



Storytelling - EDU: Educational - Digital - Unlimited?

Theo Hug

Professor, Institute of Psychosocial Intervention and Communication Studies
University of Innsbruck
Coordinator of the interfaculty Innsbruck Media Studies research forum,
Austria
Email: Theo.Hug@uibk.ac.at

Abstract

It is undisputed that storytelling is one of the oldest practices of humankind and has been ever-present in social life. This traditional role of narrating has gained new and unexpected topicality in the last decades in various fields and in many respects. Today, 'digital storytelling' is widely established as an umbrella term. Related phenomena are being discussed in terms of mediation, mediatization, multimodal forms of narration and others.

As to educational issues, the situation seems to be rather ambivalent. On the one hand, digital storytelling offers enhancements of learning experiences, chances for meaningful learning and democratization, and also for bridging formal and informal contexts. On the other hand, we can observe a persistent adherence of educational institutions to "writing" as the dominant medium in many countries, thus negating media ecologies and the multimedia environment. Especially regular schools are widely conceptualized as "monomedial provinces" (J. Böhme), thus being justified as "literal countercultures" in which it is imperative to defend literality as the foremost achievement in the process of civilization, whereas otherwise calls for "new literacies" cannot go unnoticed. The contribution reflects on various understandings of 'digital storytelling' and underestimated dimensions in this regard. It aims at pointing out conceptual problems, and it sounds out limitations of the utilization of digital storytelling in educational contexts.

Keywords: storytelling, digital stories, utilization of digital storytelling, conceptual analysis, education (Bildung), literacies, subjectivation, governementalization.

"The truth about stories is that that's all we are." (King 2003: 2)

Introduction

It is undisputed that storytelling is one of the oldest practices of humankind and has been ever-present in social life. This traditional role of narrating has gained new and unexpected topicality in the last decades in various fields and in many respects. Today, 'digital storytelling' is widely established as an umbrella term. There are many historical roots and developmental strands, some of them

concerned with formal and informal contexts of learning, formation, and education. In view of the rapid proliferation of concepts and practices of digital storytelling it seems acceptably to step back for a moment and look, how stories about digital storytelling are being told, especially as related to educational issues.

At first, I want to approach the topic from a wider context by accentuating a few points of departure and basic considerations. First of all, at least from historic and anthropological viewpoints there is a lot of evidence that narration and storytelling seem to be inescapable. It has a lot to commend that a basic necessity, a kind of an anthropological need of stories and storytelling across cultures can be claimed. Having said that, from epistemic and systematic viewpoints this can be questioned. Even if we take abstract mathematical arguments as specially regulated forms of storytelling, there are examples for efforts and practices beyond narration and storytelling (for example, Zen practices or Concrete Poetry).

From both historic and systematic viewpoints, metatexts like *The End of the Great Narratives* (Lyotard 1984) became very influential. According to Lyotard's view, in the sphere of modernity knowledge was closely tied to an 'ideological' framework, for example the emancipation of humanity or prosperity of everybody through capitalism. These common 'modern' ideologies have lost their obligation and power of legitimation in the 20th century in remarkable ways. On the one hand, there are new "Great Narratives" (global digital opportunities, global digital divide, neoliberal ethics considering market-like structures in terms of meta-ethics prior to other existing ethical beliefs). On the other hand, we can witness an immense expansion of documented stories in various contexts and in relation to qualitative and quantitative dimensions. We can observe manifold processes of differentiation of modes, mediatization, and mediation of creating, telling, sharing, listening to stories today (cf. Lundby 2008a). Moreover, there's no end of the road in sight, and processes of digitization seem to be irreversible.

With this in mind, I want to reflect on understandings of 'digital storytelling' and to sound out some options, forgotten or underestimated dimensions and also limitations of the utilization of digital storytelling in educational contexts.

First of all, if we look at practices of combining properties of things and activities it seems that language characteristics play a role in the context of storytelling, too. In the English-speaking world, hardly anybody seems to have a problem with the expression 'digital storytelling'. The same counts for expressions like 'digital painting' (Tonge 2008) or 'digital musician' (cf. Hugill 2007). In the German-speaking world, for example, one would talk of boring, exciting, emotionally moving, funny, sad, entertaining, fictitious, true or lying stories or forms of storytelling. Expressions like "Radiogesichte" or "Fernsehgeschichte" commonly refer to the history of radio or TV and rather seldom to stories being told *by means* of radio or TV, or to any kind of experiences one might have made with these media. Although meanwhile, in the German language terms like 'digitales Geschichtenerzählen' or 'digitale Narration' do show up here and there, they are scarcely used.ⁱ The same counts for 'digitale Geschichte' which rather refers to the historic developments of digital technologies and not to a 'digital story'.

