

To what extent does distance learning support the development of positive attitudes towards inclusive education: a comparison of primary education trainee teachers in England and Türkiye?

Article

Published Version

Creative Commons: Attribution 4.0 (CC-BY)

Open Access

Hazir, O. ORCID: https://orcid.org/0000-0001-6010-9364 and Harris, R. ORCID: https://orcid.org/0000-0001-8606-5515 (2023) To what extent does distance learning support the development of positive attitudes towards inclusive education: a comparison of primary education trainee teachers in England and Türkiye? European Journal of Special Needs Education. ISSN 1469-591X doi: 10.1080/08856257.2023.2242028 Available at https://centaur.reading.ac.uk/113208/

It is advisable to refer to the publisher's version if you intend to cite from the work. See <u>Guidance on citing</u>.

To link to this article DOI: http://dx.doi.org/10.1080/08856257.2023.2242028

Publisher: Informa UK Limited



including copyright law. Copyright and IPR is retained by the creators or other copyright holders. Terms and conditions for use of this material are defined in the End User Agreement.

www.reading.ac.uk/centaur

CentAUR

Central Archive at the University of Reading

Reading's research outputs online





ISSN: (Print) (Online) Journal homepage: <u>https://www.tandfonline.com/loi/rejs20</u>

To what extent does distance learning support the development of positive attitudes towards inclusive education: a comparison of primary education trainee teachers in England and Türkiye?

Oguzhan Hazir & Richard Harris

To cite this article: Oguzhan Hazir & Richard Harris (2023): To what extent does distance learning support the development of positive attitudes towards inclusive education: a comparison of primary education trainee teachers in England and Türkiye?, European Journal of Special Needs Education, DOI: <u>10.1080/08856257.2023.2242028</u>

To link to this article: <u>https://doi.org/10.1080/08856257.2023.2242028</u>

| 9 | © 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group. | + | View supplementary material 🖸 |
|-----------|---|---|---------------------------------------|
| | Published online: 28 Aug 2023. | | Submit your article to this journal 🖸 |
| 111 | Article views: 98 | Q | View related articles 🗗 |
| CrossMark | View Crossmark data 🗹 | | |



OPEN ACCESS

To what extent does distance learning support the development of positive attitudes towards inclusive education: a comparison of primary education trainee teachers in England and Türkiye?

Oguzhan Hazir (D^a and Richard Harris (D^b

^aKilisli Muallim Rifat Education Faculty, Kilis 7 Aralik University, Kilis, Türkiye; ^bInstitute of Education, University of Reading, Reading, UK

ABSTRACT

This study examines how distance learning, which took place during COVID-19 restrictions, influenced the attitudes of primary education trainee teachers in Türkiye and England towards inclusive education for students with special educational needs and disabilities. In total, 136 Turkish, and 25 English primary trainee teachers completed the TAIS survey, and a further, 14 Turkish and two English trainees, participated in semi-structured and scenario-based interviews. The quantitative data showed that both countries' trainees' attitudes level were high, but English trainees' attitude were more positive than the Turkish trainees. However, the qualitative data indicated that the absence of direct, practical experience was a major concern, and most felt the need to gain direct experience starting from their first year of teaching about inclusive teaching practices.

ARTICLE HISTORY

Received 28 March 2023 Accepted 19 July 2023

KEYWORDS

Trainee teachers: inclusive education; attitude; distance learning

Introduction

Using technology to engage with distance learning has become more common, largely due to COVID-19, but also natural disasters, such as the earthquake in southern Türkiye. Although distance learning can facilitate teaching, it can make social and academic learning more challenging, particularly for students with additional needs (Page et al. 2021). For trainee teachers it also limits opportunities to gain experience of working with such students, and heightens pre-existing concerns regarding the difficulty of assisting trainees in becoming successful inclusive practitioners (Florian and Camedda 2020). In 2020, due to COVID-19, the Turkish and UK governments moved schools to online learning and this study investigates how this move affected the attitudes of English and Turkish trainee primary teachers towards inclusive education.

Through promoting social justice and equity, the inclusive education movement has effectively forced a paradigm shift in the role of teachers (Florian 2008). Promoting positive attitudes towards inclusion, is one of the most critical factors for the successful

© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/ licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

CONTACT Oguzhan Hazir 🖾 oguzhanhazir@gmail.com

Supplemental data for this article can be accessed online at https://doi.org/10.1080/08856257.2023.2242028

2 🛞 O. HAZIR AND R. HARRIS

implementation of inclusive education (Rakap, Parlak-Rakap, and Aydin 2016) as teachers are expected to manage classrooms effectively [both physically and online] with students with diverse needs and implement appropriate teaching strategies and adaptations to meet the needs of these students (Sakiz and Woods 2014). Distance learning has potentially made the process of promoting positive attitudes towards inclusive education more complex due to the lack of face-to-face experiences for trainee teachers and the challenges of teaching online.

Although the significance of fostering positive attitudes towards inclusive education has been recognised (Florian and Camedda 2020), the effect of distance learning on these attitudes in inclusive education is less well known. This study aims to investigate the influence of distance learning arrangements on the attitudes of Turkish and English primary trainee teachers towards inclusive education. Moreover, it seeks to enhance our understanding of the effects of distance learning on the attitudes of trainee teachers regarding inclusive education.

Trainee teacher's attitudes towards inclusive education

Pre-service education can have a highly significant effect on trainees' attitude towards inclusive education (Schwab, Resch, and Alnahdi 2021). This, in turn impacts on trainees' confidence and actions in supporting all students successfully (Florian 2008; Krischler and Cate 2019; Pijl 2010). The concern is that poor pre-service experiences will adversely affect the attitudes of trainee teachers, negatively impacting the students they teach (Ainscow 2020; Sharma et al. 2006). Many factors can influence the attitude of pre-service teachers, such as the nature of students' needs (e.g. whether a student has a mild learning difficulty or a severe physical disability) or teachers' personal backgrounds and professional experiences (Schwab, Resch, and Alnahdi 2021). Preparing trainee teachers for inclusive education, especially when using distance learning, where interaction and communication with students is limited, needs to be carefully planned to mitigate feelings of inadequacy, address gaps and to develop a more helpful mindset.

