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Teaching IR with New Media

New media is a valuable object and medium of study in International Relations (IR). As an object of study, the impact of new media speaks to the questions about the nature of information in the digital age, the behavior of networked individuals, and emerging digital identities that are central to many important current debates in IR. As a medium, it can give our students greater opportunities to collect and share knowledge, collaborate meaningfully with their classmates and the outside world, and manage complex knowledge flows in order to solve problems. This paper addresses the information literacy challenges facing our students in the digital age, along with significant themes where new media can illuminate critical current issues in IR, and offers recommendations for applying new media as a method for enhancing student engagement and learning outcomes.

1. Introduction

The digital age fascinates and confuses in equal measure. Across an increasingly connected world, digitally networked individuals – from democratic protesters and activists to insurgents and cybercriminals – exchange information and self-organize with a speed and fluidity that present deep challenges to the power of democratic governments and authoritarian regimes alike (Benkler 2006; Nye 2011: 132-139). As the recent NSA leaks by contractor Edward Snowden have revealed, governments have been responding to this rapid diffusion of power partly by monitoring and collecting global communications in unprecedented volumes, reinvigorating longstanding debates about the balance between national security and individual privacy (Levy 2001; Diffie/Landau 2010).

Meanwhile, university students and professional researchers struggle to make sense of an environment defined by increasingly rapid, dense and diverse information flows. It is a world where traditional hierarchical relationships are being disrupted by new opportunities for knowledge acquisition and collective action, and where individual career advancement hinges as never before on the capacity to critically analyze growing volumes of information, collaborate at a distance, and leverage online personal and professional networks to solve problems (Rainie/Wellman 2012: 11-18; Hagel et al. 2009).

When it comes to teaching these subjects and addressing the particular challenges of teaching and learning in the digital age at universities, the range of responses from administrators and teachers swing from excitement and innovative experimentation, to confusion, apathy and deep skepticism about the appropriateness of adopting new technologies to meet our mission (Katz 2008: 12). There is little con-

sensus about whether or how to use new media tools to support learning objectives in courses, and often uncertainty how to address the social and political impact of digital technologies through course themes. Some argue that mainstream research in Politics and IR has particularly suffered from hesitation to address the impact of digital technologies (Margatts 2010: 65; Carpenter/Drezner 2010: 256). Cascading down to the student experience of IR teaching, Thornton (2012: 91) argues that » significant opportunities for student learning are being missed through disciplinary tardiness.«

New media – online platforms such as wikis, content aggregators, social networks, blogs and collaboration tools – are particularly attractive entry points for exploring the impacts of the digital age on areas of research interest in IR, and as platforms for our students to learn how to more effectively collect, analyze and produce knowledge in an academic setting.

As an object of study, the impact of new media speaks to the questions about the access to information, the behavior of networked individuals, and emerging digital identities that are central to many important current debates in IR. As a platform for achieving learning outcomes, new media can present our students with important opportunities to find and critically assess knowledge, collaborate meaningfully with their classmates, and create knowledge in ways that measurably improve both their engagement with ideas and the quality of their finished work. Furthermore, using new media as a platform for student work products can be integrated with the IR teaching experience without significant redesign of our teaching methods by applying these tools *outside* of the classroom as a support for the critical discussions and analysis that happen *within* the classroom.

As our societies become increasingly digitally dependent, it is important to explore and experiment with ways to address the impact of social technologies in our IR courses. This forum piece will briefly survey a few potential thematic agendas for integrating new media into the study of IR, address the information literacy challenges facing our students in the digital age, and conclude with some examples of how new media platforms can be used by teachers to support learning outcomes.

2. New Media as an Object of Study in IR

As computing, memory and bandwidth costs continue to plummet, pervasive connectivity and lower technical barriers to the production and dissemination of data are unleashing an unprecedented growth in the volume, variety and velocity of information around the world (Laney 2001). The deep penetration of the internet, the ubiquity of wireless devices, and the rise of online social networks continue to bring more and more of the world's population into direct contact. Within the next decade, instantaneous, real-time communication may be possible between almost any two people on the planet, with immense implications for political action, foreign policy and national security affairs (Schmidt/Cohen 2013: 83).