On the other hand, many people started talking about digital stories in various ways, and even more started creating and telling digital stories. So, how about the meaning of this term and its use? – A widely used definition is offered by the Center for Digital Storytelling (CDS), a non-profit, community arts organization in Berkeley, California. On their website, 'digital story' is defined as a "short, first person video-narrative created by combining recorded voice, still and moving images, and music or other sounds."ⁱⁱ Although the definition is focussing on voices of individuals the concept is rooted in community-based initiatives, and it's meant as a form of democratization, counting on people's agency, at the same time working as counteragent to official historical accounts. Consequently, at the

core of the work of CDS there is "a commitment to narrative, an enduring respect for the power of individual voices and a deep set of values and principles that recognize how sharing and bearing witness to stories can lead to learning, action, and positive change" (ibd.). Though, values and principles include statements like "everyone has many powerful stories to tell" and "sharing stories can lead to positive change."ⁱⁱⁱ

While the concept of the CDS focuses on workshop related activities and community-based learning (cf. Lambert 2006), academic papers mostly start from wider understandings. For example, Nick Couldry uses the term 'digital storytelling' for "the whole range of personal stories now being told in potentially public form using digital media resources" (Couldry 2008: 42). And Kirsten Drotner places an emphasis on everyday life contexts. She uses the term 'digital storytelling' for a "multitude of ongoing, often ad-hoc and haphazard everyday narratives that people give shape to through their appropriation of portable devices and online services like blogs, wikis and social files sharing and networking sites like Flickr, Facebook and YouTube" (Drotner 2008: 63).

Then again, digital media not only facilitate individual, collaborative or everyday exercises. They facilitate digital narratives and digital storytelling as related to exceptional situations, too. After all, why should "Winning the Future", the State of the Union Address recently delivered by president Obama at the U.S. Capitol not count in terms of digital storytelling?^{iv}

Since this paper is written in English, I want to take an open and tentative characterization of the key terms as a starting point for my considerations. So, by 'digital stories' – as an abbreviated manner of expression – I mean discursively embedded, narrative (co-)productions which are created, presented, received and passed on publicly in formal or informal contexts by means of digital media. According to this working definition 'digital storytelling' refers to concepts, structures and practices as related to processes of creation, mediation and transmission of digital stories. These understandings are open to both further development and critique, too, as I will argue in this paper.

Making Use of Digital Storytelling in Educational Contexts

In the past decade, digital storytelling has been promoted in many areas such as public broadcasting, community development, public health, social services, museums, and other informal educational contexts. Above all, it has been advocated in formal educational contexts, too (cf. Porter 2004; Behmer et al. 2006; Dogan & Robin 2008; Frazel 2010). There it has been recognized as a valuable tool that fosters collaboration, development of literacies and decision-making skills, bridging formal and informal contexts, and pupils and students involvement in learning processes.

In his essay on "The Educational Uses of Digital Storytelling" Bernard Robin (2006) refers to the storytelling concept of the CDS and argues that definitions of 'digital storytelling' generally "revolve around the idea of combining the art of telling stories with a variety of digital multimedia, such as images, audio, and video" (ibd.: 1). He summarizes his understanding as follows:

Just about all digital stories bring together some mixture of digital graphics, text, recorded audio narration, video and music to present information on a specific topic. As is the case with traditional storytelling, digital stories revolve around a chosen theme and often contain a particular viewpoint. The stories are typically just a few minutes long and have a variety of uses, including the telling of personal tales, the recounting of historical events, or as a means to inform or instruct on a particular topic. (Robin 2006: 1)

Based on this understanding, he explains the three different types. First of all, there are *personal narratives* that foster learning about diverse cultural and family backgrounds and that "can be used to facilitate discussions about current issues such as race, multiculturalism and the globalization that is taking place in today's world" (Robin 2006: 2). Furthermore, "a student who creates such a story

can benefit from sharing that story with others and thereby use information as a way of eliminating some of the distance that foreign born students feel between themselves and their peers" (ibid.: 2). Secondly, digital stories are considered as *documentaries* that examine historical events, focusing on supporting documents and factual aspects and possibly providing an opinion or a specific message, too. And thirdly, there are *stories that inform or instruct* – in other words: "stories that reflect instructional material in content areas such as math, science, health education and instructional technology" (ibid.: 3).

