, two of the teachers were absent for one lesson each, and two of the classes had to be rescheduled due to clashes with planned school trips.

Attempts to engage parents in the intervention consisted of two homework tasks. Pupils were assigned homework to complete with a parent or other member of the family in sessions two and three. The first homework was completed by 58 children and 64 completed the second, with 81 pupils completing at least one, representing around 69% of families becoming involved in the intervention. Both pieces of homework involved discussions about tasks already discussed in the lessons, however it was difficult to ascertain with complete certainty whether all children completed the homework with input from their parent or family member as intended, or whether they completed it on their own.

Preliminary Outcomes

Data gathered from initial piloting of the intervention are presented below. Reliability and validity of the questionnaires is assessed, followed by a brief overview of the nature of the data, detailed analysis of the outcome measures and results from the SCM.

Questionnaires. Reliability and validity of the PAS and CSEPIS scales were assessed. The Cronbach alphas for the PAS were 0.76, 0.78 and 0.78 at the pre, post and follow-up stages respectively. The Cronbach alphas for the CSEPIS were 0.77, 0.84 and 0.82 at the pre, post and follow-up stages respectively. These scores indicate both scales had good internal consistency.

Test-retest reliability was also assessed for both measures at all three time points. The intra-class correlation was used to determine reliability as it is a more

accurate measure of reliability when there are more than two time points. The intra-class correlation for the PAS at all three time points was 0.80 ($p < .01$). However, there may be errors with the scoring and reliability of this measure as the ANOVA analysis that forms part of the intra-class correlation analysis indicates the influence of fatigue/learning ($F(2, 200) = 5.87, p < .01$). The intra-class correlation of the CSEPIS at all three time points was 0.87 ($p < .01$), and there were no indicators of fatigue or learning effects with this scale, thus indicating the CSEPIS had good test-retest reliability.

Descriptive data. Scores on the PAS can range from zero to 14, with higher scores indicating greater peer acceptance, whilst scores on the CSEPIS can range from seven to 28 with higher scores indicating greater self-efficacy. Scores on the PAS were slightly skewed at the pre and post intervention stages, indicating most pupils had neutral to positive attitudes and scores at the follow-up stage were normally distributed. Scores on the CSEPIS were normally distributed at all three time points. Table 3 shows mean scores for both measures at all three time points which indicate that pupils held neutral to positive attitudes on the whole.

An independent samples t-test was conducted to measure the differences in scores between the year groups at each time point (see Table 4). There was a significant difference in baseline scores for both years four and six on the PAS and CSEPIS with medium effect sizes, indicating that attitudes and self-efficacy differed between year groups prior to the start of the intervention, with year 6 pupils scoring higher on both scales. There were no significant differences in scores at either post-intervention or follow-up. Independent samples t-tests were also conducted at each time point to compare differences between genders; no significant differences were found.

Table 3: Means (standard deviations) for PAS and CSEPIS

	Baseline (n=114)		Post-intervention (n=114)		Follow-up (n=109)	
	<u>PAS</u>	<u>CSEPIS</u>	<u>PAS</u>	<u>CSEPIS</u>	<u>PAS</u>	<u>CSEPIS</u>
	8.77 (2.72)	18.52 (3.80)	9.07 (2.86)	18.92 (4.38)	8.28 (2.93)	18.30 (4.17)
Year 4	8.23 (2.65)	17.77 (3.87)	8.72 (3.01)	18.16 (4.49)	7.98 (2.97)	18.09 (4.25)
Year 6	9.43 (2.59)	19.30 (3.60)	9.45 (2.66)	19.70 (4.17)	8.63 (2.87)	18.54 (4.10)
Girls	8.96 (2.32)	18.69 (3.48)	9.23 (2.73)	19.06 (3.90)	8.22 (3.21)	17.97 (4.36)
Boys	8.66 (3.06)	18.33 (4.17)	8.90 (3.01)	18.76 (4.90)	8.35 (2.64)	18.63 (3.96)
Contact disability ^a	9.09 (2.93)	18.81 (4.07)	9.30 (2.82)	19.51 (4.74)	8.89 (2.59)	18.99 (4.70)
Contact ID ^b	9.64 (1.84)	19.41 (4.05)	9.45 (2.79)	19.18 (4.95)	8.54 (2.69)	18.39 (4.48)

^a *Prior contact with someone with a disability*

^b *Prior contact with someone with an intellectual disability*

Table 4: Independent samples t-test, confidence intervals (CI) and effect sizes (Cohen's d) for PAS and CSEPIS

PAS									
	<u>Baseline</u>			<u>Post-intervention</u>			<u>Follow-up</u>		
	t(df)	95% CI	Effect size	t(df)	95% CI	Effect size	t(df)	95% CI	Effect size
Year group	-2.59 (113)*	-2.27–0.30	0.46	-1.37 (112)	-1.79 - 0.33	0.26	-1.15 (107)	-1.76 - 0.47	0.22
Gender	0.79 (113)	-0.61–1.41	0.11	0.62 (112)	-0.73 - 1.40	0.11	-0.24 (107)	-1.25 - 0.98	0.04
CSEPIS									
	<u>Baseline</u>			<u>Post-intervention</u>			<u>Follow-up</u>		
	t(df)	95% CI	Effect size	t(df)	95% CI	Effect size	t(df)	95% CI	Effect size
Year group	-2.19 (112)*	-2.92 - -0.15	0.41	-1.89 (112)	-3.14 - 0.08	0.36	-0.57 (107)	-2.04 - 1.14	0.11
Gender	0.50 (112)	-1.06 - 1.78	0.09	0.36 (112)	-1.34 - 1.93	0.07	-0.82 (107)	-2.24 - 0.93	0.16

* $p < .05$

Scores on the PAS and CSEPIS were positively correlated at all three time points (pre: $r = .67$, $n = 114$, $p < .01$; post: $r = .73$, $n = 114$, $p < .01$; follow-up: $r = .67$, $n = 109$, $p < .01$). This means that as children scored higher on peer acceptance, they likewise scored higher for self-efficacy as well.

PAS. A repeated measures ANOVA was conducted on the PAS. Mauchly's test of sphericity indicated the assumption of sphericity had not been violated ($\chi^2(2) = 3.18$, $p = .20$). There was a significant main effect of time for the PAS ($F(2, 208) = 5.87$, $p < .01$, $\eta^2 = .05$). Post-hoc tests using the Bonferroni correction indicate there was a significant difference between post-intervention and follow-up scores, with PAS scores reducing from post-intervention to follow-up. However, there were no significant differences between scores on the PAS between pre-intervention and follow-up which means that scores did not drop significantly below baseline at the point of follow-up, nor did they increase.

A follow-on analysis using a repeated measures ANOVA with year groups as a between-subject variable was conducted on the PAS. Mauchly's test of sphericity showed the sphericity assumption was not violated ($\chi^2(2) = 3.03$, $p = .22$). There were no interaction effects for year group ($F(2, 206) = 0.40$, $p = .67$, $\eta^2 = .00$) which means that age did not significantly affect change in peer acceptance.

An additional analysis was carried out with gender as a between-subjects variable using a repeated measures ANOVA. Mauchly's test of sphericity indicated no violations of sphericity ($\chi^2(2) = 3.40$, $p = .18$). There were no interaction effects of gender on PAS scores over time ($F(2, 206) = 0.66$, $p = .52$, $\eta^2 = .01$), indicating gender did not affect PAS scores across the intervention. A repeated measures ANCOVA was conducted to measure the effect of contact with someone with an ID

at baseline as a covariate. Mauchly's test of sphericity was not violated ($\chi^2(2) = 3.15$, $p = .21$). There were no significant effects of the PAS with contact as a covariate ($F(2, 206) = 0.01$, $p = .99$, $\eta^2 = .00$) meaning contact did not affect level of peer acceptance.

CSEPIIS. A repeated measures ANOVA was conducted on the CSEPIIS. Mauchly's test of sphericity indicated the assumption of sphericity was not violated ($\chi^2(2) = 2.57$, $p = .28$). There were no significant main effects for this scale ($F(2,206) = 1.29$, $p = .28$, $\eta^2 = .01$), indicating self-efficacy in interacting with peers with ID did not significantly change over the course of the intervention. Further analysis was conducted using a repeated measures ANOVA with year group as a between-subject's variable. Mauchly's test of sphericity was not violated ($\chi^2(2) = 2.52$, $p = .28$). There were no significant main effects of year group on the self-efficacy scale ($F(2, 204) = 1.24$, $p = .29$, $\eta^2 = .01$) which means that age was not a significant determinant in changing self-efficacy. To explore the effect of gender, an additional analysis was conducted using a repeated measures ANOVA, for which the Mauchly's test of sphericity was not violated ($\chi^2(2) = 2.24$, $p = .33$). There were no significant effects of gender on the CSEPIIS over time ($F(2, 204) = 1.54$, $p = .22$, $\eta^2 = .02$), indicating self-efficacy was not affected by pupil's gender. Contact with persons with ID at baseline was used as a covariant in a repeated measures ANCOVA; once again Mauchly's test of sphericity was not violated ($X^2(2) = 2.54$, $p = .28$). There were no significant effects of contact on the CSEPIIS, ($F(2, 204) = 0.01$, $p = 0.99$, $\eta^2 = .00$), this means that prior contact with someone with ID did not affect self-efficacy in peer interactions.

Social Cognitive Mapping. The social cognitive mapping tool was used to identify and track peer interactions of target children within the classrooms who had

been identified as having SEND. In year four however the classes had recently been formed, following mixing of different classes after year 3, and so friendship groups were continuously changing and evolving over the course of the intervention. Four target children were identified as having a SEND by the SENDCO and the nominations of all four target children on the SCM are discussed below. Two of the target children were in year four, and two in year six.

Year four. Target child A identified as having a mild-moderate intellectual disability was nominated 11 times by his classmates at the pre-intervention stage as an isolate. Being identified as an isolate means the child was not nominated as holding membership in any peer group. At the post-intervention stage, target child A received 14 nominations and was still identified as an isolate. At the follow-up stage, target child A received 13 nominations and was still identified as an isolate. This indicates target child A continued to be excluded from peer groups within the class.

Target child B identified as having an autism-spectrum disorder. This child received no nominations at any of the stages of data collection. The child did not participate in the intervention due to their level of needs and attendance at the school's special unit which clashed with the timetabled intervention.

Year six. Target child C was identified as having ADHD, and nominated 25 times as part of a peer group with high centrality, and identified as a secondary member of this group at baseline. At post-intervention, target child C received 30 nominations, continued to be part of the same peer group, which retained a high level of centrality and was identified as a nuclear member of the group suggesting he was recognised as a more central member. At the follow-up stage, target child C received 27 nominations as part of the same peer group with high centrality and was identified

as being a secondary member of the peer group. This indicates target child C continued to remain an integral part of the social group.

Target child D was identified as having an intellectual disability. At baseline target child D received seven nominations as a member of a peer group with high centrality, and was identified as a peripheral member of the group. At post-intervention stage target child D was nominated five times as a member of the same group which retained high centrality and continued to remain a peripheral member. At follow-up, target child D received seven nominations as part of the same peer group with high centrality and continued to be identified as a peripheral member of that group. Target child D was absent throughout the entire intervention.

It should be noted that target children C and D were members of the same peer group which had four members in total.

In summary, the SCM showed that of the four target children, there were no changes in the social group membership of the two children in year four, whilst there were small changes in the social group networks of the two children in year six.

Evaluating Process

Process issues were assessed through qualitative interviews with teachers, and classroom discussions to elicit the children's perceptions of the sessions.

