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Multilingual teachers and teachers of multilinguals: developing pre-service teachers' multilingual identities during teacher education

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ABSTRACT

With increased linguistic diversity in schools, it is paramount that initial teacher education and training (ITET) develops linguistically responsive teachers who can confidently work in the complex language ecologies characterising today's multilingual classrooms. We argue that to achieve this aim, all future teachers should be given opportunities to reflect on and appreciate their multilingual repertoires during ITET. Accordingly, we present the findings of a quasi-experimental study exploring the extent to which a group of pre-service teachers expressed a multilingual identity before and after participating in an innovative, identity-oriented online intervention. Participants were 37 primary and secondary pre-service teachers enrolled on an ITET course in England. During their training, 17 pre-service teachers participated in the intervention, whilst a control group of 20 did not. All participants completed a questionnaire before and after the intervention. A comparison of pretest-posttest responses revealed statistically significant increases in scores on various items designed to capture participants' multilingual identities in the experimental group with medium-to-large effect sizes, and no significant differences in the control group. Qualitative data from post-intervention interviews corroborated the overall finding that, after the intervention, pre-service teachers tended not only to consider themselves more multilingual, but also express a non-prescriptive view of multilingualism.

Introduction

The important role that identity plays in the professional and personal development of teachers, and particularly during their training and early careers, is widely recognised in the literature (Beauchamp and Thomas 2009; Freese 2006; Henry 2016; Richmond et al. 2011). It is during initial teacher education and training (ITET) that pre-service teachers' identities are 'most volatile' (Henry 2016: 292) and where conflict may arise as trainees negotiate their personal identities with an emerging, and at times conflicting, professional identity, a process of identity construction that continues over the course of teachers' careers (Henry 2016). However, limited research attention seems to have been devoted to exploring (pre-service) teachers' *multilingual* identities (MId), namely the extent to which teachers may identify as multilingual.

The importance of investigating (pre-service) teachers' multilingual identities is highlighted by the increasing linguistic diversity among the student population in primary and secondary

schools in England. With almost 20% of students believed to speak a language other than English at home (DfE 2022), and with virtually all students learning at least one additional language at primary and secondary level, English schools can indeed be conceptualised as multilingual environments. In this regard, this study adopts an encompassing definition of multilingualism proposed by Fisher et al. (2020: 449), which views 'all learners engaged in the act of additional language learning in classroom contexts as multilinguals, regardless of the number of additional languages or dialects in their repertoires, though they may not identify as such'. This view of multilingualism recognises the complex language ecologies of today's classrooms, where multiple forms of multilingualism coexist, and problematises monolingualism as the default linguistic repertoire in the school context.

In a country like England, traditionally regarded as 'monolingual', inexperienced teachers of non-language subjects may feel insecure when working in multilingual classrooms and may not ascribe themselves a multilingual identity irrespective of their language experience. In this context, they may perceive students' other languages as threatening, so that implementing implicit 'English-only' language policies in the classroom may be perceived as the safest solution. Studies across national contexts corroborate this argument. For example, in a paper investigating the language beliefs of in-service teachers from the United Kingdom (UK), Italy and Austria, De Angelis (2011) revealed a lack of openness among teachers towards integrating students' multilingual background into their teaching practices. Similarly, in a study exploring the beliefs about multilingualism of a group of secondary-school teachers of Norwegian in Norway, Vikøy and Haukås (2021: 2) found that the majority of participants expressed a 'language-as-problem orientation' towards students' multilingualism, tending to focus on the challenges of teaching students with minority languages and to associate not being fluent in the dominant language with having learning needs. In discussing these findings, the authors of both studies stressed the need to add a multilingual dimension into teacher education programmes, a recommendation that seems particularly relevant in light of recent research pointing at a lack of self-confidence among pre-service teachers with regard to teaching multilingual students (Foley et al. 2018: 2022; Llompart and Birello 2020).

Explicitly addressing issues around teachers' conceptualisation of multilingualism and their multilingual self-perceptions during ITET could thus represent an innovative and effective way to equip future teachers with the knowledge and awareness of multilingualism necessary to move away from monolingual and assimilationist paradigms, and to create opportunities for all students to explore and develop their linguistic repertoire in the classroom (Liu and Evans 2016). Although this objective has been supported by research, we currently do not know how primary and secondary pre-service teachers across the full range of subjects in England develop an awareness of their role as teachers of linguistically diverse students during ITET, a gap that this study aims to fill.

Background

Conceptualising (pre-service) teachers' multilingual identity

This study defines multilingual identity as an 'umbrella' identity (Fisher et al. 2020) that encompasses 'individuals' explicit understanding of themselves as users of more than one language' (Forbes et al. 2021: 434), as much as of their broader communicative repertoire. Following Forbes et al.'s (2021) conceptualisation of multilingual identity, this study explores pre-service teachers' MId in relation to three sub-dimensions: *experience*, *emotion* and *evaluation*. *Experience* refers to the exposure to language that a person has had in their lifetime and encompasses one's perceived linguistic repertoire, that is, all the languages and dialects that one considers to be part of their identity. The experience element places emphasis on a person's interaction with the social world over time, assuming that 'past and present, learners' exposure to and interaction with languages in the home, classroom, on travels, in the community or digitally are highly likely to influence their identification as multilingual'. (Fisher et al. 2022: 3) *Emotion* represents the affective element that has been traditionally neglected in much identity research (Zembylas 2003). Forbes et al. (2021) describe it as closely related to

the evaluation component and encompassing the emotions associated with the language learning process, but also, and more broadly, with one's view of oneself as a multilingual person. Finally, *evaluation* is a cognitive dimension consisting of one's evaluations of oneself as a speaker of languages, which are in turn shaped by one's language beliefs.

Intervention studies on multilingual-identity development

An emerging body of research into multilingual-identity development in school has provided evidence of the active role that teachers can play in developing students' multilingual identities. Through a controlled, quasi-experimental study, Forbes et al. (2021) tested the effects of adopting an identity-oriented pedagogy in the languages classroom on secondary school students' multilingual identities in England. A comparison of students' pretest-posttest questionnaire responses revealed positive, significant changes in students' language self-beliefs and emotions relating to languages, and an overall strengthening of students' multilingual self-perceptions after the intervention. No significant changes were found among students in the control group, who did not participate in the intervention. Furthermore, in a follow-up study exploring the relationships between students' multilingualism, MId and school attainment, Rutgers et al. (2021) found a positive correlation between students' self-ascribed multilingualism (i.e. the extent to which they considered themselves multilingual, as measured using a visual-analogue scale) and their GCSE scores, irrespective of whether students had English as an additional language (EAL) or not.

Whilst the above research findings stress the importance of incorporating a multilingual dimension in the school curriculum, studies investigating the multilingual identities of pre-service or in-service teachers' multilingual identities are much scarcer. Higgins and Ponte's (2017) qualitative research on seven primary school teachers in the Hawaii is one of the very few studies investigating teachers' multilingual identities. The study explored changes among in-service teachers' professional identities as they engaged in a professional-development course designed to encourage participants to experiment with linguistically inclusive practices in the classroom, especially with regard to integrating migrant students' home and community languages during the learning process. Even though the intervention was not designed to stimulate change in teachers' *multilingual* identities or to encourage teachers to explore their multilingual repertoire, it seems that those participants who did adopt multilingual teaching strategies during the intervention were teachers who had experienced multilingualism growing up and might have thus been more open towards using multilingual pedagogies. Although the small sample makes it impossible to establish any relationship between teachers' multilingual identities and their openness towards multilingual pedagogies, these qualitative findings support the claim that MId may represent an area 'ripe for further exploration'. (Fisher et al. 2020: 449).

Study aims

The above studies form an emerging body of literature pointing to the benefits of creating a classroom and school environment favouring processes of multilingual-identity construction. Although most research has been conducted in the context of formal language learning, we argue that processes of multilingual-identity construction extend beyond the languages classroom. As a result, every teacher, irrespective of subject, can actively create a linguistically inclusive learning environment where students' linguistic repertoires are recognised and valued.

