

Reconceptualising School Placement as part of Initial Teacher Education in Ireland, North and South: The Role of Specialist School Placement

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Acknowledgements

This research study was a project of the Centre for Special Educational Needs, Inclusion and Diversity at St. Angela's College, Sligo and the Faculty of Social Sciences at Ulster University. This project was made possible by the funding received from the Standing Conference on Teacher Education North and South Seed-Funding Scheme. The authors wish to gratefully acknowledge the participation of preservice teachers in St. Angela's College and Ulster University.

Table of Contents

Acknowledgements	ii
List of Tables	iv
Introduction	1
School Placement	3
Methodology	4
Findings	7
Demographics	7
Attitudes towards inclusion pre and post placement – Quantitative findings	8
Attitudes to inclusion - Findings from focus groups	12
Perceptions of competence to meet the learning needs of students with SEN - Quantitative findings	17
Perceptions of competence to meet the learning needs of students with SEN - Focus Group findings	19
Discussion	26
Attitudes towards inclusion	26
Perceptions of competence to meet the learning needs of students with SEN	27
Teacher education for inclusion	28
Conclusion	30
Recommendations	31
References	33
Appendix 1 Survey	37

List of Tables

Table 1: Demographic information St Angela's College (Pre and post placement)	7
Table 2: Demographic information Ulster University (Pre and post placement)	8
Table 3: Total mean scores for attitudes (St. Angela's College).....	9
Table 4: Total mean scores for attitudes (Ulster University).....	9
Table 5: ATIES mean and median values (St. Angela's College)	10
Table 6: ATIES mean and median values (Ulster University)	11
Table 7: Perceptions of competence pre and post placement (St. Angela's College).....	17
Table 8: Perceptions of competence pre and post placement (Ulster University).....	18

Introduction

This report provides details of a research project funded by the Standing Committee on Teacher Education, North and South (SCoTENS) which investigated preservice teachers' attitudes towards inclusion and their perceptions of competence in meeting the needs of students with special educational needs (SEN), before and after teaching placement in a specialist setting. The study focussed on final year preservice teachers, engaged in consecutive and concurrent initial teacher education (ITE) programmes for post-primary teachers, in two jurisdictions, North and South, namely, Ulster University, Northern Ireland (NI), and St. Angela's College, Republic of Ireland (RoI).

In order to qualify as a second level teacher both North and South, preservice teachers must choose from two models of ITE - consecutive or concurrent. A consecutive ITE programme refers to the model whereby 'education in a higher education institution (HEI) in one or more school 'subjects' is followed by a separate course involving pedagogy, didactics, classroom practice', whereas, 'both the school subjects and the knowledge and skills needed to teach them are studied at the same time' in the concurrent model (European Agency for Development in Special Needs Education (EADSNE), 2011 p, 18). School placement forms a significant part of ITE in both jurisdictions.

In NI, either a four-year Bachelor of Education (BEd) degree, or a one-year Postgraduate Certificate in Education (PGCE) is offered, 'combining two block periods of practical, school-based teaching experience with periods of face-to-face academic and vocational study in university' (Lambe & Bones, 2007, p. 103). Similarly, in the RoI, at the time of this study concurrent degree programmes are of four years' duration. The post-primary consecutive route is a two-year postgraduate professional diploma in education (PDE) (Teaching Council, 2013).

This study focussed on the one-year PGCE consecutive model offered by Ulster University and the four year concurrent BEd degree offered by St. Angela's College, Sligo. In Ulster University preservice teachers choose from one of eight subject areas, including Art and Design, English, Geography, History, Home Economics, Music, Technology and Design, and Physical Education. St. Angela's College, Sligo is the sole provider of Home Economics education in the RoI and offers four ITE programmes: Bachelor of Education (Home Economics with Gaeilge); Bachelor

of Education (Home Economics with Religious Education); Bachelor of Education (Home Economics with Biology), and Bachelor of Education (Home Economics with Economics).

The choice of one concurrent programme of ITE in the ROI and one consecutive programme in NI for this study was based on the school placement models offered by both institutions. Preservice post-primary teachers must undertake school placement in a specialist setting in their final year at St. Angela's College. Preservice post-primary teachers on the PGCE programme who elect to take a module on SEN in UU must also complete a school placement in a specialist setting.

The school placement offered by each institution in this study aims to provide the preservice teacher with real-life experience as a practicing teacher within a school context. In Ulster University preservice teachers complete two school placements during their training year. Academic selection is a feature of the education system at second level in NI whereby students are segregated from the age of 11 'on the basis of perceived academic ability' (Lambe and Bones, 2008, p. 108). The first school placement is spent in a non-selective school while the second is spent in a selective (grammar) school environment. Preservice teachers in Ulster University also undertake a compulsory module on SEN and Inclusion as part of their one-year PGCE programme.

In St Angela's College, preservice teachers engage in school placement, within the post-primary sector, in each year of their study, including three weeks in first year, four weeks in second year, four weeks in third year and six weeks in fourth year (two weeks teaching in a mainstream setting and four weeks in a specialist placement). This specialist placement may be situated in any one of the following settings: special school; special class attached to a post-primary school (for example, Autism Unit) and centres for early school leavers. This specialist placement, which is the focus of this study, affords preservice teachers the opportunity to develop further their knowledge, skills, attitudes and competences with regard to SEN and inclusion, and enables them to experience teaching and learning in specialised contexts other than those experienced heretofore. Course content on SEN and inclusion is infused both explicitly and implicitly throughout the BEd programme, although there is no designated SEN module. In addition, as part of preservice teachers' preparation for teaching they engage in microteaching in first, second and third year, with learners of mixed ability.

School Placement

The term school placement refers to that compulsory element of the programme which takes place in educational settings and which affords the preservice teacher the opportunity to apply educational theory in a variety of teaching situations and educational contexts. The preservice teacher is enabled to participate in school life in a way that is structured and supported (Hyland, 2012)). In 2013, the Teaching Council published *Guidelines on School Placement* (Teaching Council, 2013) as part of its re-conceptualisation of school placement in an effort to facilitate ‘quality school placement experiences’ (p. 3). The Teaching Council stipulates that preservice teachers should gain teaching experiences in a variety of school contexts to reflect the socio-economic and cultural mix of society. It goes on to state that ‘where appropriate and practicable, elements of the placement should be located in special schools or settings’ (2013, p. 14)

Providers of ITE are required to equip preservice teachers with basic knowledge and skills in SEN. The Inspectorate in NI recommends that all ITE provision should contain a mandatory special education module. In addition, the General Teaching Council Northern Ireland (GTCNI), advocate that teachers will have an understanding of their responsibilities with regard to the SEN Code of Practice and have a knowledge of the most common special needs and appropriate strategies to address these (Winter, 2006). In NI, a policy of inclusion is underpinned by the Special Educational Needs and Disability Order (SENDO) (2005), and ITE providers are required to prepare teachers for the development of more inclusive classrooms (Lambe & Bones, 2008). In the RoI, both the 1998 Education Act (Government of Ireland, 1998) and the 2004 Education for Persons with Special Educational Needs (Government of Ireland, 2004) legislates for the inclusion of students with SEN in mainstream schools. In its document, *Policy on the Continuum of Teacher Education* (2011a), the Teaching Council identifies inclusion as a current educational priority and states that ITE programmes should provide newly qualified teachers with a set of competences in this regard.

The Teaching Council has called for the development of ‘new and innovative school placement models’ (Teaching Council, 2013, p. 3) as part of a re-conceptualisation of school placement. It is viewed as a critical part of ITE programmes and plays a key role in the development of knowledge, skills and competencies (Teaching Council, 2013; Lawson, Norwich & Nash, 2013). There is shared consensus among teacher educators and accrediting bodies that school-based, practical experiences are a valuable component of teacher education programmes in that

preservice teachers gain valuable insights and experience while learning how to plan for and implement new instructional strategies in an authentic classroom environment (Frey, 2008; Simpson, 2006; Soares & Soares, 2002).

There is evidence to suggest that experiences of school placement can influence attitudes towards inclusion (Sharma et al., 2006; Lambe & Bones, 2008). O'Toole & Burke (2013) conducted a study of attitudes of preservice teachers towards inclusion in Ireland in an attempt to address a dearth of research in this area. While findings highlight the importance of the teaching placement element in developing attitudes, preservice teachers in this study were participating on a one-year postgraduate programme which did not include a specialist teaching placement. In NI, Lambe & Bones' (2006; 2008) study of the impact of special school placement on student teacher beliefs about inclusion indicated that, while placement in a special school setting did influence attitudes, some of these were expressed by participants in a negative sense. The current study sought to build on these findings in both jurisdictions and to inform the re-conceptualisation of school placement models North and South.