Teacher interviews. Interviews were conducted following the post-intervention session (week five) with all four teachers of the participating classes (with teachers from the same year group interviewed as pairs), and the school's SENDCO. Thematic analysis was used to code and identify themes from interviews to explore their perceptions of the intervention. Data were coded by the primary researcher, and one interview was also coded by the supervising researcher to ensure agreement with coding and themes. Four themes and 11 subthemes were identified,

see Table 5, with verbatim interview extracts. The themes and sub-themes are summarised below. (...) denotes words or sections that have been omitted in the interest of brevity; T denotes teacher.

Successful components. All teachers and the SENDCO identified positive aspects of the intervention. This theme was split into three subthemes, which are examined in turn below.

Engaging. The intervention was considered to be engaging due to the variety of activities involved, which reportedly worked particularly well because the activities took into consideration the different ways in which children learn. The intervention was considered to be thought provoking, encouraging pupils to think, and opened dialogue by engaging them in activities that allowed them to reflect and make sense of situations through discussions.

Challenging perceptions. The intervention was particularly useful in challenging existing perceptions, by focusing on celebrating difference which was considered a positive focus that children could relate to and connect with. The importance of providing such teaching was recognised due to its perceived utility in challenging beliefs and providing children with a new outlook.

Table 5: Summary of themes from teacher interviews with quotes

Theme	Sub-theme	Quotes
Positive feedback	Engaging	“I thought it was a good, a good selection of activities to keep the children interested which I think is important.” (SENDCO)
	Challenging perceptions	“There might be one or two things that they picked up in terms of looking at the world in a slightly different way” (Year 6 T2)
	Valuable elements	“A lot of kids are quite visual learners and the fact that it was... videos of other children (...), so they could relate to it quite easily.” (Year 4 T2)
Critiques	Social desirability	“I felt that some of my children...gave answers...to the questions that they were supposed to give...when they were being asked in front of the class” (Year 4 T2)
	Content not new	“I think a lot of what was discussed our children know already... and have grown up in this school with it, so it wasn’t like... ‘ooh, special needs, what’s special needs’ you

know, the children are well aware of that, in terms of differences and including people”

(Year 4 T1)

Problematic elements

“So four sessions in they’re doing their sketches, the plays, but quite a few of them, even by the end of all that intervention four weeks in, were still using it as an opportunity to laugh at people with learning disabilities within that sketch.” (Year 6 T1)

Suggestions

Condense

“You tend to be working in these six week blocks of like half termly... plans, so whether you’d want to spend six weeks on it, again is, maybe, too long, but then, again... one off lessons, or two lessons is too short, so I think a three-week plan, would be um... cos then that would give you time to... maybe do some follow up work” (Year 4 T2)

Personal stories

“That was lacking slightly in the sense that they weren’t able to discuss some of the issues they had themselves and how they might, how they resolved it or how they didn’t resolve it, or you know how their parents react to something.” (Year 6 T1)

	Teacher delivered	“I think it’s difficult because you don’t know the standard and the level of the children, um, and it’s difficult sort of coming in sort of blind to that situation,” (Year 6 T2)
Implementation processes	Processes aiding implementation	“I went for this one because... um... Because we have got special needs, and I felt it’s something that needs (...) more work on, (...) but I don’t have the time to do it... working with the children in the school, to understand, the needs of the children who have got special education needs, I feel that it’s not something that we do enough of, so (...) that’s what attracted me to it” (SENDCO)
	Communication	“I know we were provided with a pack which I kind of went through very quickly but I didn’t pay attention to all of the details because of the constraints of the job. So I thought I’m just there to help and facilitate you know so (researcher) can run it.” (Year 6 T2)

Valuable elements. Components such as the questionnaires, videos and homework were particularly well received. The questionnaires were seen as a useful way of eliciting honest responses from the children about not only their attitudes towards people with intellectual disabilities, but also their actions. The videos were the most well received element of the intervention as they engaged children on a personal level, whilst also providing visual means for learning. All the teachers stated they would recommend incorporating the videos in similar lessons to their colleagues. Homework was considered an effective way of engaging parents.

Critiques. Aspects the teachers thought worked less well are surmised under three subthemes.

Social desirability. The teachers expressed concerns that the children were providing socially desirable responses. They noted the children's behaviour both during the intervention and outside of the lessons suggested any knowledge potentially gained had not translated into actions, despite the children saying otherwise.

Content not new. Much of the content was not considered different from what had already been covered in the curriculum, particularly given that having a specialist unit within the school meant SEND was always on the agenda. However, it gave teachers something to anchor their teaching to, and offered an opportunity to refresh prior learning.

Problematic elements. Two of the tasks (Spinclusion game and role plays) were seen as problematic. Despite the children enjoying the Spinclusion game, it did not keep them engaged throughout and led to some children becoming disinterested due to the amount of time spent waiting for their turn. The most problematic element of the intervention, according to teachers, was the role play. Year 4 children's role

plays lacked depth whilst year 6 teachers saw the role plays being used as an opportunity to make light of the topic. Overall the role plays were considered to be ineffective and highlighted the lack of any meaningful changes to attitudes.

Suggestions for amendments. The teachers proposed a number of possible solutions to overcome the difficulties with the intervention in its current format, which make up the three sub-themes considered below.

Personal stories. There was a real sense amongst the teachers that opportunities to allow children to personally relate to the content by sharing their own experiences would have made the intervention more beneficial. Discussing personal experiences can be a tricky area to navigate but on the whole teachers felt, based on their experiences, that by doing so the children could benefit more from the lessons.

Condense. The intervention was considered to be longer than necessary, and as a result the content felt repetitive in parts. This was also problematic given the time constraints and pressure on teachers. The proposed solution to this was to shorten the number of sessions, however there did not appear to be much consensus on the length as they were aware that too short an intervention would not be effective either.

Teacher delivered. Many of the difficulties identified by the teachers resulted from the lessons being delivered by an outsider who they considered had no prior knowledge or understanding of the teaching already covered in the school. Having the intervention delivered by teachers would ensure the lessons are appropriately pitched and would allow for children to share their personal stories given that teachers would be aware of issues relating to the subject matter. In the case of having

the intervention delivered by teachers, resources and lesson plans being readily available and accessible was considered important.

Implementation processes. All teachers and the SENDCO identified a number of process issues that either aided or abated the implementation of the intervention. This theme contains two sub themes.

Processes aiding implementation. The process of recruiting schools was made easier by having a specialist unit on site, as the aims of the intervention were relevant to the school's agenda, and thus elicited interest from the school to participate in the intervention. Implementing the intervention with minimal disruption to existing lessons made it more attractive to the school to partake in the intervention. This was done by delivering the intervention during PSHE lessons and offering teacher's on-site training.

Communication. Communication and collaboration with all key participants was important for continued engagement with the school. To maintain engagement from parents, the SENDCO accompanied the information sheet with a letter from the school, the teachers were kept informed with regular emails which eased the strain on the SENDCO, and reading out the questionnaires ensured all children were able to answer the questions appropriately regardless of their ability. A number of difficulties arose from a perceived lack of clear communication. The teachers noted that clarification was needed on the distinct roles of the researcher and teachers, and particularly what was expected of them. This would have enabled them to take a more active role during the intervention and to interject where necessary. There was an acknowledgement that teachers felt inhibited both by knowing the intervention was being delivered as part of a research project, and due to pressures of their job.

Classroom discussions. Classroom discussions were held following the end of the intervention after completion of follow-up measures. All four classes, with a total of 109 children were involved in the discussions. Thematic analysis was used to code and identify themes to explore the pupil's experience of receiving the intervention. Data were coded by the primary researcher, and two discussions, one from each year group, were coded by a research volunteer to ensure agreement with coding and themes. Five themes and 14 subthemes were identified from the data; Table 6 summarises these along with their sub-themes and verbatim interview extracts.

Active learning. The intervention provided opportunities for active learning through interactive lessons, group work, and a variety of tasks. Children commented on how much they enjoyed active learning that differed from traditional teaching methods. This theme contains three sub-themes.

Variety. This subtheme relates to the variety in content and teaching methods during the intervention, which provided multiple avenues for learning through watching videos and acting out different scenarios. Children positively received engagement in discussions and activities which were experienced as interactive and interesting.

Team work. Opportunities for group work and sharing of ideas with one another meant the intervention felt inclusive of everyone in the classroom. Team work allowed children to work together to generate ideas and solutions, particularly where there were multiple opinions.

Table 6: Summary of themes from classroom discussions and quotes

Theme	Sub-theme	Quotes
Active learning	Variety	“well I liked the lessons because I thought um the variety of different ways that we learnt through not just hearing your voice but hearing what they actually thought and the different games we played and the videos that we watched.” (Year 6)
	Teamwork	“I liked that we don’t just like, we, we’re not individual we go in groups and we do things in groups” (Year 4)
	Enjoyment	“I liked it because it was interesting and fun and um, um, it had lots of emotion and I loved the games that we played.” (Year 6)
Valuable messages	Understanding disability	“I liked the um the videos that we watched because I think it helped me to actually understand or like actually see someone that has that disability” (Year 6)
	Empathy	“I liked the video that we watched about Max saying how he felt about his disability because I could really, like understand what he was talking about and relate to him.” (Year 6)

Ability	“I liked the lesson about even if they’ve got a disability they can still do things that people without disabilities, learning disabilities can do.” (Year 6)
Celebrate difference	“I’ve sort of taken back the same message every week, that we’re all different but we all share the world so we should share the, our friendship to make everyone feel welcome” (Year 6)
Learnt how to treat people	“treat people with learning disabilities like you would treat anyone else because they’re just like you but they might just have a few, uh, differences.” (Year 6)
Personal stories	“I think it would have been quite hard for you to watch because you’d be thinking is that happening to so-and-so and oh what should I do.” (Year 6)
Negatives	<p>Repetitive “I thought that most of the stuff we did it a lot of times (...) and some of us might have already learned that at younger ages, and they’re just learning the same thing, and it gets a bit boring.” (Year 6)</p> <p>Not enough time “I liked um, doing, Spinclusion, but I also didn’t like it because (...) it was a bit unfair for the people that didn’t get to have a go.” (Year 4)</p>

Changes	Include everyone	“We could have done a bit more with like interacting with each other and doing more activities where we have to work together” (Year 6)
	Change questionnaire	“I think we should do a different test each time because in the same test you had an opinion and you sort of stuck with your opinion and you already knew what the answer you wanted was.” (Year 6)
	Varied activities	“Maybe, debates of (...) maybe you should play with them, people like Hannah and Adam, or people who didn’t want to play with them and why” (Year 6)
	Other disabilities	“We should see more of those videos of kids with disabilities, so we can see every single bit of disabilities” (Year 6)

Enjoyment. The intervention was received as fun and interesting, suggesting children found it engaging and enjoyable. Parts of the intervention that received specific positive feedback included the Spinclusion game, role plays and drawing abstract shapes.

Valuable messages. This theme summarises the key messages children took away from the intervention and comprises of five subthemes.

Understanding disability. The lessons helped many of the children gain a better understanding of what life is like for people with intellectual disabilities. The videos in particular were cited as useful at helping aid their understanding. The intervention was considered useful for also equipping children with skills for how to manage difficult situations on the playground, specifically related to social exclusion.

Empathy. The children valued and enjoyed being able to understand different perspectives, with the videos cited as useful in helping enhance their empathy, giving them a sense of the lived experiences of children with intellectual disabilities. Some children felt strong emotional reactions to the content, but found it difficult to make sense of how they felt.

