
Challenges of Today: Maniness, Multivoicedness, and Dispersion of Knowledge

Sanne Akkerman & Äli Leijen***

Abstract

In today's age of globalization one faces the day waking up to a world that provides us instant waves of information and communication when accessing our media devices. As early adopters, particularly youth, show an intensive use of digital media in their everyday lives. At the same time, globalization brings a sense of ambiguity. This article questions how future students of higher education face and deal with the ambiguity in the online world. Based on literature and observations of youth and their use of interactive media, we propose that youth specifically faces three challenges relating to ambiguity: maniness, multivoicedness, and dispersion. We elaborate on how youth uses particular digital media in response to this ambiguity, respectively to explore, evaluate and narrate. Pointing out these central processes makes clear what are general tasks for educational practice.

* IVLOS Institute of Education, Utrecht University, The Netherlands, s.f.akkerman@uu.nl

** Viljandi Culture Academy of Tartu University, Estonia, ali.leijen@ut.ee

Address of correspondence: Sanne Akkerman, IVLOS, Utrecht University, Heidelberglaan 8 - 3508 TC Utrecht - s.f.akkerman@uu.nl

Introduction

Every year new students enter higher education institutes. But what do we actually know about them? Do they fit into these institutes, or vice versa, are the institutes ready for them? In recent years, a growing discussion has started about the next generation of students. Many authors describe their observations regarding a different type of student upcoming, mostly in relation to intensive use of digital media in their daily lives. Names given to them are for example Netgeneration (Oblinger, 2005), Millenials (Strauss & Howe, 1991), Webgeneration (Hartmann, 2003), or Homo Zappiens (Veen & Jacobs, 2004). With these names these authors refer to a generation of people that grow up in a world full of digital media that are used by them on a frequent basis and in a very natural way. It is stated that current teenagers have been on the forefront of adopting technologies that enable continuous communication with others (Oblinger & Oblinger, 2005).

However, research shows that it is not only youth, but also grown-ups that use these or similar digital media in their daily, but also in their professional lives (Duimel & De Haan, 2007). The intensive use of digital media increases in line with an accelerating globalizing world. The difference between youth and grown-ups seems to lie mostly in the extent and in the comfort of using digital media. Prensky (2001) emphasized this by introducing the distinction between digital natives and digital immigrants. The term digital natives refers to those people who grew up with computers, internet and mobile phones, taking them for granted and adopting them as tools similar as for example a book or the radio. The term digital immigrants refers to those people who witnessed the introduction of these tools and experienced these as innovations, only over time discovering its potentials in terms of maintaining a world wide web of information and communication.

When considering empirical research, we see a growing body of studies confirming the intensive use of digital media, particularly amongst youth. Teenagers maintain relationships by daily contact, for example through short message services (SMS), and instant messaging (IM) software, of which Microsoft Network Messenger (MSN Messenger) is an example. In 2001, Lenhart, Rainie and Lewis (2001)

found that, of the 754 teenagers (between the ages of 12 and 17) they interviewed, already 74% used IM, of which 69% several times a week. More recent research conducted in 2005 in the Netherlands shows that of the teenagers in the Netherlands, 45% has an online fotoalbum, 36% has a personal profile page, 10% has a weblog and 15% created their own website (Duimel & De Haan, 2007). It is expected that these numbers are still growing. But the high interest of social scientists for these changes is not so much the digital tools themselves, but rather the way they are used in terms of accessing information, maintaining personal relationships and participating in social networks.

In this article we aim to review some effects of the globalizing world on the next generation of students. Our tenet is that there are three aspects of globalization that relate to increasing ambiguity. As we will demonstrate, these aspects are the kind of counterforces that we witness. Moreover, we explain why certain digital media are so popular and used intensively by people. In our view, these counterforces and the role of digital media in these, reveal the kind of skills that current society requires, and point out some general tasks for higher education institutes. This article is of theoretical nature in that it aims to present an explanatory direction that needs to be tested empirically. Our theoretical reasoning is derived from literature as well as from two years of general observations of youth and their use of digital media by participating on the internet. To bring in the perspective of youth, we will refer to some fragments of transcribed interviews that were held in the autumn of 2006 with 14 pupils in the age of 12-14. The pupils were not specifically selected and came from a regular secondary school. The one-hour interviews were semi-structured and questioned the motivations of the pupils for using different kinds of digital media. The selected fragments represent our overall impression from the interviews and the observations on the internet. The data is however not meant as evidence but as illustration of our rationale.

