Social media are now an important aspect of the professional lives of school teachers. This paper explores the growing use of mass ‘teacher groups’ and ‘teacher communities’ on social media platforms such as Facebook. While these online communities are often welcomed as a means of professional learning and support, the paper considers the extent to which Facebook groups also expose teachers to some of the less beneficial aspects of social media, such as various forms of ‘digital labour’, commercialisation of exchanges and predominance of individualised reputation-driven behaviours. Drawing on a detailed examination of a Swedish teacher Facebook group of over 13,000 members, the paper first addresses aspects of the online community that could be seen as professionally beneficial and/or valuable—particularly in terms of information exchange and social support. Yet while perceived by participants as a relatively beneficial and uncontroversial aspect of their working lives, the research also points to characteristics of the Facebook group that constituted disadvantaging, exploitative and/or disempowering forms of technological engagement. In these terms, the paper highlights tensions between what appears to ‘work’ for individual teachers in the short term and likely longer-term implications that these practices might have for diminished professionalism and expertise of teachers.

Keywords: teachers; professional development; Facebook; social media; online community

Introduction

Social media are now a prevalent aspect of the professional lives of school teachers. While platforms such as Facebook and Twitter are used increasingly to support the delivery of lessons and sustain interaction with students, perhaps the most popular teacher use of social media is as a means of professional development. Indeed, social media are now seen as a flexible and expedient means of acquiring new knowledge and skills that relate to the teaching profession, subject specialisation, job responsibilities and/or work environment (Kelly & Antonio, 2016; Macià & García, 2016). In particular, teachers are increasingly using social media to take individual responsibility for their professional learning—seeking out opportunities to collaborate with other teachers online and develop ‘personal learning networks’ (Tour, 2017). For many teachers, the principal means of doing so is through organised ‘teacher communities’. These groups act as forums for teachers to discuss teaching matters, give advice, share...
and recommend resources, and generally sustain ‘professional networks’ that function on an asynchronous and remote basis. Such online groups are now an integral element of many teachers’ professional development, with some groups numbering thousands of members.

Understandably, there is a burgeoning academic interest in teachers’ professional development through social media groups. Yet the empirical literature to date has tended to frame teachers’ uses of social media as relatively straightforward and unproblematic. Social media are generally found to offer valuable support for teachers—providing access to resources, knowledge and support that would otherwise be difficult or impossible to access (Macià & García, 2016). Rarely, if ever, are teachers’ professional uses of social media groups considered as a form of work. In contrast, this paper explores teachers’ professional use of social media as a form of ‘virtual work’ (i.e. labour that takes place online and is connected with the consumption and co-creation of digital content and services) (Hughes, 2014; Webster & Randle, 2016). In particular, the paper examines the phenomenon of large-scale teacher Facebook groups. These groups are now a significant element of many teachers’ professional development, with popular groups numbering thousands of members. Yet while these social media communities are usually celebrated as a welcome additional means of professional learning and support, in what ways (and with what implications) should teacher Facebook groups be understood as ‘work’?

We base our case on a Swedish example, thus situating the empirical elements of this paper in a country which since the 1990s has undergone a distinct marketisation and decentralisation of its school system. This includes a differentiated teacher labour market that is now dependent on the local conditions of individual schools and municipalities and devolved responsibility for teachers’ professional development (Parding et al., 2017). This has opened up a diverse provision of professional development, as well as encouraging teachers to seek out informal and non-regulated means of sharing resources and experiences with other teachers. According to the Teaching & Learning International Survey (TALIS), Swedish teachers are otherwise reliant on occasional conferences alongside local groups and networks for their professional development—leaving Swedish teachers engaging in ‘official’ professional development activities for only around half the average time of teachers in OECD countries (OECD, 2013). Thus, teachers in Sweden increasingly find themselves left responsible for finding additional opportunities for meeting professional development requirements. As such, the provision of ‘free’ professional development through social media such as Facebook is an understandably popular option.

Understanding teacher Facebook groups as a form of ‘virtual work’

Approaching what teachers do in terms of working rather than teaching raises a number of different ways to make sense of online professional development. First are the insights gained from long-standing theories of work and labour that foreground work as the production of commodities through the combination of human effort (work) and capital (labour). While the labour process of being a teacher clearly differs from that of the industrial workers which much of the early labour process research focused on, teachers can still be said to experience fragmentation and degradation of their
work, alongside control in the form of institutional hierarchies, reorganisation of work practices, monitoring and the intensification of work (see Reid, 2003).

Of course, the internet alters the nature of many of these aspects of work and labour—most obviously, changing the mode of production and the nature of what is being produced (Walker, 2012). An additional useful line of thinking can therefore be found in recent writing on ‘immaterial labour’—that is, ‘labour that produces an immaterial product, such as ideas, images, forms of communication, affects, or social relationships...it is an act of production with no material product, a performative act’ (Hardt, 2005, p. 176). The immaterial labour literature therefore addresses the fact that increasing proportions of workers are involved in the production of immaterial products and services—especially work that involves the symbolic production of ideas and/or interacting with others and the production of affects. One development in the immaterial labour literature over the past decade is the extent to which value is created from online content produced through the actions of internet users—so-called ‘user-generated content’. This can take the form of what Banks and Deuze (2009) describe as ‘co-creative labour’, which takes place online—for example, content created through the use of social media (e.g. posts, uploaded content, etc.), common forms of peer production and the ‘crowd-sourcing’ of content.

In one sense, then, the internet can be seen as altering ‘traditional’ (pre-internet) forms of teachers’ work and ways of working. In addition, however, attention needs to be paid to ways that the internet has introduced substantially new (or at least different) forms of work. Here, then, we can turn to the burgeoning literature on ‘virtual work’ and ‘digital labour’ (e.g. Scholz, 2013; Bucher & Fieseler, 2017) that points to new forms of distributed, automated and fragmented work associated with internet practices. One prominent concern of these scholars is the distribution and coordination of ‘micro work’ throughout networks of dispersed individuals (Walker, 2012). Sometimes this can be paid piecework, as carried out through platforms such as Uber, Etsy and TaskRabbit. Often, however, it is unpaid work carried out (sometimes unwittingly) by mass online audiences—especially users of popular social media platforms such as Facebook.