Ability. Children learnt that peers with intellectual disabilities have a host of abilities and interests, as well as recognition that they should not be deprived of opportunities because of their intellectual disabilities. There was recognition of the similarities between typically developing children and their peers with intellectual disabilities, and the importance of treating everyone equally.

Celebrate difference. Children commented on being able to not only accept differences in others but to celebrate them. Being different was not considered a reason for excluding peers from activities and the detrimental effects of exclusion on

self-esteem, and their peer's abilities to engage in meaningful activities were recognised.

Learnt how to treat people. Children took away different messages about how to treat someone with an intellectual disability and behave around them. Some learnt that everyone should be treated equally despite their differences, whilst other children found the lessons helped them understand that people with intellectual disabilities needed more care and support.

Personal stories. Many of the children spoke about personal resonance with the content which reminded them of their own experiences and people in their lives. Concern was expressed over the subject matter bringing up difficult emotions which was challenging to talk about, or left them wondering about people they may know. There was acknowledgement that difficult past experiences with peers with intellectual disabilities and SEND would influence responses on the questionnaire, and whilst the children wanted to be honest about this, there were worries of being judged negatively if their answers were taken out of context. Despite the majority of children who brought up personal issues saying they did not feel comfortable talking about their experiences, it was suggested that having more space to talk about these, particularly for those in the class who have siblings with intellectual disabilities would provide opportunities to feel connected and know they are not alone.

Disliked. This theme summarises parts of the intervention that were disliked by the children and consists of two subthemes.

Repetitive. Quite a few of the children commented on finding the intervention and its content repetitive. Mostly children in year 6 mentioned having covered similar content previously at school and as a result did not find the lessons very useful.

Not enough time. One of the most common complaints about the intervention, mostly from year 4 pupils, was that there was not enough time for some of the tasks. This was particularly the case for the Spinclusion game, where the lack of time meant that not everyone was able to play and so the game felt unfair. Similarly, with the role plays, there was feedback that more time would have allowed them to better develop their scripts.

Changes. The children suggested a number of changes to the intervention, which fit into four sub-themes.

Include everyone. It was felt that more could have been done to include everyone to ensure all opinions were heard and they had more opportunities to work together. One suggestion for including everyone was to have a question and answer session where each child had the opportunity to ask a question.

Change questionnaire. Repeating the questionnaire at three different time points was not well received. Some of the children thought their answers and opinions would not have changed much over the course of the intervention and stated they had a tendency to stick to their opinion. Not receiving feedback on their responses on the questionnaire was criticised and they suggested that direct feedback would help them see if their opinions had changed.

Varied activities. Suggestions for more variety in the types of activities included debates, which would allow the children to take multiple perspectives, and quizzes. More opportunities for active learning that involved moving around were suggested. Specific changes and variations to individual elements such as Spinclusion and the abstract shapes task were also suggested.

Other disabilities. There was consensus that the intervention focused too much on intellectual disabilities and could also have covered other disabilities.

Disability simulation was suggested as a way to help the children understand the experience of having a disability besides intellectual disabilities.

Discussion

The current study set out to develop and pilot an intervention designed to promote positive attitudes towards children with intellectual disabilities. The intervention was implemented at a primary school in four classrooms with children aged between eight and 11 years. The main aim was to assess the feasibility of the intervention. Data collected over the six sessions were also analysed to provide indicators of efficacy of the intervention, and process issues were evaluated through qualitative analysis of interviews and classroom discussions.

Feasibility

A range of criteria were used to assess feasibility, including recruitment and retention of schools and participating children, completion of measures, and acceptability of the intervention. Considering these criteria, implementation of a school based intervention and use of the pack of measures was feasible. All participating classes engaged with the intervention throughout its duration. Measures were completed in full overall as there was little missing data, and qualitative feedback suggested the anonymised nature of the questionnaires encouraged children to give honest responses.

Initial recruitment was problematic though in that only two of 61 schools approached agreed to participate in the pilot. During the course of recruiting schools, it became clear that excluding schools with specialist units, as originally intended, was not feasible. This was supported by feedback from the participating school's SENDCO that they were attracted to the project due to it being relevant to the

school's agenda as they had a special unit on site. This meant that there might have been a better response had other schools which clearly advertised their specialist unit not been excluded from being contacted. Additionally, as the only other interested school also had a specialist unit, recruitment of schools without a unit will need to be carefully considered for future development.

Primary Outcomes

The analysed data were addressed with caution as there were no control groups for comparison or randomisation of the participants; however, the results provided some indications to inform further developments. No significant differences were found over the course of the intervention in acceptance of peers with intellectual disabilities or self-efficacy of typically developing children in their interactions with peers. There was a modest increase in peer acceptance scores, but this had dropped by follow-up, indicating the challenge of sustaining positive changes over time. Further analysis showed the drop in scores at follow-up was not significantly different to scores at baseline. The drop in scores could be linked to an effect of fatigue, suggesting the set of measures are not appropriate to be used over a short period of time, and that perhaps longer time needs to pass between completion of the measures. Unfortunately, the effect sizes were too small to provide any meaningful interpretations of the data.

The specifically developed video material was well received by the children and teachers, and the intervention appeared to have an effect on children's empathy. Empathy has been found to mediate the relationship between contact and attitudes in children (Armstrong, Morris, Abraham, Ukoumunne & Tarrant, 2015). It is possible

that including a measure of empathy could have provided further insights to the interpretation of the preliminary outcomes of the study.

The SCM was a well-received component of the questionnaire pack, with positive feedback received on this from both teachers and pupils. However, there appeared to be very little impact of the intervention on peer relations with children identified as having SEND. This was reflected in the feedback from teachers who felt that despite the intervention being interesting, it did not make a difference to the behaviour of pupils. Peer relations of target children who had been identified as having an SEND did not change drastically over the course of the intervention, and it is difficult to draw links between the teaching and any changes in social groups.

Evaluating Process

Teacher's perceptions of the intervention were fairly mixed. They identified a number of elements that worked well, particularly the videos and questionnaires, whilst also recognising limitations of the intervention in its current format, as well as challenges with the process. Whilst pupils came away with valuable messages, they too recognised parts that did not work well and required revision. There were a number of aspects both teachers and pupils agreed on, such as the videos being a good resource and the intervention needing variety. Likewise, there were disagreements in the feedback as well. The children enjoyed the Spinclusion game and role plays as they provided opportunities for active learning that went beyond traditional didactic pedagogy, but the teachers identified these as the most problematic aspects of the intervention.

Similarly, sharing personal stories was a contentious issue, teachers felt sharing personal stories was beneficial and allowed for learning to be translated to

real life situations, which would have enhanced the learning from the intervention. Whereas pupils found it hard to make sense of the emotional responses they were experiencing as a result of the content having personal resonance. Explicitly providing space to reflect on those personal experiences and encourage children to share and disclose their personal stories might have been beneficial (Liegiers & Myers, 2015), and provided children with the language to understand their experience.

Themes arising from classroom discussions were contradictory. While on the one hand children enjoyed opportunities for group work and getting everyone involved, they also felt more could be done to include the entire class. Similarly, they enjoyed the variety offered by the intervention, but felt it could also have more variety. While this offers little by way of clarification of what necessitates variety, it does exemplify the difficulties in developing an engaging classroom based intervention that appeals to all pupils.

Limitations

The SCM measure provided interesting information about children's social groups during the course of the intervention. However, the measure failed to take into account children's membership in multiple groups. One of the biggest limitations of the SCM was that it did not allow the children to state membership with friendship groups outside of their classrooms. This was an issue the children raised during the course of the intervention. Their concerns related to a child who has friends in other classes being considered an isolate if they did not have any friends within their own classroom. It was clear through the discussions during the lessons that children interacted with peers across classrooms and possibly even across year

groups. The SCM failed to take those relationships into account. Furthermore, the SCM has been identified as a problematic measure which heavily distorts children's social structures and can lead to biases (Neal & Neal, 2013) that potentially stand to be magnified when used longitudinally.

Role plays, while considered fun and enjoyable by the children, were a problematic component of the intervention. It was clear through the implementation of the exercise and feedback gained from teachers that the role plays failed to achieve their aim of improving self-efficacy. This was an unexpected discovery which warrants serious review of the session on self-efficacy. Alternative self-efficacy tasks that have been used in previous research include cooperative learning, imagined contact and disability simulation. Cooperative learning that requires joint working rather than contact only with peers with intellectual disabilities improves self-efficacy in typically developing children (Piercy, Wilton & Townsend, 2002). However, when considering implementation on a national level, this may not be feasible as not all schools will have sufficient number of children with intellectual disabilities for this to be applied effectively. Imagined contact has been proposed as an alternative, which would appear to overcome this difficulty (Miles & Crisp, 2014), but unfortunately there is little evidence to suggest it's efficacy in improving self-efficacy in interactions with peers with intellectual disabilities. Disability simulation tasks too are problematic as they trivialise disability and fail to change attitudes (Hurst, Corning & Ferrante, 2012). Further research is required to identify an effective and feasible method for improving self-efficacy.

Parental involvement was attempted through the use of homework tasks. This was partly successful as over half the children completed the task and reported receiving help from a member of their family. However, it was difficult to ascertain

whether parents did in fact engage in meaningful conversations with their child in completing the homework as there was no formal method for checking whether parents assisted with the tasks. Furthermore, contact with parents during the intervention was limited and no feedback was gained from them to gauge their views on the intervention and homework.

The difficulty with interventions designed to change and improve attitudes towards children with intellectual disabilities lies in the lack of acknowledgement of the privileged position of typically developing individuals. Beckett (2015) suggests disability teaching in schools need to stem from an anti-oppressive stance which take radical steps to acknowledging and tackling privilege in relation to changing attitudes. This is suggested through one of three approaches (1) education about the other, (2) education that is critical of privileging and othering, or (3) education that changes students and society.

It was apparent from the qualitative classroom discussions that although the children enjoyed elements of the intervention, there was prominent ‘othering’ of peers with intellectual disabilities. The current study, much like most interventions, aimed at changing problematic attitudes to behavioural intentions and actions fits under the category of “providing education about the other”, which has been described as a benign and limited approach to the ‘problem’ of disability and does not tackle societal problems with privilege and othering (Beckett, 2015). Othering creates distance between the self and perceived other, which negates the effect of reduced physical distance through a contact based learning environment.

Suggestions for Further Development

Designing a complex intervention and the process of assessing its feasibility along with piloting is an iterative process requiring continued evaluation and development. The current study identified a number of key changes that need to be addressed prior to the intervention being piloted on a larger scale. The intervention in its current format was delivered by the researcher, however it is clear there are benefits to the intervention being led by teachers with support available from the research team. Doing so will allow the teachers to tailor the intervention to a difficulty level that is in accordance with the abilities within their class. It would also bring in scope for sharing personal stories to help develop an empathic understanding and hopefully reduce the process of othering. The intervention could be made available as a series of lesson plans accompanied with resources through an online website, with schools being signposted to this. There will need to be potential for flexibility to introduce more debate and discussion based tasks for older children, whilst sticking to interactive game based activities for younger children.

Feedback from teachers suggested inviting parents to meet with the research team prior to the start of the intervention to explain what their children will be learning in school. This would help parents understand what the lessons would entail and as a result lead to greater involvement. Other ways for involving parents need to be considered, and perhaps a focus group with parents would be a helpful way to elicit this information.

Different elements of the intervention require further work. Role plays were the trickiest part of the intervention, with year 4 pupil's role plays being short and lacking in dramatic impact, whilst year 6 pupils used theirs as an opportunity to

express prejudiced beliefs veiled by humour. An alternative approach is necessary to replace role plays as a self-efficacy task. In contrast, the videos were the most well received part of the intervention. However, there is scope to expand on the videos and create a larger catalogue of footage that would cover a variety of intellectual disabilities as both videos in the empathy session depicted young people with Down syndrome.