Increasing Ambiguity

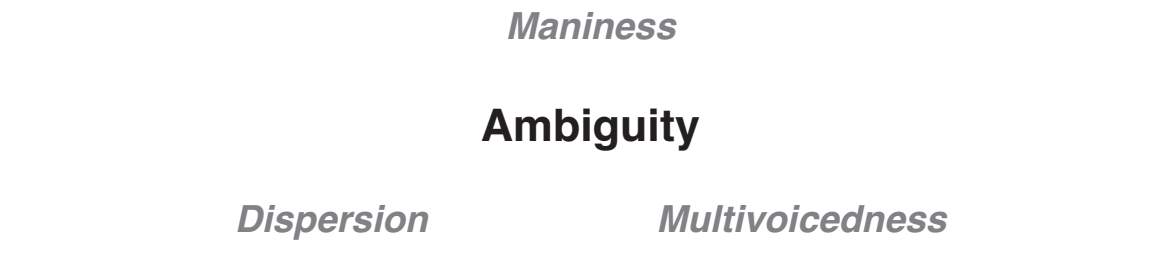
Due to increasing demographic, economic, ecological, political, and military interconnections on a global scale, cosmopolitanism is

becoming an aspect of the everyday life of people in many parts of the world (Hermans & Dimaggio, 2007). Never before in the history of human kind, have we witnessed such a wide web of global linkages. Along with an accelerating globalization, structures that traditionally organized information and communication have moved to the background. Our world is no longer merely bound to the physical and local communities determining the old big narratives we have grown up to believe in (Giddens, 1991). Instead, we scope numerous national and international newspapers from remote geographical locations, we connect to friends local and global through community networks such as Facebook, and participate in online groups to find personal support, discuss health issues, politics, products, exchange hobby experiences, or work together (Boomen, 2000). The resulting speed and dynamics cause the world to be more ambiguous, that is, more difficult to comprehend and predict. It is openness (Empson, 1977) and partial determination (Rommetveit, 1974) that creates a feeling of ambiguity. We argue that there are specifically three characteristics of globalization that relate to an increasing sense of ambiguity when it comes to the intensive use of digital media: maniness, multivoicedness and dispersion.

First of all, ambiguity is caused by a situation of maniness: in today's age of communication and information technology one faces the day waking up to a world that provides us instant waves of information when accessing our media devices. Next to the more conventional media like books, television, radio and telephone, it is the vast amount of hypertext, the Internet, which has tremendously increased our access to people and to information. As a result of this open and continuous access to a World Wide Web, we are given the impression that there is no topic that is left untouched. Everything is known, so it seems. Information has never been presented in such abundance, availability and ownership by the majority of individuals and communities in society.

Second, ambiguity is enhanced by multivoicedness, that is, by a multiplicity of positions and perspectives that are brought forward. It is not any longer merely authorities like parents, teachers, churches, or experts that preselect the information sources we consult, the values we

Figura 1. Aspects of Ambiguity



depart from and the social networks we engage in. Along with a continuous access to people and social networks worldwide we are confronted with a huge diversity of ideas, opinions, values, and beliefs.

Third, ambiguity is created by dispersion. Along with the maniness and the multivoicedness of a globalizing world, there are no longer fixed places in which one moves around. Instead, local places transformed into a digital space with no clear boundaries around and within it. Information, products, people, and their ideas and opinions have become more loosely connected nodes of a web, which continuously changes.

As we will argue below, these characteristics of globalization point to central activities in terms of making sense of, or ‘disambiguating’, the world, offering possible explanations for the meaning of using certain digital media.