However, this may not be feasible if teachers themselves do not value their own linguistic repertoire and if they do not see the benefits of adopting multilingual teaching strategies. Accordingly, this study aimed to answer the following research question: *c*an an identity-oriented intervention favour processes of multilingual-identity development in pre-service teachers? If yes, how? To answer this question, a quasi-experimental research design, involving an experimental and a control group, was used.

Research design and instruments

Context and sampling

The context of this study is primary and secondary ITET in England. The research participants were graduates enrolled on a recognised British ITET programme (typically lasting one academic year) and training to teach various subjects at primary or secondary level. The decision to include participants of different subject specialisms and at different education stages aligns with the study's overarching argument that multilingual and linguistically inclusive approaches extend beyond the languages classroom.

Research on pre-service teachers in the UK has stressed the difficulty of recruiting participants from this population (see, e.g. Foley et al. 2018), with obstacles to recruitment and access to participants including the intensive nature of ITET programmes and a de-centralised provision. Given the difficulty of using probability sampling in this context, a voluntary response sampling approach was used. Participants were recruited in September-October 2020 through a two-pronged approach. Participants were recruited online by posting a call-for-participants message on social media through the X (previously Twitter) and Facebook platforms. With regard to Facebook, the research was advertised on UK-based, teacher education pages and groups. Secondly, the project was advertised within a large teacher education provider in the East of England.

A link to an online questionnaire (the pretest) was shared with potential participants, and 117 trainee teachers completed the initial questionnaire. The questionnaire concluded with a second call for participants, inviting respondents to participate in the second phase of the project, which involved taking part in an online intervention. Interested respondents were asked to leave an email address. Those who expressed their interest ($n = 32$) were contacted via email, and an online information session with the first author was arranged, after which participants received and signed a consent form ($n = 24$). After participating in the intervention between January and May 2021 (see next sections), 17 out 19 participants completed a posttest questionnaire, identical to the pretest, in May 2021. All 17 participants were then invited to an interview with the first author between May and June 2021, and 14 accepted to be interviewed. Figure 1 shows a flowchart of the recruitment process that led to the formation of the experimental group.

The control group consisted of pre-service teachers who had responded to the pretest questionnaire in September-October 2020 but who did not engage with any research activities afterwards. In May 2021, an identical questionnaire was advertised using the same approach adopted at baseline. Identification codes were used to match respondents between time points, resulting in a control group of 20 pre-service teachers who completed the questionnaire at both time points.

Finally, the research was conducted in line with the ethical guidelines of the authors' institution and the British Educational Research Association, and the study received ethical approval by the Research Ethics Committee of the Faculty of Education, University of Cambridge.

Research instruments

Questionnaire

The questionnaire was adapted from Forbes et al.'s (2021) questionnaire on secondary students' multilingual identities and required approximately ten minutes to complete. The questionnaire was
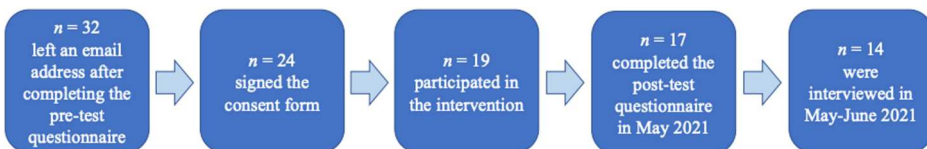

Figure 1. Recruitment process, experimental group.

designed as part of a larger research project also exploring pre-service teachers' linguistic repertoires and beliefs about multilingualism. The questionnaire was structured into four sections. The first section collected background information on respondents and included four questions that were used to generate an anonymous identification. Section two explored trainee teachers' linguistic repertoires (e.g. their perceived ability in, and frequency of use of, each of their languages), whereas sections three and four consisted of Likert items and visual-analogue scales exploring pre-service teachers' multilingual identities and other related constructs, such as their experience with language learning at school, their ideal L2 self and their beliefs about the extent to which people around them were multilingual (e.g. friends, family, students).

Five items were used to capture pre-service teachers' MId (Table 1). These items were designed to refer to the experiential, evaluative and emotional components of the MId construct. The first item was designed to capture the experience component from a MId perspective; respondents were asked to list all their languages, since the decision to include, and thus claim, a language as part of one's linguistic repertoire represents an identity act. The second item (a Likert item stating: 'I embrace opportunities to use a foreign language, even if I am not very good at it') was also used to capture the experience component, as it assessed respondents' openness towards using languages (regardless of ability) that may result from having a MId. The emotional component was explored through a seven-point Likert-item, with respondents expressing their agreement with the statement: 'I am proud of my linguistic repertoire'. The item thus explored the emotions of pride and, by opposition, shame, which have been shown to be powerful emotions in the context of MId (Forbes et al. 2021). Finally, items MId4 and MId5 were evaluative, relating to the extent to which respondents saw themselves – and perceived themselves to be seen by others – as multilingual. Specifically, MId4 was a seven-point Likert-item stating: 'people important to me see me as a multilingual person', whereas MId5 was an adaptation of the multilingual visual-analogue scale (mVAS) used by Forbes et al. (2021), asking respondents to locate themselves on a *monolingual-multilingual scale* ranging from 0 (monolingual) to 100 (multilingual). Finally, all five items were designed to not be language-specific, instead encouraging participants to reflect on the totality of their linguistic repertoires.

Semi-structured interviews

Every participant who had engaged with the intervention was invited to an online, semi-structured interview with the first author in May-June 2021, after the intervention and the posttest questionnaire. Fourteen participants were interviewed. The interviews lasted approximately 45 minutes and explored various aspects of participants' experience during ITET, such as their beliefs about multilingualism and the use of linguistically inclusive teaching practices. In order to understand the reasons behind any differences in participants' pretest-posttest responses on the five MId items, interviewees were shown their pretest and posttest responses, and they were invited to reflect about possible reasons behind any changes. Whenever the pre–post quantitative analysis revealed statistically significant differences in the responses to specific MId items, the interview data were used to (i) explore whether those changes might be attributable to the intervention and (ii) gather insights into the processes behind these changes.

Table 1. Information on the five MId items.

Item code	Item description	MId dimension	Range of values	Variable type
MId1	Number of additional languages reported.	Experience	0–5	Ordinal
MId2	I embrace opportunities to use a foreign language, even if I am not very good at it.	Experience	−3 to +3	Ordinal
MId3	I am proud of my linguistic repertoire.	Emotion	−3 to +3	Ordinal
MId4	People important to me see me as a multilingual person.	Evaluation	−3 to +3	Ordinal
MId5	Self-rate on a monolingual-multilingual scale.	Evaluation	0–100	Continuous

The intervention

The intervention was an online, self-paced course made of six modules. It required approximately ten hours to complete and was accessible to participants from January to May 2021 via an online learning platform. Considering that research participants engaged with the intervention whilst being enrolled on a full-time ITET programme, a flexible design was necessary to account for participants' needs.

Each of the six intervention modules consisted of a pre-recorded video, lasting 25–45 minutes and presented by the first author, followed by a reflective activity, which encouraged participants to reflect on the extent to which the video content related to their personal and professional experience. Participants were then encouraged to share their reflections on a discussion forum (accessible via the learning platform), which provided participants with an opportunity to interact with each other. The intervention was characterised by an identity component, defined as a series of activities that 'encourage learners to explicitly connect course content to their current and future identity' (Forbes et al. 2021: 437). The intervention structure is displayed in Figure 2.