Robin does not interpret these types as domains which are to be distinguished strictly. He rather argues that, as a matter of fact, "stories can be created using combinations of these three methods" (ibid.: 3). Apart from other practically motivated differentiations^v types of digital storytelling in educational contexts could be distinguished along with didactical settings, forms of narrative and multimodality (cf. Kress 2010), concepts of framing, or understandings of education, formation, and learning. For example, even without going deeper into models and theories of learning, a few basic distinctions like the following demonstrate that different versions of digital storytelling can be created depending on the favored understanding of learning:

- cognitive, emotional, body, or social learning,
- learning driven by motivation, technology, problem, market, or interest,
- goal oriented, problem based, or situated learning,
- instrumental/mechanistic or expansive^{vi} learning,
- functional or self-reflective learning,
- living or alienated learning,
- conscious or unconscious dimensions of learning,
- self-organized and externally organized learning,
- learning of individuals, organizations, generations, or societies.

It is noticeable that digital storytelling is often described as "tool" for learning and instruction. This counts for over-all descriptions in terms of "an effective instructional tool for teachers" or "an effective learning tool for students" (cf. Robin 2006: 3-4) as well as for descriptions in which special aspects are foregrounded, for example, the use of storytelling in educational digital games as a motivational tool (cf. Bopp 2007).

No matter how we conceptualize learning, the "tool-thinking" on its own appears to be a reduction of complexity yet. In addition, this thinking quite frequently is connected with misleading metaphors like "knowledge transfer" or "distributing education", although it is widely accepted today that coming to know through processes of active construction by the learner is better described in terms of structurally coupled processes of communicators and recipients, and consequently of teachers and learners, too. However learning is defined as process of transformation based on activities of meaning-making or behavior modification, as far as it refers to storytelling it's more than about technical or didactical tools.

One might argue that this kind of talking of tools is a figure of speech and should not be taken too seriously. Above all, there are arguments for advancements of educational efforts by means of storytelling on various levels and in manifold respects. For example, in their study on teachers' use of digital storytelling in their classrooms Dogan and Robin (2008) report that in spite of the all over positive responses during a workshop series less than half of the teachers continued to use digital storytelling during the implementation period who throughout describe "positive effects on student performance, an increase in 21st century skills, and increased motivation and engagement levels in their students" (ibid.: 1).

Maxine Alterio (2002) argues that in contrast to former understandings of storytelling as "lightweight, soft, not a real learning tool" (ibid.: 1) more recently the reflective movement has shown that storytelling can be advanced in terms of creative learning capabilities and significant learning is possible "when it is used

in thoughtful, reflective and formalised" (ibid.: 2). She says: "When educators support students to share and process their practice experiences in these ways, storytelling can:

- encourage co-operative activity;
- encompass holistic perspectives;
- value emotional realities;
- link theory to practice;
- stimulate students' critical thinking skills;
- capture complexities of situations;
- reveal multiple perspectives;
- make sense of experience;
- encourage self review;
- construct new knowledge." (Alterio 2002: 2)

Similar arguments are brought forward, also in view of teaching and learning in higher education where "storytelling" often is seen as something in contrast to serious academic reports or distracting from really important scientific course content. On the one hand, multimodal ways of knowing (Raimist et al. 2010: 283f) and the power of multimodality (cf. Hull & Nelson 2005) are sounded out -- on the other hand, the effectiveness of digital storytelling for student reflection is evaluated (cf. Jenkins & Lonsdale 2007) and aspects of meaningful technology-integrated approaches for engaged student learning are discussed (cf. Sadik 2008). Moreover, in her chapter on "Theorizing Through Digital Stories" Rina Benmayor (2009) describes how critical theorizing can be fostered by means of digital storytelling and how co-existing theorizing strategies can show up in students' digital stories and their corresponding theoretical essays.

In view of these and other contributions, it stands to reason that there is hope for innovation in higher education and also for "transmedial school-cultures" (Böhme 2006).^{vii} Having said that, these arguments should not hide the fact that there are problematic aspects, underestimated dimensions and also limitations of the utilization of digital storytelling in educational contexts, too.