It is envisaged that findings will have the potential to influence policy and practice, North and South, with regard to school placement on ITE programmes. It is also envisaged that findings will contribute to understanding and awareness of the role of specialist school placements in influencing attitudes towards inclusion and in developing teacher competencies in this regard. The outcomes will be of interest to policymakers (including DES, Teaching Council, NCSE, NCCA, GTCNI) and professionals working in the areas of ITE. It is important to note that findings may also add to discussion on the role of special schools and classes as centres of excellence for teacher education (Ware et al., 2009).

Methodology

The research methodology involved the collection of primary data employing a mixed methods approach. Data collection procedures associated with qualitative and quantitative approaches were employed (Cresswell, 2003). The research questions addressed in this study were:

1. How does school placement in a specialist setting influence attitudes of preservice teachers towards inclusion?

2. What are preservice teachers' perceptions of their competence in meeting the needs of learners with SEN, before and after school placement in a specialist setting?

Data was collected sequentially with priority, or weight given to quantitative data and analysis in order to address the research questions. A quantitative approach was deemed most appropriate for measuring attitudes towards inclusion and has been widely used in the literature for this purpose (Lambe & Bones, 2006; O'Toole & Burke, 2013; Swain, Nordness & Leader-Janssen, 2012), while qualitative methods allowed for an exploration of perceptions with regard to attitudes and competencies. Qualitative approaches were used to gather information relating to experiences of school placement (Lambe & Bones, 2008; Lawson, Norwich & Nash, 2013). Integration of both types of data occurred at different stages during the research process. The quantitative data yielded from a survey design informed the composition of interview schedules for focus groups. Data collected from the focus groups enhanced and informed survey results during the analysis stage of the study.

A non-probability sampling method was applied. The study comprised of two phases: Phase 1 – pre placement, and Phase 2 – post placement. A purposive sample for gathering of the quantitative data included 51 final year students on the BEd programme in St. Angela's College (Site 1) and 26 students on the PGCE programme for post-primary teachers, who had chosen a placement in the special school sector, in Ulster Univeristy (Site 2). A survey was administered to all preservice teachers before and after they embarked on their specialist school placement. The survey comprised of four parts: Part 1 – Background Information, consisting of 5 demographic questions; Part 2 – School Placement Details, consisting of 2 specific questions on previous placements and experience of SEN; Part 3 - Attitudes Towards Inclusion in Education Scale (ATIES) and Part 4 – Competence to meet the learning needs of students with SEN. In Part 2, participants were provided with a definition of SEN that was mutually agreed by both institutions as capturing the essence of policy, North and South. The definition stated that SEN, 'refers to a restriction in the capacity to participate in, and benefit from education, on account of an enduring physical, sensory, mental health or learning disability' (Appendix 1). Part 3 consisted of a 16-item Likert-type attitude scale developed by Wilczenski (1992) to measure attitudes towards inclusive education. The ATIES has been deemed to possess adequate reliability to justify use (Wilczenski, 1992) and measures four factors including attitudes towards students with physical, academic, behavioural and social difficulties. Responses are scored as

Strongly Agree = 5; Agree = 4; Unsure = 3; Disagree = 2 and Strongly Disagree = 1. Total scores range from 16 (least positive attitudes) to 80 (most positive attitudes).

Part 4 consisted of a scale to measure perceptions of competence to meet the learning needs of students with SEN. This 9-item scale was adapted for the purpose of this study from a number of instruments measuring self-efficacy (Bandura, 1997), confidence and concerns about inclusive education (Sharma and Desai, 2002; Forlin et al., 2011). Confirmation of validation of this 9-item scale was achieved through pretest administration to 77 preservice teachers in UU and St. Angela's College. Internal reliability was measured yielding a Cronbach alpha coefficient of .797 which is considered acceptable to measure social constructs (DeVellis, 1991). Responses were scored using a 5 point Likert scale. Total scores range from 9 (low competency rating) to 45 (high competency rating).

A coding system was utilised for the purpose of matching and comparison of responses on pre and post-placement surveys. Preservice teachers who completed the survey were invited to participate in focus groups. Semi-structured interviews were chosen as the method of data collection for the focus groups. Data gathering methods at Phase 2 were similar to those applied at Phase 1; the survey was re-administered immediately after the preservice teachers had returned from their specialist placement. There was a time-gap of at least three months between Phase 1 and Phase 2.

Statistical analysis of the survey included descriptive and inferential analyses, performed using SPSS (IBM SPSS Statistics 21). Since the sample size was relatively small, the appropriate measure of central tendency was the median, and the appropriate statistical test was the non-parametric Wilcoxon Signed Rank Test. This was used to reveal any statistically significant differences in attitudes, and perceptions of competency from pre-placement to post-placement in the specialist setting. Analysis of focus groups was based on Vaughn, Schumm and Sinagub's (1996) guide to thematic analysis. Data was managed utilising *NVIVO* 8 (QSR International, 2008).

The ethical guidelines of both institutions were adhered to throughout the project. The study drew on the Colleges' Codes of Practice for Research, and the British Educational Research Association's Revised Ethical Guidelines (2011) in the design and implementation of the study. Informed consent was sought and details of the study were provided to all participants. Confidentiality was assured and participation was entirely voluntary in that participants could decline to take part, or could withdraw at any stage during the project if they wished.

Findings

Findings are presented according to the demographics of each institution, attitudes towards inclusion pre and post specialist placement, and perceptions of competence pre and post specialist placement as evidenced from analysis of the data from the survey and focus groups.

Demographics

A total of 51 final year preservice teachers in St Angela's College participated in the study. However, only 32 students included the same identifying code on pre and post placement questionnaires, so those questionnaires without matching codes were discarded from analysis. In Ulster University a total of 26 preservice teachers on the PGCE programme participated in the study, 24 students completed the pre placement questionnaire and 26 completed the post-placement questionnaire. Of these 22 were matched according to identifying codes and were eligible for analysis.

In St Angela's College all preservice teachers were female and predominately aged between 20 and 25. All had completed school placement in post-primary schools and just under half (46.9%, n= 15) had completed a school placement in a special school. Just under one third (31.3%, n=10) had taught early school leavers and a fifth (21.8%, n=17) had taught in a further education/training centre. All had completed microteaching. Details of participant demographics pre and post placement in a specialist setting in St. Angela's College are outlined in Table 1.

Table 1: Demographic information St Angela's College (Pre and post placement)

Demographic information	Response subgroups	N	Percentage
Gender	Male	0	0
	Female	32	100
Age	20-25	31	97
	26-30	1	3
	31-35	0	0
SP settings	Primary	0	0
	Post-primary	32	100
	Special school	15	46.9
	Centre for early school leavers	10	31.3
	Further Education/Training Centre	17	21.8
	Microteaching	32	100
Taught students with SEN	Yes	32	100

In Ulster University the majority of preservice teachers (68.2%, n=15) were female, aged between 20 and 25 (72.8%, n=16). All had completed school placements in non-selective and selective post-primary schools. All had completed their final school placement in specialist settings, including special classes and special schools. Details of participant demographics pre and post placement in a specialist setting in Ulster University are outlined in Table 2.

Table 2: Demographic information Ulster University (Pre and post placement)

Demographic information	Response subgroups	<i>N</i>	Percentage
Gender	Male	7	31.8
	Female	15	68.2
Age	20-25	16	72.8
	26-30	3	13.6
	31-35	3	13.6
SP settings	Primary	0	0
	Post-primary non-selective	22	100
	Post-primary selective	22	100
	Special setting	22	100

Attitudes towards inclusion pre and post placement – Quantitative findings

Total scores relating to attitudes towards inclusion of students with SEN before placement by preservice teachers in St. Angela’s College ranged from 36 to 65 (mean=51.17, SD=6.9). Similarly, scores relating to attitudes post-placement ranged from 31 to 61 (mean=49.75, SD=7.4). Table 3 illustrates these findings.

Table 3: Total mean scores for attitudes (St. Angela's College)

	Pre-placement range	Mean	SD	Post-placement range	Mean	SD
Range of scores	36-65	51.17	6.9	31-61	49.75	7.44
Most frequent response	4 (Agree)	3.1	0.96	4 (Agree)	3.3	0.87

The total scores recorded for preservice teachers in Ulster University ranged from 35 to 70 (mean=55.31, SD=9.68) before placement and total scores ranged from 46 to 74 (mean=57.63, SD=9.38) post-placement. Table 4 illustrates these findings.

