Changing spaces, expanding mindsets: towards L2 literacies on a multimodal reading comprehension course

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ABSTRACT

Recent studies in the field of new literacies have indicated that a remarkable change in the way we access, consume and produce information has taken place. The boundaries between concepts such as authorship and ownership have become blurred. The repertoire of texts available to language learners is almost unlimited. One important purpose of language education is to provide students with functional tools to take advantage of these resources.

In this article we discuss the benefits and challenges of teaching L2 reading comprehension in a multimodal learning environment from the perspective of course design. In addition, we attempt to find answers to the following questions: what kinds of assignments are meaningful from the learner's perspective, and what added value does multimodality bring to a learning situation? A design-based research approach was implemented in this study in order to enable a dialogue between theory and practice.

The students attending the reading comprehension course described in the article were advanced university students from various European countries, who studied Finnish as a second language. In comparison to traditional reading comprehension courses, it seems that L2 learners benefit from reading digital texts and using a web-based learning platform. The digital environment enabled the learners to read meaningful texts and to actively learn through texts and assignments. Moreover, the web-based learning environment enhanced the flexibility of the learning event – flexibility in terms of time, place, course content, and the learners' language proficiency.

However, the course feedback did not support the view that students would automatically be on the "better" side of the digital divide. Instead, they do need assistance in order to understand the new learning mindsets and especially learner autonomy.

Keywords: *reading comprehension, second language learning, pedagogical design, Finnish as a second language, multimodality*

I. INTRODUCTION

What happens when one reads in a foreign language? What factors affect the text comprehension process in a multimodal environment? We need a text, possibly pictures, headings, sub-headings, a reader or readers, and a tool with which to process the text, for example, a computer, phone or an electronic reading device. The learners reading

the texts often come from different cultural backgrounds, which affects their reading. One of the elements of multicultural reading is dialogism, which is why one of this article's standpoints is an understanding of dialogism in which language and a person's existence are viewed as interactive (e.g. Bahtin 1991, Linell 1998, 2009). Linell (1998) emphasises the close connections between the structure and use of language. Textual comprehension is not seen as something that occurs in the form of an individual's actions, in his/her own mind; instead, it conjoins with the reader's previous experiences and social environment. Even when reading alone, the reader is, in fact, never alone.

Language – and from the perspective of this article, also the meaning given to words and texts – is born and develops in the continuous flow of interaction in which a person lives. Languages are not seen as systems of neutral and abstract structures of words, as is traditionally the case in monological approaches; rather, language belongs to its users and is born in the situations in which it is used. Language is, thus, temporo-spatially dependent and it cannot exist without a context. (cf. Linell 1998: 7–8.)

Throughout time, literacy has been a manifestation of power and education; the ability to read different texts has provided a limited number of people with access to information. In our networked and multimodal world, virtually anybody can access information – but, at the same time, the nature of authorship and ownership of information has changed. New forms of participatory online publishing are continuously being developed. They are based on sharing, cooperation, feedback, increased interaction and evaluation. The utilisation of multiple media in the surrounding world has also created a new environment for language teaching (Svensson 2008, Lankshear and Knobel 2006).

Typical to teaching text comprehension in the context of a foreign/second language is that the teaching begins from texts that are lexically and syntactically simple. It has traditionally been held that, before comprehensively understanding a text, a language's system must be mastered. Moreover, in the case of learners with reading difficulties, it is quite common that easier texts be given. This is somewhat of a contradiction when we consider that learners encounter complex texts in their everyday lives and have a pressing need for strategies for dealing with such texts. In our view, literacy skills rise to the fore in the context of second language learning.

The interpretation of texts requires cultural knowledge, as texts are always connected to their social, cultural, political, and historical contexts. In a similar way to Linell, and according to Hasan (1996: 417), the structures of language should not be separated from their intended social uses. Likewise, teaching vocabulary separately from the context is not effective, as words have different meanings in different contexts, which can, indeed, be numerous (Gee 2008).

This article is based on the theories of literacy research that see literacies as social practices. The background of this paradigm is located in a socio-cultural approach to language and its related processes. Instead of an individual's activities, focus is thus on interaction and social activities. A point of particular interest is the kind of literacy that has been influenced by new technologies. (Kress 2003, 2010, Lankshear and Knobel 2006).