Critical Considerations

As to challenges and critical issues of digital storytelling in educational contexts we can find a wide spectrum of considerations ranging from lack of technical support or continuing education programs to allegations of edutainment. Robin (2006) argues that "bad storytelling using digital media will simply lead to bad digital storytelling" (ibid.: 5) and issues of copyright and intellectual property are not always easy to handle, not to forget about the fact that digital storytelling "can be very time consuming" (ibid.: 6). Other considerations are dealing with critical aspects of digital spectacle and making proper use of digital props (cf. Lambert 2006: 89-90) or demarcation lines between issues of education or learning and therapeutic contexts or health professions (ibid.: 155).

In my view, there are some more basic critical issues which seem to be underestimated if not overlooked commonly in discourses about digital storytelling. As already mentioned above, describing digital storytelling as "tool" for learning and instruction corresponds with instrumentalistic connotations and reductionist views. Stories about digital storytelling read different if we take metaphorical extensions into account, too. For example, if we consider notions of "tools" in the Foucaultian sense of methods and techniques through which human beings constitute themselves, issues of subjectivation and caring come into question which otherwise easily are blanked out. Reflecting practices or "technologies of the self" (Foucault 1988) in the context of digital storytelling goes beyond the optimization of media applications or didactical settings and encourages the analysis of power relations. Furthermore, there are interesting details of the "big world of the small narratives" (Faßler 2008: 33-34) like the deceleration of communication dynamics, the generation of presence, or the

creation of connectivity which allow for a differentiated reflection of a narrative situation.

Among further critical issues as related to widespread notions of digital storytelling I want to emphasize a few aspects and dimensions. In my view, these are covering a wide range of crucial arguments.

First of all, there is the *anthropological* argument. If we think of narrating as "the basic conscious operation of creating meaning in cognition as well as in communication" (cf. Schmidt 2008: 17) then the constitutive relevance of narrative structures becomes clear. In view of the extensive inescapability of narration and storytelling 'digital storytelling' rather appears as an unavoidable program than a set of special applications for educational or other purposes. No matter how we conceptualize history and the relation of humans and technologies, it makes sense to take co-evolutionary dynamics of cultural, biological and technological transformations into account. In line with this, considering an interplay of micro-, meso- and macro-levels (cf. Lundby 2008b: 10) seems crucial whereas focussing on one level only appears to be misleading.

Emotions are widely recognized as important in the context of storytelling, sometimes in the sense of emotionalizing strategies in order to tell powerful stories. There again, Joe Lambert emphasizes that "exploring emotional material is a personal decision" (Lambert 2006: 53). In my view, power relations, institutional contexts, and aspects of group dynamics have to be considered, too. Moreover, there are at least two more aspects relevant here: (1) It makes a big difference if we conceptualize emotional or affective dynamics as "add on" which sometimes plays a role and sometimes not, or if we start from the basic assumption of an ongoing interaction of cognitive and emotional dynamics.^{viii} (2) In both cases there are limitations of the utilization of digital storytelling in the service of (unconscious) emotional dynamics to be considered as well as limitations of the utilization of emotions in the service of digital storytelling.

As to *ethics* "it seems that our typical inclination is to morally engage in narratives in order to investigate how they might help us to then live" (Raney 2011: 176). And in view of the manifold mediatized stories he comes to the conclusion that perhaps "we can no longer process all the stories we encounter" (ibd.). This is not just about orientation, moral judgement and enjoyment, about factual or desirable limitations of the instrumentalization of storytelling, or about blurrings of local or global public and private spheres -- this is also about the basic question of storytelling as "truth-telling". Without doubt, the manifold forms and efforts of "truth-telling" are challenging our emotional involvement and moral development. Moreover, insofar as education towards truth is concerned here, we should remind ourselves that "education towards truth is always education towards the truth of the educator" (Mitterer 2001: 67).

Concerning *political dimensions* digital storytelling is frequently associated with democratic practices in view of cultural diversity. According to Lambert's view, one aspect is "to provide mechanisms for people who have felt excluded from the channels of economic and political access a vehicle for projecting their stories into the mainstream" (Lambert 2006: 110). Apart from other aspects like promoting empowerment strategies or encouraging political activism and solidarity, basic questions remain like in which extent the democratic efforts are part of the problem in view political usurpations and exploitations of critical endeavors, how to deal with the relation of politics of memory and memory of politics, or how to respond to the ways in which power is organised (cf. Cox 2010). Unsurprisingly, more detailed examinations of the power relations at work may demonstrate that the concept of de-gouvernementalization emerges as concept of re-gouvernementalization on other levels (cf. Hug 2008: 251).