For many users, the use of social media platforms might not seem like ‘work’. Indeed, popular platforms such as Facebook are marketed as sites of leisure, sociability and play. Yet social media relies on users spending considerable amounts of time and effort to consume and produce content (what has been termed a continuous cycle of ‘prosumption’). Whether they see themselves as working or not, social media users are therefore engaged in cognitive, communicative and cooperative activities that lead to the creation of new ‘immaterial’ products. On the one hand, this ‘free labour’ is often celebrated as a voluntary and empowering form of self-expression and creativity (see Lindgren, 2017). Indeed, some scholars have explored how these forms of ‘free-bor’ often rely on a sense of altruism and community spirit, with social media users constituting a ‘voluntariat’ that works for free, supposedly for the public good (Shullenberger, 2014).

On the other hand, the unpaid efforts and activities of social media users are used to create value that can be appropriated by other parties for profit generation. For example, the business model of Facebook relies on mining and selling data to third parties, both for targeted advertising on the platform and for detailed consumer profiling. In addition, the content contributed to a Facebook group is appropriated by
other entities, as well as creating subjectivities, opinions, tastes and other cultural content that can be commercially profited from (Côté & Pybus, 2011). Critics have pointed to the ways in which social media users are encouraged to use platforms in commodified ways—interacting and presenting themselves in ways to garner attention and status (Duffy, 2015). Thus there is a growing literature on ‘digital labour’ that points to the exploitative (rather than empowering) aspects of social media work—from curating scrapbooks on Pinterest (Jones, 2016) to editing Wikipedia (Graham et al., 2015). As Fuchs and Sevignani (2013, p. 267) conclude: ‘Facebook labour creates commodities and profits. It is therefore productive work. It is however unpaid work.’

All these theoretical precedents offer useful ways for interrogating how teachers’ professional development takes place on social media platforms such as Facebook. For example, viewing a teacher Facebook group as a form of immaterial labour raises questions over the nature of the ‘products’ being produced. Does a teacher Facebook group function as a site for the creation of new ideas and knowledge, or are teachers primarily involved in communication, developing social relationships and other forms of affective labour? To what extent are the objects of labour being derived from teachers’ own professional experiences? Are teachers working to generate ideas, concepts and subjectivities that are then sold back to educators and schools by other parties? In addition, the ‘virtual work’ and ‘digital labour’ approaches encourage us to consider teacher Facebook groups as a likely form of unpaid online labouring. This points us to question the various forms of ‘interactivity’ implicit in a Facebook group, such as the practices of commenting, rating, liking, as well as the (re)circulation and ‘sharing’ of content. This perspective also problematises the structuring and automating role of the Facebook platform itself and the possible intensifications and extensions of online work into ‘the spaces and times of labour into those once defined by leisure’ (Hughes, 2014, p. 649).

Against this background, the remainder of this paper will explore the ways in which teacher engagement with teacher Facebook groups is implicated in matters of work and labour. On the one hand, the paper sets out to examine the labour processes involved in teachers’ engagements with professional Facebook groups—unpacking the conditions, constraints and opportunities of teachers’ social media-based professional development work. On the other hand, the paper also aims to explore how a platform such as Facebook is implicit in structuring teachers’ work. Our overarching question is deceptively simple: **What work takes place in a teacher Facebook group and with what implications?** In exploring this broad question, we need to consider specific questions of: (i) the activity that takes place in the teacher Facebook group; (ii) who is active in the group; (iii) what the underlying characteristics of the group activity are; (iv) how teachers perceive the nature of their participation; (v) what are the unacknowledged outcomes of teacher participation.

**Methods**

**Description of case**

The research questions are addressed through detailed examination of one large Facebook group developed by Swedish teachers interested in a recent innovation in
technology-based pedagogy (the so-called ‘Flipped Classroom’ approach). This group was chosen as a case since it is one of the largest and longest-running Swedish-speaking teacher Facebook groups—thus providing a three-year period of ongoing activity to study. The ‘Flipped Classroom’ movement marks a trend in the use of educational technology, where short instructional video clips (referred to in Swedish as ‘Flip-it’) are watched by students in advance of a class. Teachers can make their own videos, or reuse videos produced by others. In-class time can then be used for discussion and creative tasks. While the idea is not new per se, the popularity of the Flipped Classroom is generally associated with two US educators—Jon Bergmann and Aaron Sams (Bergmann & Sams, 2012). In many countries around the world (including Sweden), this relatively simple pedagogical concept has grown in popularity at both school and university levels, and has been a recurring topic of discussion amongst educators during the past five years or so. Social media platforms like blogs and video-sharing sites, alongside norms of sharing and producing user-generated content, have become an integrative part of this movement, which also makes it interesting for our study focus.

Collection of data

At the time of data collection, the ‘Flip-it’ Facebook group examined in our project consisted of over 13,000 members organised around the theme of the Flipped Classroom. The paper primarily draws on a corpus of data collected through the Facebook Graph API (application programming interface), a protocol for programmatically requesting data from the platform’s Social Graph database that contains all the interactions of Facebook users. Data was collected for the first three years of the group’s existence, a period with three discernible phases: (i) an initiation phase of rapid growth beginning in April 2012; (ii) an established phase with a peak activity level occurring in late 2014; and (iii) a diminishment phase with a shift to a downward trend in levels of participation at the end of March 2015. The corpus assembled from these three years of activity covers all postings, likes and comments—consisting of almost 3,000 postings, over 13,000 comments and nearly 700,000 likes. It was collected using the Facepy repository (Gorset, 2015) for the Python programming language.