In line with Beckett's (2015) critique, if the intervention is continued in a similar vein to tackle attitudes, with a greater emphasis on changing behaviour, there will need to be scope to bring in discussions to challenge the position of privilege society takes on the matter of disability, by starting with the classroom. This could be a task that requires greater involvement from parents through homework tasks or otherwise. Clinical psychologists are in a unique position to influence change across systems through their expertise of working with communities, organisations, schools and individuals to reduce stigma, foster social change and promote inclusion (Gaskin, 2015).

Conclusion

The current study indicates it is feasible to implement a multi-component intervention aimed to improve attitudes and social inclusion of children with learning, social and communication difficulties in primary schools. As per the MRC guidelines, the development of the intervention requires further adaptations following the initial stage of piloting (Craig et al., 2008).

The main changes that are necessary include the intervention being facilitated by teachers with appropriate training provided and resources being easily accessible. The lessons will need to be specifically tailored to each year group to ensure

appropriate engagement with more room for sharing personal stories. The role play was not a successful component of the intervention and so alternative methods for improving self-efficacy will need to be explored.

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Part Three: Critical Appraisal

Introduction

This critical appraisal will outline disability narratives and my personal perspective. It will then use these narratives as a framework for reflecting on the process of completing this research project. The appraisal will also reflect on implications for future research.

Disability Narratives

Disability has been understood through a variety of models including moral, medical, biopsychosocial, social, cultural and post-modern (Gaskin, 2015), as well as current rights based discourses. Earlier models dichotomised disability, labelling people as either able or disabled. These perspectives have however, seen a shift from locating the ‘problem’ of disability in the individual to the person’s environment and broader society. Most notably this change has influenced disability from being seen as a deficiency to a difference, at times free of negative connotations (Gray, 2009).

Whilst theoretical perspectives have evolved and influenced legislation, such shifts have only partly translated to societal ideas and views about disability. Furthermore, narratives of intellectual disability are far more discriminating, with greater stigma than those of physical disabilities (Werner, 2015). Lemke (2008) offers an explanation that exemplifies the inherent difficulties from a sociological viewpoint: “Everyone of lower or weaker status must learn as part of survival how the minds of the powerful work. Asymmetrically, the powerful are often much less able to put themselves in the shoes of those whose ways of thinking they are privileged to ignore.” (p.20).

The above quote highlights the disparity between the experiences of those in positions of privilege and those without. Within the current school system, children

with special educational needs and disabilities (SEND) are expected to make adjustments and learn the skills necessary to integrate within their environment. Yet little emphasis is placed on the role of privilege typically developing children have and what more they could do, in addition to action at school, parent and community level, to create an integrative and inclusive environment. Social change is necessary to tackle the perceived problem of disability (Shakespeare, 2008), however, awareness on an individual level is also necessary to exact change on a wider level.

Researcher's Perspective

Having awareness of the variety of perspectives on disability is essential in reflecting on the process of implementing an intervention that essentially challenges these perceptions. Of equal importance is awareness of my own beliefs, their influence in the decision making process and recognising the role of power in attempting to introduce change at an institutional level.

My interest in the area stems from personal experience. Having a younger brother with an intellectual disability, I have an understanding of the difficulties experienced by those with intellectual disabilities and have witnessed the implicit and explicit societal attitudes affecting people's behaviour and responses towards my brother and family. Pity becomes the main emotional response towards individuals with intellectual disabilities. As such, I feel passionate about challenging these perspectives, and helping people to celebrate differences whilst ensuring people with intellectual disabilities have access to as many opportunities as their typically developing peers. Whilst I may never understand the lived experience of having an intellectual disability, my personal experiences and insight put me in a credible position in aiming to improve the lives of people with intellectual disabilities.

Process Issues

Considering generally negative societal attitudes and my personal motivations for undertaking this project, I will in turn reflect on how these may have interacted with process issues experienced whilst conducting this research.

Recruitment

Recruitment of schools proved to be far more challenging than initially anticipated. Sixty-one schools in two boroughs were contacted via email; only two schools responded. It is possible that had I accompanied the emails with a phone call I might have received a better response. Initially schools with a special unit for pupils with SEND were excluded from recruitment, however the two schools that responded both had special units and so this criterion was dropped. During the interview with the participating school's SENDCO, it became clear that the school expressed an interest in the project for the very reason that it aligned with their inclusive agenda. The poor response rate could be understood as a systemic issue, with schools being pressurised environments with little time or scope for external research projects. Alternatively, it could also be understood within the wider scope of disability narratives that dismiss the importance of tackling stigmatised attitudes towards children with SEND. These schools are the ones that may be in most need of interventions like the one described in the empirical paper, but engaging them on a voluntary basis may prove to be a monumental task.

When recruiting actors for the documentary videos, I was expecting greater interest from families in sharing their stories, but once again I only received responses from two interested families. It is possible that parents were wary of researchers and worried about how their story would be used, as well as fearful of

any negative effects on their child as a result of featuring in the video. This was a major limitation in the development of the intervention materials, as the aim originally was to showcase diverse children with intellectual disabilities, which unfortunately was not possible.

Designing the Intervention

When designing the intervention, I wanted to ensure different components were respectful and honest, and showcased the positive attributes of children with intellectual disabilities in an attempt to promote a positive perspective. In hindsight, one of the significant limitations of the process of designing the intervention was the absence of involvement from individuals with intellectual disabilities. Whilst Max and Jenny were active participants in the process of developing some of the intervention materials by sharing their stories, there was potential for greater involvement, preferably by way of families of children with intellectual disabilities sharing their perspective on what would be helpful to include or even to review the developed material. Service user involvement may have enhanced the intervention. However, this might also have been as challenging as it was to recruit families for the videos. Perhaps this is a reflection of feelings of distrust towards research (Nicholson, Colyer & Cooper, 2013).

Delivering the Intervention

I came across a number of challenges during the delivery of the intervention. Whilst the teachers and SENDCO made efforts to accommodate the research project within their existing curriculum, there were often changes that required flexibility. Within the school environment, there were a number of processes over which I had no control. Two teachers were absent for lessons, which meant substitute teachers

who had not received training in the intervention and likely had not been adequately briefed on the lesson plan were managing the classes. This translated into limited support in the delivery of the intervention, and placed me firmly in a position of sole ‘conductor’ as I was the one with the lesson plan.

Delivering the intervention in one of the year four classes was particularly problematic. The lesson was scheduled right after a physical education (PE) lesson and was markedly shorter in duration than lessons with other classes. Added to this, these children would often arrive late, further reducing the amount of time left and would either be exhausted or energised from their PE lesson thus finding it difficult to concentrate during the session. I found it difficult to engage the children in this class and noticed my motivation steadily decrease over the weeks. This also highlighted the challenges teachers face and the influence of external factors that may hinder the fidelity of an intervention.

During the classroom discussions following completion of the intervention, some of the children explained that they had difficult personal experiences on the playground that meant they gave answers on their questionnaires to reflect these, but worried about being judged negatively. This indicates that they felt able to be open and truthful in their responses. The bigger issue however was that the multiple difficult experiences had not been adequately addressed at school. For example, a few children mentioned having made attempts to engage with peers with SEND at school, but struggled with basic problem solving skills in the face of difficulties with their interactions in the playground. It is interesting to note that despite the teachers reporting having covered special educational needs and intellectual disabilities in school, very few of the children felt equipped to handle certain situations, such as their peer becoming angry or not understanding the rules to a game. Throughout the

intervention I was approached by several of the children in the classrooms who personally thanked me for the lessons, and took the opportunity to share their personal stories, including discussing solutions to dilemmas they had experienced in the playground.

Relationships

During the course of delivering the intervention, I found myself in a paradoxical position. I felt I had little power in the school through being assigned classrooms and fitting my schedule around the timetabled lessons; and through not knowing the children and having a limited understanding of the school's context. Yet in the classroom, the label of 'researcher' appeared to render the teachers powerless and the attribution of Miss to my surname placed me firmly in a position of power.

This power dynamic ultimately affected my relationship with the teachers. Whilst I actively made efforts to engage them in the delivery of the intervention and had developed a good working relationship with them, this did not equate to a collaborative relationship. I found many of the teachers took a passive role and only became involved when directly requested to. It became clear during the teacher interviews that, due to other occasions when outside agencies delivered activities within the school, they expected the intervention to be delivered entirely by me and that their role was to provide support, but as a last resort rather than as a partner.

Qualitative Analysis

The teacher interviews were conducted by my supervisor, as I felt that the teachers might not be able to provide honest responses had I interviewed them on their perceptions of the intervention. This was ultimately more conducive as the teachers were openly critical of the intervention. There was a sense that whilst the

topic was important to cover, the intervention was too lengthy, and having it delivered by an outsider left the teachers feeling powerless. The interviews also highlighted the wealth of experience teachers had which remained underutilised. One teacher shared their personal experience of having a relative with special needs, whilst another shared their experience of having previously taught a child with intellectual disabilities. None of the teachers had shared these experiences with the class; similarly, I too did not share my personal experience with the children. Whilst doing so could have been normalising for children who had their own personal stories and encouraged them to share, it was not deemed appropriate and could potentially have been tricky territory to navigate.

Interestingly, during the classroom post-intervention discussions, the year 6 pupils' answers reflected the opinions of their respective teachers. One of the year 6 teachers was particularly critical of the intervention, in turn their class also were particularly critical of it, calling it 'boring' and suggesting a widening of the scope of the lessons. This emphasised the important role of teachers and the school system in influencing attitudes and beliefs.

Whilst conducting the classroom discussions and coding the transcripts, I was surprised to note how many of the children made suggestions for activities that we had already done or reduction of task frequency due to an overestimation of the number of times it had been completed. For example, one child thought we had watched the same video two weeks in a row, when in fact we had only watched the video once. This illustrates the challenges of delivering classroom based interventions particularly with large groups of children, as not everyone had engaged with the material despite its interactive nature.

During the qualitative analysis of pupils' feedback on the intervention, I became increasingly aware of the social desirability bias present in their responses. Given my enthusiasm for the project, it is possible that I had inadvertently encouraged positive statements from the children, which played into the bias. Whilst in the scope of a research project, this creates problems with interpretation of the data - in the interests of ecological validity, remaining objective and neutral would be desirable but not be in line with the ethos of an intervention that ultimately aims to shape attitudes in a particular direction.

Implications and Future Directions

The suggestion of the intervention being delivered by teachers generated a tinge of anxiety in me. This anxiety brought to mind my experience with one teacher in particular. While discussing the value of difference within the classroom, the teacher added to the discussion that "differences are not always good" and "perhaps we should be wary of them too". Whilst I understood the teacher's reasons for wanting to offer an alternative perspective, my sense was that they completely missed the point of the exercise which was to reframe the negatively connoted difference attached to children with intellectual disabilities as a positive attribute. Their contribution added to the disability narrative of deficiency rather than a celebration of difference. This experience created doubt in my mind about the fidelity of the intervention if it were to be delivered solely by teachers in the future. Although detailed lesson plans would be provided, there is no influence over how different aspects would be interpreted by teachers. However, any attempts to offer the intervention, following redevelopment, on a wider level would only be feasible if delivered by teachers, and will require adequate training to ensure the intervention is delivered as intended.