There has been a lively debate for some time now about the political power of social media, with a focus on whether »weak tie« networks of new media users possess the strength to cultivate real world revolutions (Van De Donk et al. 2004; Shirky 2011; Gladwell 2010). Most recently, differing explanations have been forwarded on the role of social networks during the Arab Spring revolts, especially between scholars arguing that these movements were not significantly shaped by popular access to new media (Anderson 2011; Khondker 2011) and those who argue that new media played a key role in spreading information and tactics among protesters, allowing rapid self-organization that was initially destabilizing to regimes encumbered by slow-moving security services (Lotan et al. 2011; Howard/Hussain 2011).

Far from being the exclusive domain of civil activists and democratic protesters, new media has also become a potent tool for political repression and the support of terrorism. Iran, China and Russia have all proven adept at using new media technologies as tools of state repression, leveraging social technologies to trace networks of opponents, preemptively disrupt protests, and censor unwanted political discussion (Morozov 2011). Terrorist groups such as Somalia's Al Shabaab have also developed quite sophisticated new media strategies for recruitment, propaganda, and even to coordinate attacks (Meleagrou-Hitchens et al. 2012). Bombings in Afghanistan are often followed by testy Twitter exchanges between the International Security Assistance Force (ISAF) and Taliban forces in attempts to establish narratives on the international stage (Farmer 2011). The network dynamic of loosely affiliated insurgents able to communicate and coordinate using mobile phones has presented deep challenges to Western military hierarchies accustomed to analyzing and fighting other hierarchical organizations (McChrystal 2011).

Long theorized limitations on the political power of decentralized social networks (Tarrow 1994: 138) have been receiving renewed attention, as the very network dynamics that allow self-organization of crowds around simple binary questions may also actively inhibit the development of leadership within crowds (Lanier 2006). Specifically, analysis of the spread of viral information on social networks indicate that while densely networked crowds may be particularly adept at communication and disruptive action, they may be structurally inhibited from developing more complex alternatives (Sun et al. 2009).

An important feature of studying these potential impacts of new media is that new media creates new classes of data that can be directly observed and systematically analyzed in ways that were never possible or certainly impractical with previous mediums of communication (Hafner-Burton et al. 2009: 560-565). A host of relatively easy-to-use analytical tools for measuring the reach of messages and process tracing the impact of new media communications« can be directly accessed and experimented with by students themselves (Hansen et al. 2010: 44-48; Scott/Carrington 2011: 1-6). With free online tools such as Gephi, or NodeXL, sophisticated analysis of social networks that used to require teams of professional researchers working for weeks or months, can be accessed by a single student in a matter of minutes or hours, opening up exciting opportunities for research and

classroom discussion. Undergraduate students can easily explore data sets generated by their own social networks, which can serve as inspirations for more ambitious projects as the familiarize themselves with these new sources of social data.

Recent debates over the national security leaks of Edward Snowden (Farrell/ Finnemore 2013; Gioe 2014) and the wide range of government materials publically released by Wikileaks (Maurer 2010) highlight that the ways new media shapes and mediates debates over foreign policy and national security matters are both timely and worthy of analytical attention in IR classrooms. Though these reflect longstanding debates over surveillance and privacy that have played out since the early days of the commercial internet (Levy 2001; Diffie/Landau 2010), questions about the proper balance between surveillance and privacy can hold special interests for students actively exploring their own positions on privacy and experimenting with transparency in their digital identities.

An enormous range of potential impacts of new media in IR can be presented, including intelligence studies, the politics of cybersecurity and cyberwarfare and hacktivism, to name just a few. A uniting factor in all of them is that such cases of new media as an object of study can touch on themes that are of direct relevance to our students' lives, and through direct participation in new media information flows and platforms that many of them may have experience with as users. Uniting these themes in the classroom with an active engagement with new media as a method of studying IR can help our students not only recognize the wider significance of social technologies they use, but also help them to directly and deeply participate in digital culture in order to understand its impact on the social world.

