ABSTRACT
The creation and use of a Facebook group amongst trainee-teachers in post-16 and further education on a PGCE course at a large university in the North of England was studied. The Facebook group was self-initiated and self-managed by the trainee-teachers as a means of socialisation and peer-support amongst themselves. Data was gathered through parallel interviews with a PGCE trainee and a course tutor. Interviews were semi-structured using Tuckman's stages of group development (forming, storming, norming, performing) to explore the functioning of the Facebook group throughout the duration of the PGCE course. The role of teacher-trainers in influencing professional learning within the Facebook group initiated and owned by the trainee-teachers themselves was explored using the didactical triangle as a theoretical framework. It was found that the Facebook group was highly-valued both for supporting socialisation amongst trainee-teachers and as an additional means of mediating the course content of the PGCE. Lessons can be learnt both by trainee-teachers using social media for socialisation and peer-support and by course-tutors in designing teacher-training courses that may better ameliorate the pressures and sense of alienation trainee-teachers experience during initial teacher training.

Keywords
Teacher-training, social media, Facebook, socialisation, peer-support, didactical triangle.

1. INTRODUCTION
The issue explored in this article relates to the creation of a Facebook group by a cohort of 45 pre-service trainee-teachers enrolled on a PGCE course at Sheffield Hallam University, a large university in the north of England. Initially two distinct Facebook groups were created; one for group A and another for group B. Each Facebook group therefore comprised of approximately 23 trainee-teachers. They studied together in the University-setting for two days each week and for a further three days undertook a placement experience in a range of schools and colleges where they engaged in teaching practicum. The creation of the Facebook groups was initiated by the trainee-teachers themselves with its primary purpose being a self-managed initiative owned by the trainee-teachers to support socialisation and peer-learning amongst themselves. All trainee-teachers on the PGCE course were invited to join by those that created the Facebook group. It was a closed group for the trainee-teachers only and other stakeholders, including course-tutors and placement-mentors, were not invited to join the group.

After some weeks an incident occurred within the Facebook groups that created conflict. Whilst the full details of what occurred within the closed Facebook group are unknown (and it may be unethical to enquire as to what they were) some postings were made that were construed by others as ‘unprofessional’, or at least impolite. The postings were brought to the attention of a course-tutor who subsequently met with student-abouts. It was agreed that the student-abouts were best placed to address the issues that had arisen within the Facebook group and they were supported by the course-tutor to seek to establish a protocol for ‘professional communication’ to guide the future use of the Facebook group. Following this intervention no further incidents of conflict have come to the attention of course-tutors and the Facebook groups have continued as a self-managed initiative owned by the trainee-teachers to facilitate socialisation and peer-learning amongst themselves as intended.

There are considerable ethical problems that have prevented the researchers from seeking access to the posts made on the Facebook group as a source of data. These include issues of consent, confidentiality, power, and potential conflicts between the role of researcher and course-tutor. It has, however, been observed anecdotally that the Facebook group has been highly valued and seen as beneficial by a significant number of the trainee-teachers that have engaged with it. This inquiry seeks to understand what it is about the Facebook group that has been so engaging to some trainees, and whether it is the nature of the Facebook group as self-initiated and self-managed that has contributed to its popularity. It seeks to explore whether there is a role for teacher-trainers in supporting the development of professional attributes and professional behaviours in trainee-teachers through their use of social media, and if so what that role might be.

