

**Making reasonable adjustments for pupils with special educational needs and disabilities: pre-service teachers' perceptions of an online support resource**

MORLEY, David <<http://orcid.org/0000-0002-4389-8573>>, MAHER, Anthony, WALSH, Barbara, DINNING, Track, LLOYD, Diane and PRATT, Andrea

Available from Sheffield Hallam University Research Archive (SHURA) at:

<http://shura.shu.ac.uk/15719/>

---

This document is the author deposited version. You are advised to consult the publisher's version if you wish to cite from it.

**Published version**

MORLEY, David, MAHER, Anthony, WALSH, Barbara, DINNING, Track, LLOYD, Diane and PRATT, Andrea (2017). Making reasonable adjustments for pupils with special educational needs and disabilities: pre-service teachers' perceptions of an online support resource. *British Journal of Special Education*, 44 (2), 203-219.

---

**Copyright and re-use policy**

See <http://shura.shu.ac.uk/information.html>

## 1 **Introduction**

2 Whilst different countries around the world established educational support for children with  
3 learning difficulties and disabilities (see, for example, EADSNE, 2003; US Department of  
4 Education, 2004), the UK's Children and Families Bill (DfE/DfBIS, 2013) endeavored to meet  
5 the social, educational, and health needs of all children through accessibility and entitlement to  
6 services such as education. The onus, here, was on schools to make 'reasonable adjustments'  
7 through the formulation and implementation of strategies to improve 'access' to the taught  
8 curriculum (Porter et al., 2013). The Bill was influenced by the Equality Act (Stationery Office,  
9 2010), which called on British schools to 'avoid as far as possible by reasonable means, the  
10 disadvantage which a disabled pupil experiences because of their disability' (EHRC, 2015).  
11 Teachers of all subjects need to be creative and flexible in order to develop and deliver  
12 differentiated lessons that optimize the capabilities of all pupils, even more so for children with  
13 special educational needs and disabilities (SEND) (Lovey, 2002).

14         Within educational institutions, teachers' competence and confidence affect their ability  
15 to make reasonable adjustments for pupils with SEND, and this highlights the crucial role of  
16 appropriate pre-service training. Studies carried out in the USA (Van Reusen et al., 2000),  
17 Australia (Center & Ward, 1987), and the UK (Avramidis & Norwich, 2002) suggest that  
18 training and qualifications acquired during pre-service training, aimed specifically at supporting  
19 children with SEND, resulted in positive attitudes towards inclusion and more inclusive  
20 pedagogies amongst teachers.

21         The importance of teacher training for developing positive attitudes to inclusion and  
22 increasing competence and confidence when teaching pupils with SEND is further emphasized  
23 within UNESCO's policy guidelines on inclusion in education (2009), the world report on

24 disability (WHO, 2011), and a more recent publication of the European Agency for Development  
25 in Special Needs Education (2012). Whilst the upskilling of teacher trainees in teaching children  
26 with SEND has formed part of the training of mainstream primary and secondary school teachers  
27 for some time now in the UK, the coverage has been found to be varied, inconsistent, and in  
28 some instances, limited (Salt, 2010), especially according to newly qualified primary school  
29 teachers (NCTL, 2014). The time pressures of one-year teacher education programs has meant  
30 that time spent covering inclusion is at a premium in the UK (Salt, 2010), despite its  
31 aforementioned importance, at least at policy level.

32 Policy guidelines relating to reasonable adjustments suggest that schools must take  
33 reasonable steps to avoid disadvantage to a pupil with a disability caused by provision or practice  
34 applied by a school (Stationery Office, 2010). However, there is no mention as to the most  
35 appropriate medium of dissemination for teachers to be able to access, absorb, and utilize the  
36 knowledge required to actually implement such steps. Internationally, there has been a notable  
37 increase in the number of teacher education programs that use technology-mediated instruction  
38 for distance learning. For those who teach children with moderate to severe learning difficulties,  
39 online instruction has been deemed a largely successful form of pedagogy (e.g. Jameson &  
40 McDonnell, 2007). Some of the reported benefits of online professional development tools for  
41 teachers are convenience, flexibility, and reduced travel cost (Hurt, 2008), all of which are  
42 pragmatic rather than pedagogical. Thompson et al. (2012) went one step further in their research  
43 by developing a methodology that enabled a comparison of face-to-face and online delivery  
44 formats. Here, similar outcomes were found across both formats *vis-à-vis* pupil achievement,  
45 engagement, and satisfaction (Thompson et al., 2012).