Table 4: Total mean scores for attitudes (Ulster University)

	Pre-placement range	Mean	SD	Post-placement range	Mean	SD
Range of scores	35-70	55.51	9.68	46-74	57.63	9.38
Most frequent response	4 (Agree)	3.5	0.82	4 (Agree)	3.68	0.70

The most frequent response to questionnaire items before and after placement was Agree, indicating that participants from St. Angela's College and Ulster University held generally favourable attitudes to inclusion both before and after placement in a specialist setting.

Analysis of descriptive statistics from both institutions indicated that preservice teachers held the most positive attitudes pre and post-placement in a specialist setting, towards inclusion of students with social and academic difficulties. Preservice teachers in St. Angela's College held most positive attitudes pre and post placement (mean >3) towards students who are shy and withdrawn (Item 13); whose academic achievement is one year below their peers (Item 5); who have difficulty verbally expressing their thoughts (Item 14); who need an Individual Education Plan (IEP) in literacy and numeracy (Item 7) and whose speech is difficult to understand (Item 15). These findings are illustrated in Table 5.

Table 5: ATIES mean and median values (St. Angela's College)

	Item	<i>N</i>	Mean (pre)	SD (pre)	Median (pre)	Mean (post)	SD (post)	Median (post)
1	Students who cannot move without the help of others should be in mainstream classes	32	2.94	1.05	3	2.91	1.06	3
2	Students who cannot read standard print and need to use braille should be in mainstream classes	31	2.94	0.93	3	2.91	1.03	3
3	Students who use sign language or communication boards should be in mainstream classes	32	2.53	0.92	2.5	2.72	1.05	3
4	Students who cannot hear conversational speech should be in mainstream classes	31	2.48	0.89	2	2.63	.98	2
5	Students whose academic achievement is one year below their peers in their year should be in mainstream classes	32	3.91	0.64	4	3.47	.92	4
6	Students whose academic achievement is two or more years below their peers should be in mainstream classes	32	3.03	0.82	3	2.97	1.00	3
7	Students who need an Individual Education Plan in literacy and numeracy should be in mainstream classes	32	3.66	0.79	4	3.81	1.00	4
8	Students who need training in self-help skills and activities of daily living should be in mainstream classes	32	3.28	0.99	4	3.34	1.04	4
9	Students who do not follow school rules for conduct should be in mainstream classes	32	3.59	0.80	4	3.34	1.04	3.5
10	Students who are verbally aggressive towards their peers should be in mainstream classes	32	2.72	0.81	3	2.53	0.95	3
11	Students who are physically aggressive towards their peers should be in mainstream classes	32	2.26	0.90	2	2.03	0.86	2
12	Students who cannot control their behaviour and disrupt activities should be in mainstream classes	32	2.78	0.87	3	2.50	0.98	2
13	Students who are shy and withdrawn should be in mainstream classes	32	3.91	0.78	4	4.00	0.92	4
14	Students who have difficulty expressing their thoughts verbally should be in mainstream classes	32	3.78	0.91	4	3.72	0.85	4
15	Students whose speech is difficult to understand should be in mainstream classes	32	3.44	0.95	3.5	3.50	1.08	4
16	Students who are frequently absent from school should be in mainstream classes	32	3.66	0.75	4	3.38	0.98	3

Similarly, preservice teachers from Ulster University held most positive attitudes pre and post placement in a specialist setting towards students with academic and social difficulties. Mean values >4 were recorded for students who are shy and withdrawn (Item 13) and those requiring an IEP in literacy and numeracy (Item 7). Post placement most positive attitudes (mean>4) by preservice teachers in Ulster University were held towards students with social (Items 13, 14, 15) and academic (Items 5, 7) difficulties. Mean and median values for each item pre and post placement are presented in Table 6.

Table 6: ATIES mean and median values (Ulster University)

Item	N	Mean (pre)	SD (Pre)	Median (Pre)	Mean (post)	SD	Median (post)
1 Students who cannot move without the help of others should be in mainstream classes	22	3.32	0.84	3	3.55	1.22	4
2 Students who cannot read standard print and need to use braille should be in mainstream classes	22	2.95	0.90	3	3.45	1.01	4
3 Students who use sign language or communication boards should be in mainstream classes	22	3	1.02	3	3.5	0.91	4
4 Students who cannot hear conversational speech should be in mainstream classes	22	3.18	0.91	3	3.36	0.95	4
5 Students whose academic achievement is one year below their peers in their year should be in mainstream classes	22	3.86	0.94	4	4.14	0.56	4
6 Students whose academic achievement is two or more years below their peers should be in mainstream classes	22	3.32	1.09	4	3.59	1.01	4
7 Students who need an Individual Education Plan in literacy and numeracy should be in mainstream classes	22	4.14	0.94	4	4.32	0.57	4
8 Students who need training in self-help skills and activities of daily living should be in mainstream classes	22	3.91	0.92	4	3.81	1.08	4
9 Students who do not follow school rules for conduct should be in mainstream classes	22	3.68	0.89	4	3.43	0.98	4
10 Students who are verbally aggressive towards their peers should be in mainstream classes	22	3.32	0.65	3	3.05	1.00	3
11 Students who are physically aggressive towards their peers should be in mainstream classes	22	2.32	0.89	2	2.59	0.85	3
12 Students who cannot control their behaviour and disrupt activities should be in mainstream classes	22	3.09	0.75	3	3.00	1.02	3
13 Students who are shy and withdrawn should be in mainstream classes	22	4.05	0.95	4	4.36	0.58	4
14 Students who have difficulty expressing their thoughts verbally should be in mainstream classes	22	3.95	0.90	4	4.23	0.69	4
15 Students whose speech is difficult to understand should be in mainstream classes	22	3.68	0.78	4	4.05	0.87	4
16 Students who are frequently absent from school should be in mainstream classes	22	3.55	0.86	4	3.64	1.05	4

Preservice teachers in St. Angela's College held least positive attitudes (mean <3) towards students with behavioural difficulties and students with sensory or physical impairments. Lowest mean scores pre and post placement were recorded for students who are physically aggressive towards their peers (Item 11); students who are verbally aggressive towards their peers (Item 10); students who cannot control their behaviour and disrupt activities (Item 12); The first four items on the scale related to students with physical, visual, communication and hearing impairments. Mean values for these items ranged between 2 and 3 before and after placement in a specialist setting indicating that most of the preservice teachers in St. Angela's College were either unsure or disagreed that these students should be in mainstream classes.

In Ulster University least positive attitudes (mean <3) were also held towards students who are physically aggressive (Item 11).

A Wilcoxon Signed Rank Test identified no significant changes in attitudes from pre to post-placement in a specialist setting for preservice teachers in University of Ulster. A significant difference in attitudes after placement in a specialist setting was found for Item 16 with regard to preservice teachers in St. Angela's College. There were less positive attitudes post placement ($Mdn=3$) than pre placement ($Mdn=4$), to the inclusion of students who are frequently absent in mainstream classes, $z = 2.065$, $p < .05$, with a small effect size ($r = .26$). This represents only a small change in attitudes towards this group of students.

Attitudes to inclusion - Findings from focus groups

Understanding of inclusion and barriers to inclusion were the two themes that emerged strongly from analysis of focus groups findings on attitudes to inclusion pre and post specialist school placement.

Understanding of inclusion pre and post placement in a specialist setting

Descriptions of inclusion, pre-placement, by preservice teachers in St Angela's College and Ulster University, tended to focus on academic or curricular inclusion. As one preservice teacher in St Angela's College stated

It means that every single person, regardless of anything, is to be included in the classroom (FG1PreSAC).

Another preservice teacher described how inclusion meant adapting teaching strategies to ensure participation of students with SEN

Some learners would learn far better from group work and doing things (FG1PreSAC).

Preservice teachers in Ulster University agreed that inclusion involved participation in classroom activities and that participation should not be adversely affected by type of SEN.

Inclusion involves the opportunity for all students to be included in the daily classroom activities, and they are not adversely affected due to a particular need which they have (FG1PreUUGeog).

Following placement in a specialist setting, preservice teachers in St Angela's outlined a shift in their descriptions of inclusion from academic to social inclusion. They felt that they had developed a more holistic view of students with SEN and that they would be more aware of these students in the mainstream class context. They suggested that social inclusion of students with SEN was more likely to occur in a specialist setting. One teacher described how a student with Down Syndrome was more likely to be socially included among peers in the specialist setting

In a mainstream class they would say, hi Mary how are you but they're not really friends. They're in some ways condescending but they actually have friends in this school. You can see inclusion in the school (FG2PostSAC).