One of the learning objectives of the intervention was to further participants' understanding of multilingualism and its complexities. In this regard, the intervention addressed various conceptualisations of multilingualism, and argued for an inclusive view of linguistic diversity that recognises and values different sources of multilingualism in one's linguistic repertoire, in the form of national languages, dialects, language varieties (e.g. slang, jargon), non-verbal communication (gestures, emojis) and other forms of communication (e.g. music, coding). The intervention also invited participants to challenge stereotypical views of the EAL learner, such as considering students with EAL as a homogeneous group, associating having English as an additional language with academic needs and considering EAL students the only multilingual students in school. By examining the findings of empirical research (Brady 2015; Dressler 2015; Evans and Liu 2018; Melo-Pfeifer 2015), the intervention also aimed at furthering participants' understanding of the relationships between students' language, identity and social integration, and getting them to consider the role that students' home languages play in their social and cognitive development. Finally, the intervention encouraged participants to reflect on and develop linguistically inclusive teaching strategies that they could apply in their specific classroom contexts, drawing on findings from empirical research on teaching strategies to promote the academic, social and linguistic inclusion of EAL students (Evans et al. 2020; Liu et al. 2017) and to facilitate processes of multilingual-identity construction (Forbes et al. 2021). A detailed
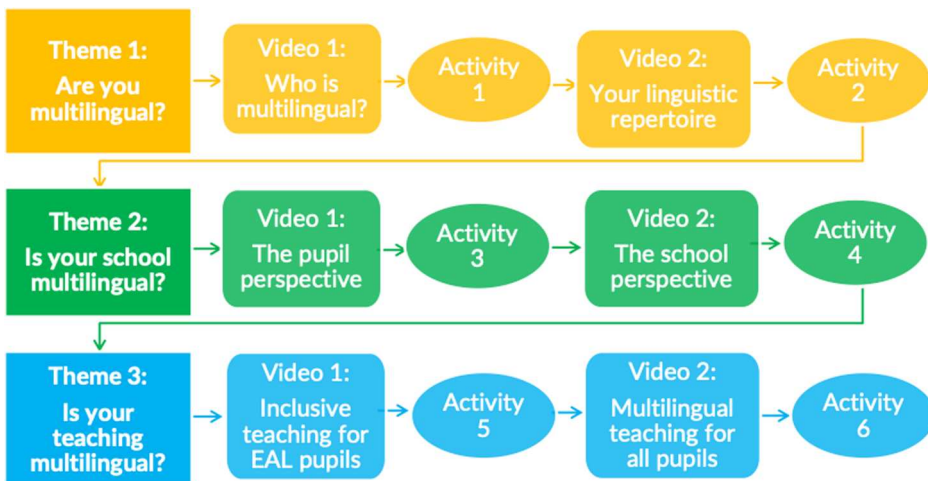

Figure 2. Structure of the intervention.

table with the content, learning objectives and reflective activities of each intervention theme can be found in Table 2, whereas an example of intervention content can be found in the Appendix.

The objectives and topics outlined above were selected to explore multilingualism from various perspectives: from the teachers' personal perspective (Theme 1), from the learners' and the schools' perspective (Theme 2) and from the teachers' professional perspective (Theme 3). Equally, since the rationale of the intervention was to add a multilingual-identity element into current ITE provision, it was essential to include issues related to EAL students, as teachers in England are expected to demonstrate a clear understanding of the specific 'needs' of EAL learners (DfE 2011).

Validity and reliability

To assess the construct validity of the questionnaire items, a confirmatory factor analysis (CFA) was conducted on the five MId items listed in Table 1. Consideringthe simplicity of the model being tested, a target sample size of 200 was considered sufficient (Muthén and Muthén 2002). Since the data collection conducted in September-October 2020 resulted in 117 complete responses, a second round of data collection was conducted online in May 2021, resulting in 83 additional responses ($N = 200$). CFA was conducted using the software Stata (version 16.1). A Mardia's test of multivariate normality indicated that the dataset was not normally distributed. As a result, Maximum Likelihood with a Satorra-Bentler (SB) adjustment was used as model estimator, as the adjustment is considered robust against violations of the normality assumption (Tong et al. 2014). The CFA results indicated factor loadings > .5 for all items (Table 3). The five-item model was evaluated against the most common indices of model fitness, namely the (Satorra-Bentler adjusted) Chi-square, RMSEA, CFI, TLI and SRMR. Table 4 reports the values obtained for each model-fit index, together the cut-off values recommended in Hu and Bentler (1999) as indicators of a good model fit.

Although the RMSEA value exceeds the cut-off threshold, the values obtained for the other fit indices indicate an acceptable model overall. Additionally, the very high factor loadings of items MId3, MId4 and MId5 (Table 3) suggest that the latent variable measured may indeed coincide with the MId construct.

The reliability of the scale was assessed via a Cronbach Alpha test on the same dataset ($N = 200$), resulting in a correlation coefficient of .869 which indicates high reliability (Cohen et al. 2007). Given the results of the validity and reliability analyses, a MId-scale variable was created through a mathematical average of the *Z*-score values of the five MId items, in order to obtain an overall measurement of participants' MId.

Results

Pre-service teachers' MId during ITET

Before presenting the pretest-posttest results, we first explore the extent to which the 200 pre-service teachers who completed a MId questionnaire during ITET expressed a multilingual identity through their responses. In terms of participant background, $n = 88$ (44%) were training to become primary-school teachers, whereas $n = 112$ (66%) were training to work in secondary schools. The subject specialism of the secondary school trainees was grouped into three categories: arts and humanities (e.g. English, history, geography, music, art), modern languages (ML), and STEM (e.g. mathematics, biology, physics, design and technology). Within the secondary group, $n = 48$ participants (24%) were training to teach modern manguages, $n = 40$ (20%) participants belonged to the arts and humanities subject area, and $n = 24$ (12%) to the STEM area.

The descriptive statistics of participants' responses to the five MId items are reported in Table 5. Considering that ML trainee teachers are likely to be more multilingual than the other participants, results are compared between the ML and non-ML subsamples. ML trainees reported on average almost three

Table 2. Structure, topics, objectives and activities of the intervention.

Theme	Topic	Objectives	Reflective activity
1. Are you multilingual?	1.1. Who is multilingual?	1. Reflect on the concepts of monolingualism and multilingualism: a dichotomy or a continuum? 2. The relationship between EAL and multilingualism. 3. Consider the benefits of being and becoming multilingual.	Think of one class that you have taught/are currently teaching: - How many students are EAL? Are they all multilingual? - Are there multilingual students who are not EAL? - What are the language profiles of your students? Share your reflections in the forum.
	1.2. Your linguistic repertoire.	1. Reflect on what constitutes our linguistic repertoire. 2. Explore your linguistic repertoire. 3. Reflect on the relationship between teachers' experience with language, their beliefs and their teaching practice.	Think about your linguistic repertoire: - What is your linguistic repertoire like, right now? - What did your linguistic repertoire use to be like when you were in school? - What may your linguistic repertoire be like a year from now? And 10 years from now? Now represent your linguistic repertoire(s) visually (e.g. as a bullet-point lists, a timeline or in any other visual form). If you wish, share your work in the forum.
2. Is your school multilingual?	2.1. The pupil perspective.	1. Reflect on the relationship between language and identity. 2. Understand how language, identity and power relations intertwine in students' school life. 3. Explore the processes of social integration experienced by newly arrived EAL students.	Think about 2 or 3 students (EAL or not) that you have taught or are currently teaching: - Are they aware of their linguistic repertoires? Why so? - In which ways do they express their identities through language in school and/or in the classroom? - What about the teaching staff? Are your colleagues multilingual? Do they see themselves as multilingual? Share your thoughts and reflections in the forum.
	2.2. Language policies and the school perspective.	1. Understand and reflect on school-wide approaches for EAL students (mainstreaming vs specialised provision). 2. Reflect on national and school language policies and on whether school change is a top-down or bottom-up process.	Talk to your mentor/colleagues/the EAL coordinator in your placement school and find out: - What provision is in place for EAL learners? - Does the school have an explicit language policy? - Has any provision/policy changed over the last few years? If yes, how and why? If you wish, share your findings in the forum.
3. Is your teaching multilingual?	3.1. Inclusive teaching for EAL pupils.	1. Reflect on the relationship between EAL students, language and attainment. 2. Reflect on teachers' different attitudes towards teaching EAL students. 3. Devise strategies for inclusive teaching for EAL students, in the form of academic, linguistic and social inclusion.	Think about the inclusive strategies discussed in the video: - Which strategies would work best in your context? Why so? - Which inclusive strategies are you currently using? - Which inclusive strategies would you like to try moving forward? Now pick a 'slice' from the diamond model of inclusive practice (Evans et al. 2020) and share your top teaching strategy/ies related to that slice in the forum.
	3.2. Multilingual teaching for all pupils.	1. Familiarise with identity-oriented pedagogies to develop students' multilingual identities. 2. Reflect on the what, why, when, where and how of an identity-oriented pedagogy.	Think about your teaching practice: - How can you make your teaching more multilingual? - What could the benefits and potential challenges be? - Which resources/strategies discussed in the video may or may not work in your school? Share your experience and thoughts in the forum.