46           Whilst international research, particularly in the USA, has explored the views and  
47 experiences of pre-service teachers in relation to (1) teaching pupils with SEND and (2) using  
48 online resources for professional development purposes, predominantly in distance learning  
49 programs (e.g. Hartley et al., 2015), to our knowledge, none has yet attempted to evaluate the  
50 impact of a specific online resource on pre-service teachers' ability to make reasonable  
51 adjustments for children with SEND within the context of the UK professional teaching  
52 standards framework (DfE, 2013). An understanding of the impact of online distance learning  
53 support on teachers' effectiveness, recruitment, and retention has been called for on numerous  
54 occasions (e.g. Hanline et al., 2012). Given the purported need for more high-quality and  
55 relevant SEND training in the UK, this article aims to evaluate the impact of an online resource  
56 on the perceptions of pre-service teachers in making reasonable adjustments for pupils with  
57 SEND. In order to achieve this aim, the following objectives were set: (1) explore pre-service  
58 teachers' perceptions of making reasonable adjustments prior to, and following, the use of the  
59 online resource; and (2) evaluate the impact of the online resource on how pre-service teachers  
60 plan for, teach, and assess pupils with SEND within the construct of Teachers' Standards (DfE,  
61 2013).

## 62 *Methodology*

### 63 **Background**

64 The UK Parliament established the Equality and Human Rights Commission (EHRC), under the  
65 auspices of the 2006 Equality Act, with the mandate of challenging discrimination, and  
66 protecting and promoting human rights (EHRC, 2015). The EHRC's role is that of outcomes-  
67 focused strategic regulator, promoter of standards and good practice, and center for intelligence  
68 and innovation (EHRC, 2015). Academic staff from a university in North-West England were

69 funded by the EHRC to develop a suite of online modules (known hereafter as the ‘online  
70 resource’) to help teachers to make reasonable adjustments for pupils with SEND (EHRC, 2016).  
71 The online resource was developed to support a range of staff working with pupils with SEND  
72 within mainstream schools, namely, senior leaders and managers, and teaching assistants and  
73 pre-service teachers, as well as classroom-based and subject-specific teachers. The EHRC  
74 approved the evaluation of the online resources, although they had no influence over the research  
75 design or the publication of findings. University ethical approval was sought and granted in line  
76 with the British Educational Research Association’s ethical guidelines (BERA, 2011).

## 77 **Approach**

78 An interpretivist qualitative approach was used in this research because it was deemed the most  
79 appropriate for exploring the key research questions (Teddlie & Tashakkori, 2010) which were  
80 designed to help shed light on pre-service teachers’ views and their experiences of the online  
81 resource and how it had, or had not, influenced the way in which they made reasonable  
82 adjustments for pupils with SEND. Therefore, an interpretivist approach afforded an  
83 understanding of the social worlds of pre-service teachers through an exploration of meaning  
84 constructed by them (Bryman, 2012). A notable limitation of qualitative approaches is that the  
85 knowledge generated from pre-service teachers cannot and should not be generalized to wider  
86 populations of teachers. Nonetheless, the findings of this study can go some way towards  
87 contributing to the ever-growing body of knowledge (Elias, 1987) on teacher training and  
88 inclusive education.

## 89 **Method**

90 Focus group discussions were used as a method to capture data because they are recognized as  
91 beneficial for researchers interested in how pre-service teachers interpret, construct, and  
92 negotiate meaning (Payne & Payne, 2004), *vis-à-vis* the experiences of the training they receive  
93 and how, if at all, such training informs practice. Given that pre-service teachers' views and  
94 experiences are shaped through interaction with others (Elias, 1987), including fellow pre-  
95 service teachers, when gathering data, focus groups were used as a way of reflecting this  
96 dynamic social interaction. Here, the collective view is just as important as the individual view  
97 because meaning and the interpretation of experiences is often sought and achieved through  
98 negotiation (Bryman, 2012), a view which is in keeping with an interpretivist paradigm.

99 In order for the discussion to have a degree of structure and be germane to the objectives  
100 of the research, an interview guide was used (Marshall & Rossman, 2011). This helped to ensure  
101 that an appropriate degree of consistency across focus groups was achieved during data  
102 generation, whilst giving enough flexibility to allow for exploration of issues that were salient to  
103 each individual and group (Arthur et al., 2013). The interview schedule was structured in direct  
104 relation to the three research objectives and conceptualized within the context of Teachers'  
105 Standards (DfE, 2013). In the UK, the Standards (DfE, 2013) identify the minimum level of  
106 practice expected of pre-service teachers in order to be awarded qualified teacher status (QTS).  
107 Whilst research has explored the potential and actual impact of the Teachers' Standards on  
108 teacher professionalism, accountability, identity, and competence (e.g. Goepel, 2012), none has  
109 yet used the Standards as an organizing conceptual tool. Table 1 exemplifies questions mapped  
110 to Standards.