To do that effectively, however, we must first recognize that our students may not be as tech savvy as we might assume, and that they face important challenges with information literacy and knowledge creation as a result of the forces of the digital age. New media have exacerbated these issues, but new media tools may also be of particular use in overcoming them. This is where experiments in course design can be of help in unlocking the potential of new media in the IR classroom.

3. Information Literacy Challenges of the Digital Age

In order to capture value from new media in teaching, it is important to grapple on some level with the complexities of how technology is altering the context education for our students. The so-called triple revolution of the Internet, social networks and mobile devices has altered the context of how our students learn, make decisions and connect with the world around them (Rainie/Wellman 2012: 19). Finding and evaluating information, discerning credible information from misinformation, and communicating information ethically and skillfully are major challenges for our students, especially in an environment where information is proliferating at an unprecedented pace (Julien/Genuis 2011: 104). As Eric Schmidt, executive chairman of Google, noted in 2010, »every two days now we create as much information as we did from the dawn of civilization up until 2003… I spend most of my time

assuming the world is not ready for the technology revolution that will be happening to them soon« (Siegler 2010).

The challenge of teaching in the digital age is often framed as a need to engage an incoming generation of »digital natives« who are supposedly both digitally literate and have high expectations for classrooms to keep pace with technological innovations they experience in their social lives (Oblinger/Oblinger 2005). Many academic institutions have responded to these challenges by investing heavily in hardware, such as smartboards or tablet computers brought into the classroom at great cost. If, however, student engagement is measured in terms of improved learning outcomes, intellectual challenge or student interest in the course, there is little evidence of any positive impact of these costly and time consuming efforts (Richtel 2013).

There is also no empirical evidence, however, that incoming students are in fact » digital natives« prepared to meet the information literacy demands of the digital age (Margaryan et al. 2011: 432; Karnad 2013: 3). While students may possess broad experience with e-mail, social networking and mobile devices, this doesn't necessarily translate into the kind of information literacy or knowledge creation skills useful in academia (Pilerot 2006: 86). Cope and Flanagan (2013: 11) have observed that while students can be quite expert at information discovery, they often struggle with »critically examining the claims made by those information sources, understanding the differences between different kinds of sources (e.g., a highly polemical blog post vs. an empirical analysis), and then synthesizing those pieces of information into a coherent and original analysis.« Or, as Justin Reich of the Harvard Graduate School of Education put it simply, »even if remarkably high percentages of students report using technology, it doesn't mean they know what they're doing « (Stokes 2011).

So how can we use new media to help our students develop information literacy and create knowledge? One promising path entails offering our students opportunities through new media platforms themselves to more easily leverage the forces of collaboration, transparency, social recognition and connection, especially in their writing and engagement with knowledge flows. New media spaces have been specifically designed to facilitate interaction, debate and collaboration, and we should be willing to experiment with ways of making use of those designs in pursuit of our learning objectives. The following recommendations offer a few illustrations of the ways new media can be used outside the classroom to support course objectives, with minimal design, maintenance or supervision requirements by the instructor.

4. New Media as a Platform for Developing Information Literacy

A simple application of new media in the learning experience is to use a social networking site, class website, or even closed wiki to allow students to share a common platform for critically assessing the sources they read. Approaching course

readings and research as a social activity rather than merely an individual one can lead to critical debates that can be brought into the classroom as the basis for class discussion.

Students may read more critically and share more of their thoughts on the literature when they are exposed to an »audience« of their fellow students, and they often experience higher levels of intellectual engagement with course materials when shared exploration of these materials is both incentivized by social recognition or instructor feedback, especially when paired with extrinsic rewards like participation grades (Reich/Daccord 2008: 230; Purcell et al. 2013). With instructor involvement, superficial engagement with the literature or confusion that might otherwise lay dormant until exposed by assessment can be identified and addressed earlier in the learning process. Leveraging the social design of new media tools can help our students engage with discussions in the literature rather than merely ingest material.

