

Managing reputation by generating followers on *Twitter*

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Abstract

It can be observed that online communities recently have a great attractiveness to users. But what motivates them to engage that intensively? Most systems offer mechanisms that show the 'rank' or 'social reputation' users have earned within this environment. The paper describes the results of a survey that has been conducted with about 220 users of *Twitter* in order to find out how important it is for users to gain 'followers'. Within this paper we outline a theoretical model that explains why users try to gain social reputation in different virtual worlds. For this, a typology of virtual worlds has been developed based on possible spill-over effects of social reputation that can be gained in virtual and real worlds. Furthermore, the implications for collaborative learning are discussed.

Introduction

The use of online communities has been growing noticeably during the last years. Services like *Twitter*, *Facebook* or *XING* have gained several million of users in only few months. However, it is not quite obvious what makes these platforms that attractive to so many users and what motivates them to engage very intensively in these environments. One aspect might be the possibility of building social relationships with others. Most systems offer mechanisms that show the 'rank' or 'social reputation' users have earned within this environment. To what extent can this be described as a reward mechanism that influences a users' behaviour? The question is, how important is this 'reputation' for users, how actively do users they try to gain social reputation in virtual worlds and how does this reputation mechanism influence users behaviour in learning?

In the following we will illustrate the activities in gaining social reputation and its management by regarding the microblogging network *Twitter*.

The microblogging service *Twitter*

First of all, *Twitter* is a service for microblogging. Microblogs can be compared to weblogs with the distinction that the posts are much shorter and do not contain additional information or headlines (cf. Barnes & Böhringer 2009, p. 2). These messages can be addressed to everybody or to a specific person, but they are usually public.

The first and currently the most popular microblogging service is *Twitter*. *Twitter* limits the number of characters used in a posting to 140 or similar, so it can be compared with an SMS to the internet that almost everybody can read and which stays stored online. The goal of this limitation is to animate users to post short messages often in their microblogs (cf. *ibid.*).

Access to the microblogging service and sending of the so-called ‘tweets’ (e.g. the postings) is also possible by using mobile text messages, desktop clients or several third party applications, so *Twitter* is extremely flexible.

By logging into *Twitter* the users are asked to type into a text box what they are currently doing (see Fig. 1). The answers are quite different: Java et al. (2007) and also Simon & Bernhardt (2008) revealed that most people use *Twitter* in order to publish links, report news or simply to chat with others – but some people even document their whole day with almost no exception (cf. Java et al. 2007; Simon & Bernhardt 2008).