111 **[Insert Table 1 here]**

112 *Sample and Procedures*

113 Secondary school teacher trainees (n=12) participated in four focus groups, consisting of three  
114 participants per group, with the interviews conducted at a university in North-West England.  
115 Researchers gave an information letter to pre-service teachers, prior to their involvement, which  
116 explained the study and requested their involvement in the research. The participants who were  
117 recruited were those who were deemed most able to discuss our research objectives as they  
118 fulfilled the following criteria: (1) had studied the reasonable adjustments online modules; (2)  
119 were studying towards an undergraduate degree in teaching in order to obtain QTS; (3) had  
120 experience of working with children with SEND; and (4) were available and willing to  
121 participate in a focus group.

122 Participants signed consent forms as evidence that their involvement was voluntary and  
123 that they were aware that they could withdraw from the study at any moment with all data  
124 generated being destroyed (BERA, 2011). Focus groups were held in separate classrooms at the  
125 university in which the participants were studying. This setting was used as the familiarity of the  
126 environment and fellow participants might have encouraged more open and honest discussions,  
127 thus resulting in the capture of richer data (Bryman, 2012). Focus group discussions generally  
128 lasted between 30 and 60 minutes; such a large disparity in duration was determined by the  
129 participants' willingness to engage in relevant and meaningful discussion. To ensure a degree of  
130 consistency across the focus groups, the lead researcher met with all of the researchers  
131 responsible for facilitating the interviews to discuss the interview process, themes, and use of  
132 pertinent probes. Briefing notes were also provided to help with standardization. Of course, the  
133 dynamic and fluid nature of focus groups (Payne & Payne, 2004) meant that a high degree of  
134 control and regulation was not achievable or even desirable.

135 An audio recording device was used, with the permission of participants, to record  
136 discussions. This approach attempted to prevent key information being missed and allowed the  
137 facilitator the freedom to engage with the group. Soon after each focus group,  
138 the audio file was uploaded to a password-protected file on a personal computer and deleted  
139 from the audio device as a way of meeting data protection requirements (Stationery Office,  
140 1998). Audio files were then transcribed verbatim, and during this process all identifying  
141 information was replaced by pseudonyms (Participant A, for example) to ensure anonymity  
142 (Webster et al., 2013). Transcripts were also saved to a password-protected file on a personal  
143 computer for data analysis.

#### 144 *Data Analysis*

145 A computer-assisted qualitative data analysis software (CAQDAS) package was used to store,  
146 manage, and code the interview transcripts. The use of CAQDAS is reported to improve the rigor  
147 and consistency of analysis because it allows for all data to be systematically explored rather  
148 than simply those parts that support a researcher's interpretation (Seale, 2010). It must be noted,  
149 however, that the coding of transcripts is still the role of researchers. In response to the research  
150 aim, data relating to the objectives concerning pre-service teachers' perceptions was coded using  
151 thematic analysis whereby hierarchical ordering of data was achieved using themes, with  
152 thematic descriptors, and sub-themes articulated as they emerged. Conversely, where objectives  
153 were more stringently established to fulfill a particular purpose, data analysis was very much  
154 construed around the research questions, as some questions were mapped specifically to reveal  
155 particular perceptions, for example, those to which Teachers' Standards (DfE, 2013) were  
156 mapped. For example, Standard 4 relates to 'plan and teach well-structured lessons' and was  
157 transposed within the code of 'Planning'. Coding involved labeling sections of the transcripts



158 aligned to the research objectives and also exploring emerging themes. These were then stored  
159 together to form sub-categories and then key themes (Flick, 2009). These are shown below in  
160 Table 1 and have been used to structure the findings and discussion.

161 **[Insert Table 2 here]**

## 162 **Findings**

### 163 *The Impact of the Online resource on Participants' Understanding of Reasonable Adjustment* 164 *and Children's Needs*

165 The focus groups aimed to explore what, if any, impact the online resource had on pre-service  
166 teachers' understanding of reasonable adjustments and the needs of pupils with SEND. This was  
167 in line with the requirements of the Teachers' Standards (DfE, 2013, p. 12), which state that  
168 'teachers must have a clear understanding of the needs of all pupils, including those with special  
169 educational needs'. The two sub-themes to emerge from the data analysis were (i) complexity of  
170 SEND in relation to making reasonable adjustments and (ii) influence of previous experience,  
171 both of which are explored below.