Maniness and Exploration

The maniness caused by globalization means that we need to continuously explore. This exploration requires that we learn how to search and select in the abundance of possibilities. As regards to information, Henry (2006) argued that without the ability to locate information in an effective manner, the usability of the Internet is limited. Maniness requires a *process of exploration*, and thereby some skillfulness in searching and selecting. Search engines play a central role in exploration. Let us turn to a fragment from one interview with two boys that explain how they search the Internet. Before this fragment they explained how they use Google as their standard search engine.

-
- Boy 1 “The further down the pages, thethe less information is on it. [Boy 2: Look. Typing some keywords in Google]. On top, on the first page you’ll often find the most information. Well, I often click on the first three eh pages.”
- Interviewer “Yes, but do you know whether this is also the most reliable information? And, and how can you know if it is good information?”
- Boy 2 “Well, you can check it. Because, if you go for example to other sites, and then eh you see it gives the same information, then you can assume that it is quite reliable, because more sites say it. But well, if other sites say something completely different, then you often go to another site to see what it says and so you go on until you know what most sites say, and that is often most reliable...because most of the people did put that that on it and yeah,...then that is what is less lied or something.”
-

In these answers, the boys explain how they often select only the first three sites, thereby completely relying on the structuring that Google presents.

The fact that one searches and selects in specific ways might not be as harmful as the lack of awareness of how these procedures work. For example, one might even argue that people have become owners of internet themselves, and therefore, for a large part, the crowd determines what is perceived as relevant (Surowiecki, 2004). A clear example of this is the free editable encyclopaedia Wikipedia. However, considering the research findings which point out that students are woefully in need of guidance on how to use Internet resource more effectively (for example see Wiley, Goldman, & Graesser, 2002), we propose that a more conscious process – exploration – should aid dealing with maniness. In the course of exploration one should follow questions like: *How can I find the right sources? Which questions, keywords I should use for the particular aims? How do I know what I find is good? Is this information relevant for me for a particular purpose?*

We believe that, for higher education it becomes crucial that students learn to explore in a way that information and communication

sources relevant for a particular topic are systematically searched and more consciously selected. Therefore, higher education seems to have an important task in teaching students how to focus while searching for information and how to use criteria for selecting what is relevant in the context of use.

Multivoicedness and Evaluation

As we mentioned above, a second characteristic that increases our sense of ambiguity is multivoicedness. Due to global interaction, people are confronted with a diversity of (sub)cultures and perspectives. We easily enter new communities and unfamiliar domains, and increasingly engage in intercultural encounters (Weber, 2001). Resultantly, knowledge is no longer a matter of facts and of truths with which to explain or perceive our world. Rather, knowledge has turned into a real 'practice of knowing' that is fragmentarily interwoven in everything that is 'created, shared, remixed, repurposed, and passed along by people' (Downes, 2006). This requires continuous *process of evaluation*, that is, a careful consideration and valuing of the things we are confronted with. Let us again turn to a fragment of an interview with two different boys who talk about maintaining their own website.

Interviewer "But can you mention some topics about which you wrote on that website?"

Boy 1 "Well for example, yeah, it mostly is about opinions... It mostly concerns opinions about ehm... actual news. It is not so much information stuff, because people are not so interested to look at that. If they want to search information, they will just go to Google or something. But it mostly covers things that people are interested in, of ehm, for example we do ehm... well the war in Iraq or something. Then you make a site about this, and give your opinion. And then other people can also leave their opinion. And that's funny, then you can see every day how much new visitors there are, and then there are all kinds of reactions on your site. And then they say, 'well that is good', 'you might better do it like this', or they leave their own opinion about the war in Iraq. Well, about those sort of things..."