Rakap et al'.s (2016) study with 123 American and 63 Turkish trainee teachers, and Tuncay and Kızılaslan's (2022) with 406 Turkish trainee teachers found that trainees with more experience in special education tended to have more positive attitudes, whilst others would accept children with physical disabilities in their classes but not those with severe intellectual disabilities. Pijl's, 2010 study in the Netherlands found that trainees of students with special educational needs and disabilities (SEND) and received little training in supporting such students.Sharma et al'.s (2006)study found that teachers who had been effectively trained and had experience in the field of special education were more self-confident and held positive attitudes towards students with SEND.

Trainee teachers` attitudes in distance learning

Although distance learning has advantages by providing online and/or anytime access to the courses for students, it limits interaction between trainee teachers and children with SEND, and preparing trainees during this process (Sokal and Sharma 2022). Distance learning alters the type of experience that is possible for trainee teachers. The concerns are that trainee

teachers' attitudes, shaped by their experiences of distance learning, may adversely impact their way of thinking, understanding and behaviours, which may negatively affect students' social and academic development (Kast et al. 2021; Zygouris-Coe 2019).

Kast et al'.s (2021) research, during lockdown, with 3,467 Austrian teachers, examining their attitudes and self-efficacy beliefs, found that distance learning did little to help teachers meet the needs of students with SEND. Sokal & Sharma's, 2022 comparison of the inclusive practices, self-efficacy, concerns, and attitudes of trainee teachers in Canada found that the attitudes of trainee teachers' inclusive education were positively shaped more by face-to-face education experiences rather than distance learning. This raises important questions about whether online learning programmes are able to support the development of positive attitudes amongst trainee teachers towards inclusive education.

Inclusive education in Türkiye and England

Understanding of inclusive education differs between educational contexts, reflecting distinct philosophical and societal roots. In some educational systems, inclusive education refers to students with SEND placed in mainstream schools (Ainscow 2020; Sakiz, Ekinci, and Baş 2020). In others, inclusive education is a broader term including all disadvantaged groups (Ainscow 2020; Florian and Camedda 2020). Inclusive education in England has a relatively longer history, going back to the Warnock, Report (1979) that proposed the mainstreaming of many students with special educational needs and is well embedded in various iterations of the Teachers Standards. Currently, in England trainee teachers are expected to: '[a]dapt teaching to respond to the strengths and needs of all pupils' (Department for Education 2021, 11). Furthermore, supporting students for whom English is an Additional Language (EAL) has been obligatory since the Local Government Act of 1966. Inclusive education in England has been driven by a philosophy of supporting all learners in the same environment to promote equal and fair opportunities.

However, in Türkiye, inclusive education is regarded more narrowly as teaching students with SEND alongside their non-SEND peers (Sakiz, Ekinci, and Baş 2020). The focus is ensuring educational provision is made. Studies of inclusive education in Türkiye tend to criticise how well inclusive educational practices are working, highlighting a number of concerns about governmental attempts to support inclusive education (Sakiz and Woods 2014; Sakiz, Ekinci, and Baş 2020). These include the need for better pre- and in-service teacher training in inclusive education, and developing positive attitudes towards students in inclusive education (Batu et al. 2018;).

In 1997, the first decree law (no: 573) on policies related to special education and inclusive education was enacted, despite subsequent later initiatives to develop inclusive education, the eighth (2000) and ninth (2007) five-year development plans of the Turkish government stated that there were insufficient initiatives and practices related to inclusive education (Directorate of Strategy and Budget 2023). Most recently, the Ministry of National Education released its 2022–2026 action plan on inclusive education (MoNE Ministry of National Education 2022), providing a comprehensive framework for further advancing inclusive practices and policies.

As seen above, inclusive education is relatively new in the Turkish education system, and there is debate about whether 'kaynaştırma' (mainstreaming), 'bütünleştirme' (integration) or 'kapsayıcı eğitim' (inclusion) should be adopted. Historically only children with SEND have

4 😔 O. HAZIR AND R. HARRIS

been the focus of inclusive education in Türkiye, but there has been an urgent need to focus on children with Turkish as an Additional Language (TAL), following the mass migration caused by the conflict in Syria since 2011. In 2019, the UNHCR estimated Türkiye had over 3.6 million Syrian refugees alongside 400,000 additional refugees and asylum seekers. Teachers are crucial in bridging refugees` home cultures into the host culture, especially as almost half of the refugees are of school-age (Refugee Association 2021). Furthermore, there are also minorities living in Türkiye whose mother tongue is not Turkish, so teachers need to know how best to support them (Sakiz, Ekinci, and Baş 2020). Consequently, there is a huge imperative for teachers in Türkiye to develop effective inclusive education.

Both Turkish and English education systems, have gone through similar significant shifts in teaching practice developing online learning due to COVID-19. Alongside this, Türkiye is now experiencing debates about how best to educate those with additional learning needs, reflecting similar discussions in England over recent decades. It is therefore of interest to see whether distance learning has had any effect on attitudes towards inclusive education in these different contexts. Therefore, the following research questions have been investigated:

- (1) How positive are the attitudes of Turkish and English primary education trainees towards inclusive education in a distance learning environment as measured by TAIS?
- (2) What differences in the attitudes of these Turkish and English trainee teachers are discernible in distance learning?
- (3) What appear to be the main challenges in developing positive attitudes towards inclusive education in a distance learning environment?

Methodology

A mixed-methods research design was employed to investigate the influence of distance learning experiences on trainee teachers' attitudes towards inclusive education. Using both quantitative and qualitative data collection techniques was intended to enhance the reliability of the study. Additionally, combining appropriate data collection methods aligns with the pragmatic philosophy, which prioritises fulfilling the research objectives, thus justifying the adoption of a mixed-methods approach in this study. By using multiple data sources and viewpoints, this triangulation strategy improves the study's validity and reliability.