### 172 *Complexity of SEND in Relation to Making Reasonable Adjustments*

173 For some pre-service teachers, the nature of the impact of the online resource was clearly  
174 evident:

175 It wasn't until the software [online resource] we used that I realised how much more that  
176 was out there that you had to make reasonable adjustments for. So again, the software did  
177 open my eyes a bit more to stuff that I haven't yet dealt with, but I may come across  
178 (Participant A).

179  
180 It did open my eyes to what it could mean in terms of physical disabilities, maybe  
181 meaning you would have to think about how you would do classroom activities or  
182 outdoor activities to make sure that they [pupils with SEND] are included. So I think it

183 has opened my eyes to the scope of what reasonable adjustments could mean (Participant  
184 A).

185  
186 Recent UK governmental policy has endeavored to capture and convey the complexity of the  
187 needs of pupils with SEND in the way that needs are typified related to (1) communicating and  
188 interacting; (2) cognition and learning; (3) social, emotional, and mental health difficulties; and  
189 (4) sensory and/or physical needs (DfE/DoH, 2015). However, it must be noted that pupil needs  
190 and capabilities are dynamic and ever changing, rather than rigid and fixed, so cannot be  
191 compartmentalized into categories of convenience. Whilst recognizing that ‘categories’ of SEND  
192 are perhaps an effective way of knowledge transmission, in the same mechanistic way in which  
193 Teachers’ Standards are promulgated, it is paramount that teachers recognize that pupils with  
194 SEND are not a homogenous group and reasonable adjustments should be made according, as  
195 always, to individual need. For Participants A and B, the resource was deemed to have impact  
196 because it broadened their knowledge and understanding of the scope and complexity of pupil  
197 needs and how these needs can be met through making reasonable adjustments.

#### 198 *Previous experience*

199 Participant J suggested that the impact of the online resource was reduced because they had four  
200 years’ experience working with pupils with SEND as a teaching assistant. When asked if the  
201 online resource had influenced their understanding of reasonable adjustments, they replied: ‘Not  
202 really, because I did it already in my school for the past four years. I think that if I hadn’t done it  
203 for them for four years, then it would have helped me a little bit. But because I’ve already done  
204 it, I already knew most of it’ (Participant J). Participant D was another who had previous  
205 experience of working with pupils with SEND: ‘I have experienced working with disabled young  
206 people before I started my teacher training. I worked in an SEN school, working with children

207 with autism. So that's my kind of background before I started my teacher training'. Participant E,  
208 too, had experience working with children with autism, in their capacity as a teaching assistant in  
209 a mainstream school: 'I did a year as a TA [teaching assistant] before I applied to be a teacher  
210 and that was in the SEN department so there were various different students. There was anything  
211 from really physical abilities to just lower abilities; kids with autism, a whole range really'.  
212 These findings present a stark contrast to studies in other countries, which report pre-service  
213 teachers feeling under underprepared due to their lack of experience of working with children  
214 with SEND (Hemmings & Woodcock, 2011).

215         It is perhaps unsurprising to hear that some of the pre-service teachers had previously  
216 worked as teaching assistants given that, in Britain at least, successful entrance onto teacher  
217 education courses at universities and in schools has become much more competitive as a result of  
218 central government funding cuts (Ward, 2013). A fortunate by-product of this competitive  
219 environment is that pre-service teachers are bringing with them an array of practitioner-based  
220 experiences that allow them to maximize opportunities for reflection and professional  
221 development during their Initial Teacher Training. It has long been established that prior  
222 experience of working with pupils with SEND can lead to positive attitudes to inclusion in  
223 education (Avramidis & Norwich, 2002) and, arguably, a greater propensity to make reasonable  
224 adjustments. Studies in the USA have provided similar evidence that the experiential benefit  
225 gained from working with children with a range of disabilities greatly affects the perceived  
226 confidence of pre-service teachers (Cramer et al., 2015). What remains, however, are questions  
227 related to the quality of the experience provided during pre-service training. For example,  
228 Guardino (2015) found that the majority of teachers (53%) in her study felt that their pre-service

229 teacher-training program had prepared them ‘slightly’ to ‘not at all’ in relation to the specific  
230 teaching of children who were deaf or hard of hearing.