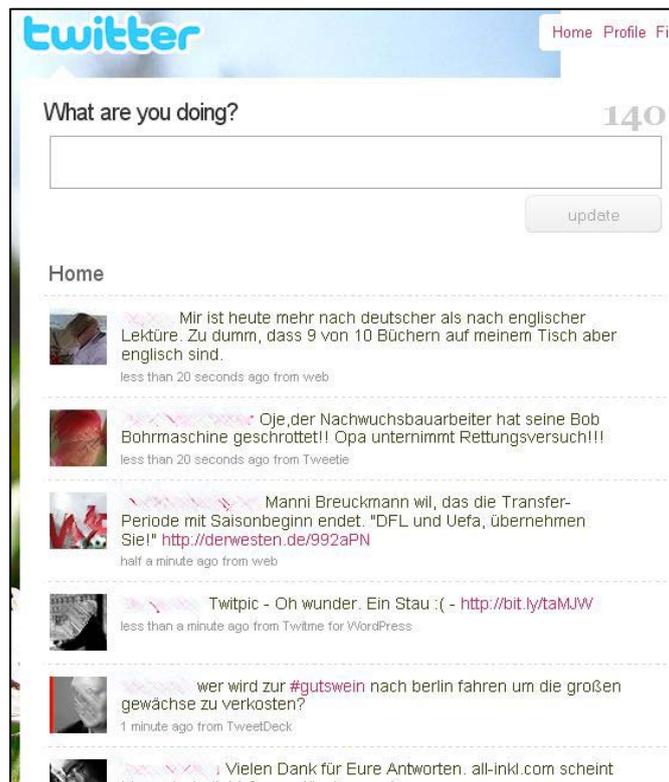


Fig. 1: personal Twitter front page

Learning with *Twitter*

Twitter is extremely flexible. It can be used in a very constructivist way, for example as it provides different RSS-feeds which can be imported into learning applications. Thus, it is possible to merge accounts or create feeds for special search queries. There are various opportunities to use *Twitter* for the purpose of learning. Grosseck & Holotescu (2008) list different possibilities in what way it could be used as a pedagogical tool. For example, they suggest “Twittering in class or outside of it is [sic!] about learning” or “Collaboration across schools, countries”, but even “Thinking about and reflecting on your learning” (Grosseck & Holotescu 2008, p. 5). *Twitter* can be used as a tool for brainstorming, but also for collecting links, making notes or communicate with the teachers. As an ‘open learning journal’ a documentation of one’s own learning process could be possible (cf. Kerres & Preussler 2009, p. 4). Ebner & Maurer (2008) even speak of the increase of reflexive abilities through the use of microblogs in learning (Ebner & Maurer 2008). Johnson et al. (2009) point out that tools for online publication are generally adequate for reflecting about life and job relevant questions or for work and research on products together. Furthermore, learning institutions can articulate as ‘public voice’ by communicating beyond the borders of classes or schools: “The ease of online publishing, especially blogging, gives students a place to voice their opinions, ideas, and research” (Johnson et al. 2009, p. 20).

However, learning with *Twitter* means learning in a network in which social relations play an important role.

Twitter as a social network

Nevertheless, the access to pure information could be realised more easily and more effectively via RSS-feeds or simply forums or information websites. But secondly, microblogs also contain features for social networking as they deal with the social relations of the users.

Functions of social relations

What is the essence of a social relation? First of all, we can state, that the way a person is represented on the net has an influence on its identity. Döring (2003) argues that this representation consists of a combination of attributes that can be generated by the user as well as the system or co-users. However, whether and how these attributes are designed depends on the “social responsibility and technical competence of the user¹” (cf. Döring 2003, p. 343).

Individuals are assigned to a social identity which represents to a social category or group. Persons can either identify with, or distance from this assignment. By doing so, they assess this

¹ Translated by the authors.

social category or group as it is expected to be an element of identity. Voswinkel (2001) speaks about collective identity, when these identities and identifications of the members of the group or category are shared (cf. Voswinkel 2001, p. 160).

Döring (2003) points out that “the whole of the social relations a person maintains with other people as well as their inner relations among themselves can be described as the social network of this person²” (cf. Döring 2003m, p. 409).

Referring to Gräf (1997) personal social networks can be divided into a narrow core region, which consists of strong ties and a further zone in which the ties are more or less weak. In addition, there are also indirect or very loose ties (e.g. friends of friends) the network is surrounded by. This periphery zone has at least two functions: On the one hand, all persons that are part of a personal network constitute a personal public. Thus, a person’s storyline is monitored and evaluated. On the other hand they potentially provide resources like esteem, love, care, recognition or assistance. This aspect of a social network is what Gräf (1997) calls its social capital (cf. Gräf 1997, p. 102).

Brass, Butterfield & Skaggs (1998) define a social network “as a set of actors and the set of ties representing some relationship or lack of relationship between the actors” (Brass, Butterfield & Skaggs 1998, p. 17). They emphasize that “the strength of a relationship refers to the frequency, reciprocity, emotional intensity, and intimacy of that relationship” (ibid.). They identify three types of relationships: multiplex relationships (“the degree to which two actors are linked by more than one type of relationship”), asymmetric emotional relationships (relationships, “in which the trust and emotional involvement of one actor are not reciprocated fully by the other”) and relationships in terms of status (ibid.).