2. BACKGROUND AND CONTEXT
Professional standards play an important role in affirming teaching as a profession and qualified teachers as having demonstrated high standards of professional behaviour and conduct throughout their training. The Teachers’ Standards (Department for Education 2011) are used by head teachers in England to assess all newly qualified teachers in schools from their achievement of qualified teacher status (QTS) through to the completion of their statutory probationary period in schools. In the post-16 and further education sector newly qualified teachers are expected to demonstrate achievement of the professional standards set by the Education and Training Foundation (2014) for the award of Qualified Teacher Learning and Skills status, which has parity with QTS for schools.
An inspection of the two sets of professional standards (Department for Education 2011; Education and Training Foundation 2014) reveals that neither makes explicit reference to the ethics of social media use by teachers. Schoolteachers are expected to ‘demonstrate consistently high standards of personal and professional conduct’ (Department for Education 2011, p. 14). These ‘high standards’ are defined firstly by reference to authorities external to the teacher (statutory provisions; fundamental British values; ethos, policies and practices of the school in which they teach; and statutory frameworks which set out their professional duties and responsibilities). Secondly, they are defined in terms of what teachers must and must not do (observing proper boundaries; safeguarding pupils; not undermining fundamental British values; not exploiting pupils’ vulnerabilities). The Education and Training Foundation, in setting out the standards for teachers and trainers in post-16 and further education, describe them as an aspirational document enabling teachers and trainers to take responsibility for their own professional learning (Russell 2014). These are articulated further as ‘develop[ing] your own judgement of what works and does not work in your teaching and training’; ‘develop[ing] deep and critically informed knowledge and understanding of theory and practice’; and ‘develop[ing] expertise and skills to ensure the best outcome for learners’ (Education and Training Foundation 2014, p. 2). Irrespective of the shift from prescription and proscription in the Teachers Standards to an increased emphasis on professional autonomy in the professional standards of the Education and Training Foundation, possibly reflecting the greater diversity of settings and specialist areas in the post-16 sector, the mention of social media is conspicuous by its absence in both sets of professional standards.

The use of social media such as Facebook has become ubiquitous amongst trainee-teachers and its use as an instructional medium has been the focus of a number of research articles (Ferdig 2007; Hrmiak, Boulton & Irwin 2009; Wang et al. 2012; Goodyear, Casey & Kirk 2014; Soomro, Kale & Zai 2014). A distinction is often made in the literature between social network sites (SNSs) such as Facebook and learning management systems (LMSs) such as Blackboard and Moodle. Siemens & Weller (2011) identify the benefits of SNSs as encouraging peer-to-peer dialogue, promoting the sharing of resources, facilitating collaboration and developing communication skills. In contrast they describe LMSs as ‘a fairly dry, bland set of communications that seems at odds with the forms of dialogue found in these spaces [SNSs] that mix humour, resource sharing, ideas, personal observations, professional updates and comments’ (Siemens & Weller 2011, p. 166). In an analysis of over 68,000 Facebook posts made by university students, Selwyn (2007) found that SNSs were used mainly for social rather than academic purposes and that there was strong opposition to universities appropriating the use of SNSs for educational purposes which was seen as invading their social space and creating role-conflict for students who struggled with knowing what ‘face’ to project.

A particular dilemma for teacher-trainers is that of supporting trainee-teachers in their use of SNSs with the concomitant risks their use poses for teacher professionalism. This is one of the concerns that this article seeks to address.

3. DIDACTIC TRIANGLE AS A THEORETICAL FRAMEWORK

The didactic triangle (fig. 1) uses the student-teacher-content triad as a heuristic for analysing didactical situations (Bjuland 2012; Scoenfeld 2012; Jaako 2013) where the student, the teacher and the content are placed at the vertices of a triangle. Whilst it should be treated as a whole when used to analyse didactic situations it is common in practice to focus on pairs. The two-way arrow between the teacher and the student represents the pedagogical relation and is concerned with the practice of teaching, whereas the two-way arrow between student and content represents the didactic relation and is concerned with the practice of studying.

![Figure 1: The didactic triangle.](image)

Kansanen and Meri (1999) and Kansanen (2003) adapt the didactic triangle by introducing an arrow from the teacher to the line representing the didactic relation (figure 2). This fourth arrow is a one-way arrow and represents the teacher's efforts to influence the practice of studying so as to enhance learning. This is explained by Kansanen and Meri (1999, p.113):

> It is well known that teaching in itself does not necessarily imply learning. … If we describe the activities of the teacher as teaching, we would prefer to call the activities of the students as studying. It is this studying we can see and observe in the instructional process. … For the teacher, to bring about learning is the central task but to control the learning taking place is theoretically impossible. What the teacher is able to control, or rather to guide, is studying.

In relation to the present inquiry, the functioning of the Facebook group to facilitate socialisation and peer-support amongst the trainee-teachers could be seen as the didactic relation along the student-content arrow where the trainee-teachers act as the ‘student’ and the Facebook group is one method by which the ‘content’ is mediated. This inquiry is concerned with how teacher-trainers (in the role of ‘teachers’) might guide the didactic relation between trainee-teachers (‘students’) and the Facebook group (‘content’) so that professional learning is enhanced. In other words, it is concerned with how teacher-trainers might influence the process of ‘studying’ undertaken by trainee-teachers through the Facebook group.