Table 3. CFA factor loadings (MId items).

Item code	Item description	Factor loading
MId1	Number of additional languages reported.	.53
MId2	I embrace opportunities to use a foreign language, even if I am not very good at it.	.58
MId3	I am proud of my linguistic repertoire.	.87
MId4	People important to me see me as a multilingual person.	.94
MId5	mVAS.	.90

Table 4. CFA model-fit indices against recommended cut-off values.

Model fit indices	Values obtained	Cut-off values (Hu and Bentler 1999)
Chi-square	9.48; $p = .091$	$p > .05$
SB-adjusted Chi-square	9.67; $p = .085$	
RMSEA	.067; C.I. .000–.132	< .06
SB-adjusted RMSEA	.069	
CFI	.993	> .95
SB-adjusted CFI	.994	
TLI	.985	> .95
SB-adjusted TLI	.987	
SRMR	.027	< .09

additional languages (MId1: $M = 2.79$, $Mdn = 3$); they tended to place themselves in the multilingual half of the mVAS (MId5: $M = 79.60$, $Mdn = 80$) and to agree that people important to them consider them multilingual (MId4: $M = 2.17$, $Mdn = 2$). ML participants also felt very proud of their linguistic repertoire (MId3: $M = 2.27$, $Mdn = 3$) and eager to use languages when possible (MId2: $M = 2.13$, $Mdn = 2$). The picture looks different for non-ML trainees. Whilst, perhaps surprisingly, this group listed on average two additional languages as part of their linguistic repertoires (MId1: $M = 1.84$, $Mdn = 2$), they tended to express a monolingual identity by placing themselves on the monolingual side of the mVAS scale (MId5: $M = 34.32$, $Mdn = 29$) and not believing that significant others would consider them multilingual (MId4: $M = -1.26$, $Mdn = -2$). Additionally, they did not feel particularly proud of their linguistic repertoire (MId3: $M = -0.47$, $Mdn = 0$), although they did not seem reluctant to use additional languages when an opportunity arises (MId2: $M = 0.93$, $Mdn = 1$).

Based on this data, the pre-service teachers in our sample, regardless of subject specialism, claimed multiple additional languages as part of their linguistic repertoire; however, they did not tend to express a multilingual identity unless they were training to become languages teachers. Although this sample may not be representative of the population of pre-service teachers in the

Table 5. Descriptive statistics of MId items, by total sample, ML and non-ML trainee teachers.

Group	Statistics	MId1	MId2	MId3	MId4	MId5
All $n = 200$	M	2.07	1.22	0.19	−0.43	45.19
	SD	1.288	1.617	2.169	2.287	32.781
	SE	0.091	0.114	0.153	0.162	2.318
	Mdn	2	2	0	−1	40
ML $n = 48$	M	2.79	2.13	2.27	2.17	79.6
	SD	1.184	1.084	1.25	1.038	18.202
	SE	0.171	0.156	0.18	0.15	2.627
	Mdn	3	2	3	2	80
Non-ML $n = 152$	M	1.84	0.93	−0.47	−1.26	34.32
	SD	1.237	1.654	1.973	1.931	28.595
	SE	0.1	0.134	0.16	0.157	2.319
	Mdn	2	1	0	−2	29

Notes. MId1: number of additional languages reported (0–5).
MId2: Likert item 'I embrace opportunities to use a foreign language, even if I'm not very good at it' (−3 to +3).
MId3: Likert item 'I am proud of my linguistic repertoire' (−3 to +3).
MId4: Likert item 'People important to me see me as a multilingual person' (−3 to +3).
Mid5: Monolingual-Multilingual visual analogue scale (0-100).

UK, the results obtained provide a rationale for exploring the potential of developing pre-service teachers' multilingual identity during ITET. The findings from the quasi-experiment are reported in the following sections.

Information on experimental and control groups

The experimental group consisted of 17 participants. Their mean age in years at the start of the project was 27.29 ($SD = 8.045$, $Mdn = 25$). Thirteen participants identified as female and four as male. Five participants were training to teach in primary schools and 12 in secondary schools. Of the latter group, six participants specialised in a STEM subject (one participant teaching mathematics, one biology, two chemistry and two physics), five in an arts and humanities subject (two participants teaching English and three hstory), and one in ML.

The 20 participants in the control group had a mean age in years of 27.80 ($SD = 6.51$, $Mdn = 25$). Eighteen participants identified as female, one as male and one preferred not to report this information. Five participants were training to become primary school teachers and 15 to teach in secondary schools. Of the latter group, twelve participants specialised in ML and three in an arts and humanities subject (one participant teaching art and design, one geography and one religious studies). No participant belonged to the STEM group, making the two groups non-equivalent with regard to participants' subject specialism.

Multilingual-identity scale

To assess the presence of statistically significant differences in participants' MId-scale scores before and after the intervention, two Wilcoxon signed-rank tests were conducted, one within the experimental and one within the control group. The Wilcoxon signed-rank test is the non-parametric equivalent of a paired two-sample t-test; a non-parametric test was preferred in consideration of the relatively small sample size and the ordinal nature of most variables under investigation.

A MId scale was computed through an arithmetic average of the scores of the five MId variables, after converting them into Z scores. As a result, the values of the resulting scale are also Z scores and are thus not directly interpretable, so that the presence and magnitude of any difference can be mainly understood through the p-value and effect size, rather than through the mean difference in scores between time points. Table 6 reports the results of the tests, including the standardised Wilcoxon test statistic (Z), the associated p-value and the effect size.

The test revealed a large and significant increase in MId-scale scores among experimental group participants, whilst no statistically significant change in scores was detected in the control group. These findings indicate that the trainee teachers who took part in the intervention tended to rate themselves higher on a series of MId items compared to before participating in the intervention. To better understand this overall change in participants' MId scores, a series of Wilcoxon signed-rank tests were conducted on the individual MId items. The analyses are presented below divided by the three MId dimensions, namely experience, emotion and evaluation. In case of a statistically significant change, the quantitative findings are complemented with qualitative data from the post-intervention interviews.

Experience: MId1 and MId2 items

MId1 item
The MId1 variable consisted of the total number of additional languages reported by participants. To only include additional languages, participants' native language was excluded from the count, and when participants indicated more than one native language, only one was removed. The values of this variable ranged from zero (no additional language reported) to five.

Table 6. Wilcoxon signed-rank test statistics by experimental and control group (Mld scale).

Group	Mean score			Test statistics		
	Pre-intervention	Post-intervention	Difference	Z	p	r
Experimental	−0.193	0.193	+0.386	−3.309	<.001*	−0.568
Control	0.068	0.094	+0.026	−0.588	.557	−0.098

As shown in Table 7, a Wilcoxon signed-rank test revealed a medium-to-large and significant increase in the number of additional languages reported by participants in the experimental group after the intervention. No significant differences were found in the control group. As shown in Table 7, more than half of participants from the experimental group included at least one more language compared to their pre-intervention responses, with only one participant listing fewer languages. This finding may be explained in two ways. On the one hand, trainee teachers who took part in the intervention may have expanded their linguistic repertoire by learning a new language or refreshing their knowledge of a previously known one; alternatively, participants may have been more inclined to claim other languages as part of their linguistic repertoire without necessarily having practised them.

To obtain insights into the reasons behind this change, participants were shown their pre–post responses and invited to comment during an interview. Of the nine trainee teachers who listed more languages after the intervention than before, seven were interviewed. Of these seven participants, three felt the increase was due to their school experience: one primary-school trainee had to refresh her knowledge of Spanish before teaching it to her class, whereas the other two participants included more languages after having had the opportunity to use them with some of their students. On the other hand, the other four participants explicitly mentioned the intervention as either the main reason or a contributing factor for the increase in the number of additional languages reported. All of them explained that the intervention helped them realise that they did not need to be fluent in a language to be able to claim it as part of their linguistic repertoire. For example, Sophie (pseudonym), 27, who was training to become a primary-school teacher, decided to include French next to Spanish after the intervention, explaining that:

> Actually, having learned and gone through the course [i.e. the intervention] and understood what you meant by, you know, 'are you mono[lingual]? Are you multi[lingual]? What is your linguistic profile?', then that made me think, 'yeah, I can add French into that because, you know, I would feel comfortable going to France and picking up the odd word or sharing it with the children in the classroom'.