These described properties fit to personal networks in general. However, besides someone’s private network, there are various forms of online networks to what these structures apply as well. These applications are also known as ‘social software’. It is a feature of most social software applications to provide a possibility for connecting people and creating networks, without the need for the users to have a specific knowledge about the technology. According to Bächle (2006) software systems that support human communication and collaboration are called ‘social software’ (cf. Bächle 2006, p. 121). These can be blogs and wikis, social bookmarking applications as well as microblogging services. As *Twitter* is one of them, we will look more detailed to social relations in this network.

Social relations in *Twitter*

In *Twitter*, members can ‘follow’ each other and thus add one another to their social network (cf. Kerres & Preussler 2009, p. 6). The recent posts of a member’s followers appear in a chronologically ordered view on their starting page (cf. Barnes & Böhringer 2009, p. 2). However,

² Translated by the authors.

just following a person does not necessarily mean a virtual friendship. People do not even get in touch with many of their followers.

Twitter is used as well by private persons as by companies, politicians, organisations, newspapers etc. Our expectation is that *Twitter* has such popularity, because users can become part of a network consisting of people with similar interests that can exchange information with each other (cf. Kerres & Preussler 2009, p. 6). Furthermore, it is a tool for self-promotion and it focuses on curiosity about other people. *Twitter* is a social network according to the human need for social acceptance. People can be heard, maybe even because of the very open situation and they can be part of others' activities (cf. *ibid.*). So additionally, *Twitter* is also a platform for establishing social relations. Herwig (2009) assumes this possibility to connect with others to be a motivator to return (cf. Herwig 2009, p. 10).

“The users are the social beings of the Web and thus make it a social web. We are increasingly moving away from sheer technique and are more and more about happy about social offerings: blogs, photo sharing, dating communities, student platforms and SMS chats. Furthermore, [...] the network becomes interesting for everyone since it offers online banking, shopping and party information besides technical discussions, hardware news and Linux kernel updates³” (Humer 2008, p. 15).

Social reputation in *Twitter*

As *Twitter* is a social network it is also a (virtual) place in which users can gain online reputation. A closer look to its definition and form seems to be necessary here:

“Reputation is a modern form of recognition. Such as trust, neither recognition is granted; it is no longer merely linked to affiliation and social proximity. The criteria to whom and why recognition is offered, have become vague and more diverse⁴” (Voswinkel 2001, p. 12).

The definition of reputation has historically changed as it has been replaced by the term ‘honour’ as a pre-modern form of recognition (cf. Voswinkel 1999 as cited in Klewes & Langen 2008, p. 45). Furthermore, the essence of reputation can be generated from the prestige someone has: “Reputation is a publicly mediated form of recognition and is based on the diffusion of prestige information to unknown parties beyond the scope of personal social networks⁵” (Eisenegger 2005, p. 24). Nevertheless, in common speech there is additionally hardly a distinction between reputation and prestige.

³ Translated by the authors.

⁴ Translated by the authors

⁵ Translated by the authors.

Prestige and reputation differ in their definitions in the way that prestige can be transformed into reputation, but not before uninvolved and unknown third parties have to get to know about someone's prestige (cf. *ibid.*). That means that though each person in a social network has a prestige, not everybody necessarily has a reputation (cf. *ibid.*). Eisenegger (2005) points out that it is essential to have publicity and develop strategies for receiving attention in order to gain reputation. Thus, it is – in contrast to prestige – a communicative product, as it depends both on intermediation and performance. In this way, reputation is connected to creating and forming social reality (cf. *ibid.*).

Eisenegger (2005) also distinguishes between a person's interior reputation, which means the recognition the reputation object awards itself on the one hand and external reputation on the other hand, which can be seen in the recognition the reputation object is allocated to by third parties (cf. Eisenegger 2005, p. 43).