Based on questions raised after preliminary analysis of the computational and ethnographic data, an additional survey was posted to the group inviting teachers to answer. This survey received 44 respondents who answered both demographic items and items that addressed such topics as why they had joined the group and their view of the group theme. The response rate might seem low, but reflects how social media communities often have a limited base of active participants (Batorski & Grzywińska, 2017). In the case of the group in this study, only 675 members started a discussion thread by contributing an original post and a subgroup of only 21 core members were responsible for the majority of group activity. Based on names given by respondents to the survey, we then created an online focus group of 10 teachers where the survey data was complemented through questions that examined why the members had joined and continued to participate in the group. Finally, a series of longer interviews was also conducted with the group moderator on her perceptions of the group interaction, moderation and the development of the ‘community’ and its activities.

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Access to the Facebook group was approved by the moderator who is also the group owner, and members were informed about the research project using the ‘pinned-post’ function that kept an information post as the first post on the group wall. Informed consent was also obtained from the group moderator, survey participants, online focus group participants and those individual members whose posts of an elaborated or sensitive nature were used in publications. In addition, all posts used in publications were translated from Swedish to English (and then back-translated for verification), rendering it difficult to trace them back to individual members through search engines.

**Analysis of data**

Data collected from group activity was analysed through an iterative combination of ethnographic and exploratory approaches. Computational analysis was conducted to identify interaction and participation patterns over time and then presented by data visualisations; manual text searches were performed to trace topics of interest that could be examined in detail at the level of individual interactions. On the one hand, sustained ethnographic engagement (Hine, 2000) with the Facebook group was undertaken by all research project members. This made it possible to confirm experiences and interpretations of group activity and patterns identified in the corpus data. On the other hand, exploratory data analysis (Morgenthaler, 2009) of the corpus data was conducted to identify recurring patterns and significant features of relevance, including temporal features of group activity and demographics such as gender. In addition, keyword in context searches in the corpus for topics relating to the aim of this study—such as work, workload, leisure time and commercial aspects—were combined with follow-up analyses of threads where these topics were discussed. The results of these analyses were then examined in relation to data collected through interview, online focus group and survey activities, and in turn the combined results informed the structure of the analysis presented here, which unpacks those findings that have particular relevance to the topic of what ‘virtual work’ takes place in a teacher Facebook group.

**Findings**

**What activity takes place in the group?**

The Flip-it Facebook group was set up by a Swedish middle-school teacher who continued to act as the group moderator throughout the period of research. The group was initially established as an open group, but was later reconfigured as ‘closed’ through privacy settings. The open group status meant that the group was publically viewable but any Facebook user wanting to see the content (and have the option of contributing) had to apply to join. During our three-year period of research, group membership grew from the moderator and an initial group of less than 50 members to over 13,000 members. Teacher Facebook groups of this size are not uncommon in Sweden—a country with one of the highest per capita rates of social media use in the world (Eurostat, 2017). Other large teacher groups on Facebook at the time of our
research included ‘Assessment for Learning (Bedömning för lärande, with 23,000 members) and ‘ICT Tools’ (IKT-verktyg, with 8,200 members). As such, while Flip-it was a large group, it was not exceptional.

The visual appearance of Flip-it conformed to the Facebook template of a ‘Wall’ of posts from users, along with links to photos and various information about prominent users who ‘Liked’ the group. As with all Facebook groups, members could browse content posted by others, offer comments or simply indicate a ‘Like’ (at the time of data collection, Facebook was yet to introduce multiple types of ‘Likes’). As with all Facebook groups, the main content of the site was a series of posts and comments. Members wrote short messages, included links to websites, images, videos and other resources, and occasionally notifications of events. Anyone accessing the page would on occasion see about 20% of their screen featuring targeted advertisements chosen algorithmically by the platform. Similar to other Facebook groups then, the content and form of the Flip-it group are shaped by user communication patterns and how the Facebook algorithms ‘translate’ this.

The three years of group activity that we studied encompassed 2,970 original posts with an average of 36 words per post. Many of these posts (88.62%) elicited replies from other members and thereby constituted a ‘thread’. Correspondingly, 13,193 comments were posted in reply with an average of 25 words per comment. Over the three years, the number of posts and comments contributed per month ranged from 14 in the first month, growing to a maximum of 1,073 at the end of the second year. After this peak, contributions declined to an average of 391 posts and comments per month in the final year of data collection. Besides writing posts and comments, group members contributed 692,007 ‘Likes’ over the three years—an average of 4,436 per week, and 233 per thread. All told, 6,163 members made one such contribution to the group over the three-year period, meaning that nearly half of the group’s members made no contribution beyond viewing the contributions of others. Hence, during these years, a lot of work was produced.

Many of the threads involved some form of redistribution and ‘sharing’ of content. This usually involved the recommendation of content that had been pre-authored elsewhere—primarily through the inclusion of hyperlinks (URLs) to online content. Of the 2,970 threads in our three-year corpus, 45% of threads (n = 1,334) contained URLs, with 27% (n = 811) of threads having URLs in the original post and 24% (n = 702) of threads having URLs in the comments. Based on computational data, we identified that this resource sharing was dominated by commercial video-hosting sites such as YouTube and application repositories such as Apple’s ‘App Store’ and Google ‘Play’. Also prominent was the sharing of resources from public school authorities such as the Swedish National Agency for Education and public media such as the Swedish Educational Broadcasting Company. Commercial and public teaching resources therefore informed the group equally, and were considered by members as useful sources.

A smaller (but sizable) proportion of posts took the form of questions—i.e. asking other group members to help with a query or uncertainty relating to the original poster’s own work. Indeed, 16% (n = 477) of posts contained interrogative words indicating questions. When scrutinised more closely, these posts of requests were often open-ended and looking to gain advice or hear the experiences of others.