Lily, 39, who was training to teach History in secondary schools, initially included French, German and Latin as additional languages in her repertoire, but also added Russian and Hungarian in the second questionnaire. When asked if she had learnt these languages in the months between the two surveys, she explained that those were languages she had studied at university, but that she 'wouldn't have counted them before'. Through the intervention, Lily realised that 'even a little bit of experience that I'd had, and my attempts to learn them now makes them part of me. So that's where it came from', further explaining that these languages 'weren't new […], but it's because [the intervention] made me see them as something which is … part of me, where I hadn't seen that before'.

The above qualitative data suggest that while, for some participants, this change in number of languages was indeed the result of refreshing their knowledge of a language, for others it

Table 7. Wilcoxon signed-rank test statistics by experimental and control group (Mld1 item).

Group	Mean score			Test statistics		
	Pre-intervention	Post-intervention	Difference	Z	p	r
Experimental	2.118	2.882	+0.764	−2.511	.012*	−0.431
Control	2.7	2.75	+0.05	−0.264	.792	−0.042

Note. *p < .05.

stemmed from an identity act of claiming other languages as part of their linguistic repertoire irrespective of the participants' linguistic ability.

MId2 item

The MId2 item was a seven-point Likert item stating: 'I embrace opportunities to use a foreign language, even if I am not very good at it', with values ranging from −3 to +3 (strongly disagree to strongly agree). As shown in Table 8, a Wilcoxon signed-rank test revealed no statistically significant differences in participants' questionnaire responses to the MId2 item in either group. This indicates that the intervention did not influence trainees' eagerness to use languages other than their native language(s) regardless of their ability level.

Emotion: MId3 item

The emotion component was explored through a seven-point Likert item stating: 'I am proud of my linguistic repertoire', with values ranging from −3 (strongly disagree) to +3 (strongly agree). A Wilcoxon signed-rank test found an overall pretest-posttest increase in item scores, which was statistically significant and moderately strong (Table 9). When inspecting the mean score difference at the two time points, the mean scores increased from around 0 (neither agree nor disagree) to almost +1 (slightly agree), suggesting a shift towards a (slight) sense of pride associated with participants' linguistic repertoires. Conversely, the responses of trainee teachers in the control group remained stable, as shown by a negligeable mean difference.

During the interviews, six of the eight participants who rated the MId3 item more highly after the intervention accepted to be interviewed. When asked to share their thoughts about this change, four participants explicitly linked it to the intervention. In line with participants' previous responses, these trainee teachers explained that their way of thinking about multilingualism had changed, which resulted in a better appreciation of their linguistic repertoire.

For Sophie (27 years old, primary) and Amy (21, secondary English), their pre-intervention responses reflected a lack of confidence in their ability in other languages. Amy initially disagreed with the statement (−2) but gave a score of 0 after the intervention, whereas Sophie still disagreed with the statement after the intervention, albeit less strongly (from −3 to −2). In Amy's words, having had the opportunity to reflect on what it means to be multilingual and challenge some of her initial beliefs encouraged her to appreciate her linguistic repertoire more, by realising that 'actually I do, I do know something, rather than saying: 'if I'm not fluent, then it's not worth anything'. Amy's emerging sense of pride about her multilingualism stemmed from the realisation that her linguistic repertoire is complex and unique:

> Going back to that idea of dialect, there are some words that I already know that are kind of part of my linguistic repertoire, that aren't part of somebody else's. So I think it's thinking more along the lines of what I do have, rather than devaluing that.

Sophie, on the other hand, despite finding that the intervention had encouraged her to challenge some prescriptive beliefs about language, still struggled to feel proud of her repertoire:

> I think this year, especially during the course [i.e. the intervention], I've realised that, actually, [...] you don't need to be completely fluent in other languages to be … multilingual, it's more about, you know, 'are you aware of some aspects of it?' 'Are you happy to engage with different languages and kind of share that?' So I think that's

Table 8. Wilcoxon signed-rank test statistics by experimental and control group (MId2 item).

Group	Mean score			Test statistics		
	Pre-intervention	Post-intervention	Difference	Z	p	r
Experimental	1.819	1.7	−0.119	−0.119	.905	−0.02
Control	1.5	1.7	+0.2	−0.849	.396	−0.134

Table 9. Wilcoxon signed-rank test statistics by experimental and control group (MId3 item).

Group	Mean score			Test statistics		
	Pre-intervention	Post-intervention	Difference	Z	p	r
Experimental	−0.059	0.882	+0.941	−2.354	.019*	−0.404
Control	1.0	1.05	+0.05	−0.378	.705	−0.06

Note. * $p < .05$.

> probably why my score has improved slightly, but still I'm still not proud of it because I'd love to be able to, you know, speak more than one or two languages, fluently.

Overall, these findings indicate that some of the pre-service teachers who participated in the intervention experienced a positive change in the emotional component of their multilingual identities; in particular, it seems that overcoming pre-conceptions linked to fluency as a pre-condition to claim a language as part of one's identity resulted in a stronger sense of pride (or a reduced sense of shame) towards participants' linguistic repertoires.

Evaluation: MId4 and MId5

MId4 item

The MId4 item was also a seven-point Likert item (ranging from −3 to +3) stating: 'people important to me see me as a multilingual person'. After the intervention, 11/17 participants in the experimental group agreed more strongly with the statement, while one participant rated the statement with a lower score after the intervention. A Wilcoxon signed-ranked test revealed that this increase was statistically significant and of medium magnitude (Table 10). On the other hand, the overall level of agreement with this statement in the control group remained rather stable, with only a negligeable and non-significant decrease in mean scores (−0.05).

As shown in Table 10, the experimental group saw an increase in mean scores of almost one point (+0.823), from a pretest mean score of −1 to a posttest mean score close to 0. An inspection of the shape of the two distributions (Figure 3) suggests that the increase in scores was driven by participants who disagreed with the statement before the intervention. Specifically, eight of the ten participants who initially disagreed with the MId4 statement (scores between −1 and −3) assigned a higher score to the statement after the intervention; conversely, an increase in post-intervention scores was found in only three participants of the seven who had rated the statement between 0 and +3 before the intervention. This suggests that the intervention may have been particularly beneficial to those participants who had originally expressed a monolingual identity through this questionnaire item.

MId5 item

MId5 was a visual analogue scale ranging from 0 (monolingual) to 100 (multilingual), on which respondents were asked to self-rate based on the extent they saw themselves as mono/multilingual. Contrary to the trend seen with most MId items, a Wilcoxon signed-rank test revealed a small, non-significant increase in responses to the MId5 item in the experimental group after the intervention (Table 11); on the other hand, a negligeable and non-significant decrease in scores was found in the control group.

Table 10. Wilcoxon signed-rank test statistics by experimental and control group (MId4 item).

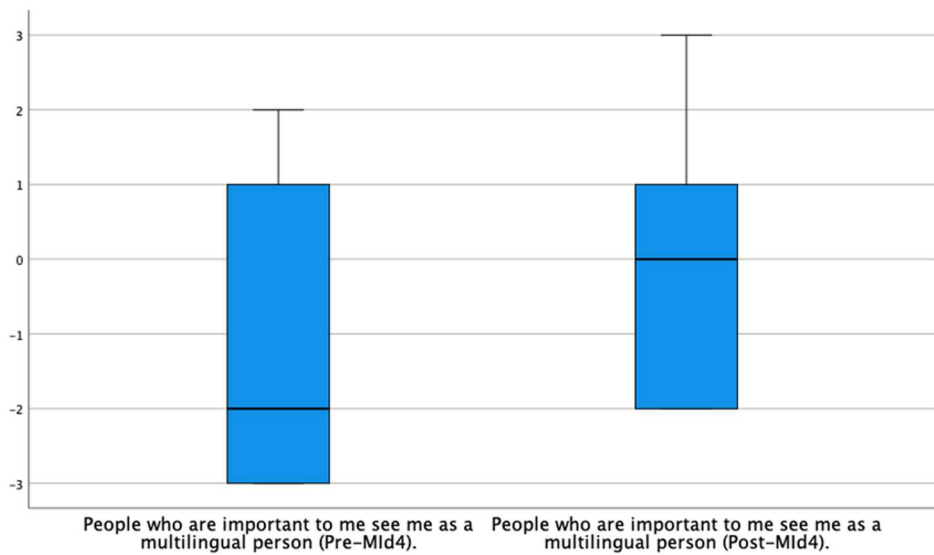| Group	Mean score			Test statistics		
	Pre-intervention	Post-intervention	Difference	Z	p	r
Experimental	−1.0	−0.177	+0.823	−2.375	.018*	−0.407
Control	0.8	0.75	−0.05	−0.333	.739	−0.053

Note. *$p < .05$.