Coming back to *Twitter* we can say that the number of followers – that means people who have subscribed to a user's *Twitter* stream – is an indicator for the social reputation of this user: *Twitter* users become the more important the more followers they have. This becomes even more obvious by looking at tools for users' statistics like 'tweet-rank.de' or news articles headlined "How to get more followers"⁶. People in *Twitter* put a great focus on their number of followers and thus, carry out activities in order to increase this number. According to this, there are differences in the usage behavior. On the one hand there are users – mostly celebrities – that have over 3 million followers but follow only very few people themselves. Herwig states that "the hierarchy inherent to the 'traditional' star/audience relationship is simply adapted and reinjected. It is the notoriety of the (star) image that renders a media personality nearly immune towards a merging in with the community" (Herwig 2009, p. 16). We would add that these people reach a high reputation also by the number of their followers and thus keep their status of being a celebrity even in the online world.

On the other hand there are people following thousands of users but do not have many followers. In many cases these are advertising accounts hoping to be re-followed by people they add to their network.

A study

In order to find out in what way people are using *Twitter* and how they are managing their reputation in this community, a survey on *Twitter* was conducted in February and March 2009. Therefore, an online questionnaire was developed in which *Twitter* users were asked about

⁶ <http://blog.datenschmutz.net/2009-08/wie-bekommt-man-mehr-twitter-follower/>

their main reasons for using *Twitter*, their period of being active in that network, their number of followers, @-responses⁷ and Re-Tweets⁸, but also their activities for gaining more followers.

219 people completed this online questionnaire. Of course, we are conscious that we could not receive representative results, but the study can be regarded as a pre-study for deducing hypotheses. Nevertheless, it was important to reveal some interesting relations.

On a five-step scale in the range of 'never' to 'always' the intentions of use were requested. Summarizing the values for 'often' and 'always' the most given answers why people use *Twitter* in general were either to have fun (76.2%), provide or spread news (60%) or tell others about one's own activities (51.6%). These results correspond to similar findings by Java et al. (2007) and also Simon & Bernhardt (2008). Distinguishing between users with many or few followers – that was either above or below the average of 179 – people with a big network more often use hash tags⁹ (53.2%/30.6%), chat with others (46.8%/25.5%), follow others back (45.1%/29.3%), link to own events (42 %/24.2%) and retweet postings (21%/13.4%) (cf. Preußler & Kerres 2009).

The people that took part in the study were additionally asked for some general statements about the importance of *Twitter*. Again, users with many and few followers were differentiated between. As a result, people with many followers agree more often to items that deal with the relevance of *Twitter* (see Fig. 2). In case of the item 'by using *Twitter* I can easily get in touch with others' (85.5%/56.7% agree fully or rather) and the item '*Twitter* is part of my everyday life' (74.2%/57.3% agree fully or rather) the differences between the groups are significant. People with many followers seem to benefit from the advantages of being part in a network more than people with few followers and, furthermore, seem to have integrated *Twitter* more into their daily routine. The majority of people also think that *Twitter* is fun. Negative items, like '*Twitter* is boring' are mainly neglected. What is interesting is that only few people admit that they are interested in the number of their followers – this aspect will be discussed more detailed later.

⁷ Putting the '@' in front of a username shows that the tweet is addressed to a special user. In most cases, this is an answer to a former tweet. Though the '@' is used, the tweet is still public.

⁸ Re-Tweeting a posting means to copy a user's tweet and publish it once again (according to the fact that every user has a different network of followers). As this is done by putting the creator's user name into the Re-Tweet, it credits this user (E.g. "RT @user-abc").

⁹ A way to tag posts either for simplifying search queries or for adding a 'headline' to the post. A hash tag is symbolized by the #-symbol.