My own experience in this area was originally inspired by an ambitious experiment in social learning and collective sense-making conducted by Kansas State University Cultural Anthropologist, Michael Wesch, who asked students in his Digital Ethnography course to both find and read 94 scholarly articles on a given theme in a single week (Wesch 2009). Organized as a »smart mob«, students were asked to read 5 articles over a week and fill in a standardized form with proper citation formats and spaces for summaries. Each entry was presented on a class web page for other students to read through before the next class meeting. Wesch was happily surprised by the results of the experience: »This created an amazing foundation for deep conversation. I think all of us were literally on the edge of our seats, finding connections and debates across the literature at a level I have *never* experienced in an undergraduate setting« (emphasis in the original).

Using new media as a method of study can be a pathway for both developing critical information literacy and as a bridge to IR course themes. Creatively integrating an activity like this into an IR course can open up new avenues for exploring course themes such as the challenges of intelligence analysis in an age of unprecedented information flows, how crowds make sense of information or disinformation, how dominant narratives arise in politics or society, or the role and limitations of expertise and epistemic communities in shaping foreign policy, just to name a few. The use of wikis and other »crowdsourced« learning methodologies can thus be deceptively simple ways of exploring deeper epistemological issues.

Suggested new media tools for the development of information literacy:

– Free wikis resources such as www.mediawiki.org/wiki/MediaWiki, or www.wikispaces.com. These can be used to create shared spaces for students to critically engage source material as in the above example, collaboratively prepare for exams, revise and update the course syllabus in light of classroom discussions and discoveries, or any other task where collective, cumulative and transparent writing would be helpful in achieving learning outcomes or critically developing information literacy.

– Content aggregation and content management tools such as www.diigo.com, www.delicious.com, can be explored for quickly and easily assessing web con-

tent, such as following fast-moving current events, or tracking a wider range of expert knowledge than set out in course readings. For a more ambitious dive into dynamic content discovery and curating, try: www.netvibes.com/en/individual.

– Another helpful resource for supporting student information literacy is the series of search education and »search literacy« courses offered by Google: www.google.de/insidesearch/searcheducation/.

5. *Opportunities for Collaboration in Knowledge Creation*

Collaborative writing assignments are another avenue for using new media platforms to work with problems that students encounter in creating knowledge. Free tools that allow students to actively collaborate on writing projects can bring greater transparency to the process of knowledge creation in service of learning outcomes. Assigning students to remotely collaborate on the creation of arguments and research papers taps into a form of transparency that simulates the kinds of distributed teams they will likely be encountering in their professional lives. While by no means any easier than any other form of writing for students, requiring them to collaborate in transparent online platforms can highlight collective action problems that many students will need to master later in their professional lives as members of globally distributed working teams.

One of the most successful experiments I have run with students in terms of improving the overall quality of their writing involved the collaborative creation of a policy position paper written with Google Docs. Students were given a 24-hour deadline to write a 6-page paper in teams of four, which predictably produced mediocre results and no small degree of group tension. The groups were then given more time to revise the paper, with the requirement that they work only through online collaboration. Students reported that the process, while frustrating, produced a higher quality work product than if they followed their usual approach to writing – that is, a predictable flurry of last minute solo writing before the deadline. As an instructor, I had a unique window into their thought process and collective problem solving through a version-tracking feature of the platform, and could more clearly see which students made significant contributions to the final work product.[1]

Flipping Deitering and Gronemyer's (2011) arguments in favor of academic blogs into an argument about student writing itself, »the dialogues become searchable, browsable resources that students can use to see the debates, the arguments, and the intellectual energy beneath the surface of polished, published scholarly work«. While there is no panacea for the classic undergraduate problems of inexperience, procrastination and insecurity, new media offers structurally different ways of approaching them. Leveraging the transparent design of new media platforms in

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1 Peer review between groups in the drafting phase can alternately be used to build accountability and critical interaction into the process.

writing assignments can have markedly positive effects on resulting work products if thoughtfully applied.