Figure 3. Distribution of Mld4-item scores before and after the intervention, experimental group.

The discrepancy of findings between the two variables justified a further examination of the Mld5-item scores. Considering that, with regard to item Mld4, positive changes in pretest-posttest scores were mainly found among participants who had assigned a negative score in the pretest, Mld5-item scores were compared by sub-samples of participants in order to see if the same trend would emerge. Specifically, the sample was divided in two sub-samples, based on whether participants had rated themselves on the monolingual or the multilingual side of the scale in the pretest. Table 12 reports the results of the Wilcoxon signed-ranked tests between two sub-samples of participants, namely the 'more monolingual' sub-group – with pretest scores between 0 and 49 (experimental group: $n = 8$; control group: $n = 5$) – and the 'more multilingual' sub-group – with pretest scores between 50 and 100 (experimental group: $n = 9$; control group: $n = 13$).

With regard to the 'more monolingual' sub-group, seven of the eight participants from the experimental group placed themselves higher on the scale after the intervention, with one tie. A Wilcoxon signed-rank test revealed that this increase in scores was statistically significant, with a large effect size (Table 12). Conversely, control-group participants in the 'more monolingual' sub-group saw a small decrease in mean scores of −3.2 points after the intervention, a difference which is not statistically significant. A series of Wilcoxon signed-rank tests also revealed that participants in the 'more multilingual' sub-sample from both the experimental and control group showed a small and moderate, non-significant decrease in mean scores, which was more marked in the experimental group (Table 12).

Overall, these results indicate that experimental-group participants who expressed a monolingual identity before the intervention were the ones who most experienced changes in their self-beliefs after the intervention. The qualitative findings from the interviews provided some insights into the reasons behind the statistically significant differences in participants' responses to the Mld4

Table 11. Wilcoxon signed-rank test statistics by experimental and control group (Mld5 item).

	Mean score			Test statistics		
Group	Pre-intervention	Post-intervention	Difference	Z	p	r
Experimental	42.941	47.118	+4.177	−1.217	.224	−0.209
Control	62.444	60.944	−1.5	−0.126	.900	−0.021

Table 12. Wilcoxon signed-rank test statistics for participants in the 'more monolingual' and 'more multilingual' sub-groups (MId5), by experimental and control group.

		Mean score			Test statistics		
Sub-sample	Group	Pre-intervention	Post-intervention	Diff.	Z	p	r
More monolingual (scores 0–49)	Experimental	20.125	34.5	+14.375	−2.371	.018*	−0.593
	Control	16.6	13.4	−3.2	−1.069	.285	−0.214
More multilingual (scores 50–100)	Experimental	63.222	58.333	−4.889	−1.483	.138	−0.35
	Control	80.077	79.231	−0.846	−0.44	.965	−0.086

Note. *$p < .05$.

and MId5 items after the intervention. Of the fourteen participants who saw a positive increase in their scores to either the MId4 or MId5 item after the intervention, nine were interviewed and asked to share their thoughts about this change. Seven out of nine participants explicitly referred to the intervention as a reason for the increase in their questionnaire scores. One of them was Alfie, 25, who was training to become a secondary-school teacher of physics. Alfie initially did not think others perceived him as a multilingual person (MId4: −2), but he rated the statement with a 0 after the intervention; at the same time, his mVAS score increased from 25 to 34. When reflecting on these changes, Alfie explained that his view of what being multilingual means had shifted: 'I guess on that spectrum of monolingual to multi[lingual], I guess I feel I've, I've kind of … well, firstly, I probably didn't really see myself in a spectrum at all. I kind of saw it as two … *binary pots*'. Starting to consider mono- and multilingualism on a continuum, together with challenging the idea of fluency in multiple languages as a precondition for expressing a MId, encouraged Alfie to consider himself more multilingual:

> I think I now see myself a bit further towards the multilingual side. So I guess specifically that is, I have some now quite unpractised, uh, French and Spanish language learning from my school days, uh, which previously I kind of would have just ignored, I guess if I considered my … language proficiency or my linguistic repertoire.

Will, 24, who was training to teach History in secondary schools, already considered himself, to some extent, multilingual. He had lived in France for a period of time and was learning Swedish, his partner's language. Will tended to think that people important to him saw him as multilingual (MId4: + 1), and he rated himself with a score of 50 on the mVAS. After the intervention, his mVAS score remained unchanged, but he agreed more strongly with the MId4 statement (+3). When asked if his way of seeing himself linguistically had changed, he replied:

> Yeah, I would say it has. Um, so I think if you'd asked me the question at the beginning, I would have spoken about the fact that English is my kind of mother tongue, and I speak French to relatively high level, having lived in France. Um, that's probably where my answer would have ended.

Will then added that the very fact that he was learning Swedish, even if at a basic level, was enriching his linguistic repertoire, but that there were also other forms and domains of communication in his repertoire that he would not have considered before:

> Also within English, I have different linguistic knowledge. You have different domains. So, uh, I think an obvious one is like cricket, uh, the sport. The sport cricket has a lot of unique vocabulary and phrases that can only really be understood within that context. Um, and then also … I mean, after this year, kind of pedagogical language, um, kind of metalanguage of teaching, I guess, is something that I've built. […] And, as well, I sort of have spots of dialect from around the UK, where I've lived and also [from] family members that are from different places. So it [my linguistic repertoire] has become more expansive, definitely.

Will finally explained that having had the opportunity to reflect on the meaning of multilingualism played an important part in this change of perspective:

> It's definitely like … doing the course [i.e. the intervention] and videos […] forced me to reflect on what multilingualism means. Uhm, and also the value of … […] not seeing only speaking a language as the, like, ultimate

form of diverse communication. So, yeah, just- just being forced to actually reflect on it … in a little bit of depth has, kind of, made me realise that – whereas before I'd never been invited to think about that or encouraged to see multilingualism in, in that kind of way.

Discussion

Summary of findings

This study explored the extent to which a group of pre-service teachers in England expressed a multilingual identity before and after participating in an identity-oriented intervention during ITET. Firstly, an analysis of the questionnaire responses of 200 pre-service teachers in the UK indicated that the trainee teachers in the sample had a varied experience with languages regardless of subject specialism; however, only participants training to teach a modern language tended to express a multilingual identity. A group of 17 pre-service teachers then participated in an identity-oriented online intervention during ITET. Overall, the quantitative and qualitative data suggest that trainee teachers in the experimental group expressed a stronger MId after the intervention. Specifically, a statistically significant increase, with a medium or large effect size, was found in most of the items designed to explore the experiential, emotional and evaluative components of pre-service teachers' MId. A comparison of pre-service teachers' pretest-posttest responses to the two questionnaire items exploring participants' multilingual self-perceptions indicated that these changes were particularly experienced by those participants who had expressed a monolingual identity in the pretest.

The statistically significant changes in trainee teachers' multilingual identities were commented by participants during a post-intervention interview, and two main themes emerged from their responses. Firstly, some of the interviewed participants indicated that the intervention helped them to challenge the idea of fluency as a pre-condition to express a MId, and, secondly, that it spurred them to appreciate the complexities of their linguistic repertoire, by encouraging them to consider dialects, language varieties and other forms of communication as part of their repertoire as much as their knowledge of additional national languages.