Furthermore, *epistemological aspects* are to be mentioned among the forgotten or underestimated dimensions. In his book *Science as an Art* Paul Feyerabend (1984) describes how during the 6th and 5th century (BCE) new forms of explanation, depiction, and schematization "crept in" (ibid.: 52) and replaced former forms of storytelling by and by. These new types of telling abstract stories which "automatically" imply a certain end denote an important step in the history of scientific forms of storytelling.^{ix} Whereas today in natural sciences and parts of social sciences graphical depictions and simulations play an important role, written language is still widely taken for granted as basis for epistemic (self-)ascertainment. Ramifications of *pictorial, cultural or mediatic turns* are hardly taken into consideration. Even arguments brought forward in the spirit of the *linguistic turn* - like, for example, in *Is There a Text in This Class?* (Fish 1980) – seem to play a marginal role only. But there are at least two more crucial arguments: (1) Some opportunities which storytelling by means of digital media offers could be backed up in detail by referring to "The Picture Theory of Reason" (Nyíri 2001) and related arguments. (2) Fish's question can be reformulated today: Is there a digital story in this class? Also today, answers might refer to issues of micro-management and authorities of interpretative community. But there are other, no less fundamental options for answers which can be summarized in the assertion that there is no such thing as a digital story at all, and if there would be such a thing, it would be a conglomerate of bits and bytes, binary codes, algorithms and magnetic or electrical charges.^{ix} Expressions like 'digital story' are rather part of general parlance or a shortened mode of speaking than clearly pointing out specifics of narration and storytelling in interactive spaces and media(ted) constellations.

As previously mentioned, digital storytelling is commonly described as a valuable tool for *educational* purposes, too. Among the often mentioned aspects we find advancement of collaboration and pupils and students' involvement in learning processes as well as the development of (new) literacies and decision-making skills. Even if we agree that a lot of valuable and worthwhile is going on in respective processes the impression remains that is more about skills, qualification and competence than about processes which are intrinsically valuable. And if we agree that one cannot be 'conditioned' into education and that education (*Bildung*) is always self-education (*Selbstbildung*), the focus on instructional dimensions in mainstream discourses is questionable. Similar-sounding words like self-determined (*selbstbestimmt*) in contrast to self-regulated (*selbstreguliert*) or self-organized (*selbstorganisiert*) should not be mixed up in this context. The same counts for independent study (*Selbststudium*), self-education (*Selbstbildung*), and self-reflection (*Selbstreflexion*).

The list could be continued and elaborated in detail, and there are many interconnections between these aspects and dimensions. Especially between the priorities of politics of memory and memory of politics education as *Didactics of Remembrance* (Schäfer 2009) and as critical mediation of individual and collective memory becomes important. And as far as the construction of personal and cultural identities is concerned the work of both narratology and ludology is significant. It's narrative truths and playful approaches turning out to be highly relevant (Hierdeis 2010, Raessens 2006). However, in my view these critical considerations show that there are limitations of the utilization of 'digital storytelling' and that considering both relative and more basic arguments are subjects for debate.

Conclusion

In concluding it can be said that stories about 'digital storytelling' in educational contexts show an ambivalent situation. On the one hand, enhancements and

enrichments of learning and education in formal contexts are reported predominantly in terms of practical viability. In addition, further creative potentials can be sounded out. On the other hand, there are limitations of the utilization of 'digital storytelling' and underestimated dimensions particularly with reference to epistemological issues, "truth-telling", and politics of remembering.

In this situation, it stands to reason that coming to terms with various forms of discursively embedded, narrative co-productions which are created, presented, received and passed on publicly in formal or informal contexts by means of digital media is on the agenda further on. As to educational contexts, the task is to figure out viable solutions for educational purposes and education for its own sake, and distinguish them from those problematic stories which think of themselves as solutions of a problem.