Suggested new media tools for online collaboration:

– Google Drive (drive.google.com) is an office suite that enables cloud storage, file sharing and collaborative editing compatible with most major file types. The version tracking and live editing features can create the ability for both students and teachers to watch each other thinking through ideas as they are created. This is new modality for content creation that is well worth exploring.
– A full-featured and popular task management tool for more complex collaborative projects is Asana: www.asana.com. Designed to facilitate group projects without e-mail, this platform is designed to provide transparency in project work and supports devolved decision making, as team members generally have equal capabilities to reassign work according to their current capabilities and interests.
– Social networks such as Facebook Groups are used by many teachers to provide shared spaces for collaboration, though I've found them to be quite limited in design, and with numerous thorny privacy issues that should be carefully weighed before use.

6. Using New Media to Connect to a Wider Community

A lively debate exists on the value of academic blogs, and many teachers have experimented in using blogs for teaching IR (Carpenter/Drezner 2010: 257-259). Shared writing platforms such as a closed blog, or even public blogs or other new media publishing platforms can be powerful venues for students to connect to each other and to outside audiences in ways that increase both their motivation and allow them to draw on outside expertise. Not only does this give students the opportunity to expose their work more directly with the outside world and create opportunities for unexpected outside feedback, but several studies indicate that the quality of student work improves when it is presented in such public forums (Reich/Daccord 2008: 230-235; Stokes 2011). The overall combined effect of these impacts was summarized by the Pew Research Center's Internet & American Life Project as »a greater investment among students in what they write and greater engagement in the writing process« (Purcell et al. 2013).

Beyond higher levels of engagement, participation in public spaces can lead students to an earlier appreciation of the value of external review. Students in a recent class were asked to complete a complex technical project (the design and construction of a drone), which required documenting and coordinating their progress with a public blog. Within a week of the blog going live, they had received input from an expert on another continent who had encountered their blog through a web search, and suggested critical fixes based on detailed photos showing a fault only an expert would recognize. This provided a powerful lesson in the potential value of transparency that could also be used to discuss the nature of knowledge flows

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and the potential speed of innovation within rigid hierarchies versus more transparent networks. Again, this could have been a topic discussed in class as theory, but dealing with it from direct experience in service of solving a problem the students found relevant was a powerful way to directly connect with the lesson.

When experimenting with this form of public engagement, it is important to consider that many of your students may not have much substantive experience with these technologies, especially for educational purposes, and may resist engagement for any number of reasons. Resistance rooted in a lack of familiarity with the technologies or with anxiety about the potential social transparency about new media learning efforts can often be effectively met through early collaborative work that takes the pressure off of any one individual to both use a new technology and face the vulnerability of social transparency. Privacy concerns, however, should be carefully considered. Students might be wary of peers outside their classes looking in on their developing thoughts, or of future employers who may negatively judge artifacts from their student years when taken out of context. If asking students to publish work online, always give them the opportunity to remain anonymous through pseudonyms.

Tracking back to IR course themes, addressing privacy concerns in their participation with new media platforms can offer opportunities to explore the technical and social challenges of remaining anonymous in the digital age, and how the need to protect individual digital identity can figure in protest movements, democratic accountability, intelligence collection, law enforcement, cybersecurity or any number of other areas where authenticated digital identities are valued. It is very difficult to understand the digital age without actively participating in it, but thoughtful crossovers of course themes and classwork methodologies can open exciting opportunities to collectively explore these issues with your students.

Suggested new media tools for sharing writing with a wider community and exploring online privacy:

– If your university doesn't already provide blogging platform for students, Wordpress is a free and open-source blogging tool that can also be used for content management (www.wordpress.org). Wordpress is the most popular blogging platform on the Web and has a very active ecosystem of expert users and resources to help students develop their ability to navigate such public spaces.