One issue stated by this boy concerns the vaporising of the idea that ‘knowledge is power’. He marks this by stating that people are not interested in information. He argues that if they want information they have access to it through search engines. This means that ‘having information’ no longer grants you status. Knowledge is no longer owned by particular specialists but by everybody, undermining previous authority based on information. Related to this is the strong emphasis that this boy puts on opinions and personal perspectives. According to him the focus of people is not so much on acquiring information, likely because of the unlimited access to it. Instead, their focus is on personal constructions, on making sense of the information, and being personally involved. As Hartmann (2003, p. 37) points out: “Instead of rebelling against the existing system or authorities, youth today are quite content with society overall [...] they tend to deal with concrete problems, which stem from their personal goals, more than with abstract and impersonal aims”.

This shift from information to evaluation can be recognized by the incredible amount of discussions taking place. The ratings seen on the Internet, for example on Amazon.com or Youtube, are additional examples of the wish of people to evaluate. Thanks to the Internet and these digital tools a politician, a statement or a book, can become popular or unpopular in but one day.

From the perspective of higher education this shift is relevant, as it means that information provided by teachers or books can be considered less relevant to future students than discussing about it. This is also emphasized in educational models that rely on authentic learning. Van Oers and Wardekker (1999) promote authentic learning in such a way that learning activities are organized to have a visible relation with real life and society, but at the same time connect to the interests and level of students. As personal constructions may represent misconceptions or unelaborated opinions, discussions with the teacher and with peers are useful in stimulating argumentation and reflection. Moreover, as already indicated by Bruner (1990), modern life calls for open-mindedness, that is, a willingness to construe knowledge and values from multiple perspectives without loss of commitment to one’s own values. He states that open-mindedness demands that we be

conscious of how we come to our knowledge and as conscious as we can be about the values that lead us to our perspectives. This asks that we be accountable for how and what we know. Also, it means that students need to learn to postpone their opinions to create time for exploration of a wide range of sources and evaluation of multiple perspectives.

Dispersion and Narration

A third characteristic of globalization that increases ambiguity is that what is cognitively and socially available is not only going to be more accessible (resulting in maniness) and diverse (resulting in multivoicedness), but also more dispersed. Accordingly, people need to find a way to relate their explorations and evaluations to themselves. How can students relate to the things they encounter and integrate it with their own ideas and perspectives? Earlier, narratives presented by parents, school, and the local community provided the story lines for reasoning, and allowed to frame what is new and different. This lead to more fixed narratives constituting what is good versus what is bad, as well as pointing out one's identity in relation to others. Now we see such pre-given linearities or fixed structures of ordering disappearing in favour of a huge diversity of stories and opinions. We witness a vast interest in personal WebPages in which people collect and organize those sources and materials (people as well as information) they find relevant and interesting. Hence, such personal productions appear as a natural counter reaction to dispersion. Let us consider a short interview fragment where two girls explain how their personal social networking site functions.

Girl 1	"Well yeah, you can just add friends, and then send them a 'scratch', that's a little note, and yes well, the latest news [giggles]."
Girl 2	"Yes, you can also add photo's, and look at those of others, yes for example also if you have holidays photographs, that is very nice to look at from others."

During the rest of the interview, the girls demonstrated how they use their personal pages to collect different materials, such as pictures, video's, to point out their interests, opinions, and relations with relevant others. This illustrates precisely how using Internet has changed completely, a change often referred to by the term Web 2.0. This term denotes that engaging in the World Wide Web no longer means acting as passive recipients of information, but to act as a creator of WebPages and materials using media publishing tools such as MySpace, Blogger, YouTube, and Flickr.

In terms of the dispersion faced in a globalizing world, this production of WebPages and digital materials seems to function as a solution of people to make sense of all that they encounter. Hence, in addition to explorations and evaluations as discussed in the previous sections, people tend to search for larger frames or organization that are self-regulated and personal. This process of personal production can be typified as a *process of narration*. It is argued that through narration, we construct our identity, that is, we can integrate old and new experiences, identify the ordinary and the exceptional, and give personal accounts that express our intentions, interpretations, and evaluations in coherent chains of events (Hermans & Hermans-Jansen, 1995; De Vries, 2004). As such, the process of narration can be understood as a reflective practice, which aims to bind knowledge with experiences and make sense of them as a whole (Procee, 2006). As the term narration points out, framing personal experiences is fundamentally connected to communicative processes and to semiotic devices (Bakhtin, 1986; Wertsch, 1998). As Prawat (2000) describes it:

It [language] allows the individual to transform his or her own inchoate understanding into a form that is more conscious and rational, thus serving the self. It also allows the individual to share insight or understanding with others, thus serving the community (p. 6).