In terms of the scope of the intervention and its future, I am left with mixed feelings. It is clear from the process of reviewing the literature and delivering the intervention that attitudes are difficult to shift, and change is necessary on a wider systemic level. During the write-up, I felt a sense of hopelessness in the face of wider societal attitudes. However, I remind myself of the above quote by Lemke (see page 111). Society holds a narrative about people with disabilities that confines them to the role of the “other” and for as long as they remain in that position, we cannot reduce the prejudice. Perhaps by focusing on addressing the role of privilege and power we can bring about the necessary change in improving not only attitudes but also social integration (Beckett, 2015).

Conclusions

Delivering an intervention in a school as an outsider poses a number of challenges. Power dynamics can create difficulties in the effective delivery of the intervention. Whilst there are advantages and disadvantages of teachers delivering the intervention, overall it would be far more advantageous due to their ability to engage the children in a meaningful way, and also in the interests of resources and scalability. A need for close monitoring of those delivering the intervention does however seem indicated to ensure they are presenting the material in line with the ethos of celebrating differences.

Disability narratives had a pervasive presence throughout the process of conducting this research project. Having awareness of the possible effects of these has been important in developing my understanding of process issues and the results of this study.

The scope of the project felt very large and ambitious. There were many individual components that needed completing and managing prior to implementation of the intervention. The delivery of the intervention was also challenging, juggling the demands of the research along with demands on clinical placements. In hindsight, this project would have been optimally completed as a joint project with sharing of responsibilities. However, it has been a trying but rewarding experience.

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Appendices

Appendix A: Ethics approval letter



1 June 2015

Dr Katrina Scior
Research Department of Clinical, Educational and Health Psychology
UCL

Dear Dr Scior

Notification of Ethical Approval

Project ID: 6405/001: Assessing the feasibility of an intervention designed to increase positive attitudes towards children with learning and social communication difficulties

Further to your satisfactory response to the committee's comments, I am pleased to confirm in my capacity as Chair of the UCL Research Ethics Committee (REC) that your study has been ethically approved by the UCL REC until September 2016.

Approval is subject to the following conditions:

1. You must seek Chair's approval for proposed amendments to the research for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing the 'Amendment Approval Request Form':
2. It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. Both non-serious and serious adverse events must be reported.

Reporting Non-Serious Adverse Events

For non-serious adverse events you will need to inform Helen Dougal, Ethics Committee Administrator [REDACTED] within ten days of an adverse incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Chair or Vice-Chair of the Ethics Committee will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

Reporting Serious Adverse Events

The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator immediately the incident occurs. Where the adverse incident is unexpected and serious, the Chair or Vice-Chair will decide whether the study should be terminated pending the opinion of an independent expert. The adverse event will be considered at the next Committee meeting and a decision will be made on the need to change the information leaflet and/or study protocol.

On completion of the research you must submit a brief report (a maximum of two sides of A4) of your findings/concluding comments to the Committee, which includes in particular issues relating to the ethical implications of the research.

With best wishes for the research.

Yours sincerely



Professor John Foreman
Chair of the UCL Research Ethics Committee

Cc:
Maria Qureshi, Applicant
Professor Peter Fonagy

Appendix B: Recruitment email sent to schools

Dear _____,

We are writing to tell you about an exciting project being carried out at UCL and ask whether you would be interested in taking part. We are introducing a school-based intervention package designed to raise awareness of and improve attitudes towards children with learning, social and communication difficulties.

The intervention package consists of six structured and planned sessions to be delivered as part of the Personal, Social and Health Education curriculum (or other more convenient lessons). The aim is to start the teaching from the start of the new academic year in September.

Benefits of participating in this research include:

- Teachers will be given training on delivering the interventions
- Involvement in research can be declared by the school as a step being take to improving inclusive education for young children with various social, communication and learning difficulties
- Involvement in the project can be declared under the Local Offer scheme

If you are interested in taking part or would like to know more, please contact **Maria Qureshi** on [REDACTED] to arrange a meeting.

We look forward to hearing from you soon.

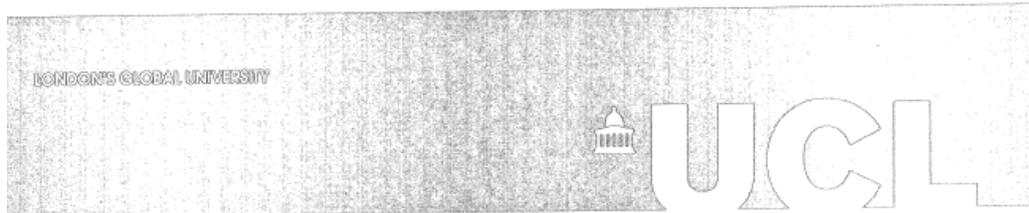
Kind regards,

Dr Katrina Scior
Senior Lecturer

Maria Qureshi
Trainee Clinical Psychologist

University College London,
Department of Clinical, Educational and Health Psychology,
1-19 Torrington Place,
London,
WC1E 7HB

Appendix C: Information sheet for school



Information Sheet for Schools

You will be given a copy of this information sheet

Title of Project: Pilot of an intervention designed to increase positive attitudes towards children with significant social, communication and learning difficulties

This study has been approved by the UCL Research Ethics Committee Project ID: 6405/001

Names: Maria Qureshi and Dr Katrina Scior

Work Address: Department of Clinical, Educational and Health Psychology, University College London, 1-19 Torrington Place, WC1E 7HB

Contact Details: [REDACTED]

We would like to invite your school to participate in an exciting research project carried out by UCL.

As you will be aware, children with significant social, communication and learning difficulties in mainstream settings often experience difficulties in their social interactions compared to their peers and are often less accepted within social groups. Recent research indicates that primary age children on the whole are willing to engage in discussions about special needs and disability, but their knowledge and understanding is often very limited.

We have designed an intervention package that not only addresses bullying and encourages acceptance of differences, but aims to go beyond these issues and encourage children to have more empathy with peers with significant social, communication and learning difficulties. As well as being more accepting and welcoming towards social interactions with them, including outside the classroom.

We are inviting your school to be involved in piloting this intervention and assessing its impact on participating children. We expect the programme to lead to greater empathy and more positive attitudes towards peers with significant social, communication and learning difficulties, and greater self-efficacy in interacting with such children. We are also hoping that it will lead to more positive interactions inside and outside the classroom.

Taking part will involve two to four classes in year's four to six in your school participating in a teaching programme spread across six sessions. These sessions can be incorporated into the existing PSHE curriculum, or other more convenient lessons.

University College London, Gower Street, London WC1E 6BT
Tel: +44 (0)20 7679 2000
email@ucl.ac.uk
www.ucl.ac.uk

To provide you with an idea of what the programme will look like, here is a brief overview of the sessions:

Session 1: Collecting pre-intervention measures data alongside basic demographic data

Session 2: Awareness raising and disability and equality training. The children will be shown a video introducing the topic of disability. Homework will be set following this session to review and discuss what was covered in the session with a parent. A worksheet with questions will be provided.

Session 3: Second part of intervention involving summarising the previous session and brief discussion on homework followed by showing short video clips showcasing personal testimonies of children with significant social, communication and learning difficulties and their experiences of peer relationships. Homework will be set to view the videos with parents and discuss the content. A short worksheet will be provided for children to complete.

Session 4: Third part of intervention will include summarising the previous session and a brief discussion of the homework. The session will then focus on using role plays and story-telling to build the children's confidence and understanding of interactions with children with significant social, communication and learning difficulties.

Session 5: Summarising the previous session and collecting post-intervention measures.

Session 6: Brief booster session after two to three months and a classroom based discussion that will be audio recorded, plus collection of follow-up data.

Teachers whose classes will be involved in this study will receive training on delivering the interventions prior to the start of the study, at your school and to fit with their availability. Following the end of the study, you will be provided with a report of the research findings. If the intervention is shown to have the desired results you will also have access to all materials used during the intervention for free future use.

If you would like further information or would like to discuss any questions you may have please contact Maria Qureshi on the email address given above.

It is up to you to decide whether your school takes part or not; choosing not to take part will not disadvantage you in any way. If you do decide to take part you are still free to withdraw at any time and without giving a reason.

All data will be collected and stored in accordance with the Data Protection Act 1998.

Appendix D: Informed Consent Form for School



Informed Consent Form for [REDACTED]

Please complete this form after you have read the information sheet and listened to our explanation of the research

Title of Project: Pilot of an intervention designed to increase positive attitudes towards children with significant social, communication and learning difficulties

This study has been approved by the UCL Research Ethics Committee (Project ID Number): 6405/001

Thank you for your interest in taking part in this research. Before you agree to take part, the person organising the research must explain the project to you.

If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to participate. You will be given a copy of this Consent Form to keep and refer to at any time.

All data will be collected and stored in accordance with the Data Protection Act 1998.

.....

Participant's Statement

I _____

- have read the notes written above and the Information Sheet, and understand what the study involves.
- understand that if I decide at any time that I no longer wish my class/one student/a group of students to take part in this project, I can notify the researchers involved and withdraw them immediately.
- consent to the processing of demographic information and responses to questionnaires for the purposes of this research study.
- understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.
- agree that the research project named above has been explained to me to my satisfaction and I agree to provide consent for my class to take part in this study.

.....

Signed: [REDACTED]

Date: [REDACTED]

Appendix E: Information sheet and opt-out consent form for parents



Dear Parents,

We have agreed to participate in a PSHE research project with University College London.

As you see from the enclosed letter the focus of the research is to raise children's awareness of children with special needs, in particular those with speech language and communication difficulties. As we have a provision within school [REDACTED] and we support children with these particular needs, we felt that this research was relevant to our school.

We hope this project will be mutually beneficial both to UCL and our school.

Thank You

[REDACTED]
[REDACTED]

Inclusion Manager.



Sustainable Travel
Accredited and Recognised
Higher standards level 2012

17 September 2015

Dear parent/guardian,

We are writing to inform you that [REDACTED] will be participating in a disability awareness programme being delivered by a research team from University College London. This will be part of the school's existing Personal, Social and Health Education (PSHE) curriculum.

Your child will be asked to complete a questionnaire at the start and end of the programme to help us see whether the activities are helpful in raising awareness of disability issues. Your child's teacher will be present throughout each aspect of the project and will be involved in delivering the teaching. The activities are designed to be engaging and fun for the children, as well as encouraging positive attitudes towards peers with special needs.

Your child will receive homework to supplement their learning in the classroom. There will be some tasks where we ask you to support your child at home by watching videos with them and having discussions about what they learnt in school. We thank you in advance for supporting your child. If you do not have access to the internet could you kindly inform your child's teacher so that we can ensure your child is provided with the same materials on DVD.

If you would NOT like your child to participate in the disability awareness sessions, please sign and return the form below to your child's teacher.

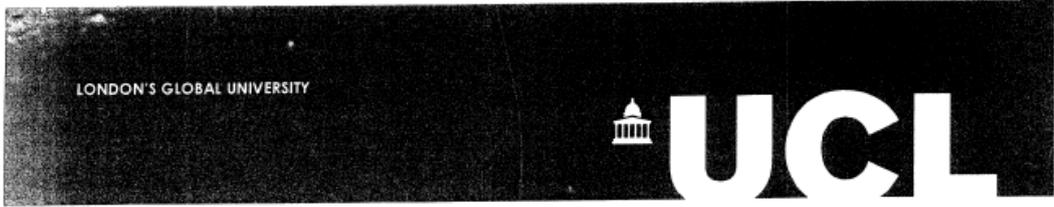
If you have any further questions, please contact the coordinator of this new programme on [REDACTED]

Kind regards,

Maria Qureshi, BSc MSc & Katrina Scior, BSc DClInPsy PhD

Clinical Educational & Health Psychology, UCL

University College London, Gower Street, London WC1E 6BT
Tel: +44 (0)20 7679 2000
email@ucl.ac.uk
www.ucl.ac.uk



.....
If you do not wish for your child to participate in the teaching please tick the box below:

I am not happy for my son/daughter to participate in the teaching on disability awareness

Name:

Parent of:

Signed:

Date:

Appendix F: Email requesting dissemination of recruitment poster for video

Good afternoon,

I am a doctoral researcher at UCL conducting research with primary school age children. My study aims to increase the social inclusion of children with special needs and learning disabilities within mainstream primary schools. As part of an in-school intervention I need to make two brief documentary films of 8-11 year olds with special needs and their parents. This will involve filming with the kids and their parents in the [REDACTED].