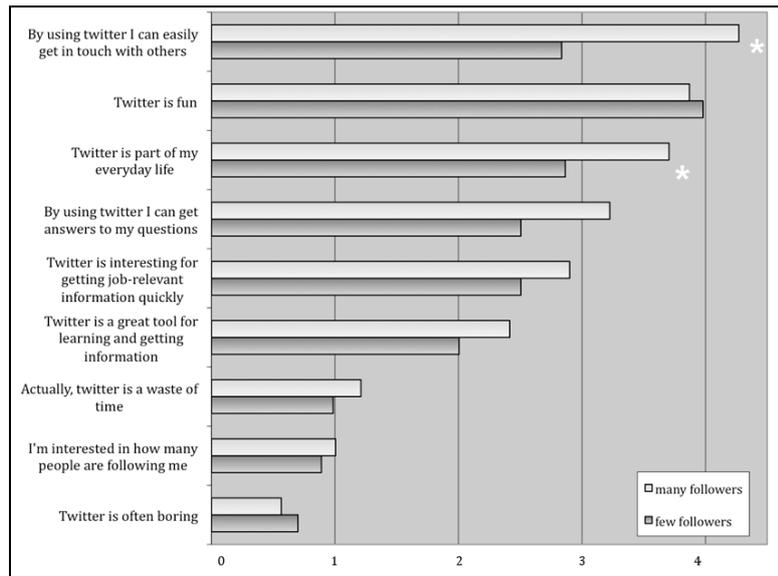


Fig. 2: Agreement to general statements about Twitter differentiated between many and few followers (marked items show a significant difference)

As the reputation was expected to be visible in the number of followers people in the study were asked what activities they practice in order to get more followers. Fig. 3 shows the statements the users made in total.

What most people do¹⁰ (57.1%) in order to gain more followers is to subscribe to persons that they already know or to information they like. This seems to be the easiest way to get in touch with each other generally.

Secondly, they provide links and images in their profile (55.7%) and also use individual backgrounds (41.6%). These activities are probably done because people want to be recognized by others or give additional information about themselves. Furthermore, 39.3% of the people we asked about *Twitter* use their real name. It is interesting, that though *Twitter* provides space for being anonymous, many users provide real information about themselves. Comparing this to the way of communication e.g. in forums, we can find less anonymity in *Twitter*.

The *Twitter* users also read posts of people they know, keep an eye on the informative benefit of their postings and embed *Twitter* to other media like their blog or *Facebook* (see Fig. 3).

¹⁰ Summarized values for 'often' and 'always'.

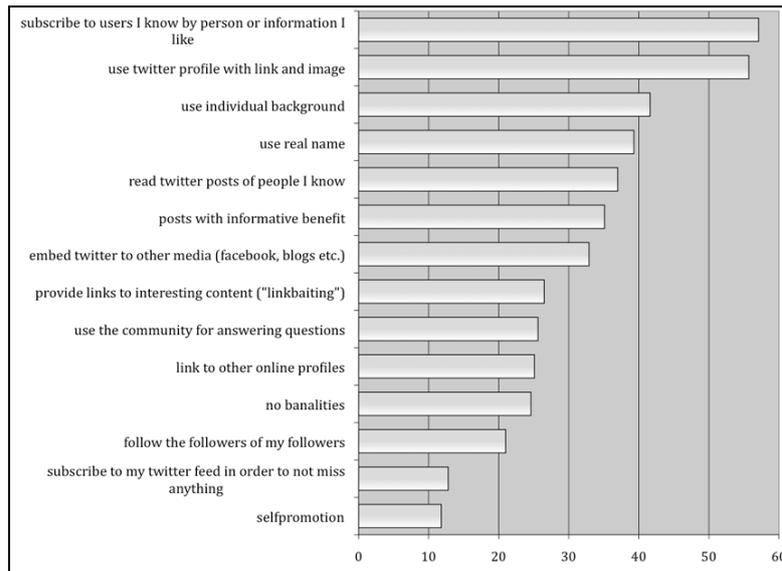


Fig. 3: Activities for getting more followers

Comparing users with many or few followers it becomes obvious, that the importance of different activities increases in the single groups. Generally, people with many followers practice activities in order to attract followers more often. Additionally, there are significant differences¹¹ regarding the items 'individual background' (54.9%/36.3%), 'use the community for answering questions' (38.7%/20.4%) or 'link to other online profiles' (38.7%/19.7%) (see Fig. 4).