One of the frequently discussed solutions refers to claims for (new) literacies. Among others, Robin (2006) says that "Digital Storytelling by students provides a strong foundation in many different types of literacy, such as information literacy, visual literacy, technology literacy, and media literacy" (ibid.: 4). On the constantly expanding list of literacies we find digital, numerical, musical, family, environmental, emotional and sexual literacies, and also 'new literacies' like multitasking, transmedial navigation or networking. In my view, the widespread modalities of pragmatic connection of 'literacy' to various areas of phenomena, such as outlined here, all too easily hide the fact that letters, words, images, numerals, formulas, etc. are linked with various forms of meaning creation, significance attribution and knowledge building. It is this metaphorical enhancement of all sorts of 'literacies' and their reduction in the sense of functionalist understandings, at least as suggested in policy priorities (cf. Drotner 2008: 74), which indicate a case of a problem claiming to be a solution. For solid solutions we have to rethink relations of literacy, numeracy and picturacy more basically. But this story may be told at another occasion.

References

- Alterio, M. (2002): Using Storytelling to Enhance Student Learning. *Higher Education Academy*. Online available at: http://www.heacademy.ac.uk/assets/York/documents/resources/resourcedatabase/id471_using_storytelling_to_enhance_learning.pdf (consulted: 2011-01-15).
- Behmer, S., Schmidt, D. & Schmidt, J. (2006): Everyone Has a Story to Tell: Examining Digital Storytelling in the Classroom. In C. M. Crawford, R. Carlsen, K. McFerrin, J. Price, R. Weber & D. A. Willis (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2006* (pp. 655-662). Chesapeake, VA: AACE, pp.
- Benmayer, R. (2009): Theorizing Through Digital Stories: The Art of "Writing Back" and "Writing For". Online document: <http://www.academiccommons.org/commons/essay/theorizing-through-digital-stories> [consulted: 2011-01-09].
- Böhme, J. (2006): *Schule am Ende der Buchkultur*. Bad Heilbrunn: Klinkhardt.
- Bopp, M. (2007): Storytelling as a Motivational Tool in Digital Learning Games. In T. Hug, (ed.), *Didactics of Microlearning. Concepts, Discourses and Examples*. (pp. 250-266). Münster et al.: Waxmann,
- Ciampi, L. (undated): Introduction into the Concept of Affect-Logic. Online available at: <http://affect-logic.com/5.html> (consulted: 2011-01-15).
- Couldry, N. (2008): Digital storytelling, media research and democracy. Conceptual choices and alternative futures. In K. Lundby, (Ed.): *Digital Storytelling, Mediatized Stories: Self-representations in New Media*. (pp. 41-60). Frankfurt a. M. et al: Peter Lang
- Cox, G. (2010): Democracy 2.0. Online available at: <http://www.anti-thesis.net/contents/texts/democracy.pdf> (consulted: 2011-01-15).
- Dogan, B. & Robin, B. R. (2008): Implementation of Digital Storytelling in the Classroom by Teachers Trained in a Digital Storytelling Workshop. In K. McFerrin, R. Weber, R.

