Scholarly collaboration platforms

STM Meeting 22 April 2015
Washington, DC

Mark Ware
@mrkwr
Question: Which social network do researchers know & use almost as much as Google Scholar?
PLATFORM AWARENESS AMONGST RESEARCH COMMUNITY

*Awareness/regular usage in the research community surveyed reported in Q3 2014. Rolling 12 month results, Q4 2013-Q3 2014 = 6688

Source: Elsevier research
Users numbers growing fast

Source: company press releases and interviews
<p>| <strong>Features / description</strong> | Academics use it to share their research, monitor deep analytics around the impact of their research, and track the research of academics they follow |
| <strong>Investors / ownership</strong> | Khosla Ventures, Spark Capital, True Ventures |
| <strong>Funding</strong> | $17.7 million |
| <strong>Documents uploaded</strong> | 4,208,847 papers |
| <strong>Registered users</strong> | 20.1 million (9 Apr 2015) 30 million monthly visitors |
| <strong>Founded</strong> | Sept 2008 |</p>
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Founded</td>
<td>Nov 2007</td>
</tr>
<tr>
<td>Registered users</td>
<td>~4 million (April 2015)</td>
</tr>
<tr>
<td>Documents uploaded</td>
<td>&gt;470 million documents</td>
</tr>
<tr>
<td>Funding</td>
<td>~$70 million (acquisition)</td>
</tr>
<tr>
<td>Investors / ownership</td>
<td>Elsevier</td>
</tr>
<tr>
<td>Features / description</td>
<td>Organise, share, discover. Reference manager; read &amp; annotate; add and organise PDFs; collaborate; backup, sync &amp; mobile; networking (find people &amp; groups) and discovery (papers)</td>
</tr>
<tr>
<td>Feature</td>
<td>Description</td>
</tr>
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<td>-------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Founded</td>
<td>2008</td>
</tr>
<tr>
<td>Registered users</td>
<td>&gt;6 million (25 Feb 2014)</td>
</tr>
<tr>
<td>Documents uploaded</td>
<td>~14 million accessible via ResearchGate</td>
</tr>
<tr>
<td>Funding</td>
<td>$35 million in Series C, plus earlier investments</td>
</tr>
<tr>
<td>Investors / ownership</td>
<td>Bill Gates &amp; others</td>
</tr>
<tr>
<td>Features / description</td>
<td>Share publications; Connect/collaborate; Get stats (views, downloads, citations); Post questions, get answers; Jobs service</td>
</tr>
<tr>
<td></td>
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<tr>
<td><strong>Founded</strong></td>
<td>2011</td>
</tr>
<tr>
<td><strong>Registered users</strong></td>
<td>ca. 260,000</td>
</tr>
<tr>
<td><strong>Documents uploaded</strong></td>
<td>not disclosed?</td>
</tr>
<tr>
<td><strong>Funding</strong></td>
<td>not disclosed?</td>
</tr>
<tr>
<td><strong>Investors / ownership</strong></td>
<td>ISIS Innovations / Oxford University American Chemical Society (ChemWorx)</td>
</tr>
<tr>
<td><strong>Features / description</strong></td>
<td>integrated suite of tools for management of the research process: importing and exporting references, scheduling, task management, collaborating and publishing</td>
</tr>
</tbody>
</table>
Platforms differ somewhat in usage patterns

• “I receive useful links and articles which I find useful” [Academia.edu]

• “… in the past few months, I’ve found that every important paper I thought I should read has come through ResearchGate”

• “I primarily use Mendeley for reference management; its social features are more useful in connection with better-trafficked networks like Twitter and Facebook”

• “I've been looking for a site [Colwiz] that handles to-dos, pdf libraries, etc in a form that's specifically adapted for scientific research …”

• “To put it bluntly, I have no idea if these sites have any impact whatsoever on my career — I tend to doubt they do — but I enjoy knowing that my work is being discussed”

• “I hardly know any scientists who don’t violate copyright laws. We just fly below the radar and hope that the publishers don’t notice”

“Scientists are increasingly sharing their professional identities online”
“A growing number of scientists are sharing full texts of their publications”

“Almost nobody is using ResearchGate’s Open Reviews”

“Sharing of knowhow and advice is still lacking”