– I would also strongly recommend that all IR students familiarize themselves with TOR software for providing anonymous online browsing, and basic encryption tools such as PGP. Browsing anonymously and communicating privately are not just technically interesting topics, but for students who seek work in the fields of diplomacy, journalism or human rights, these should be minimum required skills for ensuring their own security and the livelihoods of those they work with (Schneier 2013).

7. Conclusion

Our students will likely spend their lives increasingly reliant on the Internet, mobile computing and online social networks to navigate the complexities of their world. They will be entering a networked information economy that differs significantly from the industrial information economy that preceded it, and must develop news skills to cope with rapid increases in the volume, variety and velocity of information in society. They will be required to engage with new media spaces in order to make their voices heard in these new public forums, and a premium will be placed on their ability to meaningfully discover, make critical sense of, and contribute to knowledge flows. As the complexity and speed of the global communications continues to increase, digital information literacy will become a more challenging and more important skill set to acquire. Bridging their firsthand experience with the Internet, social networks and mobile devices with rigorous analysis of the social and political impacts of those forces is an exciting opportunity in IR teaching. Building this into the design of our classes creates the opportunity for learning and reflection by both teachers and students on many complex, important themes of the digital age.

It is important to help break down the traditional isolation of the university classroom by connecting students more deeply to ongoing academic debates, to their classmates and teachers through collaboration, and to the wider world outside the classroom through these new public spaces. Technology can facilitate the goal of university courses to step beyond their traditional role as centers of expert knowledge transfer, into more dynamic venues for the analysis, critique and collaborative creation of knowledge by students themselves. By taking this step we are more likely to see our students think rather than just learn, and we in turn are more likely to learn from them. In an era of accelerating technological disruption in every area of public life, we all have much to learn. Critical engagement with new media can help all of us on that journey.

References

Anderson, Lisa 2011: Demystifying the Arab Spring: Parsing the Differences between Tunisia, Egypt, and Libya, in: Foreign Affairs http://www.foreignaffairs.com/articles/67693/lisa-anderson/demystifying-the-arab-spring

Benkler, Yochai 2006: The Wealth of Networks: How Social Production Transforms Markets and Freedom, New Haven, CT.

Carpenter, Charli/Drezner, Daniel W. 2010: International Relations 2.0: The Implications of New Media for an Old Profession, in: International Studies Perspectives 11: 3, 255-272.

Cope, Jonathan/Flanagan, Richard 2013: Information Literacy in the Study of American Politics: Using New Media to Teach Information Literacy in the Political Science Classroom, in: Behavioral & Social Sciences Librarian 32: 1, 3-23.

Deitering, Anne-Marie/Gronemyer, Kate 2011: Beyond Peer-Reviewed Articles: Using Blogs to Enrich Students' Understanding of Scholarly Work, in: Libraries and the Academy 11: 1, 489-503.

Diffie, Whitfield/Landau, Susan 2010: Privacy on the Line: The Politics of Wiretapping and Encryption, 2nd Edition, Cambridge, MA.

Farmer, Ben 2011: Kabul Attack: ISAF and Taliban Press Officers Attack Each Other on Twitter, in: The Telegraph, 14.9.2011.

Farrell, Harry/Finnemore, Martha 2013: The End of Hypocrisy: American Foreign Policy in the Age of Leaks, in: Foreign Affairs, in: http://www.foreignaffairs.com/articles/140155/henry-farrell-and-martha-finnemore/the-end-of-hypocrisy; 9.4.2014.

Gioe, David 2014: Tinker, Tailor, Leaker, Spy: The Future Costs of Mass Leaks, in: The National Interest, 7.1.2014.

Gladwell, Malcolm 2010: Small Change: Why the Revolution Will Not Be Tweeted, in: The New Yorker, 4.10.2010, in: http://www.newyorker.com/reporting/2010/10/04/101004-fa_fact_gladwell; 3.3.2014.