![Figure 2: The didactic relation.](image)
4. METHODOLOGY AND METHODS
Data was collected by conducting two parallel interviews. One of these interviews was conducted by a teacher-trainer with one of the PGCE trainees. This trainee was well-respected by her peers and represented a student-group at the staff-student course committee. She will be referred to throughout this article as 'PGCE trainee'. The other interview was carried out by another of the PGCE trainee-teachers who interviewed an experienced teacher-trainer responsible for course leadership of the PGCE. She will be referred to as 'course tutor'. Both interviews were audio-recorded and transcribed. The interviews were semi-structured using Tuckman's (1965) four stages of group development of forming, storming, norming and performing to explore the functioning of the Facebook group. Whilst the opinions expressed by the two interviewees cannot be taken as representative of those of the trainee-teachers or teacher-trainers more widely, they do provide an authentic voice of two influential individuals. Similarly, whilst this particular study into the use of Facebook on the PGCE course may not be transferable to other contexts, it is nevertheless of interest beyond its immediate context as an 'intrinsic case study' (Cresswell 2014) given the infiltration of social media into so many fields.

A key ethical consideration for ethnographic researchers in seeking to study culture-sharing groups is to negotiate access to the group prior to the research and to leave the field as undisturbed as possible after the research (Madison 2005; Ryen 2009). It has been discussed earlier that it would have been unethical to seek access to posts made on the Facebook page because of issues of consent, confidentiality and conflict of interest between the roles of researcher and teacher-trainer. It is also notable that recruiting participants for individual interviews also raised ethical concerns, particularly as the participants could be perceived, or perceive themselves, as speaking on behalf of others. There was a risk of disclosure during interviews of behaviour by individual trainees that could have been construed as 'unprofessional' that brought into question the fitness of those individuals to practice as teachers. This risk was managed through the process of participant recruitment by making it explicit and emphasising the importance of respecting confidentiality. The conducting of the interviews after completion of the taught content of the PGCE did alleviate some of the difficulties of leaving the field undisturbed since future attendance of the PGCE groups at University-based lectures were no longer being scheduled.

Each of the two interview transcripts were analysed independently by more than one researcher for key themes. These independent analyses were compared in order to enhance the reliability of the final analysis of the data. Once the analysis for each of the individual participants was completed the data was presented as a synthesis using Tuckman's (1965) forming, storming, norming, performing model to show the commonalities and contradictions between the viewpoints of the PGCE trainee and the course tutor on the PGCE course. The initial findings that emerged from the data were shared with the research participants at a group debrief session as a form of respondent-checking.

5. RESULTS
'Forming' is the first stage of Tuckman's (1965) model where the group acts as individuals and there is a lack of clarity about the group's purpose and the roles of individuals within it. This is followed by 'storming' where conflict arises as people begin to establish their place in the team. Storming then gives way to 'norming' where there is a level of consensus within the group, some clarity about individual roles and where group leadership emerges. Finally, 'performing' is where the group has a clear strategy and shared vision and is able to operate autonomously and resolve issues positively.

5.1 Forming
The creation of the Facebook group by the trainee-teachers to support socialisation and peer-support amongst themselves was discussed as early as the induction week of the course.

PGCE trainee: There was like an induction week and then the week after there was an introduction to the course, and I think it had been mentioned in the induction week. But then it became something that was actually discussed properly in the introduction, perhaps in the break. And a couple of people said 'Should we set up a Facebook group so that we can kind of help each other out and ask each other questions and share our experiences from placement because we're only going to see each other sort of once a week?' And everyone thought that was a good idea and so one person decided to set it up and then invite everyone and that's how <pause> and then people invited each other if anyone was missed off because obviously you're not friends with everyone in the first place, you have to sort of befriend them first and then invite them into the group.

This description of the forming of the Facebook group as student-led, spontaneous, autonomous and organic contrasted sharply with practices from earlier cohorts of trainee teachers where socialisation and peer exchange was tutor-led, planned, managed and contained.

Course tutor: We talk about ground rules [during induction week]. One of the ground rules and one of the expectations is about that we support each other, we're going to stay in touch with one another, we're going to have buddy groups, support groups. And whereas in previous years, 'Let's have a distribution list of names and phone numbers and email addresses', the past couple of years it's been 'Let's set up a Facebook group'.