231 For other pre-service teachers, the impact of the resource was minimal in that it ‘did  
232 [increase awareness] to an extent but it was very basic. It [the content] was more common sense  
233 than it was new information’ (Participant G). Participant I supported these comments by saying  
234 ‘I agree. It [the online resource] seemed like a recap of things we’ve previously covered. Points  
235 to consider and different aspects we needed to look at, but nothing specifically new’. This is not  
236 necessarily to say that the online resource is not a useful tool for increasing awareness of  
237 reasonable adjustments and the needs of pupils. It is more, perhaps, the encouraging news that  
238 some pre-service teachers had already gained this knowledge regarding meeting the needs of  
239 children with SEND from previous experiences and/or pre-service training, whilst others had not.

#### 240 *Impact on Teaching and Learning*

241 In order to move beyond an analysis of the impact of the online resource on pre-service teacher  
242 knowledge of reasonable adjustments, the focus groups explored the ways in which, if at all, the  
243 online resource has influenced the actions of pre-service teachers; that is, the impact of the online  
244 resource on their practice. The three most prominent sub-themes to emerge within this theme  
245 were (i) planning and (ii) assessment.

#### 246 *Planning*

247 According to Participant I, the online resource ‘had a massive impact on planning, in that I was  
248 able to give more consideration to things that I needed to put in place for the students, things that  
249 I might need to consider and plan for’. Participant F was another who suggested that the online  
250 resource had a positive impact on their planning for inclusion because it ‘covered a crucial

251 awareness that aided the planning of lessons... Being able to plan ahead of time rather than  
252 doing things off the cuff is key, so the lessons are as seamless as possible to the students'. One of  
253 the key benefits of being proactive through careful inclusive lesson planning – rather than  
254 reactive by trying to make adjustments during a lesson as challenges to inclusion emerge – is that  
255 the approach is more in keeping with a social ideology of disability (Barton, 1993). Indeed,  
256 attempts to restructure learning environments so that pupils with SEND do not have to assimilate  
257 into the culture of education that was intended for pupils without SEND are often considered to  
258 be more inclusive (Barton, 1993). Comments by Participant H also clearly illustrate the ways in  
259 which the online resource has influenced how they plan for inclusion:

260 I found that having the awareness of it [reasonable adjustments] did impact on my  
261 planning because you are sitting there thinking, what can I do for the warm-up? When I  
262 was planning the warm-up, when I was planning the ore movement that I was going to  
263 teach them throughout the lesson, I was thinking: make it more accessible to that  
264 particular learner. I put her in a group with some core movement that had been adapted  
265 for her, so that was really helpful.

266  
267 Whether the approach mentioned by Participant H ensured that the identified pupil had a more  
268 meaningful and enriching learning experience is difficult to say from the data available. What  
269 can be said, however, is that the online resource is reported to have had a positive impact on the  
270 way pre-service teachers attempt to make reasonable adjustments during the planning stage,  
271 which is encouraging given that the Teachers' Standards (DfE, 2013) require teachers to 'plan  
272 and teach well-structured lessons' and 'contribute to the design and provision of an engaging  
273 curriculum' for all pupils, including those with SEND.

#### 274 *Assessment*

275 The next theme to be explored relates to the ways in which the online resource influenced how  
276 the pre-service teachers made reasonable adjustments as part of assessment strategies. According

277 to Participant I, the online resource ‘changed how I look at assessment’. For them, it was  
278 important that all pupils are ‘measured against the same grading system, but it might be tweaked  
279 or changed to make it personal for an individual’ (Participant I). Conversely, Participant A was  
280 quite critical of the ‘one-size-fits-all assessment for GCSE [General Certificate of Secondary  
281 Education] students’ by arguing that you have to be able to make adjustments to assessments  
282 ‘otherwise, you are not going to get an across-the-board assessment of how people [pupils] have  
283 progressed’. Unfortunately, it is beyond the scope of this article to explore the appropriateness of  
284 standardized GCSE assessments for pupils with SEND (see Salvia et al., 2013). Nonetheless, it is  
285 worth remembering that there is a legal duty for teachers to use appropriate assessment to set  
286 targets which are deliberately ambitious and ensure the progress of all pupils, including those  
287 with SEND (DfE/DoH, 2015). Participant C explained how, based on what they had learned  
288 from the online resource, they made reasonable adjustments as part of their assessment  
289 strategies: ‘there are adjustments for abilities and then obviously a student might be given a  
290 scribe or a reader so there is an adjustment for the exam. Yes, that is it, isn’t it, a reader or a  
291 scribe’. Participant E is another who gave specific examples of the reasonable adjustments they  
292 now make as a result of the online resource: ‘If it was a child with autism, where they sit in the  
293 classroom is important; who they sit with is important. Children who are dyslexic, making sure  
294 their papers are different’.