Though narration has always been fundamental to knowledge building (Hermans & Hermans-Jansen, 1995), current youth shows a much more active stance in narration. In the use of digital media by youth, we see that it is not only verbal language that is used as semiotic device, but also various creative forms of audio and video productions that allow people

to integrate, construct and share with others their ideas and perspectives. The Weblog is probably the most explicit example of a popular digital tool intended for people to narrate. Weblogs allow people to create their own Webpage on which they collect textual, audio, and video materials, point out their opinions and reflections, discuss with others, and in doing so, present who they are to the outside world. Weblogs have been argued to afford individualistic, intimate forms of self-expression, more than supporting interactive discussion (e.g. Herring, Scheidt, Bonus, Wright, 2005). The many Weblogs we find on the internet, filled with very personal narrations, illustrate how well digital natives have adopted this tool for reflective practice and identity construction. This need to narrate as a response to dispersion, is in line with the argument of Hermans and Dimaggio (2007) that globalization should not be equated with homogenization or uniformity, as globalization finds localization as its counterforce. To phrase his reasoning:

Whereas globalization challenges people to extend their selves and identities beyond the reach of traditional structures, this extension implies the pervasive experience of uncertainty. Intensification of this experience motivates individuals and groups to maintain, defend, and even expand their local values and practices by establishing a niche for the formation of a stable identity (p. 6).

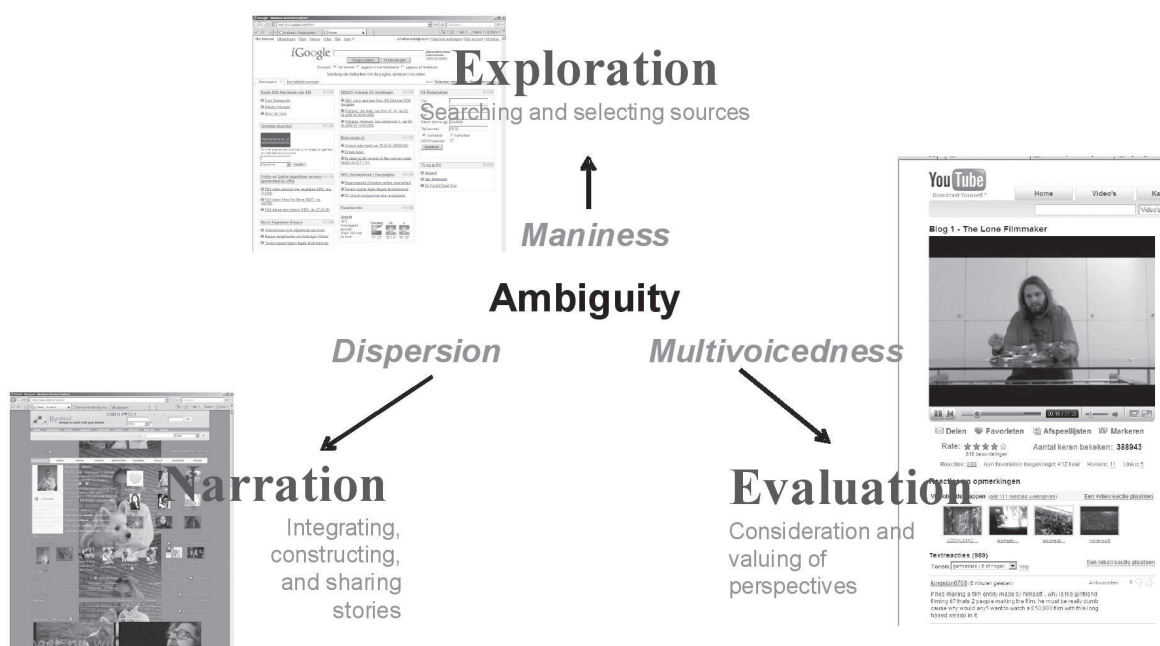
In other words, personal productions are ways to narrate, and can be seen as a way to overcome the sense of ambiguity that follows from dispersion. Particularly youth as digital natives show to search for ways to narrate their personal accounts, and show a willingness to share these with others. We believe that possibilities to create and share narrations should be applied more readily to higher educational practices. Inviting students to create and share narrations of the subjects at hand, supports personal and collaborative construction of knowledge, and moves beyond a traditional idea of education as acquiring a fixed body of academic knowledge.