Hafner-Burton, Emile M./Kahler, Miles/Montgomery, Alexander H. 2009: Network Analysis for International Relations, in: International Organization 63: 3, 559-592.

Hagel, John III./Brown, John Seeley/Davison, Lang 2009: Measuring the Forces of Long-Term Change: The 2009 Shift Index, in: http://www.deloitte.com/us/shiftindex; 3.3.2014.

Hansen, Derek/Shneiderman, Ben/Smith, Marc A. 2010: Analyzing Social Media Networks With NodeXL: Insights from a Connected World, Burlington, MA.

Howard, Philip N/Hussain, Muzammil M. 2011: The Role of Digital Media, in: Journal of Democracy 22: 3, 35-48.

Julien, Heidi/Genuis, Shelag K. 2011: Librarians' Experiences of the Teaching Role: A National Survey of Librarians, in: Library & Information Science Research 33: 2, 103-111.

Karnad, Arun 2013: Embedding Digital and Information Literacy into Undergraduate Teaching (Centre for Learning Technology), London, unpublished, in: http://eprints.lse.ac.uk/51221/1/__libfile_REPOSITORY_Content_Centre_for_Learning_Technology_Embedding digital information literacy.pdf; 10.3.2014.

Katz, Richard N. 2008: The Gathering Cloud: Is This the End of the Middle?, in Katz, Richard N. (Hrsg.): The Tower and the Cloud: Higher Education in the Age of Cloud Computing, Washington DC, in: http://www.educause.edu/ir/library/pdf/PUB7202.pdf; 3.3.2014.

Khondker, Habibul Haque 2011: Role of the New Media in the Arab Spring, in: Globalizations 8: 5, 675-679.

Laney, Douglas 2001: 3D Data Management: Controlling Data Volume, Velocity and Variety (META Group Working Paper), in: http://blogs.gartner.com/doug-laney/files/2012/01/ad949-3D-Data-Management-Controlling-Data-Volume-Velocity-and-Variety.pdf; 10.03.2014.

Lanier, Jaron 2006: Digital Maoism: The Hazards of the New Online Collectivism, in: Edge, 29.5.2006, in: http://www.edge.org/conversation/digital-maoism-the-hazards-of-the-new-online-collectivism; 3.3.2014.

Levy, Steven 2001: Crypto: How the Code Rebels Beat the Government – Saving Privacy in the Digital Age, New York, NY.

Lotan, Gilad/Graeff, Erhardt/Ananny, Mike/Gaffney, Devin/Pearce, Ian 2011: The Revolutions Were Tweeted: Information Flows during the 2011 Tunisian and Egyptian Revolutions, in: International Journal of Communication 5, 1375-1405.

Margaryan, Anoush/Littlejohn, Allison/Vojt, Gabrielle 2011: Are Digital Natives a Myth or Reality? University Students' Use of Digital Technologies, in: Computers & Education 56: 2, 429-440.

Margatts, Helen 2010: The Internet in Political Science, in Hay, Colin (Hrsg.): New Directions in Political Science, Basingstoke, 64-87

Maurer, Tim 2010: Wikileaks 2010: A Glimpse of the Future? (Explorations in Cyber International Relations Discussion Paper Series #2011-10 of the Belfer Center for Science and International Affairs), in: http://belfercenter.ksg.harvard.edu/files/maurer-dp-2011-10-wikileaks-final.pdf; 5.3.2014.

McChrystal, Stanley A. 2011: It Takes a Network: The New Front Line of Modern Warfare, in: Foreign Policy, in: http://www.foreignpolicy.com/articles/2011/02/22/it_takes_a_network; 3.3.2014.

Meleagrou-Hitchens, Alexander/Maher, Shiraz/Sheehan. James 2012: Lights, Camera, Jihad: Al-Shabaab‹s Western Media Strategy (Policy Report of the International Centre for the Study of Radicalisation and Political Violence), London.

Morozov, Evgeny 2011: The Net Delusion: The Dark Side of Internet Freedom, New York, NY.