295         Whilst Participants C and E focused on the reasonable adjustments made as part of the  
296 assessment activities, Participant J emphasized what they learned from the online resource when  
297 it comes to ensuring that pupils with SEND are prepared for the assessment:

298         For our ASD pupils, we have to make adjustments to the classroom to make sure that  
299 they’re free, everything’s labeled, that we’ve got visual timetables around so that the  
300 pupils know what’s happening throughout the day. That around the school everything is

301 labeled so the children know where things are and that the day rooms run smoothly and if  
302 there are any changes, that pupils are made aware of it as soon as possible (Participant J).

303  
304 *Conclusion*

305 This research evaluated the impact of an online resource on the perceptions of pre-service  
306 teachers in making reasonable adjustments for pupils with SEND. From the findings of the  
307 research, it appeared that pre-service teachers are a receptive group when it comes to reasonable  
308 adjustments, in that they seem committed to understanding the needs and capabilities of pupils  
309 with SEND and making adjustments to learning activities and other experiences to ensure that all  
310 pupils are equitably challenged to meet their potential.

311 The online resource appeared to increase the knowledge and understanding of some pre-  
312 service teachers in relation to the complexity of SEND as a concept and was generally well  
313 received as a learning format. This reflects previous international studies that have used  
314 technology to successfully support pre-service teachers in special education, perhaps due to its  
315 engaging and interesting format (Rayner & Allen, 2013).

316 The impact of the online resource was less noticeable for those who had previous  
317 experience of supporting pupils with SEND in schools. This is not necessarily to say that the  
318 online resource is not a useful tool for increasing awareness of reasonable adjustments. In fact,  
319 the impact was deemed significant by those who had little or no experience of making reasonable  
320 adjustments and/or working with pupils with SEND. It is more that some pre-service teachers  
321 had already gained this knowledge from previous experiences, whilst others had not. Perhaps the  
322 online resource could be differentiated itself with an initial scoping exercise of previous  
323 experiences that would then lead to the appropriate signposting based on a teacher trainee's prior  
324 experiences of supporting children with SEND. After all, structured 'field' experiences and  
325 knowledge of disability are said to increase awareness and positive attitudes to teaching pupils

326 with SEND (Campbell et al., 2003). It would be interesting to know what, if any, impact the  
327 online resource would have on serving teachers, given that most, if not all, should have some  
328 experience of teaching pupils with SEND.

329         When it comes to teaching and learning, the online resource was found to have had a  
330 positive impact on the planning and assessment strategies of pre-service teachers. Making  
331 reasonable adjustments at the planning stage will, arguably, ensure that a well-structured lesson  
332 and engaging curriculum are delivered to all pupils, including those with SEND..

333         What is not yet known is how committed to making reasonable adjustments other key  
334 stakeholders are. Future research will need to analyze the extent to which senior managers in  
335 schools, SENCOs, and LSAs, to name a few, are committed to making reasonable adjustments.  
336 There are many involved in the educational experiences of pupils with SEND, and the extent to  
337 which they are committed or opposed to making reasonable adjustments will influence, by  
338 degrees, whether or not pupils experience disadvantage.

339         The evaluation of the resource over a sustained period of time is crucial in understanding  
340 whether pre-service teachers entering the profession are given the expressive freedom (Elias,  
341 1978) to make reasonable adjustments by those who are part of their schools, such as senior  
342 managers, fellow teachers, support assistants, and pupils. This is particularly important when  
343 considering the ‘wash-out’ effect (Zeichner, 1986) that newly qualified teachers might  
344 experience as they become socialized into their new institutions, with the potential for ideals and  
345 practices developed at university being superseded by their new culture.

346 *References*



347 Adewoye, M., Porter, S., & Donnelly, L. National College for Teaching and Leadership (NCTL).  
348 (2014). *Newly qualified teachers: annual survey 2014 research report*. London: NCTL.

349 Arthur, S., Mitchell, M., Lewis, J., & McNaughton-Nicholls, C. (2013). Designing fieldwork. In  
350 J. Ritchie, J. Lewis, C. McNaughton-Nicholls, & R. Ormston (Eds.) *Qualitative research*  
351 *practice (2nd Ed.)* (pp.147-176). London: Sage.