¹¹ Summarized values for 'often' and 'always'.

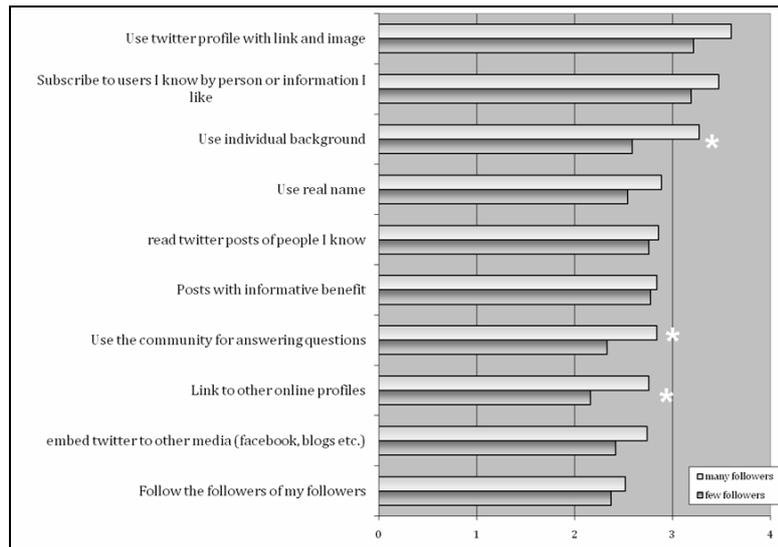


Fig. 4: Activities for getting more followers differentiated between many and few followers

Another item dealt with the question whether users think, that certain aspects are important to themselves or also to other *Twitter* users. For example, 'communication with others' is important for the people that took the survey, but these subjects also think it is important to others (see Fig. 5).

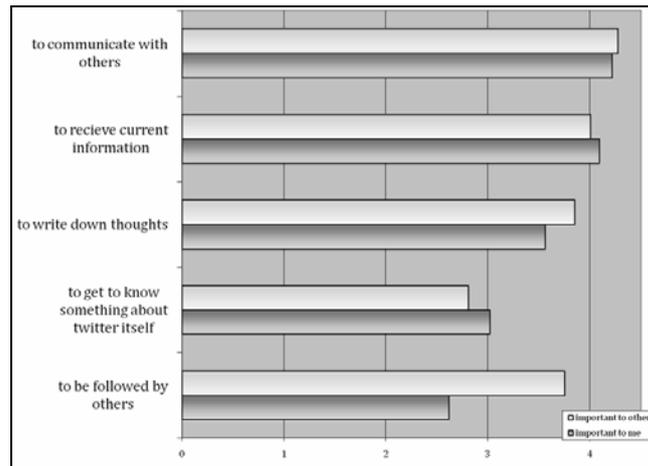


Fig. 5: Aspects for using Twitter differentiated by importance

What is most interesting in this chart is the last item. Over 64% of the users agree totally or rather to the statement ‘for others users it is important to be followed by others’. People seem to impute the relevance of followers to each other, but no one seems to admit this openly. Especially those, who say it is not important for them to have many followers, say it is – from their point of view – important to others.

These results show that users are engaged in various activities to improve their ‘social reputation’. Why does this play such an important role?

Spill-over effects

Our assumption is that one of the factors influencing the motivation of gaining followers depends on the spill-over effect from one personal network to another. In a virtual world, like *SecondLife*, it is rather hard to gain reputation that is visible to others. Even active users in a forum have to write many postings that other people rate as useful and thus get positive votes. In a gaming world, like *World of Warcraft*, players have to be active for quite some time – and even have to pay money – to get a better ranking in the hierarchy (cf. Kerres & Preussler 2009, p. 7). In *Twitter* it is enough to post little messages from time to time and exchange with others in order to get more people attracted. Thus, it is much easier to become reputed quickly.