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example: ‘Is someone using Facebook to deal with information to pupils? Would really like to hear how you think it has worked!’ [original post]. Other questions were more self-serving—for example, looking to use the group to find resources: ‘My question is: Is there somebody here who has a collection of short flips which I can show my principal?’ [original post]. Still other questions were discursive in nature—i.e. not related to specific answers or recommendations, but focused more on initiating more abstract discussions, in the spirit of ‘I am happy to think things through together’ [original post]. In sum, the questions raised were mainly teaching-oriented and close to the experiences of teachers’ daily work.

Who is active in the group?

As with most online communities, much of what took place on Flip-it according to our corpus data was initiated and enacted by a small core of users with the work of the moderator most significant. The moderator was a practicing school teacher who had set up the group as a way to generate a collegial discussion around an interest that was not shared by her local colleagues. As she put it when interviewed:

I sat there then and felt so incredibly lonely... you feel like, is this only me being like this? And I felt like, yes but a Facebook group would be good if not only to be able to get things I've experienced out... the Facebook group became sort of my space to breathe.

Unlike other (non-teacher-focused) internet forums where moderators are often involved in controlling and regulating group members’ behaviour and censoring posts, the Flip-it moderator’s role was primarily one of keeping the group on-topic and maintaining the momentum of discussions. Over the three years of our study, the moderator alone was responsible for 20% of posts, and 26% of comments.

Beside the moderator, the group was sustained by a core of about 20 participants who accounted for much of the remaining activity. These 20 participants were responsible for 22% of the total number of original posts and 23% of comments, meaning that together the moderator and the 20 most prolific contributors accounted for well over a third of all posts and comments. Otherwise, only 675 people (of the group’s over 13,000 members) had made an ‘original post’ and 1,435 had commented on a post during the three years of our study. While the proportion of contributions might appear low, this pattern of minority participation and limited interaction is similar to other studies of online communities (e.g. Batorsi & Grzywińska, 2017). Our survey demographics show a clear overrepresentation of teachers with a special profile, most commonly appointed excellent teachers (designated as ‘First Teachers’ in the Swedish school system) or responsible for IT or school development, furthermore 31 of 44 respondents were women. The gender representation in the corpus data also shows that 14 of the 20 most prolific contributors plus the moderator were women. Moreover, cross-checking the profile names of contributors against Swedish population register data shows a similar ratio of 67.73% (10,948) of posts and comments contributed by people with a profile name identified as female. However, this skewed gender distribution broadly reflects official statistics for overall gender representation in the Swedish teaching profession (Swedish National Agency for Education, 2017).
Beyond the teachers visibly working in Flip-it, it is also important to recognise the work that the Facebook platform itself performed. Indeed, the platform played a key role in shaping what was taking place through a variety of automated processes—sorting, blocking, recommending, directing, curating timelines and generally deciding the content that was made visible through its EdgeRank algorithm (Bucher, 2012). Interestingly, we found that these automated features prompted a range of counter-work amongst group members. In particular, Facebook’s prioritising of new content clashed with many participants’ desire to return to older posts and threads. The group regularly featured repeated requests for information and disquiet over ‘lost’ content—as evidenced in posts such as: ‘I think this has been written about before here?’ [original post]. Several respondents in the online focus group similarly inquired about best-practice examples and compilations of methods and models for being able to select in the overall flow of postings, ‘I agree, it is mostly noise but some are really good stuff’ [comment to original posting].

There was also a tendency for users to attempt to bookmark threads of interest by posting a perfunctory reply, often in the form of a single word such as ‘follow’ or even just a single full stop that ensured the content remained in their view. Indeed, 2.2% (n = 295) of comments in the corpus consisted of only the word ‘follow’ or a full stop. While a useful ‘work around’ for the individuals concerned, this often interrupted and/or curtailed conversations and discussions. In order to counter this difficulty, the group moderator resorted to curating collective book lists, FAQs and recommendations of content—making these lists available to the group via her separate blog.

**What were the underlying characteristics of the Flip-it group activity?**

First, it was notable based on our own continuous ethnographic observation of the group that participation in the Flip-it group brought teachers into contact with various forms of advertising. In one sense, then, it was obvious how teachers’ sharing of content often involved advertising commercial products produced by others. As illustrated in the following post, these contributions were sometimes acknowledged as resembling commercial marketing:

*Original Post:* After the tips from [name], I hope it’s OK I make some extra advertisement for your attention in another comment. Sams & Bergmann’s book ‘Flip Your Classroom’ is in stock again at the publishing company. Let’s see how fast it takes to sell out this time☺

Other participants were also keen to promote their own self-produced products, mostly videos and resources:

*Original Post:* Many pupils are satisfied with the flipping and tell me when we work with something hard ‘Hey! Put out a clip on YouTube’. For me, it feels tremendously fun and inspiring and I gladly refer to ‘my films’ as the pupils ask how to do this and that. . . Please take a look on my YouTube channel (search for [name] or my home page – I’m grateful for help and advice from you who done this longer (I only started in November). ☺
While this example was from a teacher (and regular contributor to the group), other posts were less ‘local’ in origin and intent. Attracted by the size of the audience, it was notable that Jon Bergmann himself (and to a lesser extent Aaron Sams) was one of the most prolific contributors—providing updates (in English) on recent videos and other resources that he had created, as well as providing details of speaking engagements and other forms of self-promotion. These posts tended to be amongst the most viewed in the group, but tellingly were usually far less liked and responded to relative to other posts:

Original Post: Hi all: aaron sams and i just launched a completely online flipped learning course. in the course we will take you through how to flip a class. we have videos of actual teachers flipping, their students, and interviews with the experts (us:)). you can get continuing credit and even graduate credit if you want. you can get all the details here: http://info.kdsi.org/flipped-classroom.