352 Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration / inclusion: a  
353 review of the literature. *European Journal of Special Needs Education*, 17, 129-147.

354 Barton, L. (1993). Disability, empowerment and physical education. In J. Evans (Ed.) *Equality,*  
355 *education and physical education* (pp.43-54). London: The Falmer Press.

356 British Educational Research Association (BERA) (2011). *BERA Ethical guidelines for*  
357 *educational research*. London: BERA.

358 Bryman, A. (2012). *Social research methods* (4th Ed.), Oxford: Oxford University Press.

359 Campbell, J., Gilmore, L., & Cuskelly, M. (2003). Changing student teachers' attitudes towards  
360 disability and inclusion. *Journal of Intellectual and Developmental Disability*, 369-379.

361 Center, Y., & Ward, J. (1987). Teachers' attitudes towards the integration of disabled children  
362 into regular schools. *The Exceptional Child*, 34, 41-56.

363 Cramer, E. S., Coleman, M. B., Park, Y., Bell, S. M., & Coles, J. T. (2015). Art Educators'  
364 Knowledge and Preparedness for Teaching Students With Physical, Visual, Severe, and Multiple  
365 Disabilities. *Studies in Art Education*, 57, 6-20.

366 Department for Education (DfE) (2013). *Teachers' standards: guidance for school leaders,*  
367 *school staff and governing bodies*. London: DfE

368 Department for Education (DfE), & Department for Business, Innovation and Skills (DfBIS)  
369 (2013). *Children and Families Bill 2013*. London: DfE/DfBIS.

370 Department for Education (DfE), & Department of Health (DoH) (2015). *Guidance on the*  
371 *special educational needs and disability (SEND) system for children and young people aged 0 to*  
372 *25*. London: DfE/DoH.

373 Elias, N. (1978). *What is sociology?* New York: Columbia University Press.

374 Elias, N. (1987). *Involvement and detachment*. Oxford: Blackwell.

375 European Agency for Development in Special Needs Education (EADSNE) (2003). *Special*  
376 *education across Europe in 2003: trends in provision in 18 European countries*. Brussels:  
377 EADSNE.

378 European Agency for Development in Special Needs Education (EADSNE) (2012). *Teacher*  
379 *education for inclusion: profile of inclusive teachers*. Brussels: EADSNE.

380 Equality and Human Rights Commission (EHRC) (2015). *About the commission*. London,  
381 England: EHRC. Retrieved from [http://www.equalityhumanrights.com/about-us/about-the-](http://www.equalityhumanrights.com/about-us/about-the-commission)  
382 [commission](http://www.equalityhumanrights.com/about-us/about-the-commission) [Accessed 13 October 2015].

383 Equality and Human Rights Commission (EHRC) (2016). *Commission launches online training*  
384 *kit to help schools unlock opportunity for disabled children*. London, England: EHRC. Retrieved  
385 from [http://www.equalityhumanrights.com/commission-launches-online-training-kit-help-](http://www.equalityhumanrights.com/commission-launches-online-training-kit-help-schools-unlock-opportunity-disabled-children)  
386 [schools-unlock-opportunity-disabled-children](http://www.equalityhumanrights.com/commission-launches-online-training-kit-help-schools-unlock-opportunity-disabled-children).

387 Flick, U. (2009). *An introduction to qualitative research* (4th Ed.). London: Sage.

388 Goepel, J. (2012). Upholding public trust: an examination of teacher professionalism and the use  
389 of Teachers' Standards in England. *Teacher Development: An International Journal of Teachers'*  
390 *Professional Development*, 16, 489-505.

391 Guardino, C. (2015). Evaluating teachers' preparedness to work with students who are deaf and  
392 hard of hearing with disabilities. *American Annals of the Deaf*. 160, 415-426.

393 Hanline, M. F., Hatoum, R. J., & Riggie, J. (2012). Impact of Online Coursework for Teachers of  
394 Students With Severe Disabilities: Utilization of Knowledge and Its Relationship to Teacher  
395 Perception of Competence. *Research and Practice for Persons with Severe Disabilities*, 37, 247-  
396 262.

397 Hartley, M. D., Ludlow, B. L., & Duff, M. C. (2015). Second Life®: A 3D Virtual Immersive  
398 Environment for Teacher Preparation Courses in a Distance Education Program. *Rural Special*  
399 *Education Quarterly*, 34, 21-25.