Participants

The participants in this study were trainee teachers in primary initial teacher training (ITT) in England and Türkiye, drawn from four departments in Türkiye and one from England. Due to the difficulty in reaching universities as a result of the pandemic, snowball sampling was utilised. Within the universities, we contacted 212 trainee teachers from Türkiye, and 30 trainees from England. Other departments in England were invited to participate but declined due to the pressures caused by the pandemic. In total, 136 Turkish students responded from four different universities (please *see* Table 1). Of these, 14 Turkish and two English trainees participated in qualitative data collection.

| | | The number o | of participants | | | | | | |
|---------|------------|--------------|-----------------|------------|--------|--------|-------|--|--|
| Country | University | Quantitative | Qualitative | Pseudonyms | | | | | |
| Türkiye | Acorn | 25 | 4 | Yusuf | Yigit | Sarp | Ata | | |
| | Juniper | 24 | 3 | Gökalp | | Nil | Asya | | |
| | Oak | 39 | 3 | Tekin | | Çolpan | Orhan | | |
| | Pine | 48 | 4 | Aysun | Turgut | Ayhan | Nizam | | |
| UK | Apple | 25 | 2 | Lavinia | | Holly | | | |

| Table 1. The number of | participants and | pseudonyms. |
|------------------------|------------------|-------------|
|------------------------|------------------|-------------|

Data instruments

Trainee teachers' attitudes towards inclusion were assessed using an established quantitative survey instrument called the Teacher Attitude towards Inclusion Scale (TAIS). Although TAIS does not specifically address issues related to distance learning, participants were asked to fill out the TAIS questionnaire considering the distance education process. The data was also collected during the pandemic, providing us with an understanding of the impact of distance learning on trainees' attitudes during this period. However, it should be noted that other variables may influence the trainees' attitudes. Qualitative data, using semi-structured and scenario-based interviews, was collected to complement the quantitative data, to allow deeper insights into the attitudes of these trainee teachers and how they felt about the distance learning process.

TAIS

TAIS was adapted by Monsen et al., (2015), and computed the internal consistency coefficients of TAIS in four distinct dimensions, ranging α from .76 to .86, to assess its reliability. Further, the TAIS survey has been used in other studies (Samanta 2016; Thomas and Uthaman 2019), however, the reliability test has been conducted in the study carried out by Ashton (2020) [α between .95 and .86].

The Turkish version of the TAIS test was translated separately by three Turkish academics, who obtained their PhDs from UK universities and one Turkish PhD candidate. Following this, four other Turkish academics, who also received their PhDs from UK universities, conducted a compatibility check between the English and Turkish versions. The resulting text underwent further scrutiny, with two Turkish teachers and a special education teacher examining its meaning, structure, and grammar. This scale consists of 4 sub-categories:

- demographics (6 items) which obtained data such as the age, gender, and special education experience of the participants, number of students in their classes and which ages they taught
- willingness to include (9 items) which explored how far trainee teachers were inclined to accept students with visual, hearing, physical, emotional, social and learning difficulties and intellectual disabilities into their classes. The questions used an eight-point Likert-type scale, ranging from *Definitely Yes*, to *Definitely No*;
- adequacy of support (12 items) where trainees reflected on their experiences in the last 12 months, using an eight-point scale;
- attitudes towards inclusion were examined using 30 items; a positive phrasing was used for 12 items, whilst the remainder were phrased negatively.

6 🕒 O. HAZIR AND R. HARRIS

Semi-structured interviews

To gain a more rounded perspective, semi-structured interviews were used. Questions related to trainees' perception, and covered their understanding of inclusive education during distance learning, their level of knowledge, distance ITT support, coping skills, teaching materials' preparation, how to involve the students in the classroom and school, the cooperation of school staff, and the practices and proficiency of the teacher training programme towards inclusive education in distance learning (*see* Supplementary material A).

Scenario-interviews

Scenario interviews encourage participants to discuss events or phenomena they may encounter or reflect on possible alternative actions individuals might follow (Brose et al. 2013). Scenario-based interviews are seen as an effective way of identifying someone's genuine experiences, values and attitudes (Jaidin 2018) Scenarios were designed to explore possible actions and options by using worst and best-case scenarios, as well as identifying future expectations (Williams and Hummelbrunner 2010). This would give insights into trainees' knowledge, understanding, experience and attitudes about supporting students with additional needs.

These interviews used four classroom scenarios, drawn from Mastriopieri and Scruggs (2010). The scenarios were chosen because they included common learning needs trainees were likely to encounter in an online and face-to-face classroom: attention deficit hyperactivity disorder, improving attention and memory, reading comprehension, and spelling (*see* Supplementary material A).

Data collection

The data were collected between December 2020 and March 2021 in England and Türkiye. The TAIS survey took an average of 12 minutes to complete. For qualitative data collection, quota sampling was used., Participants were asked whether they would like to participate in an online interview which lasted 15–20 minutes to collect more data about this research. Hence, 14 Turkish and two English trainees participated voluntarily.

Ethics

This study was approved by the university's ethics committee, and all relevant procedures of the British Educational Research Association BERA (2018) were followed. Following COVID-19 procedures at the time, interviews were conducted online. Permission to use the TAIS was obtained from its creators. The TAIS survey was sent to participants via a link to Online Surveys. All data were pseudonymised. All participating universities were also pseudonymised.

Analysis

Statistical analysis

To increase the efficiency of the analysis result, the effect of missing values that increase the error variance need to be controlled (Osborne and Overbay 2004).

Therefore, in order to minimise the effect of missing data at the beginning of the analysis, the mean assignment technique was used to have less effect on the variances. In addition, with the purpose of determining one-way outliers, the total scores of each measurement should be located ± 3 standard deviations away from the mean. Seven participants were excluded from the study due to outliers and missing data (Burak and Gültekin 2021).

To answer the research questions, the normality of the scores in the data set was first tested. A Kolmogorov Smirnov Hypothesis test was performed to test normality, and it was observed that the data were not distributed normally in general (p < 0.05). In this context, Mann-Whitney U and Kruskal Wallis nonparametric hypothesis tests were used to answer the research questions (Burak and Gültekin 2021). Beside this, Mann-Whitney U and Kruskal Wallis tests were used to compare the scores of the three subscales of TAIS, and the results were evaluated at a significance level of .05.

Furthermore, descriptive statistical techniques were also utilised in the analysis of quantitative data. Within this scope, the means, medians, and standard deviations of TAIS scores were calculated.

Qualitative analysis

The interview data were analysed inductively, using an in-vivo approach for the initial coding stage (Saldaña 2016). From these initial codes, three main themes were identified (*see* Supplementary material B). The themes were: *Knowledge of inclusion through distance learning, perceptions of the efficacy distance learning in ITT programme, development of attitudes towards inclusion in distance learning*. Grouping data under themes helped to understand the influence of distance education on trainee teachers` attitudes towards inclusive education more clearly.

Two researchers independently analysed the data for this study, and comparable patterns and themes were identified by consensus (confirmability). Moreover, researchers accurately reflected participants' perspectives (credibility), and the same data capture methods yielded consistent results across multiple candidates and environments (transferability and dependability) (Denzin and Lincoln 2018). While presenting the findings, a pseudonym was given for each participant and university. For example, 'Lavinia-Apple' is used for Apple University's first participant.