No statistically significant changes in any of the questionnaire items were found in the control group. On the one hand, this may suggest that multilingual-identity development may not be a process that would normally occur within ITET programmes without targeted interventions. However, the fact that the mean pretest MId scores of the control group were higher than the ones of the experimental group suggests that it is also possible that trainees in the control group did not experience changes in their identities due to already displaying a stronger MId at the start of the study.

To the authors' knowledge, no comparable intervention study focusing on pre-service or in-service teachers' multilingual identities has been published so far, so it is impossible to compare these results with other empirical research. Nonetheless, these findings seem in line with the results obtained by Forbes et al. (2021), who, in their experimental study on developing secondary-school students' multilingual identities in the languages classroom, found significant changes in participants' self-beliefs and emotions associated with languages after the intervention, suggesting that the identity-oriented pedagogical approach being tested facilitated processes of multilingual-identity construction. Although the present study adopted the conceptual framework of MId proposed by Forbes et al. (2021), the two projects were fundamentally different in terms of research context (i.e. secondary school language learners versus pre-service teachers). As a result, this study required a different operationalisation of the MId construct. Whilst, for example, Forbes et al. (2021) investigated learners' enjoyment of language learning as part of their exploration of the emotional component of students' multilingual identities, this dimension was not included in the current study given that participants were not actively involved in language acquisition. On the other hand, examining the identities of adults provided an opportunity to explore their awareness of their multilingual repertoires, using the number of languages they would be willing to claim as part

of their repertoires as an indicator of their MId. In this regard, the significant increase in the languages reported after the intervention represents a particularly remarkable finding, which highlights that the way one expresses their experience with language is highly subjective and shaped by one's language beliefs.

Developing (pre-service) teachers' MId during teacher education: A conceptual model

Based on the evidence from this study, a conceptual framework is presented in Figure 4, which proposes the implementation of identity-oriented interventions on the topic of multilingualism within teacher education as a way to facilitate processes of multilingual-identity development. Specifically, when considering the three theorised sub-dimensions of MId (experience, emotion and evaluation), the quantitative and qualitative research findings provide some preliminary indication of a potentially positive effect of the intervention on participants' feeling of pride associated with their linguistic repertoires and on participants' self-perceptions as multilinguals. Additionally, participants tended to consider more languages as part of their multilingual repertoire after the intervention, even without having engaged in language learning. At the same time, however, participants did not show significant changes in their attitudes towards using additional languages. For this reason, and for the fact that the intervention was not meant to increase participants' exposure to languages, the arrow linking the intervention with the experience component is dotted. Secondly, this model theorises that developing (pre-service) teachers' MId may in turn shape both teachers' conceptions of their students' multilingualism (e.g. moving away from exclusively associating student multilingualism with the EAL learner) and their language practices in the classroom, since it is reasonable to hypothesise that teachers who both value their linguistic repertoire and recognise the complexities of their students' multilingualism may be more prone to creating a linguistically inclusive learning environment in their classroom. More research is however needed to test this hypothesis, and this is reflected through the other dotted arrows in the model below.
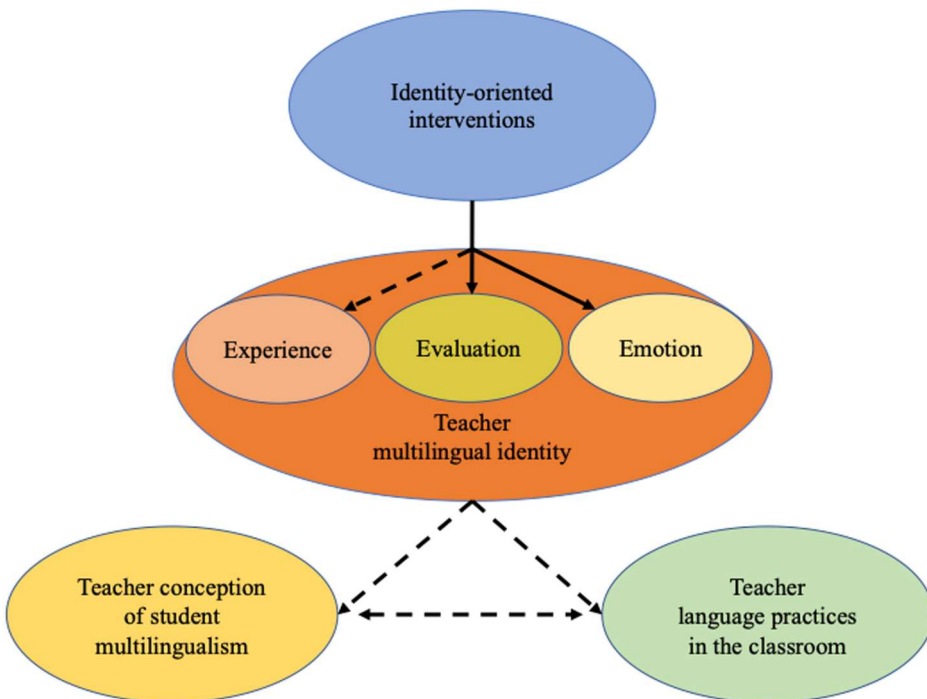
Figure 4. A conceptual model for developing (pre-service) teachers' multilingual identities.

Contributions, limitations and implications

The study findings provide a rationale for adding an identity and multilingual element into the current ITET provision on linguistically inclusive teaching. In particular, being encouraged to reflect on the meaning of being multilingual and consider an inclusive view of multilingualism may encourage future teachers to challenge prescriptive beliefs about multilingualism, which in turn may stimulate processes of multilingual-identity construction. As trainee teachers negotiate and construct a professional identity from their developing teaching experience, having opportunities to reflect on such processes of identity and belief development seems particularly important.

When assessing the findings and contributions of this study, its methodological limitations should be equally considered. Firstly, the MId construct was only measured through five items. As a result, each sub-dimension of MId was not measured separately, but instead integrated into a single, one-factor model. Therefore, as it is, the questionnaire is not sufficiently developed to explore each of the three dimensions in detail. Another methodological limitation regards the sampling process and the generalisability of the study findings. Since participant recruitment relied on purposive sampling, the control group was not equivalent to the experimental group, and the sub-group of ML trainees was more represented in the control than in the experimental group, resulting in consistently higher mean scores across questionnaire items among the control group and thus limiting the possibility to generalise the findings. This, together with the small sample size of the intervention and control groups, limits our ability to draw any firm conclusions from the findings or to establish a causal link between the intervention and participants' developing MId. Nonetheless, in consideration of the paucity of observational and experimental research on pre-service teachers' multilingual identities during teacher education, this study highlights a new avenue of research with important implications for ITET providers. Given the limitations of the current study, future research should aim to include a larger and more representative sample of participants and to explore pre-service teachers' MId development in the longer term, such as during the transition into in-service teaching.

In conclusion, it is the authors' hope that this study will pave the way to more research on pre-service and in-service teachers' multilingual identities, both in the UK and in other national contexts. In particular, it is crucial that future studies also examine any relationship between teachers' multilingual identities and their teaching practices, as to understand whether, and to what extent, a teacher identifying as multilingual may be more inclined to adopt multilingual pedagogies in the classroom. Confirming this relationship would provide an even stronger rationale for designing and implementing identity-oriented interventions for both pre-service and in-service teachers.

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The authors report there are no competing interests to declare.

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References

Beauchamp, C., and L. Thomas. 2009. Understanding teacher identity: an overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education* 39, no. 2: 175–189. https://doi.org/10.1080/03057640902902252.

Brady, J. 2015. Dialect, power and politics: standard English and adolescent identities. *Literacy* 49: 149–157. https://doi.org/10.1111/lit.12058.

Cohen, L., L. Manion and K. Morrison. 2007. *Research Methods in Education*, 6th ed. London, NY: Routledge Falmer.

De Angelis, G. 2011. Teachers' beliefs about the role of prior language knowledge in learning and how these influence teaching practices. International Journal of Multilingualism 8, no. 3: 216–234. http://doi.org/10.1080/14790718.2011.560669.

Department for Education. 2011. *Teachers' Standards*. London: Department for Education. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1040274/Teachers__Standards_Dec_2021.pdf.

Department for Education. 2022. *Schools, Pupils and Their Characteristics: England 2021*. London: Department for Education. https://explore-education-statistics.service.gov.uk/find-statistics/school-pupils-and-their-characteristics.