Another preservice teacher described how the emphasis in the specialist setting was on the development of independence and life skills and how this had changed her perception of teaching

It has changed my perception of teaching in a way. It gives you a different outlook on teaching and the purpose of teaching. We were teaching for life skills and independence in our centres and it really showed me the importance of that (FG2PostSAC).

The majority of preservice teachers from both institutions agreed that their views on inclusion had been shaped by course content and their experiences on school placement.

Preservice teachers in St. Angela's College referred to content which had influenced their understanding on the BEd programme particularly during the final year of the programme

The content – we do hear the word inclusion a lot in lectures and maybe we mightn't have heard as much about inclusion in the previous years so we wouldn't have been paying as much attention to it in teaching practice but this year we have been focussing a lot on inclusion. That's where we're getting the basis of our knowledge (FG1PreSAC).

Others indicated that their views were based on experiences of teaching students with SEN during placements in mainstream schools

I think your experience of teaching practice or school placement. When I first started, I would have just assumed that everyone would have been equally included in classes but when you look at it from a teacher's perspective, you think maybe it wasn't the way you thought and some people weren't included all of the time (FG1PreSAC).

Similarly, the majority of preservice teachers in Ulster University indicated that their views on inclusion were influenced by their school placements and lecture content on the PGCE programme. One preservice teacher indicated how the programme content and his experience in mainstream schools on school placement had enhanced his understanding of inclusion

Having guest speakers explain how inclusion of SEN can be catered for in mainstream school has helped. Having taught lessons that included SEN students in mainstream classes has helped me understand the need for differentiated tasks to include all pupils (FG1PrePE).

A number of preservice teachers in Ulster University also indicated that they had been influenced by previous work experience including experience working in schools as classroom assistants

As a classroom assistant I had often experienced SEN children being ignored or excluded during lessons. I understand why it is difficult for one teacher to fulfil the needs of an entire class with varied abilities (FG1PreUUEng)

Barriers to inclusion

The second theme to emerge strongly was barriers to inclusion. Two key barriers to inclusion were identified by preservice teachers in St. Angela's College and Ulster University pre and post-placement. Preservice teachers in St. Angela's College and Ulster University identified the SEN of the students and the impact of this on other students without SEN in mainstream classes as a barrier to inclusion. In addition to this, preservice teachers in St. Angela's College identified class size as a barrier to inclusion.

The SEN of students

Preservice teachers in St Angela's College, expressed the view that placement in a specialist setting was more suitable for some students with SEN than a mainstream setting. This view was expressed pre and post placement. There were less positive attitudes expressed towards inclusion of students with challenging behaviours. There was a view

expressed that students with behavioural difficulties could have a negative impact on other students. The majority of preservice teachers in St. Angela's college suggested that there were better supports available for students with SEN in specialist settings, particularly for students with behavioural difficulties.

If they got angry, they could leave the room and take a break and come back in and they would be completely fine after that (FG1PostSAC).

Mine had a counsellor as well. They would lose the plot out of nowhere and they could get up and go to her. It was a really nice room with beanbags and they could relax with her (FG1PostSAC).

Similarly, one preservice teacher in Ulster University expressed concern that students with behavioural difficulties could pose a risk to safety for students and staff

The only reservations I would have with regards to SEN is the inclusion of students who may pose a risk to themselves or others and staff safety is a priority (FG1preUU history).

Identification of behavioural difficulties as a barrier to inclusion sheds some light on the reason why preservice teachers displayed least positive attitudes towards this category of student in mainstream schools. Preservice teachers in St. Angela's also displayed less positive attitudes towards students with sensory and physical impairments and this was alluded to in the focus groups. One preservice teacher expressed this view in relation to a student she had taught on a school placement who had a hearing impairment

Maybe the students I talked about with the hearing difficulties. You felt like you didn't want to hold back the rest of the learners who were well able. Maybe it's best for both the students and the rest of the class if some students are educated in a separate setting. (FGPreSAC).

Another preservice teacher described her reaction to meeting a student with multiple sclerosis during a mainstream school placement.

I was in class with a girl. She had MS, she can't look around, she's in a wheelchair, she can't speak and I was like, whoa. I'm teaching her and thinking how am I going to approach this...we're not that prepared to deal with that sort of situation (FG2PreSAC).

Class size

Challenges to inclusion as a result of class size featured strongly in the pre and post-placement focus groups in St. Angela's College only. There was a view that there were too many students in mainstream classes to allow for the needs of those with SEN to be addressed. There was a perception that further assistance was required to meet these needs. There was a suggestion that an alternative placement might be more suitable and beneficial to students without SEN in mainstream classes

Not every SEN student would be suited to a mainstream class and they may need smaller classes or more individual settings for their own educational needs and for the rest of the class as well. It might be more beneficial (FG1PreSAC).

There was a view that it would be extremely difficult to get to know the individual needs of students in a mainstream class context due to class size

It was very difficult with 7 or 8 in the class, so trying to do that with 30 sitting in front of you is extremely difficult. Trying to see the individual needs of every single learner in front of you that may be really able or less able is so hard because it was hard with 7 (FG1PostSAC).

These findings indicate that preservice teachers from both institutions define inclusion in mainstream schools in terms of participation in academic activities but are more likely to view inclusion in specialist settings in terms of participation in academic activities and development of social and personal skills. The focus group findings also indicate that more preservice teachers perceive students with behavioural difficulties as presenting a greater challenge to inclusion in a mainstream setting than students with social or academic difficulties. The focus groups also highlighted less certainty among preservice teachers in St. Angela's College regarding placement of students with sensory impairments and this seemed to be based mainly on experience during school placement in mainstream settings.

Perceptions of competence to meet the learning needs of students with SEN - Quantitative findings

On the perceptions of competence scale, preservice teachers' in St. Angela's College scores ranged from 24 to 36 (mean=29.78, SD=3.49) pre placement, and from 20 to 39 (mean=32.63, SD, 4.08) post placement. Higher mean values indicate higher levels of agreement with statements related to perceptions of competence to meet the learning needs of students with SEN. In Ulster University, the range of total mean scores pre and post placement were higher than in St. Angela's, ranging from 25 to 43 (mean=34.71, SD=4.55) pre placement and from 30 to 42 (mean=35, SD=3.12) post-placement. A Wilcoxon Signed Rank Test revealed no statistically significant changes in perceptions of competency before and after placement in University of Ulster. However, it did reveal statistically significant changes in perceptions of competency before and after placement among preservice teachers in St. Angela's College. Greater levels of perceived competency were evident post placement ($Mdn=33$) than pre placement ($Mdn=30$), $z=-3.128$, $p<.05$, with a medium effect size ($r=.39$). This represents a medium change in perceptions of competency in a positive direction post placement in a specialist setting among preservice teachers in St. Angela's College.

Mean and median values for responses to individual items on the perceptions of competence scale, pre and post placement, from St. Angela's College are presented in Table 7.

Table 7: Perceptions of competence pre and post placement (St. Angela's College)

	Item	N	Mean (Pre)	SD (Pre)	Median (Pre)	Mean (Post)	SD (Post)	Median (Post)
1	I am able to meet the learning needs of students with SEN in my classes	32	3.22	.75	3	3.78	.66	4
2	I know how to use assistive technology to meet the learning needs of students with SEN	32	2.84	1.02	2.5	3.38	.87	3.5
3	I have the knowledge and skills required to teach students with SEN	32	3.06	.80	3	3.91	.53	4
4	There is very little that can be done to get through to the most difficult students	32	1.84	.63	2	1.88	.98	2
5	I am confident in my ability to establish a classroom management system with each group of students	32	3.84	.92	4	3.94	.88	4
6	I can implement strategies to address the needs of students with SEN	32	3.69	.64	4	4.06	.56	4
7	I am concerned I will not have the skills required to teach students with SEN in the mainstream setting	32	3.34	1.04	4	2.50	1.04	2

8	I think you need to be a special kind of teacher to teach pupils with SEN	32	3.34	1.00	4	3.66	1.07	4
9	My preference would be to teach students without SEN	32	2.34	1.07	2	2.41	1.13	2

Analysis of mean values for individual items with regard to preservice teachers in St Angela's College indicated higher levels of perceived competence (mean >3) pre and post placement in implementation of strategies to address the needs of students with SEN (Item 6) and confidence in establishing a classroom management system (Item 5). Similarly, preservice teachers in Ulster University had higher levels of agreement (mean >4) with competence in establishing a classroom management system (Item 5) both pre and post placement in a specialist setting. Post placement mean values for Ulster University were >4 for Items 1, 2, 3, 5 and 6 indicating that most preservice teachers from Ulster University agreed or strongly agreed that they felt competent in each of these areas. Ulster University mean and median values are presented in Table 8.