Results

Quantitative data

Descriptive findings

A total of 161 teacher trainees from England and Türkiye completed the online questionnaires. Most of the participants were female (TR: 75%, UK: 96.15%), whilst the participants` average age was similar (TR: 22.33, UK: 21.70). Further, in training schools, the average class size where trainee teachers were placed, was similar (TR:24.28, UK:23.25). Some classes also had restrictions due to COVID-19, which affected their class size.

8 😉 O. HAZIR AND R. HARRIS

Although the trainees gained some classroom teaching experience remotely, only 25.73% of Turkish trainees said they had worked with any students with SEND, compared to 88.46% of the trainees in England (please *see* Table 2).

TAIS

Reliability of data

The 65-item attitude scale had Cronbach's alpha values for the three dimensions; willingness to include was $\alpha = .986$, adequacy of support was $\alpha = .899$, and attitudes towards inclusion were $\alpha = .840$.For these measurements, the internal consistency of willingness to include data is 'excellent': $0.9 \le \alpha$, and adequacy of support and attitude towards inclusion also show that the internal consistency of the data is 'good': $0.8 \le \alpha < 0.9$.

Analysis of data

As seen in Table 3, it was determined that the mean ranks of willingness to include $(RM_{TR}^{-1} = 65.17, SD_{TR}^{-2} = 30.73, RM_{UK}^{-3} = 141.12, SD_{UK}^{-4} = 30.13)$, Adequacy of Support $(RM_{TR} = 73,44, SD_{TR} = 14.63, RM_{UK} = 98,46, SD_{UK} = 12.82)$, Attitudes towards Inclusion $(RM_{TR} = 69,07, SD_{TR} = 26.05, RM_{UK} = 121,02, SD_{UK} = 16.14)$ of trainee teachers were different. This difference was statistically in favour of trainee teachers studying in England (willingness to include: $\mu = 22.00, Z = -7.80, p = .000 < .05$, Adequacy of Support: $\mu = 1088.50, Z = -2.57, p = .000 < .05$, Attitudes towards Inclusion: $\mu = 524.50, Z = -5.33, p = .000 < .05$). According to this, both have positive attitudes although there is a statistically significant difference in favour of the trainees in England. Hence, it can be said that trainee teachers in England have a more positive attitude overall compared to Turkish trainees.

Table 4 shows the Kruskal-Wallis data analysis of trainees' attitudes for four primary education departments in Türkiye and one in the UK. As seen in Table 4, the Willingness to Include mean ranks (Acorn = 63.85, Juniper = 68,65, Oak = 65,78, Pine = 63,55, Apple = 141,12) and Attitudes towards Inclusion (Acorn = 72,56, Juniper = 82,72, Oak = 65,80, Pine = 62,84, Apple = 121,02) of the aspiration scores of trainee teachers at different universities in

| | | | Training Classrooms | | | |
|-----------|-------------------------------------|----------------|-----------------------------------|---------------|--------------------------|--|
| Countries | Gender | Trainee Age | Level and Age | Number | Trainees SEND experience | |
| Türkiye | F = 102 (75.00%) M = 34 (25.00%) | Average: 22,33 | Year 1-2-3-4 (5.5–10-year-old) | Average 24.28 | 35 (25.73%) | |
| England | F = 24 (96.15%) M = 1 (3.84%) | Average: 21,70 | Year 1–2 (5–8-year-old) | Average 23.25 | 20 (88.46%) | |

Table 2. Demographic Information.

Table 3. Türkiye and England Comparison Variables.

| , , , | | | | | | | | |
|-----------------------------|---------|-----|-----------|-------|-------------|---------|-------|------|
| Variables | Groups | n | Rank Mean | SD | Sum of Rank | μ | Z | р |
| Willingness to Include | Türkiye | 129 | 65.17 | 30.73 | 8407.00 | 22.00 | -7.80 | .000 |
| | England | 25 | 141.12 | 30.13 | 3528.00 | | | |
| Adequacy of Support | Türkiye | 129 | 73.44 | 14.63 | 9473.50 | 1088.50 | -2.57 | .000 |
| | England | 25 | 98.46 | 12.82 | 2461.50 | | | |
| Attitudes towards Inclusion | Türkiye | 129 | 69.07 | 26.05 | 8909.50 | 524.50 | -5.33 | .000 |
| | England | 25 | 121.02 | 16.14 | 3025.50 | | | |

| Variables | Groups | n | Rank Mean | CMIN | DF | р |
|-----------------------------|---------|----|-----------|--------|----|------|
| Willingness to Include | Acorn | 24 | 63.85 | 61.016 | 4 | .000 |
| - | Juniper | 23 | 68.65 | | | |
| | Oak | 38 | 65.78 | | | |
| | Pine | 44 | 63.55 | | | |
| | Apple | 25 | 141.12 | | | |
| Adequacy of Support | Acorn | 24 | 75.04 | 7.654 | 4 | .105 |
| | Juniper | 23 | 75.02 | | | |
| | Oak | 38 | 77.72 | | | |
| | Pine | 44 | 68.03 | | | |
| | Apple | 25 | 98.46 | | | |
| Attitudes towards Inclusion | Acorn | 24 | 72.56 | 31.799 | 4 | .000 |
| | Juniper | 23 | 82.72 | | | |
| | Oak | 38 | 65.80 | | | |
| | Pine | 44 | 62.84 | | | |
| | Apple | 25 | 121.02 | | | |

| Tab | e 4. | De | partmental | | /aria | b | les 1 | for | the | grou | ps. |
|-----|------|----|------------|--|-------|---|-------|-----|-----|------|-----|
|-----|------|----|------------|--|-------|---|-------|-----|-----|------|-----|

England and Türkiye differ. This difference was statistically significant ((Willingness to include: CMIN = 61.016, DF = 4, p = .000 < 0.05) and (Attitudes towards Inclusion: CMIN = 31,799, DF = 4, p = .000 < 0.05)). In order to determine which universities, have significant differences between each other, pairwise comparisons were made using the Mann-Whitney U test. In this context, it was determined that Apple in England differed significantly from the other universities (p < 0.05). It was found that there was no significant difference between the scores of trainee teachers studying at the four universities in Türkiye. It can be said that trainee teachers studying in England were more willing to accept students with disabilities and disadvantaged groups in their classes. Their attitude was more positive, while trainees in different universities in Türkiye showed less willingness and a less positive attitude than in England, whilst the views of trainees within the Turkish sample were largely similar.