Nye, Joseph.S. 2011: The Future of Power, New York, NY.

Oblinger, Diana/Oblinger, James (Hrsg.) 2005: Educating the Net Generation, in: http://net.educause.edu/ir/library/pdf/pub7101.pdf; 3.3.2014.

Pilerot, Ola 2010: Information Literacy – An Overview, in Martin, Allan and Madingan, Dan (Hrsg.), Digital Literacies for Learning, London, 80-88.

Purcell, Kirsten/Rainie, Lee/Heaps, Alan 2012: How Teens Do Research in the Digital World (Pew Research Center‹s Internet and American Life Project), Washington, DC, in: http://www.pewinternet.org/~/media//Files/Reports/2012/PIP_TeacherSurveyReportWithMethodology110112.pdf; 3.3.2014.

Purcell, Kirsten/Buchanan, Judy/Friedrich, Linda 2013: The Impact of Digital Tools on Student Writing and How Writing is Taught in Schools (Pew Research Center's Internet and American Life Project), Washington, DC, in: http://pewinternet.org/Reports/2013/Teachers-technology-and-writing; 3.3.2014.

Rainie, Lee/Wellman, Barry 2012: Networked: The New Social Operating System, Cambridge, MA.

Reich, Justin/Daccord, Thomas 2008: Best Ideas for Teaching with Technology: A Practical Guide for Teachers, by Teachers, Armonk, NY.

Richtel, Matt 2013: In Classroom of Future, Stagnant Scores, in: New York Times, 3.9.2011, in: http://www.nytimes.com/2011/09/04/technology/technology-in-schools-faces-questions-on-value.html?pagewanted=all; 3.3.2014.

Schmidt, Eric/Cohen, Jared 2013: The New Digital Age: Reshaping the Future of People, Nations and Business, New York, NY.

Schneier, Bruce 2013: NSA Surveillance: A Guide to Staying Secure, in: The Guardian, in: http://www.theguardian.com/world/2013/sep/05/nsa-how-to-remain-secure-surveillance; 13.3.2014.

Scott, John/Carrington, Peter J. (Hrsg.) 2011: The SAGE Handbook of Social Network Analysis, London.

Shirky, Clay 2011: The Political Power of Social Media: Technology, the Public Sphere, and Political Change, in: Foreign Affairs, in: http://www.foreignaffairs.com/articles/67038/clay-shirky/the-political-power-of-social-media; 3.3.2014.

Siegler, MG. 2010: Eric Schmidt: Every Two Days We Create As Much Information As We Did Up To 2003, in: TechCrunch, 4.8.2010, in: http://techcrunch.com/2010/08/04/schmidt-data/; 3.3.2014.

Stokes, Audrey 2011: Expert Article: Making the Case for Teaching with New Media, Common Classroom, in: http://www.commonsensemedia.org/educators/blog/expert-article-making-the-case-for-teaching-with-new-media; 12.3.2014.

Sun, Eric/Rosenn, Itamar/Marlow, Cameron/Lento, Thomas 2009: Gezundheit! Modeling Contagion through Facebook News Feed (International AAAI Conference on Weblogs and Social Media), Stanford.

Tarrow, Sidney 1994: Power in Movement: Social Movements, Collective Action and Politics, Cambridge, MA.

Thornton, Stephen 2012: Issues and Controversies Associated with the Use of New Technologies, in: Gormley-Heenan, Cathy/Lightfoot, Simon (Hrsg.): Teaching Politics and International Relations, New York, NY, 91-104.

Van De Donk, Wim/Loader, Brian D./Nixon, Paul G./Rucht, Dieter (Hrsg.) 2004: Cyberprotest: New Media, Citizens and Social Movements, London.

Wesch, Michael 2009: How to get Students to Find and Read 94 Articles before the Next Class (Mediated Cultures Blog), 28.1.2009, in: http://mediatedcultures.net/smatterings/how-to-get-students-to-find-and-read-94-articles-before-the-next-class/; 3.3.2014.