Table 8: Perceptions of competence pre and post placement (Ulster University)

	Statement	N	Mean (pre)	SD (pre)	Median (pre)	Mean (post)	SD (post)	Median (post)
1	I am able to meet the learning needs of students with SEN in my classes	22	3.95	0.65	4	4.14	.56	4
2	I know how to use assistive technology to meet the learning needs of students with SEN	21	3.71	0.96	4	4.09	.68	4
3	I have the knowledge and skills required to teach students with SEN	22	3.91	0.68	4	4.45	.60	4.5
4	There is very little that can be done to get through to the most difficult students	22	1.91	0.81	2	2.09	1.07	2
5	I am confident in my ability to establish a classroom management system with each group of students	22	4.18	0.59	4	4.18	.50	4
6	I can implement strategies to address the needs of students with SEN	22	4	0.62	4	4.23	.59	4
7	I am concerned I will not have the skills required to teach students with SEN in the mainstream setting	22	2.14	0.89	2	1.91	.68	4
8	I think you need to be a special kind of teacher to teach pupils with SEN	22	2.64	1.33	2	3.59	1.30	4
9	My preference would be to teach students without SEN	22	2.14	0.94	2	2.36	1.21	2

There were low levels of agreement across both institutions (mean <2, St Angela's College) and (mean<3, Ulster University), that very little can be done to get through to the most difficult students (Item 4). Preservice teachers in Ulster University indicated lower levels of agreement pre and post-placement (mean<3) in relation to Items 9 and 7, indicating a willingness to teach

students with SEN and a lack of concern in relation to competence to teach these students in a mainstream setting.

A Wilcoxon Signed Rank Test revealed statistically significant changes in perceptions of competence across both institutions, albeit in different areas. Median values for preservice teachers in St Angela's College revealed statistically significant changes in perceptions of competence in relation to Items 1, 2, 3 and 7. There was an increase in perception of competence from pre placement ($Mdn=4$) to post placement ($Mdn=3$) in the ability to meet the learning needs of students with SEN (Item 1), $z=-2.786$, $p<.05$, with a medium effect size ($r=.35$). There was an increase in perceptions of competency in the use of assistive technology (Item 2) from pre ($Mdn=2.5$) to post placement ($Mdn=3.5$), $z=-2.621$, $p<.05$, with a medium effect size ($r=.32$). In addition, there was an increase in perceptions of competence in relation to knowledge and skills required to teach students with SEN (Item 3) from pre ($Mdn=3$) to post placement ($Mdn=4$), $z=-3.888$, with a slightly larger effect size ($r=.48$). There was also less concern that they did not have the skills required to teach students with SEN in the mainstream setting (Item 7) from pre ($Mdn=4$) to post placement ($Mdn=2$), $z=-3.505$, $p<.05$, with a medium effect size ($r=.44$).

Median values for preservice teachers in Ulster University revealed statistically significant changes in perceptions of competence in relation to Items 3 and 9 post specialist placement. Preservice teachers in Ulster University showed an increase in perceptions of competence in relation to knowledge and skills required to teach students with SEN (Item 3) from pre ($Mdn=4$) to post placement ($Mdn=4.45$), $z=-3.638$, with a large effect size ($r=.55$). There was also a significant increase in the perception that a special kind of teacher was required to teach students with SEN in the mainstream setting (Item 9) from pre ($Mdn=2$) to post placement ($Mdn=4$), $z=-3.216$, $p<.05$, with a relatively large effect size ($r=.49$).

Perceptions of competence to meet the learning needs of students with SEN - Focus Group findings

Analysis of descriptive statistics highlighted significant changes in perceptions of competence to meet the learning needs of students with SEN pre and post specialist placement in a range of areas. These findings are supported by focus groups findings. Lack of knowledge and experience, and requirements for the development skills and confidence were the two key themes that emerged from focus groups in St Angela's College and Ulster University pre placement.

Pedagogical approaches required to teach students with SEN emerged as a theme in Ulster University only. Post-placement themes were development of knowledge and skills, and support during placement.

Lack of knowledge and experience pre placement

Preservice teachers from St. Angela's College and Ulster University agreed that they did not have the knowledge or experience required to teach students with SEN pre placement in a specialist setting.

I currently do not think I am capable of teaching students with any type of SEN because I do not have the experience or training in a lot aspects of SEN (FG1PreUUEng).

This was a source of concern for many of the students. As one preservice teacher stated

I'm dreading this placement. I'm really not looking forward to it at all (FG2PreSAC).

It was suggested that the relatively short time spent on each placement did not afford them with an adequate opportunity to become familiar with the needs of students with SEN.

I personally feel like when you are on placement, you are there for such a limited time so it's difficult in many ways to really look into that. To achieve the levels that you aspire to achieve, it's difficult in 3 or 4 weeks. (FG1PreSAC).

There was also a perception among preservice teachers in St. Angela's College that some students with SEN could present with more challenges than others and that grades could be adversely affected if the preservice teachers were not seen by their tutors to be meeting the needs of students.

I suppose it depends on the students you get on the day. Then it has an impact and it's a bad experience and you're going to get a bad mark so you're not going to look back and think I learned a lot out of that. You're going to look back and think, I got a D (FG1PreSAC).

While some of the preservice teachers who participated in focus groups in Ulster University pre placement in a specialist setting indicated that they felt they had the skills and confidence required to teach students with SEN, this depended on the type, or category of SEN experienced by students. This reflects the findings from the survey pre placement whereby the range of scores

with regard to perceptions of competence for Ulster University were higher than in St. Angela's College. Many of the preservice teachers from Ulster University indicated that they felt confident to teach students where they had experience of the type of SEN involved. This experience was usually gained during school placement. One preservice teacher indicated that he felt more confident teaching students with autism or specific learning difficulties

I feel most confident teaching pupils with learning difficulties such as dyslexia, dyscalculia and autism (FG1PreUUGeog).

The majority from Ulster University agreed that they lacked confidence in their ability to teach students with social emotional and behavioural difficulties. As one preservice teacher explained

I would feel least confident teaching pupils with severe behavioural difficulties (FG1PreUUGeog).

Requirements for developing skills and confidence to meet the learning needs of students with SEN

Preservice teachers from St. Angela's College and Ulster University identified a number of ways in which they felt ITE programmes could facilitate the development of competencies in teaching students with SEN. These included an increase in time allocated to observation of teaching in specialist settings. Preservice teachers from St. Angela's College also alluded to the need for a greater emphasis and recognition of formative development of skills and support in this regard. Preservice teachers from Ulster University described some pedagogical approaches they considered necessary to meet the learning needs of students with SEN.

Increase in time allocated to observation of teaching on ITE programmes

Preservice teachers from St. Angela's College expressed the view that they would like to spend more time in placement settings observing teaching and getting to know students.

I think it would be more beneficial to us if we had a week to go out and actually be in the school. Not be inspected, not be under pressure, not be under fear that the inspector is going to walk in the door. Just to go to the class, get to know the students, get to know their

names, get to know what they're like and just be in the school and not be under pressure. I think that would really benefit me to just go into the school and see the run of things (FG2PreSAC).

Similarly preservice teachers from Ulster University also agreed that further observation of teachers in specialist settings could support development of skills and confidence

If there was an opportunity to do some observation in a special needs school in Semester 1 it might be beneficial, (FG1PreUUMusic).

Others agreed and made further suggestions on how they could benefit from observation of teaching including a potential role for cooperating teachers

I feel it would be beneficial for us as student teachers to have the opportunity to observe the teaching of pupils with different levels of SEN. This could be done by recording a lesson and then the teacher could talk us through the techniques that he/she used throughout the lesson (FG1PreUUGeog).

Increased focus on formative development of skills

Many of the preservice from St. Angela's College expressed the view that there was greater emphasis placed on assessment of preservice teachers than on the formative development of teaching skills during school placements, including microteaching.

There was a shared view that microteaching sessions in the College were not beneficial in the provision of experience of teaching students with SEN. There was a perception that the main focus of microteaching was on assessment of the preservice teachers rather than formative development of skills and that having a student with SEN in a microteaching group could impact negatively on assessment of teaching

You're not sure what kind of students you're going to get and then you can't really be fully prepared. Then if you have SENs you might see that as a hindrance instead of a learning opportunity. It's a bad way to think about it (FG1PreSAC).