An awareness of the potential for ethical issues to arise as a result of the creation of the Facebook group was anticipated from the outset by the course tutor, although this awareness was accompanied by a sense of powerlessness.

Course tutor: Are we in a position to say 'No, you mustn't do it'? Cause they're going to do it anyway. [laughter]. So we know they're going to do it anyway, but let's be aware that they're doing it, and let's try and put things in place that can safeguard the integrity of the course, protect them and ensure that it's the supportive tool it should be.

It was evident that the reference to 'let's try and put things in place' did not extend to the imposition of rules, but rather to the establishment of a pastoral relationship in advance of anticipated issues likely to arise.

Course tutor: I try very hard to establish a relationship with the group so that they feel that they have the opportunity to be open with me, to be honest with me, and to tell me things so that if things need to be dealt
The trainee teachers, in contrast, did not anticipate the potential for ethical issues to arise from the use of Facebook in a professional learning context and ground rules established for the use of the Facebook group appeared to be arrived at tacitly, if at all.

PGCE trainee: I don’t know if we did any ground rules or not. Ground rules were mentioned at some point … and I think in the ‘About’ section of the group you can write something about what the group should be used for at least, but it wasn’t like a list of rules or anything.

5.2 Storming
Several weeks after the creation of the Facebook group an incident that could be described as ‘storming’ took place. The interviewees recalled their experiences of the incident.

PGCE trainee: I’m actually surprised that there wasn’t more storming throughout the year. It only happened once, in the whole year, with all that kind of tension. And it’s all been resolved now, there’s no friction between the people that were involved. So I think it was just one person, then another person joined in saying that the things people were posting on the group were pointless, or something, and everyone else said, ‘Well, you don’t have to participate; it’s voluntary and everyone else finds it voluntary and supportive, so why are you saying this?’ … I have a feeling it might be because a couple of people were actually looking at the thread during [course tutor’s] lesson, and she asked what was going on, and so we explained it to her <pause> and she was a bit concerned, and then at that point after the lesson one person sent the screenshot of some of the thread, and that was when [she] intervened and asked [the student reps] to come and meet her.

Course tutor: The experience I’ve had is the experience I was expecting. That yes, … this virtual place that we’re all very familiar with in our social lives, I’m very mindful that some of that, some of those social rules and that etiquette that’s acceptable within a social Facebook world can sometimes leak into the Facebook page that’s trying to operate we hope differently for this course. And so it was no surprise to me … that there would be conflict, that there would be upset, that there would be <laughter> issues. I didn’t throw my hands up and go <gasp> ‘What’s going on?’ I went, ‘Oh, here we go’.

The ethos of the course tutor described earlier to ‘try very hard to establish a relationship with the group so that they feel that they have the opportunity to be open with me, to be honest with me, and to tell me things’ contrasted with the culture of the trainee–teacher group that regretted the involvement of the course tutor.

PGCE trainee: There was no discussion of taking it to the [course tutor]. One person just thought, ‘I’m going to take a screenshot of this and take it’. And everyone else thought that made us look very silly and childish, that we couldn’t solve our own problems ourselves, and we needed the grown-ups to intervene. And that annoyed quite a few people because we thought, we could have resolved this. It was actually fizzling out at that point anyway.

5.3 Norming
The third stage of Tuckman’s (1965) model is where consensus and agreement is reached on the purpose of groups and where agreements on individual roles and leadership emerge.

The view of the PGCE trainee expressed earlier that ‘we could have resolved this’ and ‘actually it was fizzling out anyway’ contrasted with the interventionist approach of the course tutor.

Course tutor: I think that what happened was we then brought the course reps together with some of the team. We brought [another course tutor] in who could talk about the legality of it in terms of safeguarding and the dangers, but mainly about where we stood in terms of the law, and the University, and policy and practice. … and then we had the course reps who were excellent and what they did was they identified roles within themselves. … They identified roles and they identified actions that they took back to the group, fed back, and they operationalised it. They actually made it happen.

The course tutor stood back after the meeting with the course reps based on the assumption that they were going to establish rules with their respective groups and appoint a moderator to enforce those rules.