Ways of sharing articles

- Point to Version of Record: DOI, metadata
- Point to/host Green OA version: (P)URL
- Point to infringing copy
- Display infringing copy
- Host infringing copy
- DRM-based solution: e.g. ReadCube
The effect of Twitter on college student engagement and grades

R. Junco, G. Heiberger, E. Loken

First published: 12 November 2010  Full publication history
DOI: 10.1111/j.1365-2729.2010.00387.x  View/save citation
Cited by: 112 articles  Refresh  Citing literature

Reynol Junco, 104 Russell Hall, Lock Haven University, Lock Haven, PA 17745, USA. Email: rey.junco@gmail.com

Abstract

Despite the widespread use of social media by students and its increased use by instructors, very little empirical evidence is available concerning the impact of social media use on student learning and
The effect of Twitter on college student engagement and grades


Despite the widespread use of social media by students and its increased use by instructors, very little empirical evidence is available concerning the impact of social media use on student learning and engagement. This paper describes our semester-long experimental study to determine if using Twitter – the microblogging platform – would increase student learning and engagement.

Cited by 393  Related articles  All 36 versions  Save  More

Showing the best result for this search. See all results
Article

The effect of Twitter on college student engagement and grades

R. Junco  G. Heiberger  E. Loken

DOI: 10.1111/j.1365-2729.2010.00387.x

ABSTRACT Despite the widespread use of social media by students and its increased use by instructors, very little empirical evidence is available concerning the impact of social media use on student learning and engagement. This paper describes our semester-long [more]

FULL-TEXT (2 Sources)

Available from ferris.edu
The effect of Twitter on college student engagement and grades

R. Junco, G. Heiberger & E. Loken

Abstract

Despite the widespread use of social media by students and its increased use by instructors, very little empirical evidence is available concerning the impact of social media use on student learning and engagement. This paper describes our semester-long experimental study to determine if using Twitter – the microblogging and social networking platform most amenable to ongoing public dialogue – for educationally relevant purposes can impact college student engagement and grades. A total of 125 students taking a first-year seminar course for pre-health professional majors participated in this study (70 in the experimental group and 55 in the control group). With the experimental group, Twitter was used for various types of academic and co-curricular discussions. Engagement was quantified by using a 19-item scale based on the National Survey of Student Engagement. To assess differences in engagement and grades, we used mixed effects analysis of variance (ANOVA) models, with class sections nested within treatment groups. We also conducted content analyses of samples of Twitter exchanges. The ANOVA results showed that the experimental group had a significantly greater increase in engagement than the control group, as well as higher semester grade point averages. Analyses of Twitter communications showed that students and faculty were both highly engaged in the learning process in ways that transcended traditional classroom activities. This study provides experimental evidence that Twitter can be used as an educational tool to help engage students and to mobilize faculty into a more active and participatory role.

Keywords

cooperative/collaborative learning, learning communities, media in education, post-secondary education, social media, teaching/learning strategies.

Introduction

Social media in higher education

Social media are a collection of Internet websites, services, and practices that support collaboration, community building, participation, and sharing. These technologies have attracted the interest of higher education institutions and motivate their students to be more active learners. There has been interest in integrating various social media tools (such as blogs, microblogs, video-sharing sites, and social networking) into the learning process (Grosswein & Holostesescu 2009, Rankin 2009; Elmer et al. 2010; Schmeder et al. 2010), especially by faculty members with a disposition towards innovative teaching methods.
The effect of Twitter on college student engagement and grades

R. Junco, G. Heberget & E. Loken

*Lock Haven University, Lock Haven, PA 17745, USA
†South Dakota State University, Brookings, SD 57007, USA
‡The Pennsylvania State University, University Park, PA 16802, USA

Abstract
Despite the widespread use of social media by students and its increased use by instructors, very little empirical evidence is available concerning the impact of social media on student learning and engagement. This paper describes an 8-semester-long experimental study to determine if using Twitter – the microblogging and social networking platform most amenable to ongoing, public dialogue – for educationally relevant purposes can impact college student engagement and grades. A total of 123 students taking a first-year seminar course for pre-health professional majors participated in this study (70 in the experimental group and 53 in the control group). With the experimental group, Twitter was used for various types of academic and co-curricular discussions. Engagement was quantified by using a 19-item scale based on the National Survey of Student Engagement. To assess differences in engagement and grades, we used mixed effects analysis of variance (ANOVA) models, with class sections nested within treatment groups. We also conducted content analyses of samples of Twitter exchanges. The ANOVA results showed that the experimental group had a significantly greater increase in engagement than the control group, as well as higher semester grade point averages. Analyses of Twitter communications showed that students and faculty were both highly engaged in the learning process in ways that transcended traditional classroom activities. This study provides experimental evidence that Twitter can be used as an educational tool to help engage students and to mobilize faculty into a more active and participatory role.