Some expressed the view that there should be more support available during the school placement rather than one or two visits from tutors for the purpose of assessment. One preservice teacher indicated that she felt more formative support was required from tutors during school placement

When you meet with your tutor, you don't really have those questions ready. It's more when you're in the classroom and experiencing them, then that evening you need to ask the question before the next class but we don't really have anyone (FG1PreSAC).

Pedagogical approaches

Many of the preservice teachers in Ulster University identified pedagogical approaches required to facilitate the inclusion of students with SEN in mainstream classes, and referred to perceptions on competence in this area. There appeared to be greater perception of competence in this area among preservice teachers in Ulster University than among those in St. Angela's College pre-placement in a specialist setting, as reflected by findings of the quantitative survey. The importance of differentiation featured strongly as a prerequisite for inclusion as illustrated by this quotation

It is important for all pupils to be included and it is the responsibility of the teacher to differentiate, regardless of the type of special or additional learning needs (FG1PreUUPE).

The importance of adapting teaching strategies to meet individual needs was also highlighted. One preservice teacher described how she had facilitated the inclusion of student with autism in a PE lesson

Another girl would not participate in PE and would aim to distract other pupils. I provided her with small tasks such as question sheets related to using the iPad to take photos and videos of good practice as a non-participant. This made her feel included and still encouraged learning (FG1PreUUPE).

Development of knowledge and skills post placement

The majority of preservice teachers from St. Angela's College agreed that they had benefited from their placement in the specialist setting. This was already highlighted by the significant increase in perceptions of competence to teach students with SEN. There was agreement that they had developed confidence in their ability to teach students with SEN as a result of the placement and that this would be of benefit in future teaching roles.

I think we are all more prepared now. We are aware of students' different needs. When we go into jobs next year, we'll be a lot more aware. We'll be able to spot if a student is struggling with literacy or numeracy or you might notice if a student has a slight bit of autism or asperger's. I think we'll all be pretty well prepared in that area now (FG1PreSAC).

Another preservice teacher described how she would no longer fear having a student with SEN in a mainstream class

You'd be afraid and in a mainstream class, it would be one line in your lesson plan and you would think you were trying your best but you look at those people completely different now. You see the skills that they have and what they can actually do and how you can integrate with them (FG2PostSAC).

There was a view expressed that they had developed a greater understanding of the needs of students with SEN. One preservice teacher described how she felt her understanding of behavioural difficulties had developed

Even with behaviour - a lot of students we would have in past year, you would see aggression. A lot of them slip through the cracks and they get put off as the negative students or the bold students and they're not. This allowed us to get to know them and know their backgrounds and what they were coming from. You were able to understand it more and cater for them more (FG1PostSAC).

Another preservice teacher agreed that her perspective on students with behavioural difficulties had changed as a result of the placement

It allowed us to be less judgemental. In mainstream, you might say you hate that student and they're so bold for no reason. When you actually get to know what's going on in their lives and why they're acting like that, you can cater for them so much more. In mainstream, you would say you don't even want them in your class (FG1Post SAC).

Among the skills identified was differentiation to suit abilities of students, using visual supports and adapting the pace to suit the level of abilities of students.

It's all about different strategies. Some work with one group but they don't work with another group. You could go in one day and it could be horrendous so you go home and think of a different approach or strategy for the next day (FG1PostSAC).

The importance of identifying and addressing the individual needs of students with SEN was emphasised by many of the preservice teachers as a result of their experience of the specialist teaching placement.

Support during placement

There was agreement that the support received in schools and centres from cooperating teachers had been very beneficial and a key source of learning. One preservice teacher described her experience

The co-op teachers I had were fantastic. They would help you with absolutely anything. I would have had 8 different co-ops so I suppose I was very lucky. They're brilliant. You're only going to learn so much in four weeks so you do need their help. They've been teaching them for years, a lot of them and they might be able to tell you stuff that you would never figure out for yourself (FG1PostSAC).

Special Needs Assistants (SNAs) were also identified as a key source of support during the placement. Some preservice teachers considered the SNAs as an invaluable source of information as they knew the students so well

There is only so much you can get from a lecture. The SNAs know the kids you're talking about. They know what the kids like. Even standing up here, our schools are so different. Some of mine are severe to profound and some of them are non-verbal and have no use of their hands so it's totally different to having one come from mainstream. None of the students in my school would be counting past 5. It totally depends on your school and that's why the SNAs are so valuable (FG2PostSAC).

There was a view that support from the College could be improved through provision of more lectures on specific categories of SEN.

There needs to be more. A lot of lectures should focus more on development of ADAs and different methodologies to cater for dyslexic. It's very hard when you're sitting at home in front of the computer to think what to do for a dyspraxic student. I think more focused lectures with more added in (FG1PostSAC).

There was agreement that the level of input on SEN should be increased before placement in the specialist setting, particularly in relation to planning.

We need more lectures particularly in special educational needs. I don't think we had that much this year and I think they should be done a lot earlier in the year. We only had a lecture there about two weeks before we went out on lesson planning and none of us felt prepared at all. There needs to be bigger emphasis on lesson planning and educating us more about the different types of special educational needs (FG2PostSAC).

Discussion

This study investigated the attitudes towards inclusion and perceptions of competence in meeting the needs of learners with SEN, of final year student teachers, on concurrent and consecutive ITE programmes for post-primary teachers, in St. Angela's College, Sligo and the University of Ulster, NI. Findings indicate that final year preservice teachers in both institutions held generally positive attitudes towards inclusion of students with SEN both pre and post-placement in a specialist setting. Findings also demonstrate an increase in perceptions of competence to meet the learning needs of students with SEN following placement in a specialist setting.

Attitudes towards inclusion

Attitudes towards inclusive education are multi-dimensional, as they are largely dependant on the SEN of the student with regard to its impact on teaching and learning, and the type of accommodations required. Preservice teachers in this study held generally positive attitudes towards inclusion both pre and post specialist placement, with the most positive attitudes held towards students with social and academic difficulties. Least positive attitudes were held towards students with behavioural difficulties and this reflects the findings of studies both nationally (O'Toole and Burke, 2013) and internationally (Subban and Sharma, 2006). There was a perception of a lack of experience and preparation for meeting the learning needs of these students. There was no significant change in attitudes towards inclusion following placement in a specialist setting suggesting that the experience of school placement served to reinforce attitudes already formed from previous experience. With regard to preservice teachers from St. Angela's College, this was illustrated by descriptions of experience of teaching students with physical or sensory impairments. There was less certainty among this cohort of preservice teachers about the

inclusion of these students in a mainstream setting based on experiences during school placements.

Many of the preservice teachers described inclusion in a mainstream setting predominately in terms of academic inclusion, while descriptions of inclusion in a specialist setting tended to emphasise the importance of social inclusion. The findings suggest that preservice teachers view inclusion in the mainstream setting largely in terms of participation in academic activities while inclusion in specialist settings encompasses both development of life skills and, to a lesser extent, participation in academic activities.

Preservice teachers expressed concerns about inclusion in a mainstream setting for students with SEN. They identified class size and the SEN of students as the strongest barriers to inclusion in mainstream schools. This finding reflects that of Lancaster & Bain (2007, 2010), Forlin & Chambers (2011), Takala et al (2012) who reported that greater levels of engagement with students with SEN had heightened their awareness of the implications for them as teachers to accommodate the needs of all students, resulting in greater concerns about the implementation of inclusion. On completion of the specialist placement the majority of preservice teachers expressed the view that, in the main, the specialist setting was the most appropriate placement for the students they had taught as it provided the necessary supports and resources to address the specific needs of the most vulnerable students. It could be perceived that preservice teachers were more realistic and pragmatic about the type of supports required to accommodate students with diverse needs in the general classroom (Forlin & Chambers, 2011). Conversely, and aligned to findings by both Richards & Clough (2004), and Lambe & Bones (2006) who purport that despite generally supporting the philosophy of inclusion and claiming to have increased confidence in their ability to teach students with SEN many preservice teachers seemed ‘socialised’ into accepting the provision of segregated services.