Course tutor: I made a decision at that point to step back. They are beginning teachers. They have to acknowledge that they are now professionals. What and how they operated their social Facebook page is different to how they operate this Facebook page … there has to be different rules in place, and I, I’m assuming, that they did move into the next phase of working with the rules. If the rules weren’t dealt with then I imagine the moderator would come in and said ‘This is not acceptable.’

A very different perspective on the place of rules and the moderator were expressed by the PGCE trainee to those of the course tutor.

PGCE trainee: I think the reaction against [the imposition of rules] would’ve been quite negative. Because we don’t see it as something that’s part of what we do in college time. It’s part of our friendship group I suppose, and we don’t, it’s not something we want policing. We want it to be self-policing, and self-moderating. … [Ground rules] don’t have to be really formal or anything, but just you know, what are our expectations of each other and how are we going to use the group, and let’s make sure that we make that clear in the group description and that’s enough. And then it’s not imposed by the teachers, but the teachers are able to advise the students. I think that would be more helpful.

5.4 Performing
The final stage of Tuckman’s (1965) model is where a clear strategy and shared vision emerges that allows groups to operate autonomously and resolve issues positively. It was apparent that this stage was reached where the Facebook group operated as an autonomous trainee-owned initiative.
PGCE trainee: When we had a meeting as reps we discussed the fact that we should be a bit more polite to each other, and if we have any issues about the group, direct it to the group moderator and not just put it on the wall for everyone to see. But apart from that we've not had any incidents since so it must've worked, because that was over half-a-year ago <pause> and everyone has been treating everyone with respect since then.

A particular benefit of the Facebook group was the opportunity it afforded trainees to share some of the difficult experiences from placement, particularly given the lack of time in University to do so.

PGCE trainee: ... we've learnt a lot from each other I think. 'Oh, I've tried this in a lesson and it worked really well'; or 'I tried this and it was awful, it just fell completely flat'; or 'I used this piece of software, it was really good, it went down really well with my class'. That sort of possibilities to share ideas and share experiences, good or bad, we sort of wished that we'd maybe had a little bit of time to do a bit of a group work on that rather than, not to replace what we were doing, but in addition to. ... sometimes when we were asked to do something as a group we'd start talking about what we were supposed to be talking about [laughter] and then drift into what happened on placement that week and <pause> and we found that really helpful and supportive.

The immediacy of Facebook for sharing resources was acknowledged.

PGCE trainee: I've just remembered something else we used it for as well is that when we did work in class, group work, we would photograph it. So we had one person who photographed it every week and posted it on the Facebook group ... all you have to do is click upload from your mobile phone app, and it's just there instantly, so it was always there after the lesson.

A further benefit of the Facebook group was that it supported further socialisation amongst smaller groups of trainees away from the group site.

PGCE trainee: Yeah, it brought us closer together you know. We maybe started communicating through our personal Facebook pages as well, as some of us have group private messages that we have going on where we maybe we don't want the whole cohort to hear our problems that we're having. So like three or four of us will talk about something that's going on at placement or a problem we're having with our coursework or something, offer support that way. But I think the group kind of led to that a bit more, because we sort of had to befriend each other on Facebook in order to invite each other to the group.

There was a vision for the continuation of the Facebook group after completion of the PGCE as a source of socialisation and peer-support into the trainee-teachers' NQT (newly qualified teacher) year.

PGCE trainee: I think we all think it's going to carry on in some form and we hope that it'll be a way for us to keep in touch after the course is over. And still certainly in our NQT year I think we'll use it to share our experiences a bit and anything we've learnt from our NQT year. ... I think we'll probably become less and less in need of it as we become more and more established in teaching and we rely more and more on our local networks in the colleges or schools we're teaching in <pause> but certainly you feel sort of, a bit of an outsider or loner at the start. Same when you're starting placement. Probably the same when you're starting your first job, and you, you're going through the same thing that everyone else is going through. So, you've got that shared experience of, you're all an NQT and you're sort of new to it <pause> finding your way.

6. DISCUSSION

The interview with the PGCE trainee revealed that the need for the Facebook group was identified by the trainee-teachers themselves from the very outset of their PGCE year. Regardless of the single storming incident referred to earlier, its effectiveness was confirmed throughout the year by the benefits derived by those who engaged with it. Furthermore, there appeared to be a widespread expectation amongst the trainee-teachers that the Facebook group would continue as a supportive network beyond the PGCE into the NQT year. A key benefit was to provide a sense of community and a way of sharing experiences that was not possible face-to-face because of teaching placement locations being dispersed across a wide geographical region. The need to ameliorate for the sense of alienation felt by the trainee-teachers on placement is not surprising where immersion in practice is the dominant model of teacher-training and trainee-teachers are located within a range of placement settings from the first week of their PGCE.