While posts from Bergmann and Sams were deemed admissible, the moderator remained concerned over other for-profit incursions into the group’s activities. She described in an interview that she altered the group from a wholly open ‘public’ group to an invitation-only private group after noticing a representative of an education company posting questions and ‘snooping around’ for personal gain. The moderator reckoned that she ‘had to do something’ as ‘market forces wanted to exploit the group’s willingness to share openly’. As she continued: ‘If Sweden’s teachers put down so much working hours and free time on sharing I think it is rather bad that others use that to make money.’ Throughout the three years of our study the moderator would delete posts that she deemed commercially orientated, for example: ‘I have cleared all his posts. Do not want his advertising here. If I’ve missed something, please say so.’ Interestingly, this opinion is contrary to one of the survey questions, where we asked the 44 respondents if they considered the influence of commercial actors to be problematic for the Flipped Classroom approach and the majority (19 respondents) answered ‘not at all’ or (15 respondents) ‘to a small degree’.

Second, in the promotion of products and resources, the group was also characterised by a general tendency of contributors to engage in individualised self-promotion and contribute posts aimed primarily at seeking the social attention of others in the group. At a general level, it was notable that most contributions to the forum were individualised in nature. Many attempts to ‘share’ resources might be more accurately described as ‘pseudo-sharing’—i.e. acts that are primarily communicative rather than distributive in intention, aimed at enhancing one’s status within the group (Belk, 2014).

The prevalence of such activity can be seen in Figure 1, taken from our computational data, which shows the distribution of lengths (in number of words) for posts and comments where hyperlinks have been included across the corpus. These posts and comments represent instances where members have chosen to share a resource with the group, whether that be an app, article or video. As Figure 1 shows, posts and comments where resources are shared are accompanied by relatively little text. 75.33% ($n=611$) of the 811 posts with URLs in the corpus were shorter than the overall corpus mean for all posts of 36 words. For comments, 72.58% ($n=1,048$) of the 1,444 comments with URLs in the corpus were shorter than the overall forum
mean of 25 words. In short, then, most instances where a hyperlink was shared included little description or argumentation for the sharing of that resource. This suggests that participants may have been more concerned with being seen to ‘share’ something, rather than providing contextual information and/or initiating discussion about what was being shared. This phenomenon also appeared in the focus group interviews. As one interviewee reflected: ‘People qualify in the group by good postings. I always read some people’s postings in Flip-it, for example X’s contributions. Even if it isn’t any formal merits in it, I think well-put postings, blogs, etc. are more qualifying in social media than the hysteria of likes.’ Another interviewee responded: ‘You quickly choose who’s worth listening to, at least I do.’

Besides such ‘pseudo-sharing’, it was also notable that most discussions focused on the individual teacher rather than their class, school or municipality. For example, across the 16,193 posts and comments in the corpus, only 2.8% \((n = 461)\) contained mention of either ‘my pupils’, ‘my school’ or ‘my class’. More prominent, however, were postings driven by concerns over the development of individual reputation and status. This was evident, for example, in posts that sought simply to increase the viewing and ‘liking’ figures for participants’ own YouTube videos: ‘Thank you everyone who “likes”... it means a lot to me. Please check in!’ [original post]. Other participants were keen to promote the popularity of their own videos and resources, with varying degrees of what they considered to be success:

Original Post: Happy and content over have passed over 1000 [views] on my YouTube channel of short 5 minute video clips which I send home as homework and which pupils use to prepare for tests.
(40 likes)

Original Post: 50,124 viewings this morning on my YouTube site. Today will be a celebration. The need for arts and crafts tips never ends, many of the hits surely are colleagues out in the country. Today, YouTube and this fantastic side is a large

Figure 1. Word length of posts and comments that include the sharing of a URL.
part of the development of arts and crafts teachers offered today. My web page has around 1000 hits per week.

Original Post: Hope you are interested in the experiences I have after putting up 400 lessons with over 1.7 million views to flip my classroom.

As can be seen, such posts tended to attract relatively large numbers of ‘Likes’, thus reinforcing the cycle of self-promotion in order to enhance individuals’ online reputation, or simply gain recognition and visibility from colleagues. Even those participants who did not present themselves as being a kind of ‘micro-celebrity’ were careful to present themselves as working hard and/or effectively, being active and acting the proper way in the group. As stated by one focus group participant: ‘There is a lot of sharing and the tone sometimes get rough. As when someone share something for the first time and is attacked for some little mistake, it’s hard to get back again for him/her.’

How did teachers perceive the nature of their participation in Flip-it?

Unsurprisingly, most of the online comments and statements on the group itself indicated that the group was perceived as being of benefit to participants. The group was characterised by collegial discussions maintaining an overall professional tone. Interactions and exchanges conveyed a level of civility not always apparent in online discussions—with polite forms of address such as ‘Please’ and ‘Thanks’ used regularly. Of the 13,193 comments in the corpus, 12% \( (n = 1,548) \) include derivatives of the word ‘thanks’. For example: ‘What a good discussion it became! Thanks!’. Indeed, comments would sometimes thank the group as a whole: ‘Thanks for launching it! I have had great benefit from this group. Thanks!’

That said, it was also notable that many of the conversations were brief and lacking substance. For example, of the 2,970 threads in the corpus, 51% \( (n = 1,501) \) contained one or no comments, and only 31% \( (n = 930) \) contained five or more comments. That said, while many of the posts, comments and interactions were brief and superficial in nature, occasional threads would ‘ignite’ into a flurry of activity. These episodes could be classed as knowledge-building in nature, with a number of participants developing their professional knowledge and understanding through their posts while a large number of others observed, as the following thread excerpts illustrate:

**Thread (142 likes and 20 comments)**

Original Post: As the new term is approaching, I have compiled a web page of short video films for the maths book series [book title] and [link to a Google site document]. If anyone wants a customized home page in some way, please send me a message and I can make you a copy.