I was wondering whether you might be able to help in sharing my advert calling for kids and families who would like to be filmed and have their story heard and shared. The first film will involve us filming the kids playing and a short discussion with them about what they like about school, their friendships and any difficulties they may have had. For the second film I would like to hold a short interview with the parents to get their perspective. We anticipate the short films will be 5 minutes in duration each.

I would really appreciate if you could share the attached flyer with parents of children with learning disabilities who attend mainstream primary school within the [REDACTED]. I am happy to answer any questions you may have. Just to let you know I have DBS clearance and the study has received approval from the UCL ethics committee. Thank you.

Kind regards,
Maria Qureshi
Trainee Clinical Psychologist
University College London
Department of Clinical, Health and Educational Psychology,
1-19 Torrington Place,
London,
WC1E 7HB

Appendix G: Recruitment poster for video

Does your child have a learning disability?

Are they aged between 8 to 12 years?

Do they attend a mainstream/inclusive school?



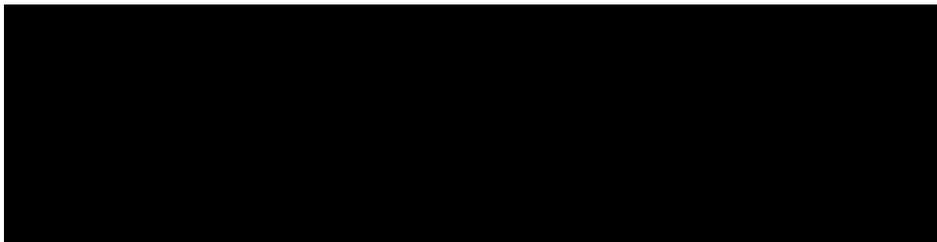
If you answered YES to the above questions, would you and your child like to take part in a short documentary film?

We are researchers from University College London working on a project taking place in primary schools that aims to achieve greater social inclusion for children with learning disabilities. We think more needs to be done to encourage positive interactions towards children with learning disabilities both in and out of school.

As part of this work, we are looking to make short films of kids with learning disabilities, aged 8 to 12, who attend inclusive schools. The films will be shown in primary schools and will show what the kids like and dislike and what their hopes and concerns are. We would also like to film brief clips of their parents talking to us. All kids who take part will receive a voucher to thank them for taking part.

If you are interested or would like to find out more please contact Maria Qureshi on the email address below

We can arrange to meet with you in person so you can find out more information, ask any questions and decide if you and your child would like to appear in our short documentary films.



Appendix H: Email recruiting volunteer film-maker

Good morning/afternoon,

I am a doctoral researcher at UCL conducting research with primary school age children. My study aims to increase the social inclusion of children with special needs within mainstream primary schools. As part of an in-school intervention I need to make two brief documentary films of 8-11 year olds with special needs and their parents. This will involve filming with the kids and their parents in the London area.

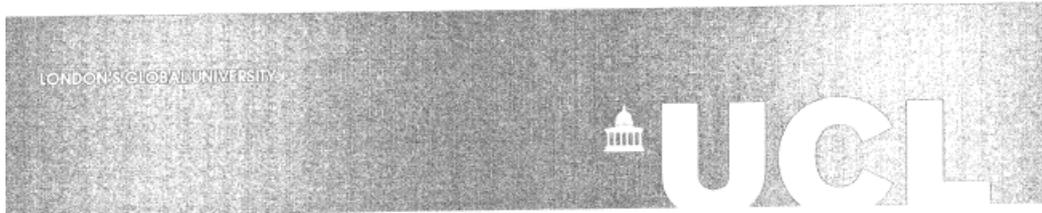
I was wondering whether any students at [REDACTED] doing short courses in film making and editing would like to get involved in making these short films with me and my team. Our team will recruit the kids and parents for the films and I will be interviewing them. We anticipate up to 5 minutes of film including showing the young people engaged in fun activities and another short clip of their parents talking to me.

I would be keen to collaborate with any interested students in creating these videos with me over the summer. I am specifically looking for someone to shoot/film the interviews and someone to edit the final product (although if the same person would like to do both, that would work too).

I look forward to hearing from you soon.

Kind regards,
Maria Qureshi

Appendix I: Release forms for videos



Name: [Redacted]

Address: [Redacted]

Date: [Redacted]

Maria Qureshi
University College London
Department of Clinical, Health and
Educational Psychology,
1-19 Torrington Place,
London,
WC1E 7HB

Short documentary film to promote social Inclusion of children with learning disabilities in mainstream schools (Working title)

1. That on signing this I have agreed that all or some of my recorded contribution can be included in this short documentary film and to the other points in this letter.
2. That the nature of the short documentary film which deals with portraying experiences of children with a learning disability of being in a mainstream school and their parents has been explained to me.
3. That the team does not have to use my recorded contribution, but if they do, they may fairly cut and edit it in accordance with current broadcasting regulations in the United Kingdom and use it in any publicity for the short documentary film.
4. That I give all necessary consents for my recorded contribution to be used in any and all media anywhere in the world.

Signature _____ [Redacted]

University College London, Gower Street, London WC1E 6BT
Tel: +44 (0)20 7679 2000
email@ucl.ac.uk
www.ucl.ac.uk



Name:

[Redacted]

Address:

[Redacted]

Date:

[Redacted]

Maria Qureshi
University College London
Department of Clinical, Health and
Educational Psychology,
1-19 Torrington Place,
London,
WC1E 7HB
Email: [Redacted]

Short documentary film to promote social inclusion of children with learning disabilities in mainstream schools (Working title)

[Redacted] who is under my care and control has been asked to take part in the above short documentary film.

1. That on signing this I have agreed that all or some of [Redacted]'s recorded contribution can be included in this short documentary film and to the other points in this letter.
2. That the nature of the short documentary film which deals with portraying experiences of children with a learning disability of being in a mainstream school and their parents has been explained to me.
3. That the team does not have to use [Redacted]'s recorded contribution, but if they do, they may fairly cut and edit it in accordance with current broadcasting regulations in the United Kingdom and use it in any publicity for the short documentary film.
4. That I give all necessary consents for [Redacted]'s recorded contribution to be used in any and all media anywhere in the world.

Signature [Redacted]

University College London, Gower Street, London WC1E 6BT
Tel: +44 (0)20 7679 2000
email@ucl.ac.uk
www.ucl.ac.uk

Appendix J: Interview questions for short film

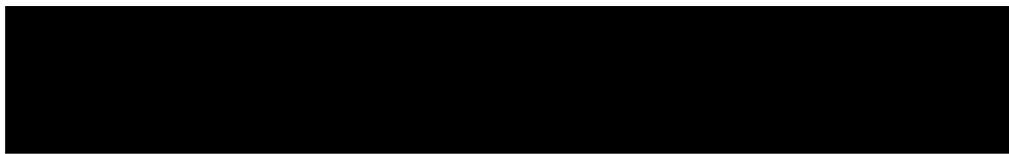
Child's interview

1. Tell me about yourself? What is your name? How old are you?
2. What do you like doing?
3. Who do you like spending time with?
4. How would others describe you?
5. What do you like doing at the weekend?
6. What are your favourite things to do with your friends?
7. What do you like about school?
8. What do you not like about going to school?
9. Do you have friends at school? What do you like doing with them?
10. Has anyone been mean to you at school? What did you do about it?
11. What do you want to be when you're a grown up?

Parent's interview

1. What has been your experience of your child attending a mainstream school?
2. Have you received any support in helping your child adjust to being in a mainstream school? Either from teachers or the school
3. Have you received any support from other parents at your child's school?
4. Has your child had any problems at school?
5. What has helped your child settle into his/her school?
6. How did other children in the school react to your child when they first started?
7. Has your child experienced difficulties making friends at school?
8. Have you or your child faced any challenges as a result of attending a mainstream school? What has helped you overcome these challenges?
9. How can parents support their children to create a more inclusive and friendly environment at school?
10. What can others do to help create a more inclusive and friendly environment at school?
11. Do you have any advice for parents whose children have a learning disability and attend a mainstream school?

Appendix K: Vignettes and measures



Primary School

Questionnaire pack

Please answer the questions as best as you can

1. How old are you?

7 8 9 10 11 12

2. Are you a:

girl boy

3. Do you know anyone in your family or friends who has a disability?

yes no don't know

© gettyimages

This is Adam. He is 9 years old and has a learning disability. Adam loves to play football with his friends. He plays football at the weekend and enjoys being the goalkeeper. Adam takes longer to learn new things in the classroom than many of his friends. Adam finds it difficult to sit still for long and can get cross when he finds things hard.

© gettyimages

This is Hannah. She is 11 years old and has Down's syndrome and a learning disability. Hannah loves to chat to friends and enjoys baking. She likes making chocolate chip cookies at the weekend which she shares with her classmates at school. Hannah takes longer to learn new things in the classroom than many of her friends. It is sometimes difficult to understand Hannah when she talks.

1. Do you know anyone in your family or friends who has a learning disability like Hannah or Adam?
 yes no don't know

2. Would you feel like helping a child like Hannah or Adam if they were hurt at school?
yes maybe no

3. Would you like to play with a child like Hannah or Adam?
yes maybe no

4. Would you say "hello" to a child like Hannah or Adam if you met them in the park?
yes maybe no

5. Would you want to work on a project with a child like Hannah or Adam in class?
yes maybe no

6. Would you feel like sharing a secret with a child like Hannah or Adam?
yes maybe no

7. Would you invite a child like Hannah or Adam to your home to play?
yes maybe no

8. If you saw a child like Hannah or Adam playing on their own during break time, would you invite them to play with you and your friends?
yes maybe no

1. Sitting near a child like Hannah or Adam in the classroom is _____ for you
very hard hard easy very easy

2. Playing with a child like Hannah or Adam is _____ for you
very hard hard easy very easy

3. Some kids are making fun of a child like Hannah or Adam in your class. Telling them to stop is _____ for you
very hard hard easy very easy

4. Your class is going on a trip and the teacher makes you partner with a child like Hannah or Adam. Being their partner is _____ for you
very hard hard easy very easy

5. You are having a party. Deciding to invite a child like Hannah or Adam is _____ for you
very hard hard easy very easy

6. Working on a project with a child like Hannah or Adam is _____ for you
very hard hard easy very easy

7. If you saw a child like Hannah or Adam on their own in the playground, asking them to play with you and your friends is _____ for you
very hard hard easy very easy

Are there some people in your class who hang around together a lot? Who are they?

Write their names close together on this piece of paper. Show as many groups as you can think of in your class. Some groups can have just 2 people. Some people might be in more than one group. Don't forget to put yourself on the map.

Draw a circle around each group of pupils who hang around together a lot. Maybe some people don't hang around with a group – you can put them in a circle on their own.