Furthermore, the rank means of the adequacy of support scores of trainee teachers studying at different universities in England and Türkiye differ (Acorn = 75,04, Juniper = 75,02, Oak = 77,72, Pine = 68,03, Apple = 98,46). This difference is not statistically significant (CMIN = 7.654, DF = 4, p = .105 > 0.05). Therefore, it can be said that trainees at different universities in England and Türkiye held similar views of the adequacy of support they experienced.

Qualitative data

Analysis of the interviews led to the identification of three themes: *The knowledge of inclusion through distance learning, perception of distance learning in ITT programme, perception towards inclusion in distance learning.*

Knowledge of inclusion through distance learning

Trainees in both countries had covered an inclusive education module in their universitybased training during the period of distance learning, so they were familiar with the term inclusive education and what this means for face-to-face and online learning. Most of the trainees from Türkiye and England were able to provide general definitions for the term 'inclusive education'; for example, English trainees said: 10 🕒 O. HAZIR AND R. HARRIS

all the children are able to gain the resources and opportunities and be able to learn together. (Lavinia-Apple)

every child has the opportunity to learn. No matter the circumstances. (Holly-Apple)

Holly stated that all children should receive education together even if there is distance learning and emphasised the continuity of education in inclusion. In contrast, the following comments were typical;

it is the education of students who can receive education together with their `normal` peers at `normal` grade levels. (Tekin-Oak)

being able to receive education in the same environment as `normal` children (Yusuf-Acorn),

In the scenario interviews, participants were asked to identify a possible issue with the student and how they would support the student. In response to the first question, most of the participants from both countries offered generalised responses based on the behaviour of the child rather than describing the actions in this scenario.

 \dots would say that the problem is he has Attention Deficit Hyperactivity Disorder (ADHD) or autism \dots (Lavinia-Apple)

It could be some form of learning disability... (Asya-Juniper),

... attention deficit (Nizam-Pine).

Some respondents from Türkiye were able to identify a possible problem;

... Student has a problem with the pronunciation of and writing the words ... (Nil-Juniper)

... has difficulty focusing ... (Sarp-Acorn),

... This student has difficulty concentrating on the courses, and these lessons may not be fun enough. (Ayhan-Pine)

When asked how best to support the students in these scenarios, most trainees were often only able to give general answers rather than detailing possible actions, stating that they would develop materials or use games, without giving specific examples. Some Turkish trainees also stated that any adaptations were not possible due to the nature of the distance learning environment.

Several trainees identified sources of additional support: I [would] cooperate with his parents (Yiğit-Acorn),

I would sit the students next to hardworking students ... I will definitely need to get help from the school's psychological counsellor and from the Guidance Research Centre. (Orhan-Oak)

Others felt that their level of knowledge in the field of special education was affected by the distance education process.

During this period of distance education, university tutors in special education and inclusion modules simply read PowerPoint slides, without providing us with any teaching approaches regarding special education. As a result, I am at a loss regarding how to proceed with these children. (Ata-Acorn)

When we consider teaching approaches in special education, everything remained very theoretical... If we weren't in distance education, we would have been able to apply and learn from what we have learned. (Nizam-Pine)

In most cases, trainees from both countries (Orhan-Oak, Çolpan-Oak, Turgut-Pine, Ayhan-Pine, Holly-Apple) felt their knowledge of how to support students with SEND was superficial, due to the limitations of distance learning.

Perceptions of the efficacy of distance learning in ITT programme. Due to COVID-19 restrictions, trainees were unable to teach lessons face-to-face teaching sessions In Türkiye, trainees claimed this was inadequate, as they felt they needed the direct experience of working with children with SEND:

I can only learn by doing. (Ayhan-Pine)

In England, Lavinia-(Apple) had a personal experience outside of the programme, one due to having a son with autism and the other through private tutoring to some children with autism. Despite these experiences, Holly (Apple) also thought that they needed to experience face-to-face teaching in the classroom because;

... learning by doing is the best way ... (Holly-Apple)

Some Turkish trainees stated that the distance learning was not well designed, and their knowledge of inclusive education was therefore insufficient (Ata-Acorn, Gökalp-Juniper, Tekin-Oak, Orhan-Oak, Çolpan-Oak, Aysun-Pine, Ayhan-Pine). University tutors were trying their best, but felt distance learning was a poor way to learn about the theory and practice of inclusive education (*Sarp-Acorn, Ata-Acorn*).

Since our practice courses are distance learning, I don't know how to transfer theory to practice, it's a mystery to me (*Çolpan-Oak*),

When we were observing the class through Zoom meeting, we did not understand who the inclusive education students were until the mentor teacher [pointed this out] (Sarp-Acorn).

Almost all trainees in England and Türkiye claimed that their practical experience had been superficial due to ITT having switched to distance learning and that they needed to gain experience by being in an actual classroom environment.

Due to distance learning, ITT was interrupted for some external reasons. Some Turkish trainees did not have internet at home, for example one had to go to his uncle's house regularly for distance learning sessions (Yiğit-Acorn). Students in schools also encountered difficulties. For example, families with many children may have had only one device that can be connected to distance learning due to economic reasons, so children with special needs or TAL were unable to attend the class regularly (Çolpan-Oak). Therefore, the technical and economic problems experienced by both the student and the trainee can disrupt the continuity of distance learning in Türkiye.

Furthermore, most of those in England and Türkiye wanted to gain more experience in a SEND school too in order to develop their special education skills (Yusuf-Acorn, Sarp-Acorn, Gökalp-Juniper, Asya-Juniper, Aysun-Pine, Ayhan-Pine, Turgut-Pine, Nil-Juniper, Lavinia-Apple). This was because of the limited opportunities offered by distance learning to gain in-depth knowledge of inclusive education (Aysun-Pine, Nizam-Pine, Nil-Juniper). There were also concerns about the content of the ITT programme; for example, Gökalp (Juniper) wanted a research-informed approach, whilst Aysun (Pine) and Turgut (Pine), as well as Asya (Juniper), felt the emphasis in training was on meeting the needs of mainstream students. Further, most of the participants, in both countries, wanted to have more practical experience of working with students with SEND from the start of their programmes.

Development of attitudes towards inclusion in distance learning

The language used to describe students with SEND highlights differences in attitudes during distance learning. For many Turkish trainees SEND students had to 'fit in'. This is seen in the discourse, where trainees used terms such as 'with normal peers', 'in the normal classroom', 'as normal children'. In addition, some trainees said 'special education schools are better for them ... especially in distance learning', or held 'low expectations about these children'.