The operation of the Facebook group can be viewed as the process of studying along the didactic relation between student and content on the didactic triangle (Kansanen and Meri 1999). Interestingly, the operation of the Facebook group as a virtual community was not seen by the trainee-teachers as replacing the need for teacher-trainers to promote socialisation and peer-support through the University-based aspects of the PGCE, but rather emphasised that it was a missing aspect of their university experience that they would have liked more of. The importance of socialisation, and peer-support, whether self-mediated or university-mediated, is attested to by Friesen and Besley (2013, p. 23) who argue that 'learning to be a teacher is as important as learning how to teach' [their italics]. Ticknor (2014, p. 291) argues that 'By reading, writing, talking, thinking, and interacting with others invested in the education community ..., preservice teachers can engage in opportunities to negotiate professional identities within the supportive context of teacher education programs and build confidence as novice teachers'. Self-mediated support on social networks and structured opportunities for peer-sharing in the university aspects of teacher-training need not be mutually exclusive. Rather, the challenge is to more effectively embed socialisation and peer-support in teacher-training by strengthening connections between the different modes of support that exist.

Once the Facebook group had been established by the trainee-teachers it is not unsurprising that the teacher-trainers tried to influence its use. Such intentions are consistent with Kansanen and Meri's (1999) assertion that whilst teachers cannot control the learning that takes place as a result of their teaching they can control, or rather guide, the process of studying. The course tutor's desire to guide the use of the Facebook group owned by the trainee-teachers was driven by the duty to safeguard the integrity of the course, protect the trainees, and ensure it was a supportive
tool appropriate for professional learning. Whilst there was an implicit assumption from the course tutor that social media use was in her view inappropriate for teacher-training, the trainee-teachers appeared to hold a contrary belief that by locking down the security settings to create a ‘closed group’ any potential tensions between Facebook as a social space and a professional learning space were removed. Since teacher professionalism is a contested notion that is socially constructed it is surprising that the polarised positions of the course tutor and PGCE trainee were largely unchanged, and rather became entrenched, through their experiences of using the Facebook group on their PGCE year.

7. CONCLUSION

Several studies have been carried out into higher education students’ personal use of social media and its impact on learning, and into universities attempts to appropriate these social spaces for pedagogic purposes. This present study focuses more specifically on the functioning of a closed group on Facebook set up by trainee-teachers in post-16 and further education as a self-initiated, self-managed and self-owned initiative to support socialisation and peer-learning amongst themselves at one university during their PGCE year. Given the ubiquitous nature of social media it seems highly likely that similar initiatives have taken place on teacher-training courses at other universities. This is an under-researched area and further studies are needed into the ways such groups are set up and the benefits and tensions that arise from their use in professional learning contexts, both for trainee-teachers themselves and the teacher-trainers responsible for their professional formation.

The Facebook group met a real need brought about by the trainee-teachers’ sense of alienation from each other within an immersion-in-practice model of teacher-training and appeared to succeed in meeting that need for those that engaged with it. Nevertheless, the trainee-teachers still craved opportunities to share their placement experiences within the university-based aspects of their teacher-training. The challenge for teacher trainers is neither to discourage the use of social media nor to seek to control its use, but rather to create links between the informal social learning taking place on social media and elsewhere and the more structured parts of teacher-training.

It is suggested that increased opportunities for socialisation and peer-learning within teacher-training courses may mitigate against the risks of some trainee-teachers being disengaged from social media in a similar way to that in which social media use has compensated for the sense of isolation within immersion-in-practice models of teacher training for some trainees.

Professional standards provide little explicit guidance to trainee-teachers on social media use and practices differ widely across different educational providers. Wider ethical issues within the professional standards can be related to trainee-teachers’ social media use including promoting diversity and inclusion, building collaborative relationships with colleagues, and operating within an ethic of respect. Assumptions about the ethical use of social media held by trainee-teachers themselves and teacher-trainers are likely to be challenged by the increased use of social media in professional contexts for different purposes.

8. REFERENCES