- Carlsen & D. A. Willis (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2008*. Chesapeake, VA: AACE, pp. 902-907.
- Drotner, K. (2008): Boundaries and bridges. Digital storytelling in education studies and media studies. In K. Lundby (ed.): *Digital Storytelling, Mediatized Stories: Self-representations in New Media* (pp. 61-81). Frankfurt a. M. et al: Peter Lang,
- Faßler, M. (2008): Communities of Projects oder: Die Große Welt der kleinen Erzählungen. In Y. Gächter, H. Ortner, C. Schwarz, A. Wiesinger, C. Engel, T. Hug, S. Neuhaus & T. Schröder (eds.): *Erzählen - Reflexionen im Zeitalter der Digitalisierung / Storytelling - Reflections in the Age of Digitalization* (pp. 29-55). Innsbruck: Innsbruck University Press,
- Faßler, M. (2009): *Nach der Gesellschaft. Infogene Welten - Anthropologische Zukünfte*. München: Fink.
- Faßler, M. (2010): Sichtbarkeit und Wissen: Netzwerke entstehender Ikono-Kratie. In T. Hug, & R. Maier (eds.): *Medien - Wissen - Bildung: Explorationen visualisierter und kollaborativer Wissensräume* (pp. 9-28). Innsbruck: Innsbruck University Press,
- Feyerabend, P. K. (1984): *Wissenschaft als Kunst*. Frankfurt a. M.: Suhrkamp.
- Fish, S. (1980): *Is There a Text in This Class? The Authority of Interpretative Communities*. Cambridge et al.: Harvard University Press.
- Foucault, M. (1988): Technologies of the self. In L.H. Martin, H. Gutman & P. H. Hutton, (eds), *Technologies of the self: A seminar with Michel Foucault* (pp 16–49). Amherst: Univ. of Massachusetts Press,
- Franz, N. (2010): *Digital Storytelling - Grundlagen und Anwendung im Bereich Edutainment an einem ausgewählten Beispiel aus der Mitarbeiterschulung*. Hamburg: Diplomica Verlag.
- Frazel, M. (2010): *Digital storytelling guide for educators*. Washington, DC: International Society for Technology in Education.
- Glanville, R. (1999): Re-searching Design and Designing Research. In: *Design Issues*. 13(2), pp. 80-92. Online document: <http://www.univie.ac.at/constructivism/papers/glanville/glanville98-design.pdf> [consulted: 2007-05-09].
- Heßler, M. (2006): Von der doppelten Unsichtbarkeit digitaler Bilder. *zeitenblicke* 5 (3). Online document: <http://www.zeitenblicke.de/2006/3/Hessler> [consulted: 2011-01-09].
- Hierdeis, H. (2010): Der Vater in mir. Zur Anregung autobiographischer Vater-Erzählungen durch belletristische Literatur. Unpublished manuscript.
- Holzcamp, K. (1996): Wider den Lehr-Lern-Kurzschluß. Interview zum Thema 'Lernen'. In R. Arnold, (ed.), *Lebendiges Lernen*. Baltmannsweiler: Schneider-Verlag Hohengehren, pp. 21-30.
- Hug, T. (2008): Education towards Truth? Reflecting a Sentence of Josef Mitterer. In A. Riegler & S. Weber, (Eds.): *The Non-dualizing Philosophy of Josef Mitterer. Constructivist Foundations* 3(3), pp. 249-253. Online available at <http://www.univie.ac.at/constructivism/journal/articles/3/3/249.hug.pdf> [consulted: 2011-01-09].
- Hugill, A. (2007): *The Digital Musician*. London & New York: Routledge.
- Hull, G. A. & Nelson, M. E. (2005): Locating the semiotic power of multimodality. *Written Communication* 22(2), pp. 224–261.
- Jenkins, M & Lonsdale, J. (2007): Evaluating the effectiveness of digital storytelling for student reflection. In *ICT: Providing choices for learners and learning. Proceedings ASCILITE Singapore*. (online available at: <http://digitalliteracyintheclassroom.pbworks.com/f/Educ-Uses-DS.pdf>; consulted: 2011-01-15).
- King, T. (2003): *The Truth About Stories: A Native Narrative*. Toronto: House of Anansi Press.
- Kress, G. (2010): *Multimodality. A social semiotic approach to contemporary communication*. London: Routledge.
- Lambert, J. (2006): *Digital Storytelling. Capturing Lives, Creating Community*. 2nd ed., Berkeley: Digital Diner Press.