Perceptions of competence to meet the learning needs of students with SEN

The findings indicate that there were significant changes in perceptions of competence to meet the learning needs of students with SEN following placement in a specialist setting among preservice teachers from both institutions, across a range of areas. There was a significant increase among preservice teachers from both institutions in relation to knowledge and skills required to teach students with SEN. The skills identified, included the ability to differentiate

teaching and planning, use of a variety of teaching strategies, use of assistive technology, and the ability to adapt teaching to suit the individual needs of students. These are critical findings, and highlight the positive influence of field-experiences to develop competences, which in turn impacts on the conviction that what they do in class will be effective for all students (Palmer, 2006). In addition, there was a significant reduction in their concerns related to a lack of skills required to teach students with SEN in mainstream settings. The specialist placement seemed to promote a deeper understanding of concepts; through their active engagement, preservice teachers were able to experiment and try out new teaching practices in a real life context with students who had diverse learning needs. The use of ‘real-life’ and meaningful learning activities is crucial for preservice teachers, having had the opportunity to observe the impact of their instructional strategies, they could reflect on and evaluate the salient outcomes which in turn increased their confidence (Howard, 2002; Frey, 2008). This finding is particularly relevant to the process of re-conceptualising teacher education, the development of teacher competences and also highlights the important role of specialist settings can play in the process of ITE and the development of inclusive practices.

Teacher education for inclusion

Preservice teachers in this study suggested a number of ways in which ITE programmes could facilitate the development of competences in meeting the learning needs of students with SEN. This included an increase in time allocated to observation of teaching and an increase in content related to inclusion and SEN on the programmes.

There was general agreement that competence in teaching students with SEN could be developed through further experience teaching students with diverse needs, and in particular, through increased observation of teaching in a variety of settings. Preservice teachers acknowledged the need to engage in additional school placements as they attested to the value of the specialist placement in improving competencies. This endorsement of the practical field experience has been highlighted in other studies (Soares & Soares, 2002; Simpson, 2006; Frey, 2008) and despite having concerns before the specialist placement, preservice teachers were, in the main, more positively disposed to the experience which supports the view ‘that a process of affirmative and rewarding personal engagement with people with disabilities is most likely to continue the furthering of inclusion (Forlin et al, 2009, p. 206). As part of the additional school placement, preservice teachers highlighted the need for opportunities to observe practicing teachers in

inclusive settings and learn from these positive role models. The facilitation of classroom observation, collaborative work with experienced staff, and greater engagement with the life of the school has been advocated in the *Guidelines on School Placement* (Teaching Council, 2013). Preservice teachers were satisfied with support received on placement from cooperating teachers and reported the support received from SNAs to be invaluable. The provision of structured support for the preservice teacher within the school context is recognised as a key element of school placement (Teaching Council, 2013). However, there was a perception of an overemphasis on assessment rather than formative development and preservice teachers in one institution alluded to a fear of having to teach students with SEN during school placement. While assessment of preservice teachers is a necessary part of undergraduate and postgraduate programmes, ITE providers should ensure that the assessment process is not structured in such a way as to inhibit formative development of competences.

There was consensus across both institutions that additional input was required on social emotional and behavioural difficulties, and on pedagogical approaches, including differentiation. This finding is similar to findings from other studies (Winter, 2006; Sharma et al, 2008; Forlin & Chambers, 2011; Killoran et al, 2013). Sharma et al (2008, p. 783) posits that ‘the content and the pedagogy of an ITE programme are by far the most significant predictor of preservice teachers’ attitudes, sentiments and concerns about inclusion’. They advocate the need for ‘direct and systematic engagement with persons with disabilities’ during the course of their study so as to enhance understanding and competence. Winter (2006) recommends that providers of ITE programmes re-evaluate their teacher preparation courses to ensure that they are meeting the needs of preparing preservice teachers for inclusive school practices. In other studies preservice teachers seemed to value both a dedicated unit of study on diversity, together with a greater emphasis on modifying curricula that is infused across all disciplines (Winter, 2006; Kearns & Shevlin, 2006). These units of study on diversity that improve knowledge, confidence and competence are crucial. However, what has emanated from this study, similar to Forlin & Chambers’ (2011) study is that improving knowledge, confidence and competence alone is insufficient to impact significantly on attitudes towards inclusion. As well as preparing for inclusion, teacher educators must provide opportunities to explore inclusion critically; the meaning of inclusion, the understanding of inclusion, and information on good inclusive models (Takala et al, 2012). It is important, that within institutions all teacher educators work collaboratively and cohesively to ensure that preservice teachers are provided with opportunities to ‘appreciate environmental, social and cultural contexts of learning, behaviour and teaching,

and be able to enact these understandings in inclusive classrooms serving increasingly diverse students' (Killoran et al, 2013, p. 428).

As is posited by Winter (2006) the voices of preservice teachers can help inform the design and delivery of the ITE programme by identifying the teaching competences required to include students with SEN in mainstream classes. It is incumbent on ITE providers to listen to student voices as part of the re-conceptualisation process.

Conclusion

The view of teaching as 'a complex profession which requires high standards of competences, professional skills and commitment' was jointly endorsed by the General Teaching Councils for Scotland, Wales, Northern Ireland (NI) and the Republic of Ireland (RoI), in a statement issued in April 2013 (British Educational Research Association (BERA), 2014). Throughout Europe, teacher education is currently undergoing significant review and reform. This is largely underpinned by the policy agenda of a movement towards a more inclusive education system (EADSNE), 2011). In order to improve teacher education for inclusion, there is need for significant changes in the way preservice teachers are prepared for their professional roles and responsibilities, to ensure that tomorrow's teachers are competent to meet the challenges they will face throughout their careers, and to enable them to fully support their students (EADSNE, 2011; Teaching Council, 2011a). All teachers should be prepared to take responsibility for all learners in their classes, and ITE programmes should appropriately prepare preservice teachers to be confident and competent in teaching students with diverse needs. ITE, as part of its conceptual frame-work, must focus on developing positive preservice teachers' attitudes and values, as well as, developing knowledge and skills on inclusion (World Health Organisation (WHO), 2011).

The Teaching Council in its document, *Initial Teacher Education: Criteria and Guidelines for Programme Providers* (2011b), has outlined how ITE programmes should be re-conceptualised. In addition, the *Report of the International Review Panel on the Structure of Initial Teacher Education Provision in Ireland* (Sahlberg et al., 2012) supports the re-conceptualisation of ITE, and acknowledges 'that the key characteristics of internationally recognised teacher education systems include high quality instruction on both pedagogy and pedagogical content knowledge, a

strong focus on research as a basis of teaching and learning, a close engagement with schools instruction through systematic clinical practice in school settings, and real internationalisation of the institutions providing initial and continuing teacher education’ (p.18). Moreover, the *Guidelines on School Placement* (2013) issued by the Teaching Council provide a ‘clear blueprint for all involved in facilitating quality school placement experiences’ (p.3). It stipulates that preservice teachers on ITE programmes should gain teaching experience in a variety of school contexts so as to reflect the socio-economic and cultural mix of society, with elements of the placements located in special schools or in other atypical settings (Teaching Council, 2013). It is evident from this study that the specialist placement, while not impacting significantly on attitudinal change did impact significantly on perceptions of competence with regard to teaching students with SEN, both North and South.

Recommendations

Although this is a small-scale study and the findings are applicable to the two institutions involved, the findings are relevant to all ITE providers and policy makers.

Three recommendations emanate from these findings. The first two echo recommendations made by preservice teachers who participated in this study. The third relates to the need to address attitudes towards students with behavioural difficulties as part of ITE programmes and through further research in this area.

- Preservice teachers emphasised the need for greater input on SEN and inclusion throughout their teacher education programmes, regardless of the ITE model of training. They particularly referred to the importance of knowledge of different types of SEN and appropriate pedagogies. Providers of ITE programmes should constantly reflect on and evaluate the organisation and content of the programmes so as to provide opportunities to explore inclusion critically. Providers of ITE must acknowledge, assert and embrace their role more fully to ensure that all preservice teachers are equipped with the appropriate knowledge, skills, attitudes, and competences so as to be proactive in furthering inclusion. It is important that preservice teachers do not embark on their teaching careers with an understanding of inclusion that is restricted to participation in academic activities in the mainstream context. Teacher educators must be prepared to model good practice,

differentiate their curricula, and provide modes of delivery that are appropriate and relevant to meeting the needs of diverse learners. It is recommended that within institutions all teacher educators work collaboratively and cohesively to ensure that preservice teachers are provided with ample opportunities to improve attitudes towards inclusion and competence in meeting the needs of diverse learners.