... If the other children [typical developing children] can learn these words while this student with special needs cannot, it means there is a problem with this student that needs to be specifically addressed. Additionally, when we conduct classes remotely, working with these children [in inclusion] can become a bit more difficult (Tekin-Oak)

In contrast, the language used by trainees in England was positive, as they referred to 'equal opportunities', 'everyone', 'no matter the circumstance [including distance learning]', whilst also acknowledging this may depend 'on what their mood is, what they are feeling'.

 \dots need to have a maybe someone sat with her constantly to remind her to be able to keep on task \dots if they needed to go outside burn energy off, depending on what their mood is what they're feeling. (Lavinia-Apple)

 \dots You can't get frustrated with a child for not learning \dots then they'll achieve the same attainment levels as other children. (Holly-Apple)

Some Turkish trainees held also positive attitudes towards students' potential being supported:

If we put the student in the front row, it will be easier, and we will minimise the distractions. (Gökalp-Juniper)

I would like to make these instructional adaptations to be included in the online and face-to-face classroom in a smooth way. (Turgut-Pine)

However, some Turkish participants exhibited more negative attitudes and lowered expectations.

 \ldots SEND students should be sent to SEND schools rather than online inclusive education classes. (Orhan-Oak)

I can seat that student in the back row of the class (Ata-Acorn),

I want refugee children to be integrated into Turkish society, but not severely disabled students in my class. (Yiğit-Acorn)

I would make that student do the tasks I gave in the lesson; So, like wiping the board, turning on/off the light ... carry teacher's bag, close the door/window. (Ayhan-Pine)

While responding to one of the scenarios, Sarp (Acorn) touched on the general viewpoint of trainee teachers' low attitude signs towards students;

80 percent of trainees who saw this child would say that he is a hyperactive child, but I do not want to label him. This child is active and has a lot of energy.

Turgut (Pine) also had a similar explanation. They preferred to show what is happening rather than labelling.

There were also comments that reflected stereotypical views, such as

hyperactive students are successful in maths (Yusuf-Acorn), the hyperactivity is uncontrollable (Çolpan-Oak), SEND students need to be educated by SEND teachers ... (Ayhan-Pine), SEND schools are better for SEND students (Nizam-Pine).

The existence of such attitudes is potentially problematic in both online and face-to-face situations, as it can lead to Turkish teachers holding lower expectations of such students. Additionally, Yiğit (Acorn) and Ata (Acorn) felt only students with mild learning difficulties should be incorporated into mainstream classes, whereas those with moderate or severe learning disabilities ought to be educated elsewhere. Ata (Acorn) also explained how they thought students with learning difficulties should be made to sit together as a group towards the back of the classroom. Additionally, some Turkish trainees simply did not believe that students with SEND were capable of achieving the same as their peers especially in distance learning (Ayhan-Pine, Orhan-Oak). Others, however, were more enthusiastic about teaching students with SEND or E/TAL. While a few of the participants in Türkiye seemed eager to accept the children in the SEND/disadvantaged group into their online or face-to-face classes, two trainees interviewed in England stated that the children should be in an any inclusive education environment regardless of the type of disability.

Hence, the Turkish trainees generally stated that teaching through distance learning did not help them develop their ability to adopt inclusive education. As seen in the findings, the lack of practical face-to-face experience during COVID-19 can be observed, which highlights the main point that distance learning provided no face-to-face experiences to promote positive attitudes towards inclusive education. However, many of the trainees in England were able to maintain positive attitudes based on their prior experiences of children with SEND. Still, Table 2 shows that most of the English trainees had previous experience with children with SEND, and it can be concluded from the findings that having prior familiarity with children with SEND contributed to their positive attitudes while the practical experience continued.

Discussion

The study compared primary education trainee teachers in England and Türkiye to examine the extent to which distance learning supports the development of positive attitudes towards inclusive education, in light of the influence of the COVID-19 pandemic on their ITT program. Meanwhile, much of the data obtained in distance education is

consistent with earlier studies. Overall, the attitudes of trainees, as reported in the survey, from both countries are positive about inclusive education. Schwab et al. (2021) and Woodcock (2013) states that it is expected that the attitudes of the trainees who will teach for the first time will be high. However, as Sharma et al. (2012) suggest, we used qualitative data, alongside the quantitative data to increase the reliability of the findings. In both countries, trainees hold similar views about the adequacy of their ITT programme as it moved towards distance learning. However, the attitudes of English trainees appear more positive about towards inclusion of all students in the face-to-face or online classroom.

The qualitative data show that Turkish trainees generally felt that inclusion required the child needed to adapt to fit in, rather than the teacher adapting to the child's needs. This indicates a limited understanding of inclusion. Several factors could explain this. One of these factors, adequate teacher training is vital in developing positive attitudes towards inclusion (Florian and Camedda 2020; Schwab, Resch, and Alnahdi 2021). However, because of the COVID precautions, Turkish trainees gained most of their knowledge through distance learning. Even though distance learning has unique benefits and advantages, considering teacher training e.g. collaborative learning, flexibility, comfort, self-directed learning, accessibility to all students, e-materials, recording the session, reducing travel and other expenses (Zygouris-Coe 2019), distance learning also has some drawbacks as it restricts the ability to apply learning in a practical context. Hence, trainees interact with students less often during this process (Beumer 2021). As demonstrated in the raw data, most Turkish participants said they were unable to interact with students with SEND because of distance learning.

Moreover, some Turkish trainees were unwilling to accept students with moderate or severe learning needs in their online and face-to-face classrooms. The data shared attributes this to trainees' lack of experience, knowledge, and confidence as they only felt able to support students with mild learning difficulties or some limited physical disability, which replicates findings from other studies (Avramidis and Kalyva 2007; Krischler and Cate 2019). Furthermore, some Turkish trainees reported examples of both students and trainees having limited access to distance learning facilities due to socio-economic reasons which shows parallels with Page et al'.s (2021) findings. This might have an effect on the ability of trainees to connect theory to practice and thus limit experience.