Write each person's first name clearly. If there are 2 people with the same first name put the first letter of their second name also.

Appendix L: Intervention plan and resources

Social inclusion pilot

Intervention pack

Year 4 & 6

General Overview of Intervention

Session		Time (mins)	Task
1	1	2	Introductions
	2	20	Completing pre-intervention measures
	3	5	Discussion on “Respecting difference” and “Inclusion”
	4	20	Spinclusion game
2	Awareness Raising		
	1	20	Class activity “Difference and Similarities”
	2	15	Video “What is a learning disability”
	3	20	Class activity “Difficulty understanding”
	<i>HW</i>		<i>What is a learning disability worksheet completed with parents</i>
3	Empathy		
	1	5	Summarising previous session with a short class quiz
	2	15	Video “Max”
	3	20	Class activity “What would you do?”
	4	15	Video “True colours”
	<i>HW</i>		<i>Watch videos with parents, complete worksheet</i>
4	Self-efficacy		
	1	5	Summarising previous session and short class quiz
	2	40	Role play “What would you do?”
	3	10	Discussion on role plays
5	1	5	Summarising previous session
	2	20	Completing post-intervention measures
	3	20	Spinclusion game
6	1	20	Complete follow-up measures
	2	30	Classroom discussion on intervention as a whole

Session 1: Collecting pre-intervention data alongside basic demographic data.

1. Introductions (2 minutes)
2. Collecting questionnaire data (20 minutes)
3. “Respecting difference” and “Inclusion” (5 minutes)

Ask the pupils what do they know or have learnt already about “respecting difference” and “inclusion” – print out large laminated posters saying “Respecting difference” and “Inclusion” to be stuck up on the walls during length of intervention

4. SPINCLUSION game (20 minutes)

PREP

Split the class into six teams giving each team a colour (red, green, blue, yellow, purple, orange)

Give each team member a nametag with a number to help determine the spinning order (numbers 1 – 5 for five members per team).

INTRODUCTION

Tell the class that you will play a game called Spinclusion and you will learn to think about celebrating differences and including everyone. Introduce the three challenges; 1) differences as being good, 2) what people can do, not what they can't do, 3) people's feelings.

PLAYING THE GAME

- Team member #1 from the first team comes up and spins the wheel
- The Facilitator reads a question from the card deck to the entire group
- The Facilitator listens to the answers of the children who have put up their hands. In order to earn their points the team must give 3 different answers as well as identify which challenges fit the question (see Spinclusion posters under resources)

Session 2: Intervention 1 - Awareness raising

1. Class activity – differences and similarities (20 minutes)

Explain to the class that the purpose of the activity is to help them imagine what it might be like to have "different abilities" than they do now; and to understand why some people act differently than they might expect. Write the word "ability" on the board and talk about what it means. Write the word "unique" on the board and talk about what it means.

Explain that everyone has different abilities. Say that you want to find out how the students in the class are different. Have them raise their hands in response to questions, such as these:

Who can roller skate?

Who can skate board?

Who is good at video games?

Who knows how to knit?

Who can bake cookies?

Who can paint?

It is important that not every child answers affirmatively to every question, so you can show diversity. So, for the youngest grades, or if all the students raise their hands for every question, it is best to include questions such as the following.

Who has black hair?

Who has blonde hair?

Who has brown hair?

Who wears glasses?

Etc...

Comment on the fact that everyone has different abilities or qualities about themselves that make them unique among others.

Now describe a scene on the playground, and ask... "*Have you ever played a game of "rounders" and when it was your turn to hit the ball, you planned to really hit it hard so it would go far...and when the ball was thrown to you, you tried to hit it, but you missed?"* You can act this out while you are talking to make it more dramatic. Ask "*Who likes it when the other kids say, '...don't worry, try again, it's okay, you*

can do it,...'?" Or who likes it when they say "...that was stupid, why did you do that?" Typically, all of the children will raise their hands to agree with wanting to be understood.

Now ask *"Who likes it when people understand you?"* Questions can also be phrased slightly differently, like *"Who wants friends who understand you?"* or *"Who likes it when their friends understand them?"*

Comment on the fact that even though everyone has different abilities, talents, and qualities, that we are the same in one basic way; we all want other people to listen to us and understand us.

2. Video introducing learning disability (15 minutes)

Discussion about the video. What did they notice about what the people in the video were saying? What do they understand by the term "learning disability"? What differences and similarities did they notice in the video?

3. Class activity – "difficulty understanding" from Adcock and Remus
"Disability Awareness Activity Packet" (20 minutes)

Have 2 students sit back to back. Give one student a paper with an abstract shape on it. Without seeing each other, he/she must explain to the other student how to draw the shape. Give the second student a pencil and piece of paper. He/she must draw the shape following the first student's directions.

What were the problems? What would have helped? What did it feel like trying to explain the shape? What did it feel like not understanding what your partner was saying? What helps you understand? How did you feel in your role as the person drawing/as the guide? What was the most frustrating part? What did you do to help finish the task? What can we learn from this about how to talk to other people?

4. Worksheet on "What is learning disability?" for homework to be completed with parents

Session 3: Intervention 2 - Empathy

1. Summarising previous session with a short quiz (5 minutes)
2. Short documentary film of Max (15 minutes) followed by discussion

What did you notice about Max?

3. Everyone Everyday – “What would you do?” (20 mins)

Split class into six groups, each group is given one of the following scenarios and is asked to describe their feelings and subsequent actions for their situation. Two groups will be working on one of each scenario.

- a) Everyone in your class is going to a picnic in the park during the holidays but a classmate who is not popular is not invited. How would that classmate feel? What could you do to help?
- b) A classmate tells you not to play with someone from your class because they are ‘uncool’. What do you do?
- c) You see a classmate picking on someone and calling them names. How do you think this would make the child feel? What could you do?

4. “True Colours” video (15 minutes)

Discussion: What happened? Why do you think the girls reacted that way in the beginning? How might the girl be feeling? What would you do if you were in this situation? What would you tell the other girls to do? Did you see anyone do things your group agreed would be a good idea? Did you see the girls in the film do anything that would be nice to do?

5. Homework: Parents to watch True Colours, Max and Jenny videos and both pupil and parent complete homework sheet

Session 4: Intervention 3 – Self-efficacy

1. Summarising previous session with a short quiz and discussion (5 minutes)
 - a. What did you notice about Max?
 - b. What can we do to help someone feel included/welcome?
 - c. How would you feel if you were being picked on?
 - d. What could you say to someone who is picking on other people?
2. Role play “What would you do” (40 minutes - 10 minutes to create role play, 30 minutes to act out)

Class split into same six groups from the previous session. Each group now has to create a role play of the scenario they discussed in the previous week where they act out and show what they would do to intervene. Each play to be 2-3 minutes in length and each pupil will be allocated a role depending on the scenario that they pick from a hat.

- a) Everyone in your class is going to a picnic in the park during the holidays but a classmate who is not popular is not invited. How would that classmate feel? What could you do to help?
- b) A classmate tells you not to play with someone from your class because they are ‘uncool’. What do you do?
- c) You see a classmate picking on someone and calling them names. How do you think this would make the child feel? What could you do?

Roles: 3 actors, 1 director, 1 producer, 1 narrator/scribe

3. Discussion following role plays (10 minutes)

What have you learnt?

Will you do anything differently in future if in a similar situation?

Session 5: Post-intervention measures.

1. Summarising previous session with a short discussion (5 minutes)

What have you learnt?

Have you learnt anything new?

Will you do anything differently if in a similar situation in the future?

2. Post-intervention measures (20 minutes)

3. Spinclusion game (20 minutes)

Instructions as in session 1

Session 6: Follow-up measures

1. Complete measures at follow-up (20 minutes)
2. Class discussion (30 minutes)

Class discussion which will be audio recorded on what they have learnt from the sessions, is anything different? What did they like about the sessions? What did they not like? What could be better? What do they remember the most?

Resources

Spinclusion game posters:

INCLUSION:

What inclusion means to us

- Everyone gets to take part in games, activities, your classroom, or group
- We accept our differences because this makes us who we are
- We will welcome each other

CHALLENGES:

We want you to think about

1. Differences as being good
2. What people can do, not what they can't do
3. People's feelings

GROUND RULES:

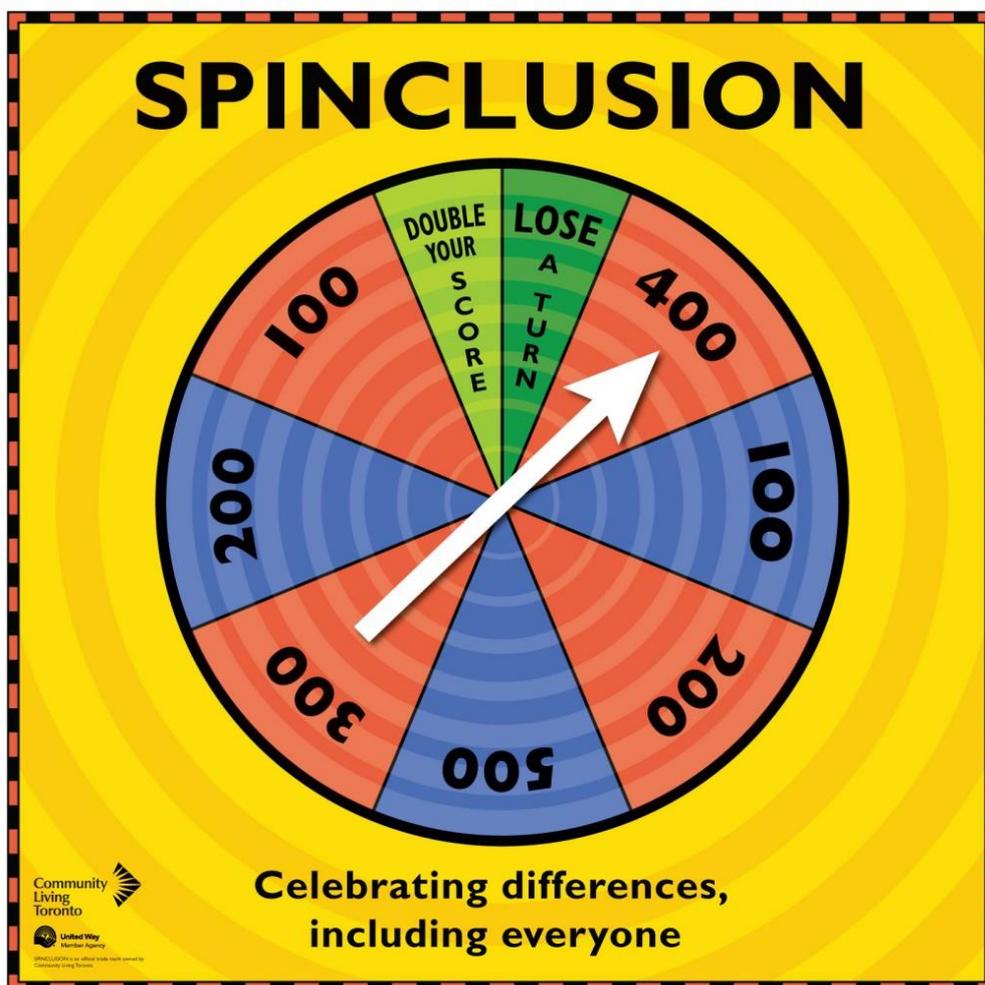
- Be respectful (no putdowns)
- One person speaks at a time
- Every team gets a turn
- There are no wrong answers if the challenges are being followed
- A penalty may be given to a team if the ground rules are broken