Comment 1: Tip! There is another tool (for free) called Scalable Learning which is very good for following up videos with questions and answers from students. It can for example provide statistics on who has seen the film.

Comment 2: Impress! 

Comment 3: Can I link this to my blog?
Comment 4: I definitely think it takes time, energy, focus to really make students work with it.

Comment 5: I liked this a lot! In particular, as you have included the important concepts. You could add concepts and explanations to [link to application] so that they can practice the concepts as they go. Shared it with our maths teachers! 😊

There was also evidence of the group supporting various forms of networking and social capital formation, occasionally reaching a point of participants arranging to meet up offline, for example: ‘How many are interested in coming to meet up in Hässleholm? We can arrange a room if we plan ahead.’ [original post]. There were also regular illustrations of the supportive and affective benefits of the group. One focus group participant reflected: ‘It feels good to be able to discuss with others working with this and get new ideas. It’s a mental flip!’ Posts that clearly indicated stress, confusion, joy or other emotions tended to attract notably higher levels of responses and attention. In these moments, the group clearly functioned as a site of emotional support, as the following thread excerpts illustrate:

Original Post: I’m on trial before a group of parents who don’t like my lesson planning... or anything else I do either next week. I was wondering if anyone has references to research showing positive effects on flipped classroom...

Comment 154: We are 7616 members of this group standing behind you... Hope you feel support at the meeting!

Comment 155: Don’t let yourself be broken! Think about the students’ engagement compared to ‘traditional teaching’... Principals seem to be totally steered by school budgets and grade results. Salary levels doesn’t say anything about your real capacity! 😊

Clearly, this is a vulnerable state expressed by the original poster here, relating to the choice of the Flipped Classroom approach. The profession-oriented response is mainly affective and appreciative rather than academic, and the outside pressure is considered as emanating from parent critique and management concerns over performance.

What unacknowledged outcomes of participation were apparent?

On the face of it then, the group was a typical example of what tends to be celebrated in the education literature as ‘a valued source of professional development’ (Macià & García, 2016, p. 291) rather than a form of work. As the group moderator put it in one of her many postings: ‘For me, it is a kind of break to pursue pedagogy and to think of teaching in different forms outside regular working hours. [The group] is a break you chose to take, but it’s not compulsory’ [original post]. That said, a number of more problematic issues can also be identified within the practices and processes just described.

The most obvious indication of the work involved in group participation was the times and places at which participants were engaging with the group. Flip-it certainly could be described as a ‘work-extending technology’ (Bittman et al., 2009), with many instances of engagement taking place outside of school hours—notably
evenings and weekends. Participants would occasionally mention their outside-work work on Flipped Classroom activities, for example: ‘I am planning on spending the weekend learning to make simple recordings of PowerPoint and record them with a narrated voice over’ [original post]. This extension of work was certainly evident in the usage data. As can be seen in Figure 2, of the 16,163 posts and comments in the corpus, 25% \((n = 4,038)\) were made on weekends and 43% \((n = 6,945)\) were made during the early morning or evening hours (i.e. on weekdays before 08:00 or after 17:00). Only 32% \((n = 5,180)\) of posts and comments were made during working hours.

Moreover, as can be seen in Figure 3, while peak months for contributions were at the beginning or middle of school terms, 11.5% \((1,852)\) of posts and comments were made during the months of June and July, when schools are not generally in session in Sweden.

It is also worth acknowledging that group participants were inevitably engaged in the unpaid ‘virtual labour’ that any user of Facebook is involved in. One obvious consequence of being a group member was the way in which users were involved in additional content creation and consumption to create value for Facebook and the third-party advertisers implicit in its business model. One tangible indication of this was the way in which being a member of the Flip-it group skewed participants’ viewed advertisements on Facebook. While one might not have been ‘Friends’ with all 13,000 participants, membership of the group nevertheless altered one’s connections and therefore the nature of the content one would receive through Facebook’s ‘news feed’ and targeted advertising.

**Discussion**

The Flip-it Facebook group clearly does not constitute a wholly harmonious site of mass professional development, yet neither does it appear to be without benefit to
teachers. Thus, in making sense of these findings, we need to maintain a balanced perspective. In the first instance, we need to consider the ongoing popularity of the group. Given the uncompensated ‘extra-curricular’ nature of the work, why did teachers continue to engage in the group? What needs were being met and what value were teachers extracting from the group? This requires consideration of how social media use fits into teachers’ everyday lives, as well as the ‘complexity with which living individuals approach and make sense of their own labour’ (Hughes, 2014, p. 652).

From the perspective of the individuals using it, there is much that could be said in praise of the group as a site of work. In contrast to many social media spaces, our observations found Flip-it to be an online setting where norms of respectful and polite exchange were largely maintained. Moreover, the group was a place where teachers felt able to gain useful information and advice, and thereby develop professional knowledge. The group reflected long-standing tenets of teacher professionalism—in particular, self-regulation, autonomy in practice and a shared commitment to developing knowledge and practice (Hargreaves & Goodson, 1996). For some participants, the group clearly fulfilled a sense of community and belonging with like-minded teachers on a national scale, thereby countering the ‘culture of isolation’ that can develop amongst specialised teachers working in disparate schools (Valli & Buese, 2007). It is also worth acknowledging the career-building benefits of gaining social status as a ‘core’ contributor, or simply developing a professional identity through participation in the group. Finally, as with much social media use, Flip-it was a site of considerable affective engagement—allowing some participants to gain fulfilment through helping others with displays of care and concern.