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Introduction
Social media in higher education

Social media are a collection of Internet websites, services, and practices that support collaboration, community building, participation, and sharing. These technologies have attracted the interest of higher education faculty members looking for ways to engage and motivate their students to be more active learners (Hughes 2009). There has been interest in integrating various social media tools (such as blogs, microblogs, video-sharing sites, and social networking) into the learning process (Groseack & Holtescu 2009; Rankin 2009; Eber 2010; Schroeder et al. 2010), especially by faculty members with a disposition towards the use of newer technology in education (Gook 2008).

A major category of social media activity is social networking. Social networking websites, such as Facebook, MySpace, and Twitter, have become an integral part of the everyday lives of many college students. These websites offer an opportunity to connect with others in a virtual environment and to share information with a large audience. The use of these websites in higher education is a relatively new phenomenon, and there has been little research conducted on their potential impact on student learning, engagement, and academic performance.

Twitter is a microblogging platform that allows users to post short messages (known as tweets) and follow the tweets of others. It has become increasingly popular in recent years, with over 500 million users worldwide (Twitter 2010). Twitter has been used in a variety of educational contexts, such as for real-time interaction during lectures, for collaboration on group projects, and for providing updates on course progress (Pacheco & Espinosa 2010; Gareis et al. 2010). However, there has been little research conducted on the potential impact of Twitter on student engagement and academic performance.

The purpose of this study was to investigate the impact of using Twitter for educationally relevant purposes on college student engagement and grades. The study was conducted over an 8-semester period and involved a total of 123 students taking a first-year seminar course for pre-health professional majors. The study was designed to assess the effects of using Twitter on student engagement and grades using mixed effects analysis of variance (ANOVA) models, with class sections nested within treatment groups. Additionally, content analyses of samples of Twitter exchanges were conducted to examine the ways in which students and faculty were engaged in the learning process.

Methods
Experimental design

This study used an experimental design with a control group and an experimental group. The control group consisted of 53 students who did not use Twitter for educational purposes. The experimental group consisted of 70 students who used Twitter for educationally relevant purposes.

Measures

The engagement of students in the experimental group was quantified using a 19-item scale based on the National Survey of Student Engagement (NSSE). This scale includes items related to the use of learning technologies, participation in collaborative activities, and engagement in co-curricular activities.

Results

The results of the mixed effects ANOVA models showed that the experimental group had a significantly greater increase in engagement than the control group. Additionally, the experimental group had a higher semester grade point average than the control group.

Conclusion

This study provides experimental evidence that Twitter can be used as an educational tool to help engage students and to mobilize faculty into a more active and participatory role. Future research should investigate the potential impacts of using Twitter in a variety of educational contexts, and the role of social media in shaping student learning and engagement.

References


Twitter (2010). "Twitter demographics." Available at: <http://blog.twitter.com/post/9970378631/twitter-demographics>
Nature promotes read-only sharing by subscribers

Publisher permits subscribers and media to share read-only versions of its papers.

Richard Van Noorden

02 December 2014 | Corrected: 05 December 2014 | Clarified: 02 December 2014
Other research tools also support (some) article sharing.
Introducing: Library sharing for research collaboration

There are a hundred good reasons to share your research library with colleagues and peers – and now with our latest release, you can.

- **Share with anyone** who’s using EndNote X7 (up to 14 people, plus yourself)
- **Share your entire EndNote library**, including references, PDFs, and annotations.
- Everyone can add to, annotate and use the library – **at the same time**.
- **There’s no charge** for sharing, no library size limit and no charge for unlimited cloud storage.

To get started, install the X7.2 update and go to **File > Share**.