- Lambert, J., Hill, A., Mullen, N., Paull, C., Paulos, E., Soundararajan, T. & Weinschenker, D. (2003): *Digital Storytelling Cookbook and Travelling Companion. Version 4.0*, Berkeley: Digital Diner Press (online document: <http://www.storycenter.org/cookbook.pdf>; consulted: 2005-05-15).
- Liebhart, M. (2009): *Vom Storytelling zum Digital Storytelling: Möglichkeiten des Einsatzes in der Sekundarstufe I*. Saarbrücken: VDM Verlag.
- Lundby, K. (Ed.) (2008a): *Digital Storytelling, Mediatized Stories: Self-representations in New Media*. Frankfurt a. M. et al: Peter Lang.
- Lundby, K. (2008b): Introduction: Digital Storytelling, Mediatized Stories. In K. Lundby, Knut (Ed.): *Digital Storytelling, Mediatized Stories: Self-representations in New Media*(pp.1-17) Frankfurt a. M. et al: Peter Lang.
- Lyotard, J.F. (1984): *The Postmodern Condition: A Report on Knowledge*. Minneapolis: University of Minnesota Press.
- Mitterer, J. (2001): *Die Flucht aus der Beliebigkeit*. Frankfurt am Main: Fischer.
- Nyíri, K. J.C. (2001): The Picture Theory of Reason. In: B. Brogaard & B. Smith (eds.), *Rationality and Irrationality* (pp.242-266). Wien: öbv-hpt, 2001,
- Porter, B. (2004): *DigiTales: The Art of Telling Digital Stories*. Sedalia, CO: BJP Consulting.
- Raessens, J. (2006): Playful Identities, or the Ludification of Culture. *Games and Culture. A Journal of Interactive Media* 1(1), 52-57.
- Raimist, R.; Doerr-Stevens, C. & Jacobs, W. (2010): The Pedagogy of Digital Storytelling in the College Classroom. *Seminar.net - International journal of media, technology and lifelong learning* 6(2)Vol. 6, 280-285 (online available at: http://www.seminar.net/images/stories/vol6-issue2b/Raimist_percent_2CDoerr-Stevens_percent_26Jacobs-ThePedagogyofDigitalStorytelling.pdf; consulted: 2011-01-15).
- Raney, A. A. (2011): Media enjoyment as a function of affective dispositions toward and moral judgement of characters. In K. Döveling, C. von Scheve & E.A.Konijn, (eds.), *The Routledge Handbook of Emotions and Mass Media* (pp. 166-178). London & New York: Routledge,
- Robin, B. R. (2006): The Educational Uses of Digital Storytelling. In C. M. Crawford, R. Carlsen, K. McFerrin, J. Price, R. Weber & D. A. Willis (Eds.): *Proceedings of Society for Information Technology & Teacher Education International Conference 2006*. Chesapeake, VA: AACE, pp. 709-716 (online available at: <http://digitalliteracyintheclassroom.pbworks.com/f/Educ-Uses-DS.pdf>; consulted: 2011-11-15).
- Sadik, Aa. (2008): Digital storytelling: a meaningful technology-integrated approach for engaged student learning. *Educational Technology Research and Development* 56(4), 487-506.
- Schäfer, C. (2009): *Didaktik der Erinnerung. Bildung als kritische Vermittlung zwischen individuellem und kollektivem Gedächtnis*. Münster et al.: Waxmann.
- Schmidt, S. J. (2008): Telling Stories about Storytelling. In Y. Gächter, H. Ortner, C. Schwarz, A. Wiesinger, C. Engel, T. Hug, S. Neuhaus & T. Schröder (eds.): *Erzählen - Reflexionen im Zeitalter der Digitalisierung / Storytelling - Reflections in the Age of Digitalization* (pp. 17-28) Innsbruck: Innsbruck University Press.
- Tonge, G. (2008): *Bold Visions: A Digital Painting Bible*. Cincinnati, OH: F+W Media (Impact books).

ⁱ It's different in the context of new speech or "New German" where Anglicisms and Americanisms play an important role. This counts for diploma or master theses, too (for example, cf. Liebhart 2009; Franz 2010).

ⁱⁱ Cf. <http://www.storycenter.org/index1.html> (accessed: January 25, 2011).

ⁱⁱⁱ Cf. <http://www.storycenter.org/principles.html> (accessed: January 25, 2011).

^{iv} Cf. <http://www.whitehouse.gov/blog/2011/01/26/state-union-address-winning-future> (accessed: January 28, 2011).

-
- v Cf., for example, <http://old.lubbockisd.org/sfirenza/storytelling/> (accessed: January 28, 2011). Here, 18 types of digital stories are distinguished, indeed from a practical viewpoint and not systematically.
- vi Cf. Holzkamp (1996), for example, who distinguishes between "defensive learning", initiated by a third party, and "expansive learning", initiated by the learning subject on the basis of his or her own intentions, plans and interests. In doing so, he emphasizes a constructivist argument in his critique of the "teaching-learning short circuit" (ibid.: 23), a well known pedagogical figure of thought which says that teaching in formal contexts automatically implies learning and that the learning subjects learn what is taught by an instructor.
- vii In many countries we can observe a persistent adherence of educational institutions to "writing" as the dominant medium, thus negating media ecologies and the multimedia environment. As Böhme puts it, especially regular schools are widely conceptualized as "monomedial provinces" (ibid.), thus being justified as "literal countercultures" in which it is imperative to defend literality as the foremost achievement in the process of civilization, whereas otherwise calls for "new literacies", "transliterations" or "multiliteracies" cannot go unnoticed.
- viii Cf. the concept of affect-logic (Ciampi 2007).
- ix If we take scientific forms of storytelling as especially regulated forms of storytelling which are communicatively and methodically stabilized in special institutions, then we have an analogy to Glanville's (1999) argument that „(scientific) research is a subset of design, not the other way round“ (Glanville 1999: 89).
- x This argument can be elaborated in analogy to claims of the invisibility of 'digital images' (cf. Heßler 2006) and related arguments for rethinking visibility (cf. Faßler 2009: 207-225; 2010).