- Preservice teachers requested additional school placement opportunities with a focus on teacher observation. Through the re-conceptualisation of the school placement experience preservice teachers will gain direct teaching experience of up to 250 hours, with at least one block placement for a minimum of ten weeks. Non-teaching hours in schools should facilitate classroom observation, collaborative work with experienced staff, and greater engagement with the life of the school (Teaching Council, 2013). While this increased field-experience is welcomed by ITE providers, they must outline clearly the kind of inclusive experiences that would contribute and enhance the preparation of preservice teachers. To this end, it is imperative that schools and teacher education institutions work together to ensure that preservice teachers are offered a supportive school placement in school contexts that have a pro-active approach to inclusion.
- Preservice teachers from both institutions highlighted some key barriers to inclusion, including the SEN of students. There was a focus on students with behavioural difficulties. Concern was raised particularly about those students who are physically aggressive. It would be useful to consider this finding in the context of further research into the construal of behaviour difficulties, North and South. It would be beneficial to determine how behavioural difficulties are identified and managed so as to engender more positive attitudes, and more appropriate responses to students who present with behaviours that challenge. The development of positive attitudes towards students with behavioural difficulties should be addressed as part of ITE programmes if preservice teachers are given supported and structured opportunities to observe and engage in inclusive practice as part of their school placement experiences. Further research in this area is warranted.

References

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman and Company.
- British Educational Research Association (2011) *Ethical Guidelines for Educational Research 2011*. London: Author.
- British Educational Research Association (2014) *The Role of Research in Teacher Education: Reviewing the Evidence: Interim Report of the BERA-RSA Inquiry*. London: Author.
- Creswell, J. W. (2003). *Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- DeVellis, R.F. (1991) *Scale development: Theory and applications*. Newbury Park, CA: Sage.
- European Agency for Development in Special Needs Education (2011) *Teacher Education for Inclusion across Europe: Challenges and Opportunities*. Brussels: Author.
- Forlin, C., Loreman, T., Sharma, U. and Earle, C. (2009) Demographic differences in changing pre-service teachers' attitudes, sentiments and concerns about inclusive education. *International Journal of Inclusive Education*, 13 (2), pp. 195-209.
- Forlin, C. and Chambers, D. (2011) Teacher preparation for inclusive education: increasing knowledge but raising concerns. *Asia-Pacific Journal of Teacher Education*, 39 (1), pp. 17-32.
- Forlin, C., Earle, C., Loreman, T. and Sharma, U. (2011) The Sentiments, Attitudes, and Concerns about Inclusive Education Revised (SACIE-R) Scale for Measuring Pre-Service Teachers Perceptions about Inclusion. *Exceptionality Education International*, 21 (3), pp. 50-65.
- Frey, T. (2008) Determining the Impact of Online Practicum Facilitation for In-service Teachers. *Journal of Technology and Teacher Education*, 16 (2), pp. 181-210.
- Government of Ireland (1998) *The Education Act*. Dublin: The Stationery Office.
- Government of Ireland (2004) *The Education for Persons with Special Educational needs (EPSEN) Act*. Dublin: The Stationery Office.
- Howard, J. (2002) Technology-enhanced project-based learning in teacher education: Addressing the goals of transfer. *Technology and Teacher Education*, 10 (2), pp. 343-364.
- Hyland, A. (2012) *A Review of the Structure of Initial Teacher Provision in Ireland: Background Paper for the International Review Panel*. Cork: University College.

IBM Corp. Released (2012) IBM SPSS Statistics for Windows, Version 21.0 Armonk, New York: IBM Corp.

Kearns, H. and Shevlin, M. (2006) Initial teacher preparation for special educational needs: policy and practice in the North and South of Ireland. *Teacher Development: An international journal of teachers' professional development*, 10 (1), pp. 25-42.

Killoran, I., Woronko, D. and Zaretsky, H. (2013) Exploring preservice teachers' attitudes towards inclusion. *International Journal of Inclusive Education*, 18 (4), pp. 427-442.

Lambe, J. and Bones, R. (2006). Student teachers' perceptions about inclusive classroom teaching in Northern Ireland prior to teaching practice experience. *European Journal of Special Needs Education*, 22 (2), pp. 167–186.

Lambe, Jackie and Bones, Robert (2008) The impact of a special school placement on student teachers' beliefs about inclusion in Northern Ireland. *British Journal of Special Education*, 35 (2). pp. 108-116.

Lancaster, J. and Bain, A. (2007) The design of inclusive education courses and the self- efficacy of pre-service teacher education students. *International Journal of Disability, Development and Education*, 54 (2), 245-256.

Lancaster, J. and Bain, A. (2010) The design of pre-service inclusive education courses and their effects on self-efficacy: a comparative study. *Asia-Pacific Journal of Teacher Education*, 38 (2), pp. 117-128.

Lawson, T. and Norwich, B. and Nash, T. (2013) What trainees in England learn about teaching pupils with special educational needs/disabilities in their school based work: the contribution of planned activities in one year initial training courses. *European Journal of Special Needs Education*, 28 (2), pp. 136-155.

Nash, T. and Norwich, B. 2008. *Adaptation of ITT resources relating to teaching pupils with SEN/disabilities*. Report for TDA.

QSR International Pty Ltd (2008) NVIVO 8 (QSR International), USA: QSR Ltd.

O'Toole, C. and Burke, N. (2013) Ready, willing and able? Attitudes and concerns in relation to inclusion amongst a cohort of Irish pre-service teachers. *European Journal of Special Needs Education*, 28 (3), pp. 239-253.

Palmer, D. (2006) Durability of changes in self-efficacy of pre-service primary teachers. *International Journal of Science Education*, 28 (6), pp. 655-671.

Richards, G. and Clough, P. (2004) ITE students' attitudes to inclusion. *Research in Education*, 72, pp. 77-86.

Sahlberg, P., Munn, P. and Furlong, J (2012). *Report of the International Review Panel on the Structure of Initial Teacher Education Provision in Ireland*. Dublin: The Stationery Office.

- Sharma, U. and Desai, I. (2002) Measuring Concerns about Integrated Education in India. *The Asia-Pacific Journal on Disabilities*, 5 (1), pp. 2-14.
- Sharma, U., Forlin, C., Loreman, T. and Earle, C. (2006) Pre-service teachers' attitudes, concerns and sentiments about inclusive education: an international comparison of the novice pre-service teacher. *International Journal of Special Education*, 21 (2), pp. 80-93.
- Sharma, U., Forlin, C. and Loreman, T. (2008) Impact of training on pre-service teachers' attitudes and concerns about inclusive education and sentiments about persons with disabilities. *Disability and Society*, 23 (7), pp. 773-785.
- Shevlin, M., M. Kenny, and A. Loxley. (2008) A time of transition: Exploring special educational provision in the Republic of Ireland. *Journal of Research in Special Educational Needs*, 8(3), pp. 141-52.
- Simpson, M. (2006) Field experience in distance delivered initial teacher education programmes. *Journal of Technology and Teacher Education*, 14 (2), pp. 241-254.
- Soares, L.M. and Soares, A.T. (2002) Immersion: The core of teachers' education. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Subban, P. and Sharma, U. (2006) Teachers' perceptions of inclusive education in Victoria, Australia. *International Journal of Special Education*, 21 (2), pp. 42-52.
- Swain, K.D., Nordness, P.D. and Leader-Janssen, E.M. (2012) Changes in Pre-service Teacher Attitudes Toward Inclusion. *Preventing School Failure: Alternative Education for Children and Youth*, 56 (2), pp. 75-81.
- Takala, M., Sarromaa, H., Astrid, A. and Head, G. (2012) Inclusion seen by student teachers in special education: differences among Finnish, Norwegian and Swedish students. *European Journal of Teacher Education*, 35 (3), pp. 305-325.
- Teaching Council (2011a) *Policy on the Continuum of Teacher Education*. Kildare: Author.
- Teaching Council (2011b) *Initial Teacher Education: Criteria and Guidelines for Programme Providers*. Kildare: Author.
- Teaching Council (2013) *Guidelines on School Placement*. Kildare: Author.
- Vaughn, S., Schumm, J.S. and Sinagub, J.M. (1996) *Focus Group Interviews in Education and Psychology*. New York: Sage Publications.
- Ware, J., Balfe, T., Butler, C., Day, T., Dupont, M., Harten, C., Farrell, A., McDaid, R., O'Riordan, M., Prunty, A., Travers, J., (2009). Research Report on the Role of Special Schools and Classes in Ireland, Trim Co. Meath : NCSE
http://www.ncse.ie/uploads/1/SpecSchlsClasAcc_1.pdf
- World Health Organisation (2011) *World Report on Disability*. Geneva: Author.

Wilczenski F.L. (1992) Measuring Attitudes Towards Inclusive Education. *Psychology in the Schools*, 29 (1), pp. 306-312.

Winter, E. (2006) Preparing new teachers for inclusive schools and classrooms. *Initial Teacher Education*, 21 (2), pp. 85-91.

Appendix 1 Survey