However, the English trainees' statements were more positive. These trainees were more willing to adapt their teaching to the needs of a child. In part this could be because of personal and professional experiences. Many of the trainees in England (88.46%, n = 20) stated that they had had encountered a child with special needs in their education settings. In contrast, almost 75% (101) of trainees in Türkiye claimed that they had never met any students with SEND (Sarp-Acorn, Gökalp-Juniper, Orhan-Oak, Çolpan-Oak, Asya-Juniper) or TAL (Sarp-Acorn), neither in distance learning nor in face-to-face education settings. One possible reason for this difference can be explained by the fact that there is a more inclusive school system in England than in Türkiye and that there is more interaction with children with a range of needs from an early age. These data also help us to explain why English trainees' attitudes are higher. If the number of English trainee respondents had been higher, richer and more reliable data would have been available. However, several studies (Avramidis and Kalyva 2007; Kast et al. 2021; Woodcock 2013) show that trainees who worked and spending more time with students

with additional needs experience have more positive attitudes towards SEND/disadvantaged children than those without.

The rapid shift to distance learning meant many schools struggled to adapt to distance learning, which also denied trainees opportunities for face-to-face education, to learn how to establish effective communication with students, control the classroom regularly, and deliver an effective teaching performance (Beumer 2021). The move to an online environment also forced training programmes to adapt quickly, with negative results in some instances. Both Turkish and English trainees stated that it caused the ITT programme to feel more superficial. Sokal and Sharma (2022) found that although face-toface training did not have much effect on candidates with low attitudes and concerns, face-to-face training encouraged the attitudes and concerns of trainee teachers in a more positive way than distance training. It was argued that distance learning did not significantly affect the candidates' attitudes to promote inclusive education. According to the findings, even with a 'superficial' distance ITT programme in England, one might expect that the trainees' attitudes towards inclusive education should be good because the system that has already adopted an inclusive approach for students. At this point, it is difficult to claim that distance learning negatively affects trainee teachers' attitudes towards inclusion, as most English participants who attended distance learning still had positive attitudes towards inclusion. On the other hand, since these value judgements are just beginning to be established in Türkiye, the place to develop this perspective is the ITT programme, where the theory is put into practice. However, since this has turned into distance learning, the trainees stated they could not gain enough inclusive experience. It can be claimed that distance learning reinforced the negative attitudes of Turkish participants, who stated that they had no experience with SEN children in the past, preventing them from gaining practical experience. Therefore, although there is a rapid transition to distance learning in both countries, the findings show us that attitudes differ between the two countries based on their previous inclusion experience. Hence, effective ways to develop attitudes towards inclusion in Türkiye are needed, as the concept of inclusive education is less well established, especially where distance learning is involved. Trainees in England generally seem to have a more positive attitude, but distance learning is less effective in developing practical experience of working with SEND students. Exploring ways that this might operate in a distance learning environment seems to be crucial moving forward, if more hybrid ways of working are to become more widely used in training (Kast et al. 2021).

Limitations

This study's findings examine the attitudes of Turkish and English classroom teacher trainees in the process of distance learning towards inclusive education. Given the small number of English participants, it would be inappropriate to generalise the results more widely.

Implication and recommendation

A concern of the authorities during the pandemic was to ensure children's continuing education, but the education of trainees appeared to be less of a priority. However, as inclusive education continues to be a central aspect of education, it is an area that needs

16 🕒 O. HAZIR AND R. HARRIS

to be considered and further researched. In particular, there is a need to examine how distance learning could influence attitudes towards inclusion more effectively. It is always possible for schools to close due to an emergency, such as the Kahramanmaraş Earthquake in Türkiye in February 2023, which completely destroyed many cities, the COVID-19 Pandemic, so inclusive distance learning models should be a top priority for policymakers. Based on our study, it seems that distance ITT programmes need further improvements. These improvements should particularly focus on providing real-life or vicarious experiences. Our study would further suggest that qualitative data is needed alongside such quantitative instruments to provide more meaningful insight into the views of participants.

Notes

- 1. RM_{TR}: Rank Mean Türkiye
- 2. SD_{TR}: Standard Deviation Türkiye
- 3. RM_{UK}: Rank Mean United Kingdom
- 4. SD_{UK}: Standard Deviation United Kingdom

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Oguzhan Hazir () http://orcid.org/0000-0001-6010-9364 Richard Harris () http://orcid.org/0000-0001-8606-5515

References

- Ainscow, M. 2020. "Promoting Inclusion and Equity in Education: Lessons from International Experiences." *Nordic Journal of Studies in Educational Policy* 6 (1): 7–16. https://doi.org/10.1080/20020317.2020.1729587.
- Ashton, J. 2020. A Quantitative Study Investigating Teachers' Attitudes and Perceptions towards Inclusion of Children with Social, Emotional and Mental Health Needs in Lancashire. [Master Thesis]. Mancester Metropolitan University.
- Avramidis, E., and E. Kalyva. 2007. "The Influence of Teaching Experience and Professional Development on Greek teachers' Attitudes Towards Inclusion." *European Journal of Special Needs Education* 22 (4): 367–389. https://doi.org/10.1080/08856250701649989.
- Batu, E. S., G. Cüre, S. Nar, D. Gövercin, and M. Keskin. 2018. "Türkiye'de ilkokul ve ortaokullarda yapılan kaynaştırma araştırmalarının gözden geçirilmesi (2006-2016)." Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi 19 (3): 577–614. https://doi.org/10.21565/ozelegitimdergisi.336925.
- BERA (British Educational Research Association). 2018. *Ethical Guidelines for Educational Research*. 4th ed. London: BERA.
- Beumer, E. N. 2021. *Teacher educators' self-efficacy beliefs during the COVID-19 pandemic* (Master's thesis). Utrecht University.
- Brose, A., A. Fügenschuh, P. Gausemeier, I. Vierhaus, and G. Seliger 2013. A System Dynamic Enhancement for the Scenario Technique. https://opus4.kobv.de/opus4-zib/frontdoor/index/ index/docld/1815.