For all these reasons, the group might be seen to be a relatively beneficial and uncontroversial aspect of these teachers’ working lives, as it provides a professional context around a shared interest which may be lacking in teachers’ local schools or

Figure 3. Contributions to the group (posts and comments) by month.
groups of colleagues. Social media is now a primary source of work-related information and learning in many professions—from journalism to medicine (e.g. Heravi & Harrower, 2016). As such, the group appeared to embody many of the characteristics associated with ‘light-weight’ communities of peer production (Haythornthwaite, 2009)—i.e. where ‘those with common interests or in spatially distributed teams can make tacit knowledge visible to improve their work […] practices’ (Gruzd et al., 2016, p. 1189). Groups such as Flip-it would also fit into Facebook founder and CEO Mark Zuckerberg’s own preferred state of Facebook supporting what the company judge to be ‘very meaningful group[s]’ (Kelly, 2017). Some group members certainly commented regularly on seeing themselves as pragmatic and entrepreneurial professionals, who had found a beneficial means of online support. Conversely though, throughout our data corpus and interviews very few participants expressed seeing the group as a form of work (let alone a problematic form of work).

Yet while participants might not perceive Flip-it as a site of work, this does not mean that it should be presumed to be an unproblematic form of non-labour. Indeed, many forms of online knowledge labour are ‘often not recognized as “proper work”’ (Primorac, 2016, p. 161). As Scholz (2013, p. 2) contends:

> Casual digital labour looks merely like the expenditure of cognitive surplus, the act of being a speaker within communication systems. It doesn’t feel, look, or smell like labour at all. This digital labour is much akin to those less visible, unsung forms of traditional woman’s labour such as child care, housework, and surrogacy.

Thus, it is worth now considering the (largely unrecognised) aspects of the group that we might consider to be disadvantaging and disempowering forms of teacher activity. In the first instance then, we need to acknowledge the embedding of the group within Facebook’s business model of extracting surplus value from the unpaid labour of its users. As such, the creation of content on the group was generating data that was saleable to advertisers. As we saw, a group of 13,000 teachers is a profitable site through which to sell targeted advertisements for technology products or, indeed, for marketers to directly infiltrate. Any teacher, or indeed any user, using Facebook is inevitably working for Facebook as well as for themselves (Fuchs, 2014). Also problematic is Facebook’s use of the group to generate surplus value from the objectification of knowledge derived from teachers’ professional experiences of working in Swedish public education (see Zukerfeld, 2017). That this knowledge is being used for profit by a US corporation lends weight to Šrnicek’s (2016) contention that platforms such as Facebook are parasitical to other value-producing industries.

Alongside these concerns of exploitation, we also need to recognise the implicit ways in which teachers’ use of Facebook reshapes professional values and attributes. Here, a number of concerns arise from our data relating to the restricted ways that teachers were able to work as skilled professionals online. For instance, while teachers were ‘free’ to engage with the group in any way they pleased, the Facebook interface afforded only limited control over content. Rather than being an accessible repository of accumulated expertise, Facebook presented a narrow selection of content to teachers and made it difficult to actively engage with the information. Indeed, despite some participants’ efforts to disrupt the platform’s logic with ‘follow’ and ‘.’ posts, the group was characterised by users’ passive interaction with the online content.
determined (to a large extent) by the platform’s algorithms rather than teacher expertise. In this sense, the Flip-it group functioned as what Franklin (1999) describes as a ‘prescriptive technology’—i.e. a technology designed for compliance that ‘reduces workers’ judgment and decision making, and acculturates them to external control, authority and conformity’ (Cohen, 2015, p. 116).

The group also functioned in a manner that, despite statements encouraging the inclusiveness of the group by the moderator and core members, seemed to discourage most ‘participants’ from actively contributing their own knowledge. Perversely, then, the group could be said to engender a reduced expertise amongst the majority of what would be considered elsewhere to be expert participants. Rather than being a site of dialogue and discussion, the dominant communication patterns were notably one-way and devoid of substance, with only occasional elaborated discussions. Moreover, most users were consuming content with little or no reciprocal exchange of their own knowledge. As our analysis highlighted, the group certainly replicated Facebook’s dominant mode of most users relatively passively consuming content with little or no reciprocal exchange. In this sense, the group functioned to make ‘lurking’ teachers dependent on a niche of expert others who were responsible for the bulk of post and comment contributions. This might be unproblematic in a situation where teachers have their professional development needs met through other means and social media is a supplementary source. However, especially in cases such as Sweden—where teachers have relatively little access to formally organised and certificated continuing professional development compared, for example, with Germany (Forsberg & Wermke, 2012)—the character of non-formal opportunities becomes significant.

Another problematic aspect of teachers’ work within the group was the notable homogeneity of content, interaction and exchange. This was evident in the repetitive nature and form of threads—from the reiteration of previously asked questions to the standard pattern of truncated call-and-response with only occasional follow-up to responses. Moreover, while polite and respectful, these interactions also had a common deferential tone, with little room for dissent, contradiction or deviation. Somewhat paradoxically given the thematic interest of the group around the Flipped Classroom approach, the group was generally characterised by the recommending and recycling of existing products, rather than supporting the development of new resources. Beyond the regular addition of new posts and comments, and the contributions of a small minority of individuals, Flip-it did not constitute a creative community of content producers per se. All told, Flip-it echoed a broader tendency throughout social media for a ‘mass synchronisation’ of thinking, experiences and ideas. While users were ostensibly all doing different things, their actions shared a common ‘sameness’ (Crary, 2013) in terms of practice and interaction.

Our data also illustrated the role that Flip-it played in extending and intensifying teachers’ engagement in their work. For example, teachers logging onto Flip-it during school hours are engaging in a near-simultaneous form of ‘double work’. Conversely, however, we found that most engagement with the group took place during periods that would most often be considered to be ‘free’ or ‘leisure’ time in the Swedish context. In these instances, the inclusion of Flip-it into one’s Facebook feed clearly reduced the ability of teachers to find gaps and spaces in their working lives to disengage and switch off. Instead, our data suggested a continuous incursion of work into
teachers’ personal and social life. This could be seen as evidence of the group appearing to exacerbate and extenuate the traditionally ‘always on’ nature of teaching work as an ‘all-encompassing’ profession that relies on over-work. Given the gender characteristics of this group, which mirror the profession in general, but also from the perspective of recent reports on high demands, work stress and loss of control in particular affecting female teachers (Swedish National Union of Teachers, 2013), this is particularly troublesome. As Crary (2013, pp. 30–31) concludes: ‘Since no moment, place, or situation now exists in which one cannot shop, consume, or exploit networked resources, there is a relentless incursion of the non-time of 24/7 into every aspect of social or personal life.’