Conclusion

In this paper we have argued that the globalizing world brings an unprecedented challenge: an increasing sense of ambiguity. We have

elaborated on specifically three aspects of globalization that relate to ambiguity, and pointed out how we witness counterforces to deal with those challenges. A first aspect of ambiguity is the maniness of information that calls for people to become skilled in exploration. A second aspect concerns multivoicedness, that is, the diversity in ideas and perspectives that one encounters. This calls for skilfulness in evaluation, in terms of a careful consideration and valuing of the things we are confronted with. As we elaborated, a third aspect of ambiguity entails the dispersion, requiring people to narrate their personal account of what they face and learn. Through describing these three different aspects of ambiguity, we have tried to contextualize the use of certain digital media by youth in a globalizing world. To summarize, the popularity of using search engines to find information can be explained by its function in exploration, the popularity of ratings and personal opinions on internet fits with the emphasis on evaluation, and the increasing use of personal pages and materials produced seems in line with the prominence of narration. Figure 2 gives an overview of aspects of ambiguity and the counterforces that we identified.

Figure 2. Counterforces to ambiguity in a globalizing world



Though the processes of exploration, evaluation, and narration that can be typified as counterforces to different aspects of ambiguity, these are naturally intertwined processes and should not be seen as sequential phases of activity. For example, already when searching the internet and selecting sources one quickly evaluates the relevance of each site, and a process of narration (e.g. the personal interest in a particular rock band) functions as frame of reference that gives direction to exploration (e.g. which key words one tends to use) and evaluation (which criteria are considered).

Our intent was to analyze more specifically the kind of challenges that proceed with globalization, challenges we argue to relate to ambiguity. In doing so, we hope to have contributed to a perspective with which to understand more specifically the basic needs of future students that enter higher education institutes. The reasoning we have presented requires more empirical studies of youth. It requires research that moves beyond mapping the frequency or intensity of use of different media (c.f. Lenhart, Rainie and Lewis, 2001; Duimel, & De Haan, 2007), and concentrates more on the *motivation* of using certain digital media (What are the intentions of the students? What purpose(s) do different media serve?)

If the suggestions made in this article are empirically supported, a general implication that can be drawn is that education should organize learning not by prescribing what and how to learn step by step, but rather, by enabling individuals to learn in their own creative ways. The intensive and daily use of digital media in addressing information and maintaining social contacts worldwide, show how future students are well apt in learning creatively. Due to the active and personal stance of students in exploring, evaluating and narrating, learning paths will become much more diverse. By stimulating and coaching exploration, evaluation, and narration, higher education can make sure that what is learned connects to personal interests and habits and to worldwide practices of knowing.

References

- Bakhtin, M.M. (1986). *Speech Genres and Other Late Essays*. In C. Emerson & M. Holquist (eds.), V.W. McGee (Trans.). Austin: University of Texas Press.