- Burak, D., and M. Gültekin. 2021. "Primary School students' Academic Achievement in Social Studies: A Structural Equation Modeling Analysis." *International Online Journal of Primary Education* 10 (2): 469–491.
- Denzin, N. K., and Y. S. Lincoln, Eds. 2018. The SAGE Handbook of Qualitative Research. 5th ed. Los Angeles: Sage.
- Department for Education. 2021. Teachers' Standards Guidance for School Leaders, School Staff and Governing Bodies. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1040274/Teachers_Standards_Dec_2021.pdf
- Directorate of Strategy and Budget, 2023. Development Plans. https://www.sbb.gov.tr/kalkinmaplanlari/
- Florian, L. 2008. "Inclusion: Special or Inclusive Education: Future Trends." *British Journal of Special Education* 35 (4): 202–208. https://doi.org/10.1111/j.1467-8578.2008.00402.x.
- Florian, L., and D. Camedda. 2020. "Enhancing Teacher Education for Inclusion." *European Journal of Teacher Education* 43 (1): 4–8. https://doi.org/10.1080/02619768.2020.1707579.
- Jaidin, J. H. 2018. "Scenario-Based Interview: An Alternative Approach to Interviewing Children." *Asia-Pacific Journal of Research in Early Childhood Education* 12 (1): 23–37. https://doi.org/10. 17206/apjrece.2018.12.1.23.
- Kast, J., K. T. Lindner, A. Gutschik, and S. Schwab. 2021. "Austrian teachers' Attitudes and Self-Efficacy Beliefs Regarding At-Risk Students During Home Learning Due to COVID-19." *European Journal of Special Needs Education* 36 (1): 114–126. https://doi.org/10.1080/08856257.2021.1872849.
- Krischler, M., and I. M. Cate. 2019. "Pre-And In-Service teachers' Attitudes Toward Students with Learning Difficulties and Challenging Behavior." Frontiers in Psychology 10:327. https://doi.org/10. 3389/fpsyg.2019.00327.
- Mastriopieri, M. A., and T. E. Scruggs. 2010. *The Inclusive Classroom: Strategies for Effective Differentiated Instruction*. 4th ed. Upper Saddle River, N.J: Merrill Prentice Hall.
- MoNE (Ministry of National Education). 2022. Mainstreaming/Integration Education Practices Through National Action Plan. 24 01 2023. https://www.meb.gov.tr/meb_iys_dosyalar/2022_12/ 03103346_Ulusal_Eylem_PlanY_3_KasYm.pdf.
- Monsen, J. J., D. L. Ewing, and J. Boyle. 2015. "Psychometric Properties of the Revised teachers' Attitude Toward Inclusion Scale." International Journal of School & Educational Psychology 3 (1): 64–71. https://doi.org/10.1080/21683603.2014.938383.
- Osborne, J. W., and A. Overbay. 2004. "The Power of Outliers (And Why Researchers Should Always Check for Them)." *Practical Assessment, Research & Evaluation* 9 (1): 6.
- Page, A., J. Charteris, J. Anderson, and C. Boyle. 2021. "Fostering School Connectedness Online for Students with Diverse Learning Needs: Inclusive Education in Australia During the COVID-19 Pandemic." *European Journal of Special Needs Education* 36 (1): 142–156. https://doi.org/10.1080/ 08856257.2021.1872842.
- Pijl, S. J. 2010. "Preparing Teachers for Inclusive Education: Some Reflections from the Netherlands." Journal of Research in Special Educational Needs 10:197–201. https://doi.org/10.1111/j.1471-3802. 2010.01165.x.
- Rakap, S., A. Parlak-Rakap, and B. Aydin. 2016. "Investigation and Comparison of Turkish and American Preschool Teacher candidates' Attitudes Towards Inclusion of Young Children with Disabilities." *International Journal of Inclusive Education* 20 (11): 1223–1237. https://doi.org/10. 1080/13603116.2016.1159254.
- Refugee Association 2021, Refugee 2021 October Report. https://multeciler.org.tr/eng/. 22 February 2022.
- Sakiz, H., A. Ekinci, and G. Baş. 2020. "Inclusive Education for Religious Minorities: The Syriacs in Turkey." *Social Inclusion* 8 (3): 296–306. https://doi.org/10.17645/si.v8i3.3073.
- Sakiz, H., and C. Woods. 2014. "From Thinking to Practice: School Staff Views on Disability Inclusion in Turkey." *European Journal of Special Needs Education* 29 (2): 135–152. https://doi.org/10.1080/ 08856257.2014.882058.
- Saldaña, J. 2016. The Coding Manual for Qualitative Researchers. 3rd ed. London: Sage.

- 18 🕒 O. HAZIR AND R. HARRIS
- Samanta, S. 2016. "Attitude of Secondary School Teachers Towards the Inclusion of Special Educational Needs (SEN) Children in General Education Classroom." *International Journal of Innovative Research and Advanced Studies* 3 (9): 185–188.
- Schwab, S., K. Resch, and G. Alnahdi. 2021. "Inclusion Does Not Solely Apply to Students with Disabilities: Pre-Service teachers' Attitudes Towards Inclusive Schooling of All Students." *International Journal of Inclusive Education* 1–17. https://doi.org/10.1080/13603116.2021.1938712.
- Sharma, U., C. Forlin, T. Loreman, and C. Earle. 2006. "Pre-Service Teachers' Attitudes, Concerns and Sentiments About Inclusive Education: An International Comparison of Novice Pre-Service Teachers." *International Journal of Special Education* 21 (2): 80–93.
- Sharma, U., T. Loreman, and C. Forlin. 2012. "Measuring Teacher Efficacy to Implement Inclusive Practices." *Journal of Research in Special Educational Needs* 12 (1): 12–21. https://doi.org/10.1111/j. 1471-3802.2011.01200.x.
- Sokal, L., and U. Sharma. 2022. "How Effective is Online Pre-Service Teacher Education for Inclusion When Compared to Face-To-Face Delivery?" *International Journal of Inclusive Education* 1–15. https://doi.org/10.1080/13603116.2022.2046191.
- Thomas, E., and S. Uthaman. 2019. "Knowledge and Attitude of Primary School Teachers Towards Inclusive Education of Children with Specific Learning Disabilities." *Journal of Social Work Education and Practice* 4 (2): 23–32.
- Tuncay, A. A., and A. Kizilaslan. 2022. "Pre-Service teachers' Sentiments, Attitudes and Concerns About Inclusive Education in Turkey." *European Journal of Special Needs Education* 37 (2): 309–322. https://doi.org/10.1080/08856257.2021.1873524.
- Warnock, Report. 1979. "Children with Special Needs: The Warnock Report." *English Medical Journal* 1 (6164): 667. https://doi.org/10.1136/bmj.1.6164.667.
- Williams, B., and R. Hummelbrunner. 2010. *Systems Concepts in Action: A Practitioner's Toolkit*. Stanford, CA: Stanford University Press.
- Woodcock, S. 2013. "Trainee teachers' Attitudes Towards Students with Specific Learning Disabilities." *Australian Journal of Teacher Education (Online)* 38 (8): 16–29. https://doi.org/10. 14221/ajte.2013v38n8.6.
- Zygouris-Coe, V. I. 2019. "Benefits and Challenges of Collaborative Learning in Online Teacher Education." In Handbook of Research on Emerging Practices and Methods for K-12 Online and Blended Learning, 33–56. IGI Global.