That said, it was notable that there was a distinctive temporality to the group, with teachers’ engagement mirroring the distinctive periods of busyness and stasis built into the school academic year. This synchronisation of online work with offline work periods is a reminder that technology does not wholly determine social action. Instead, the group retained a sense of ‘teacher time’ as ‘a social entity, formed through collective rhythms of human engagement with the world’ (Wajcman & Dodd, 2017, p. 2). Flip-it was a site where teachers’ work was expanded and intensified—albeit shaped by long-established patterns of teachers’ general propensity to (over-)work. Interestingly, over the three-year period there are clear points of increase and decrease in activity, perhaps due to a lack of interest in the topic over time or the group simply becoming too large and therefore feeling more depersonalised.

Finally, beyond these issues of over-work and busy work are concerns over the diminished quality of engagement and experience in teachers’ work. While Facebook was clearly an effective platform for engaging (and retaining) the attention of a large number of teachers, the Flip-it group could not be described as a fertile space for extended dialogue, listening-and-responding, democratic exchange and genuinely public debate amongst professionals. Instead, while the group was a site of extensive activity by teachers, these tended to be highly individualised and instrumental forms of activity. As Bengtsson (2016, pp. 222–223) argues, mass social media platforms tend to function as ‘sites for the cultivation and deployment of neoliberal subjectivities that prioritize entrepreneurialism, self-sufficiency, a willingness to work anytime and anywhere, and instrumental relationships towards institutions and other human beings’. While some participants might consider these to be desirable characteristics, they are certainly counter to the senses of obligation and reciprocity that one would commonly associate with notions of ‘community’ and ‘solidarity’ within professional groups drawing on trust and mutuality.

Conclusions

The findings of this study highlight the need to approach professional uses of social media in a nuanced manner and to move beyond discussions of Facebook being either ‘good’ or ‘bad’; ‘empowering’ or ‘oppressive’. Instead, as with any form of online collective, we need to make sense of a teacher social media group in terms of ‘the logics that motivate and sustain it, and it’s personal, social, cultural and economic consequences’ (Baym & Burnett, 2009, p. 447). In these terms, our findings point to tensions between what appears to ‘benefit’ individual teachers in the short
term and likely longer-term implications that these practices might have for diminished professionalism and expertise of teachers. Our study therefore raises the need for more research into professional uses of social media that better acknowledges the contradictory nature of digital technologies in supporting professionals to engage in collective work-related activities that ‘are pleasurably embraced and at the same time often shamelessly exploited’ (Terranova, 2000, p. 37).

Theoretically, then, this study adds to the burgeoning academic discussion on the changing conditions and pressures of teachers’ work as digital technologies contribute to broader patterns of work intensification, expansion into personal time and space, and conditions of performativity (e.g. Selwyn et al., 2017; Singh, 2018). In particular, our current study highlights a set of tensions implicit in teachers’ Facebook use that merit further exploration. For example, while teachers see themselves benefitting from participation in groups such as Flip-it, our study finds some to be committing substantial amounts of personal time and effort to this participation. Conversely, while Flip-it is a site of (over-)work outside school hours and location, the group notably retained traces of the traditional school calendar—suggesting that the ‘always-on’ promise of social media is nonetheless still being shaped by enduring educational cultures (i.e. a persistent shared understanding of teachers not working during the summer vacation). Whether this is specific to teachers and/or Swedish teachers certainly merits further consideration.

These are all issues of practical—as well as theoretical—significance. Thus, there is a need for teachers, school leaders, policymakers, unions and organised labour to begin to address the implications of teachers’ increased professional use of digital technologies like Facebook. With education systems such as Sweden’s reducing the officially designated work time for professional development, growing numbers of teachers seem compelled to engage in these types of distributed and non-formal virtual work. What future possibilities are there for the aspects of groups such as Flip-it that proved of value to teachers being achieved under conditions that are perhaps not so open to the constraining, differentiated and/or exploitative characteristics of the Facebook platform?

Depending on the goals for using social media groups in a professional context, one line of enquiry might lie in developing teachers’ professional sensibilities towards using social media as a collective, collegial endeavour, rather than as an individualised practice. Just as teachers might differentiate their actions in a classroom compared with their ‘private lives’, thus teachers might be encouraged to reflect upon and further develop professional modes of collegial and constructive social media engagement. This might involve heightened awareness of not necessarily replicating standard social media traits and norms (e.g. continuous ‘Liking’, superficial posting, non-critical engagement). Instead, expected norms might include collective values of openness, mutuality, constructive criticism and debate. The norms could also include expectations of the ‘group’ only being active for certain periods of designated ‘work’ time (e.g. during school term times). In short, this would constitute a cultural change amongst the teaching profession with regard to how one engages with social media in a professional capacity.

Such suggestions might appear fanciful and impractical. Yet by initiating these conversations, we begin to see the limits, constraints and problems surrounding the
migration of teachers’ work and professional development away from face-to-face contexts and towards mass social media platforms such as Facebook. Above all, we would argue for the need for teachers and the wider education community to develop critical awareness of the problematic nature of the digital tools that are now playing a central role in the working lives of teachers. While the professional benefits of social media are not to be wholly rejected, neither is it sensible to unthinkingly accept the implicit conditions of technologies that are inherently designed to exploit their users.

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