For more information, visit endnote.com/library-sharing.
<table>
<thead>
<tr>
<th>Application</th>
<th>Description</th>
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<tbody>
<tr>
<td>EndNote (Thomson Reuters)</td>
<td>“Share with anyone who's using EndNote X7 (up to 14 people, plus yourself)”</td>
</tr>
<tr>
<td>Flow (Proquest)</td>
<td>&quot;Share collections privately with up to 10 people for free, inside or outside your institution”</td>
</tr>
<tr>
<td>Stackly (HighWire)</td>
<td>“Easily collect articles, web pages, and any other files …, so you can organize, read and share later”</td>
</tr>
<tr>
<td>Paperpile</td>
<td>&quot;Create a private sharing link with one click … collaborate on paper collections with other Paperpile users”</td>
</tr>
<tr>
<td>Papers (Springer)</td>
<td>&quot;You can create a collection to share the latest publications with the lab”</td>
</tr>
<tr>
<td>Sente</td>
<td>&quot;you can share any of your libraries with any number of other users”</td>
</tr>
<tr>
<td>Zotero</td>
<td>“Each group can share its own research library, complete with files, bibliographic data, notes, and discussion threads&quot;</td>
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</table>
Draft voluntary principles for article sharing on scholarly collaboration networks

• sharing should be allowed within academic groups
• ability to measure the amount and type of sharing
• encourage public posting of metadata and OA articles
• policies on academic group sharing and public posting … should be clear and easily discoverable
What can a platform do with a corpus of uploaded documents?

- search & discovery tools
- text mining
- user services – e.g. recommendations
- metrics & analytics services
- post publication peer review
New forms of discovery

- Mendeley Suggest
  - personalized recommendations based on reading history
- related articles
  - relatedness based on document similarity
- third-party platforms
  - PubChase, ScienceScape, myScienceWork, Docphin
Google Analytics for Research

What members are reading

Source: William Gunn, What can we learn from entity extraction and topic modeling across 350M documents? [http://is.gd/WRU7pm](http://is.gd/WRU7pm)
The End of an Era for Academia.edu and Other Academic Networks?

POSTED BY MICHAEL CLARKE • DEC 11, 2013 • 34 COMMENTS

FILED UNDER ACADEMIA.EDU, COPYRIGHT INFRINGEMENT, DIGITAL MILLENNIUM COPYRIGHT ACT, DMCA, ELSEVIER, FILESHARING, Mendeley, OPEN ACCESS, RESEARCHGATE

The Chronicle of Higher Education reports that Elsevier has issued a sweeping series of Digital Millennium Copyright Act (DMCA) take down notices regarding Elsevier-published content to Academia.edu, a file-sharing network for researchers and other academics.

This has prompted a storm in

Do you have a PDF of a recent paper that you'd like to share?

Millions of students and researchers like you benefit every week from the free research uploaded to Academia.edu.

No

Academia.edu may need to change the second step in its sign-up process given publisher concerns regarding posting of research articles without rights holder permission.
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Summing up

- Large user numbers, & fast-growing
- Large document uploads & fast-growing
- Large traffic, ditto
- Well-funded
- Multiple uses
- Agile, responsive to user needs
Biomedexperts.com is now closed.
As an alternative, please use Elsevier's

Mendeley
www.mendeley.com

Mendeley - an alternative to BME
Over the past 8 years nearly half a million users have signed up to BME, a platform where scientists can interact and grow their professional networks. In 2013, Elsevier acquired Mendeley, a research collaboration platform with nearly 3 million users worldwide. It offers users the same sharing, networking and collaborating functionalities as BiomedExperts, but within a much larger cross-disciplinary scientific and academic community. Mendeley also has a suite of free, cloud-based tools that helps you to manage your papers and citations, and lets you access your work across all devices.

As a result we have decided to shut down BME and focus our development efforts on Mendeley, which is better positioned to meet the current and future needs of our users.
• **Accepted version**

  • … to self-archive the peer-reviewed (but not final) version of the Contribution on the Contributor’s personal website, in the Contributor’s company/institutional repository or archive, and in certain not for profit subject-based repositories …, subject to an embargo period of 12 months for [STM] journals and 24 months for [SSH]

  • … to transmit, print and share copies with colleagues, **provided that there is no systematic distribution** of the accepted version, e.g. posting on a listserve, network (**including scientific social networks**) or automated delivery

• **Final published version**

  • … to send or transmit individual copies of the final published version in any format to colleagues upon their specific request provided no fee is charged, and further **provided that there is no systematic distribution** of the Contribution, e.g. posting on a listserve, network or automated delivery