Dressler, R. 2015. Exploring linguistic identity in young multilingual learners. *TESL Canada Journal* 32, no. 1: 42–52. https://doi.org/10.18806/tesl.v32i1.1198.

Evans, M. and Y. Liu. 2018. The unfamiliar and the indeterminate: language, identity and social integration in the school experience of newly-arrived migrant children in England. *Journal of Language, Identity, & Education* 17, no. 3: 152–167. https://doi.org/10.1080/15348458.2018.1433043.

Evans, M., C. Schneider, M. Arnot, L. Fisher, K. Forbes, Y. Liu and O. Welply. 2020. *Language Development and Social Integration of Students with English as an Additional Language*, 1st ed. Cambridge: Cambridge University Press. https://doi.org/10.1017/9781108656047.

Fisher, L., M. Evans, K. Forbes, A. Gayton and Y. Liu. 2020. Participative multilingual identity construction in the languages classroom: a multi-theoretical conceptualisation. *International Journal of Multilingualism* 17, no. 4: 448–466. https://doi.org/10.1080/14790718.2018.1524896.

Fisher, L., M. Evans, K. Forbes, A. Gayton, Y. Liu and D. Rutgers. 2022. Language experiences, evaluations and emotions (3Es): analysis of structural models of multilingual identity for language learners in schools in England. *International Journal of Multilingualism*: 1–21. https://doi.org/10.1080/14790718.2022.2060235.

Foley, Y., C. Anderson, J. Conteh and J. Hancock. 2018. *Initial Teacher Education and English as an Additional Language*. Edinburgh: The University of Edinburgh. https://www.ceres.education.ed.ac.uk/wp-content/uploads/2020/08/ITE-Report.pdf.

Foley, Y., C. Anderson, J. Hancock and J. Conteh. 2022. Exploring the professional identity and agency of student teachers in multilingual classrooms. *Language and Education* 36, no. 2: 106–121. https://doi.org/10.1080/09500782.2021.1991369.

Forbes, K., M. Evans, L. Fisher, A. Gayton, Y. Liu and D. Rutgers. 2021. Developing a multilingual identity in the languages classroom: the influence of an identity-based pedagogical intervention. *The Language Learning Journal* 49, no. 4: 433–451. https://doi.org/10.1080/09571736.2021.1906733.

Freese, A.R. 2006. Reframing one's teaching: discovering our teacher selves through reflection and inquiry. *Teaching and Teacher Education* 22, no. 1: 110–119. https://doi.org/10.1016/j.tate.2005.07.003.

Henry, A. 2016. Conceptualizing teacher identity as a complex dynamic system: the inner dynamics of transformations during a practicum. *Journal of Teacher Education* 67, no. 4: 291–205. https://doi.org/10.1177/0022487116655382.

Higgins, C. and E. Ponte. 2017. Legitimating multilingual teacher identities in the mainstream classroom. *The Modern Language Journal* 101, no. S1: 15–28. https://doi.org/10.1111/modl.12372.

Hu, L-T. and P.M. Bentler. 1999. Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal* 6, no. 1: 1–55. https://doi.org/10.1080/10705519909540118.

Liu, Y. and M. Evans. 2016. Multilingualism as legitimate shared repertoires in school communities of practice: students' and teachers' discursive constructions of languages in two schools in England. *Cambridge Journal of Education* 46, no. 4: 553–568. https://doi.org/10.1080/0305764X.2015.1091441.

Liu, Y., L. Fisher, K. Forbes and M. Evans. 2017. The knowledge base of teaching in linguistically diverse contexts: 10 grounded principles of multilingual classroom pedagogy for EAL. *Language and Intercultural Communication* 17, no. 4: 378–395. https://doi.org/10.1080/14708477.2017.1368136.

Llompart, J. and M. Birello. 2020. Migrant and non-migrant origin pre-service teachers' beliefs about multilingualism and teaching in multilingual classrooms: convergences and divergences. *Sustainable Multilingualism* 17, no. 1: 102–123. https://doi.org/10.2478/sm-2020-0015.

Melo-Pfeifer, S. 2015. Multilingual awareness and heritage language education: children's multimodal representations of their multilingualism. *Language Awareness* 24, no. 3: 197–115. https://doi.org/10.1080/09658416.2015.1072208.

Muthén, L.K. and B.O. Muthén. 2002. How to use a monte carlo study to decide on sample size and determine power. *Structural Equation Modeling: A Multidisciplinary Journal* 9, no. 4: 599–520. https://doi.org/10.1207/S15328007SEM0904_8.

Richmond, G., M.M. Juzwik and M.D. Steele. 2011. Trajectories of teacher identity development across institutional contexts: constructing a narrative approach. *Teachers College Press* 113, no. 9: 1863–1905. https://doi.org/10.1177/016146811111300907.

Rutgers, D., M. Evans, L. Fisher, K. Forbes, A. Gayton and Y. Liu. 2021. Multilingualism, multilingual identity and academic attainment: evidence from secondary schools in England. *Journal of Language, Identity & Education*. 1–18. https://doi.org/10.1080/15348458.2021.1986397.

Tong, X., S. Zhang and K-H. Yuan. 2014. Evaluation of test statistics for robust structural equation modeling with non-normal missing data. *Structural Equation Modeling: A Multidisciplinary Journal* 21, no. 4: 553–565. https://doi.org/10.1080/10705511.2014.919820.

Vikøy, A. and Å. Haukås. 2021. Norwegian L1 teachers' beliefs about a multilingual approach in increasingly diverse classrooms. *International Journal of Multilingualism* 20, no. 3: 912–931. https://doi.org/10.1080/14790718.2021.1961779.

Zembylas, M. 2003. Emotions and teacher identity: A poststructural perspective. *Teachers and Teaching* 9, no. 3: 213–238. https://doi.org/10.1080/13540600309378.

Appendix

An example of the intervention content: slides used in the second video.

TO SUM UP: AM I MULTILINGUAL?

- Everyone has a unique linguistic repertoire that continuously changes
- Therefore, everyone is on a linguistic journey
- If we consider multilingualism in an all-encompassing way, then we all are, at least to some extent, multilingual.
- Everyone has the right to consider her/himself as multilingual

TO SUM UP: ARE MY STUDENTS MULTILINGUAL?

- Our students may be at different stages of their linguistic journey
- Just as we can consider EAL students as "emergent bilinguals", we can consider all students as "emergent multilinguals"
- But are they aware? What if all students considered themselves multilingual? What would the advantages be?

More on this in theme 2 and 3!

THEME 1: ARE YOU MULTILINGUAL? VIDEO 2: YOUR LINGUISTIC REPERTOIRE

Content and objectives:
✓ What constitutes our linguistic repertoire
✓ Exploring our linguistic repertoire
✓ **Introducing the relationship between teachers' experience, beliefs and teaching practice**

WHY IS THIS IMPORTANT FOR ME? TEACHERS' BELIEFS AND PRACTICE

Idea for blog post: how does your experience with languages and personal beliefs shape your decisions and practice?

- "Teachers are active, thinking decision-makers who make instructional choices by drawing on [...] networks of knowledge, thoughts and beliefs." (Borg, 2003, p. 81)
- When teaching in multilingual classrooms, teachers' pedagogical decisions are strongly influenced by their beliefs about languages and informed by their knowledge of languages (De Angelis, 2011; Ellis, 2004)
- Furthermore, "in addition to having pedagogical power inside the classroom, [...] teachers also have a great deal of power outside the classroom, as they are in the position to advice families on how and when to use the home language in their daily lives." (De Angelis, 2011, p. 217)
- Therefore, there is a need for all teachers to develop linguistic awareness in order to be able to support students in their linguistic journey. (Fisher et al., *forthcoming*)

TO SUM UP:

- Our personal beliefs shape our professional practice
- Recognising and appreciating our linguistic repertoire contributes to becoming linguistically aware teachers
- Which, in turn, can help us make decisions both inside and outside the classroom

ACTIVITY 2:

- Activity 2: Reflect and share in the forum:

What does your linguistic repertoire look like now? What did it use to be like? What may it be like a year from now? And 10 years from now?

OUR LINGUISTIC REPERTOIRE CHANGES WITH US