Separated worlds

Regarding the structure of personal networks in different communities we can state that there are usually separated worlds: In a forum for computer hardware we usually do not know all the other members by person and mostly do not even wish to know them. They are not part of our personal network. It is a comparable situation in *SecondLife*, where people even have a virtual name. As there are many aspects that generate anonymity, it does not surprise if a user does not know many of his or her *SecondLife* friends in real life. Regarding *XING*, the social integration is at a medium range, because *XING* can open and widen a personal network, but people normally do not exchange frequent messages. *StayFriends* – a network for school friends pictures someone’s network almost 1:1 but it is not supposed to widen it, because the number of people a person went to school with is limited. *Facebook* and especially *Twitter* make the personal network grow and put additional value to it.

This way, the social integration of virtual life and real life varies regarding the different communities (see Table 1). While the integration in a forum is at a very low level, it is rather high in *Facebook* and *Twitter*. ‘Friends’ or ‘followers’ in these networks are more likely to be or become also friends in real life.

	social integration virtual life/ real life
Forums	low
<i>SecondLife</i>	low
<i>XING</i>	medium
<i>StayFriends</i>	medium
<i>Facebook</i>	high
<i>Twitter</i>	high

Table 1: social integration of networks

The overlap of the various worlds creates different incentive structures. According to this, the easiest way to gain reputation is the real life (or ‘first life’) relating to people known by person in someone’s personal network. However, there are people in this network that are also part of this person’s virtual network. It might be a specific attribute of *Twitter* that reputation can be transported from one world to another. The survey described before gives additional hints relating to this idea, as, for example it is important for people to provide real information by use their real name or a personalized background.

Herwig (2009) describes the competition between different platforms and argues that *Twitter* offers optional anonymity which “competes with various incentives to reintroduce the hierarchies of existing social structures: Immediately after sign-up, users may search their email address book to identify contacts who already are on *Twitter*; they are presented with a list of popular *Twitter* users and given the option to follow them” (Herwig 2009, p. 6). This argumentation even strengthens our assumptions:

Though there are many dimensions of use that make *Twitter* successful we suppose this possibility to be an important aspect of the service, because it distinguishes *Twitter* from other communities: In addition to pure communication it allows the formation of networks in a particular and very easy way. These aspects do as well fit to *Facebook*, which also maintains a network in real life, but *Twitter* is more free of use. For example, as it allows the export of the tweets via RSS, they can be imported into *Facebook*.

Conclusion

As our results demonstrate, gaining ‘followers’ and improving their social reputation are relevant aspects that users of *Twitter* are concerned with.

Relating to this, it is necessary to deal with the question to what extent the spill-over effect of transporting reputation from a real life network into *Twitter* and vice versa takes place and what implications for learning can be deduced. Taking into account seriously that *Twitter* is a tool for collaborative activities, in what way can a reputation system influence the learning activities? How does online reputation manipulate group structures within learning groups?

For the collaborative use of *Twitter*, these questions are relevant. On the one hand, people with few followers can profit from those with many followers – e.g. be part in their network. On the other hand, those who have successfully gained followers might be more powerful and higher in the hierarchy, as they have a higher reputation. Especially when they are part of a learning group consisting of few-follower co-learners, this can be compared to the ‘big fish little pond’-effect (cf. Marsh 1987). In case of *Twitter*, it is hardly possible to homogenize the learners on the same level. Even a separate account for learning issues would not solve the problem, because reputation is not based on accounts but on persons. A learner with a high reputation can easily gain many followers, just by informing his or her existing network about this.

If, for example, a learning task is to reflect about one’s learning process, people with many followers are able to receive more feedback to their postings and thus, have a better possibility to incorporate this. If they have a specific question, they can ask their network instead of using search engines. As their reputation is higher, their social capital is higher as well.

Educational institutions have to find a way to deal with those different conditions of the learners when focusing on collaborative activities on *Twitter*.

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