Spinclusion game sample questions

- How can you make someone feel better about him/herself?
- What is a good friend?
- How do you choose a friend?
- Why do you need friends?
- How do you make the new person in your class feel welcomed?
- If you have been mean to someone, how can you show them that you are sorry?
- Tell us one thing that is different about yourself or your teammates
- How can you help someone in your class if they are having trouble with their schoolwork?
- What is bullying? What can you do if you are being bullied?
- How can you play tag without the same person being “it” all the time?
- Your friend is being mean to someone. What can you do?
- If you break your leg, how can you still play with your friends?
- What sports can a person in a wheelchair play? How would they do it?
- If someone is feeling sad, how can you make him/her feel happy?
- How can you pick teams without someone being picked last?
- If you see a group of kids bullying another kid in the playground, what could you do to help?
- You are playing a game that is for 2 people and a 3rd person wants to join you. What can you do?
- If you moved to a new country and couldn't speak the language or understand anyone, how would you feel? What might you do about it?
- You have a new student in your class who has just moved here from a different country. Some kids are making fun of her at lunch time because of the food she is eating. What would you do?
- There's a new student in your class who doesn't speak any English. He is by himself at recess. What would you do?
- It is winter time and you and your friends are playing in the snow during recess. There is a new girl in your class who has just come from another

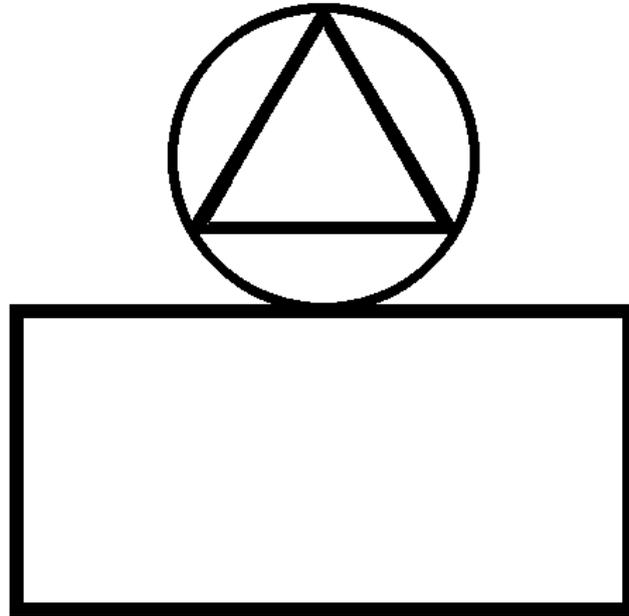
country where there is no snow. She feels scared of the snow and does not play with anyone. How can you make sure she is not left out?

- You have come back from Christmas break and you ask your friend who has just moved here from a different country, what he got for Christmas. Your friend says he doesn't celebrate Christmas. What kinds of questions can you ask to learn more about his culture and celebrations?
- BONUS: One team member is blindfolded and his/her teammates have to verbally give directions to get something specific (e.g. water bottle).

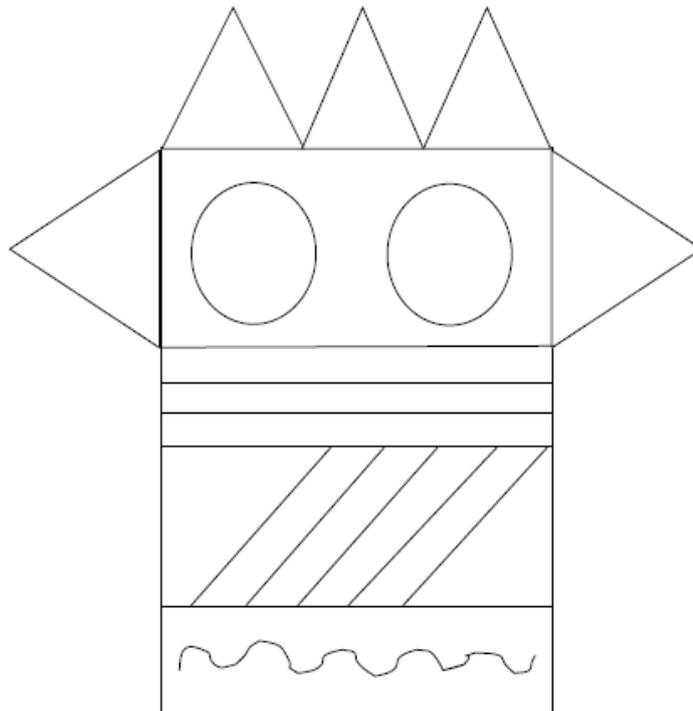


Session 2 – difficulty understanding

For year 4 classes:



For year 6 classes:



Homework worksheet: What is a learning disability?

Write down four things you learnt today about how to help someone when they are finding things difficult to understand.

1
2
3
4

Short quiz recapping raising awareness session

1. What does “ABILITY” mean?
2. What does the word “UNIQUE” mean?
3. Does everyone have the same abilities?
4. What does it mean to have a learning disability?
5. What can we do to help us understand each other?

PSHE Lesson 3

Read the description below and answer the questions

Everyone in your class is going to a picnic in the park during the holidays but a classmate who is not popular is not invited.

1. How would that classmate feel?

2. What could you do to help?

PSHE Lesson 3

Read the description below and answer the questions

A classmate tells you not to play with someone from your class because they are 'uncool'.

1. How do you think this would make the child feel?

2. What could you do to help?

PSHE Lesson 3

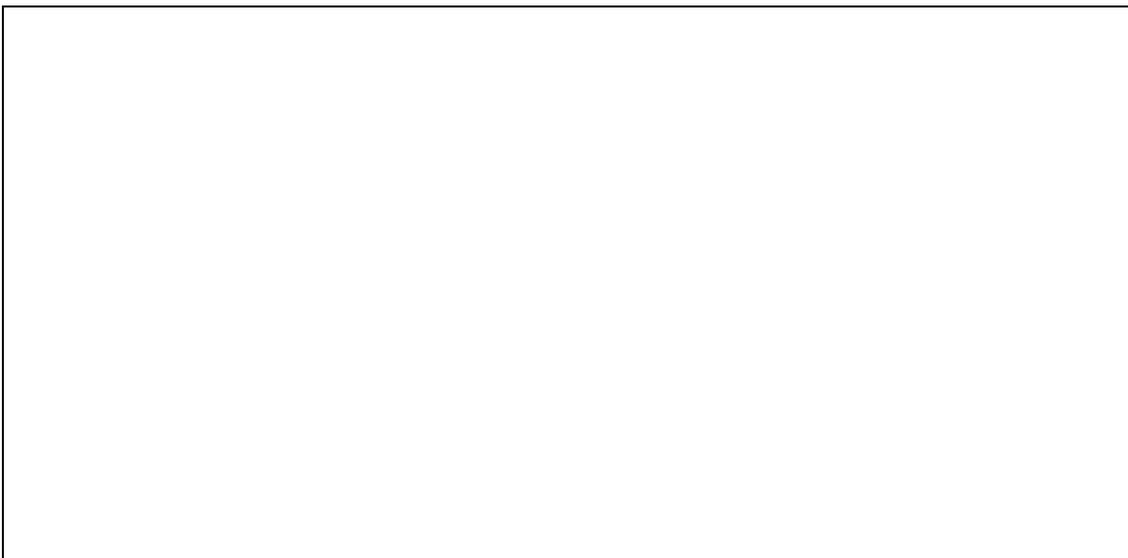
Read the description below and answer the questions

You see a classmate picking on someone and calling them names.

1. How do you think this would make the child feel?



2. What could you do to help?



PSHE Homework 2

Go to this link and watch the videos “Max”, “Jenny” and “True Colours” with your homework helper: <http://tinyurl.com/PSHEvideos>

Once you have seen all three videos, talk about what you watched and answer the questions below. Remember to think about FEELINGS and how you can HELP.

1) How do you think Max felt when the other kids were being mean to him?

2) How can you help a child like Max feel welcome on their first day of school?

3) How do you think Jenny felt when Max was not invited to activities with his classmates outside of school?

4) What did you learn from watching Jenny talk about her experience?

Short quiz recapping empathy session

1. What did you notice about Max?
2. What can we do to help someone feel included/welcome?
3. How would you feel if you were being picked on?
4. What could you say to someone who is picking on other people?

Appendix M: Interview schedule for teachers and SENDCO

Interview Schedule for Teachers

1. What did you think about the programme overall?
2. Did you find the programme a useful addition to the curriculum?
3. Contents, Structure, and Delivery:
 - Thinking about the contents and structure of the programme:
 - What parts of the programme worked well? Were there any highlights for you?
 - What parts of the programme worked less well?
 - How did you find the delivery of the programme?

e.g. pacing, variety of tasks/activities, language used, discussion topics etc

- How effective was the use of multi-media components?
- Would you suggest any changes or improvements to the programme/lessons?
- Were there any elements missing that you think would have been useful to include?

4. Homework & Parental Involvement:

- What did you make of the homework tasks?
- How could the homework completion be improved?
- Do you have any suggestions on how to get parents more involved?

5. Impact:

- What do you think was the impact on the children, if any?
- Did you notice any changes within the classroom during or after the lessons?

e.g. student behaviour, active participation, inclusive environment, peer relations

- Were you surprised by any of the responses from your pupils?
- Do you think the programme was successful in meeting the overall aims of the project?

(improve social inclusion and create a more cohesive environment in the classroom and beyond)

6. Future:

- Are there any parts of the lessons/activities that you would incorporate in your teaching with other classes?
- Do you think the lessons (or a revised version) should be delivered to other classes?
- Would you advise other schools to deliver this or a revised version of the programme?

7. Training:

- Did the brief training prepare you sufficiently well?
- Would you be able to deliver the lessons to other classes?
- Would you feel able to train other teachers in the school on the programme?

Interview Schedule for SENDCO

1. What did you think about the programme overall?

2. Did you consider the programme a useful addition to the curriculum?

- What if anything extra did you think the programme might provide?
- How well do you think the issues addressed in the programme are covered by your school/within the national curriculum?
- Do you think the programme was successful in meeting the overall aims of the project?

(improve social inclusion and create a more cohesive environment in the classroom and beyond)

3. Liaison & Engagement

- What did you think of the process how the school/you were approached by UCL?
- How easy or difficult was it to convince school leadership to take part in the programme?
- Could the researchers have done anything else to facilitate your discussions with school leadership about taking part?
- What general thoughts do you have on engagement by the researcher with the school (e.g. initial meetings, training, weekly update and planning email)?

4. Training:

- What did you make of the brief training session?
- Do you think this provided the right level of information to teachers? Too much/ too little?

5. Homework & Parental Involvement:

- What do you think of the attempt to involve parents via the homework tasks?
- Do you have any suggestions on how to get parents more involved?

6. Feedback:

What feedback have you had from participating teachers? (positive and negative)

Have you had any feedback from children or parents?

7. Impact:

- From your position as SENDCO, what do you think has been the impact on the children, if any?
- What do you think has been the impact on teachers, if any?
- What do you think has been the impact on parents, if any?

8. Future:

- Might you consider delivering this or a revised version of the programme in other year 4 to Year 6 classes?
- Would you advise other schools to deliver this or a revised version of the programme?
- Any suggestions for taking this forward?

Appendix N: Interview schedule classroom discussions

1. What did you like about the lessons?
2. What did you not like?
3. What was your favourite part?
4. What was your least favourite part?
5. What was the most important thing you learned?
6. Would you change any of the tasks in the lessons?
7. Do you think the lessons were useful/interesting?
8. Do you think other classes in your school should have the same lessons?