400 Hemmings, B., & Woodcock, S. (2011). Preservice teachers' views of inclusive education: A  
401 content analysis. *Australasian Journal of Special Education*, 35,103-116.

402 Hurt, J. (2008) The advantages and disadvantages of teaching and learning on-line. *Delta Kappa*  
403 *Gamma Bulletin*, 74, 4-11.

404 Jameson, J. M., & McDonnell, J. (2007). Going the distance to train teachers for students with  
405 disabilities: The University of Utah Distance Teacher Education Program. *Rural Special*  
406 *Education Quarterly*, 26, 26-32.

407 Lovey, J. (2002). *Supporting special educational needs in secondary school classrooms (2nd*  
408 *Ed.)*. London: David Fulton Publishers.

409 Mannheim, K. (1936). *Ideology and utopia*. New York: A Harvest Book.

410 Marshall, C., & Rossman, G. B. (2011). *Designing qualitative research (5th Ed.)*. London: Sage.

411 Payne, G., & Payne, J. (2004). *Key concepts in social research*. London: Sage.

412 Porter, J., Georgeson, J., Daniels, H., Martin, S., & Feiler, A. (2013). Reasonable adjustments for  
413 disabled pupils: what support do parents want for their child?, *European Journal of Special*  
414 *Needs Education*, 28 (1), pp. 1-18.

415 Rayner, C., & Allen, J. M. (2013). Using Online Video-Recorded Interviews to Connect the  
416 Theory and Practice of Inclusive Education in a Course for Student Teachers. *Australasian*  
417 *Journal of Special Education*, 37, 107-124.

418 Salt, T. (2010). *Salt review: independent review of teacher supply for pupils with severe,*  
419 *profound and multiple learning difficulties*. London: Department for Education.

420 Seale, C. (2010). Using computers to analyse qualitative data. In D. Silverman (Ed.) *Doing*  
421 *qualitative research: a practical handbook (3rd Ed.)* (pp.251-267). London: Sage.

422 Stationery Office (1998). *The Data Protection Act 1998*. London: Stationery Office.

423 Stationery Office (2010). *The Equality Act 2010*. London: Stationery Office.

424 Teddlie, C., & Tashakkori, A. (2010). Overview of contemporary issues in mixed methods  
425 research. In, A. Tashakkori, & C. Teddlie (Eds.) *Sage handbook of mixed methods in social and*  
426 *behavioural research* (pp.1-44). London: Sage.

427 Thompson, J. R., Klass, P. H., & Fulk, B. M. (2012). Comparing online and face-to-face  
428 presentation of course content in an introductory special education course. *Teacher Education*  
429 *and Special Education*, 35, 228-242.

430 United Nations Educational, Scientific and Cultural Organization (UNESCO). (2009). *Policy*  
431 *guidelines on inclusion in education*. Paris: UNESCO.

432 US Department of Education. (2004). *Individuals with disabilities education improvement act,*  
433 *12 20 U.S.C. Section 1412 (5) (A)*. Washington, DC: US Department of Education.

434 Van Reusen, A. K., Shoho, A. R., & Barker, K. S. (2001). High school teacher attitudes towards  
435 inclusion. *The High School Journal*, 84, 7-20.

436 Ward, H. (2013). *Teacher training revamp leaves universities with £1 million funding cuts*.  
437 London, England: Times Educational Supplement. Retrieved from  
438 [http://news.tes.co.uk/b/news/2013/12/18/universities-face-163-1-million-shortfalls-in-teacher-](http://news.tes.co.uk/b/news/2013/12/18/universities-face-163-1-million-shortfalls-in-teacher-training-cuts.aspx)  
439 [training-cuts.aspx](http://news.tes.co.uk/b/news/2013/12/18/universities-face-163-1-million-shortfalls-in-teacher-training-cuts.aspx).

440 Webster, S., Lewis, J., & Brown, A. (2013). Ethical Considerations in Qualitative Research. In J.  
441 Ritchie, J. Lewis, C. McNaughton-Nicholls, & R. Ormston (Eds.) *Qualitative research practice*  
442 *(2nd Ed.)* (pp.77-110) London: Sage.

443 World Health Organization (WHO). (2011). *World report on disability*. Geneva: WHO.

444 Zeichner, K. (1986). Individual and institutional influences on the development of teacher  
445 perspectives. In J. Raths, & L. Katz (Eds.) *Advances in teacher education* (pp.135-164)  
446 Norwood, NJ: Ablex.

447 **Table**