- Boomen, M. v. d. (2000). *Leven op het net. De sociale betekenis van virtuele gemeenschappen*. [Living on the net. The social meaning of virtual communities]. Amsterdam.
- Bruner, J. (1990). *Acts of Meaning*. Cambridge, MA: Harvard University Press.
- De Vries, B. (2004). *Opportunities for Reflection: E-mail and the Web in the Primary School*. Unpublished doctoral thesis. Enschede: University of Twente.
- Downes, S. (2006). E-learning 2.0. *eLearnMagazine*. Retrieved from <http://www.elearnmag.org/subpage.cfm?section=articles&article=29-1>
- Duimel, M. & De Haan, J. (2007). *Nieuwe links in het gezin. De digitale leefwereld van tieners en de rol van hun ouders* [New links in the family. The digital world of teenagers and the role of their parents]. Sociaal en Cultureel Planbureau, Den Haag.
- Empson, W. (1977). *Seven Types of Ambiguity* (3rd ed.). London: Chatto and Windus.
- Giddens, A. (1991) *Modernity and Self-Identity. Self and Society in the Late Modern Age*. Cambridge: Polity.
- Giles, J. (2005). Internet encyclopaedias go head to head, *Nature*. Published online: 14 December 2005; Updated online: 22 December 2005; Updated online: 28 March 2006. Retrieved from <http://www.nature.com/news/2005/051212/full/438900a.html>
- Hartmann, M. (2003). *The Web Generation: The (De)Construction of Users, Morals and Consumption*. Brussels: SMIT-VUB, Free University of Brussels.
- Henry, L.A. (2006). SEARCHing for an Answer: The critical role of new literacies while reading on the Internet. *The Reading Teacher*, 59, 614-627.
- Hermans, H.J.M. and G. Dimaggio (2007). Self, identity, and globalization in times of uncertainty: a dialogical analysis. *Review of General Psychology*, 11, 31-61.
- Hermans, H., & Hermans-Jansen, E. (1995). *Self-Narratives. The Construction of Meaning in Psychotherapy*. London: The Guilford Press.
- Herring, S., Scheidt, L.A., Bonus, S. and Wright, E. (2005). Weblogs as a bridging genre. *Information, Technology & People*, 18, 142-171.
- Lenhart, A., Rainie, L., & Lewis, O. (2001). *Teenage Life Oline: The Rise of the Instant-Message Generation and the Internet's Impact on Friendships and Family Relationships*. Washington D.C.: Pew Internet & American Life Project.
- Oblinger, D.G. (2005). Learners, Learning, & Technology, *Educause Review*, 40, 66-75.

- Oblinger, D.G. & Oblinger, J.L. (2005). Educating the net generation, *EDUCAUSE*. Retrieved August 14, 2008, from <http://www.educause.edu/educatingthenetgen/>
- Oers, B. van, & Wardekker, W. (1999). On becoming an authentic learner: Semiotic activity in the early grades. *Journal of Curriculum Studies*, 31, 229-249.
- Prawat, R.S. (2000). The two faces of Deweyan pragmatism: Inductionism versus social constructivism. *Teachers College Record*, 102, 805-840.
- Prensky, M. (2001a, September/October). Digital natives, digital immigrants. *On the Horizon*, 9, 1-6.
- Procee, H. (2006). Reflection in education: A Kantian epistemology. *Educational Theory*, 56, 237-362.
- Rommetveit, R. (1974). *On Message Structure: A Framework for the Study of Language and Communication*. London: Wiley.
- Strauss, W. & Howe, N. (1991). *Generations*. New York: Quill.
- Surowiecki, J. (2004). *The Wisdom of Crowds*. New York: Doubleday.
- Veen, W., & Jacobs, F. (2004). *Leren van Jongeren: een Literatuuronderzoek naar Nieuwe Geletterdheid*. [Learning of Youth: a literature study on new literacy]. Utrecht: Stichting Surf.
- Weber, S. (2001). A framework for teaching and learning 'intercultural competence'. In G. Alred, M. Byram and M. Fleming (eds.), *Intercultural Experience and Education* (pp. 196-212). Clevedon, Multilingual Matters.
- Wertsch, J.V. (1998). *Mind as Action*. Oxford: Oxford University Press.
- Wiley, J., Goldman, S.R., & Graesser, A. (2002). Promoting critical inquiry from Web Sources. In W.G. Gray and C.D. Schunn (eds.), *Proceedings of the 24th Annual Conference of the Cognitive Science Society* (pp. 23). Mahwah, NJ: Erlbaum.