A more recent view, which differs from the former skills theories, maintains that literacy consists of a number of different practices related to specific events. Barton and Hamilton (2000: 6) define literacy practices as activities taking place around texts. The term "literacy event" refers to all events that are in some way connected to a text (Heath 1983: 93, Barton 1994: 35, Barton and Hamilton 2000: 7). Street (2001: 11) notes that literacy practices are particular ways of thinking, reading, and writing, and that these are situated within cultural contexts. The practices also fluctuate between different individuals' domains.

Reading can be examined from the perspectives of both dialogism and literacy research. These approaches share some similar qualities, in particular: the social starting point of activities (Bahtin 1996: 293, Linell 1998: 7–8, Barton et al. 2000: 8–9), the central role of interaction (Bahtin 1996: 36, Barton and Hamilton 2000: 9), the tendency to view language as action (Street 1993: 829), dynamism (Bahtin 1991: 99, Barton and Hamilton 2000: 7) and reflection on cultural backgrounds (Barton and Hamilton 2000: 7). All of these qualities come powerfully to the fore also in examining teaching and learning of text comprehension in new multimodal learning environments.

II. THE MULTIMODALITY OF READING

The Internet has shaped the ways in which we read: moving from a linear towards a more multimodal direction (Eagleton and Dobler 2007). The traditional text is no longer the only constructor of meaning, as videos, music, social media, and multidimensional hypertexts carry the reader along meandering paths of meaning construction, in which the reader is an active agent. These processes, in which texts are mixed and re-constructed, blur the boundaries of textual ownership and authorship (Kress 2010). Let us examine this by means of a short example:

> "The point of books is to combat loneliness," David Foster Wallace observes near the beginning of "Although of Course You End Up Becoming Yourself," David Lipsky's recently published, book-length interview with him. If you happen to be reading the book on the Kindle from Amazon, Mr. Wallace's observation has an extra emphasis: a dotted underline running below the phrase. Not because Mr. Wallace or Mr. Lipsky felt that the point was worth stressing, but because a dozen or so other readers have highlighted the passage on their Kindles, making it one of the more "popular" passages in the book. (Johnson 2010.)

The textual and media landscape is noticeably more complicated than has previously been the case. Texts are significantly more multimodal and integrate different ways of creating meanings. With regard to textual activities, this means, for example, that social media has adopted a central role. Furthermore, textual activities are typically part of a culture of participation (Jenkins et al. 2006) and sharing. Let us examine this matter via a small vignette.

A Facebook-user recommends a journal article. This either happens by reading the articles online and then clicking on the Facebook recommend button or by posting a direct link to the article on the Facebook wall feature. It is then possible to comment on the recommendation – it can be "liked" and the recommendation can be forwarded to other people. In addition, the reader can go to the journal's website and take part in conversations pertaining to the article. A blog may also function as a channel for sharing such material.

The reading process no longer needs to stop with reading and discussing a text. Instead, reading can produce, for example, a video in which the reader brings to the fore his or her own interpretations of the text. A video uploaded to YouTube might even receive a momentary burst of attention in the form of view and comments. The video might even go on to be disseminated via other social media channels, with new versions in the form

of "responses". In teaching literature, a student may upload to a web-platform a music video that is in an intertextual relation to a short story or novel.

Twitter allows a reader to follow the status updates of an author, which possibly open new windows onto the author's way of thinking and make it possible for new interpretations to be made. For example, Paulo Coelho actively updates his Twitter status and has, in so doing, made contact with his readers. Never before has it been possible for a reader and a writer to have such a close relationship. Indeed, every reader can share his or her reading experiences on a global scale, for everyone to read. In some cases, social media may even open up a direct route for conversation between author and reader.

In this way, new media forms facilitate a dialogue in which different cultures mix and go on to form new operational cultures. This kind of intercultural dialogue is particularly interesting from the perspective of teaching, as it challenges education to participate in the dialogue. The bringing of new textual syntheses into the classroom necessitates new pedagogical practices. Indeed, teachers are faced with a new challenge; namely, that students' backgrounds are increasingly varied – regarding their culture, identity, prior knowledge, and the ways of thinking and behaving. In these new environments, students develop their identities and new ways of thinking and operating. (See Figure 2.)

III. RESEARCH QUESTIONS

In this article we discuss the benefits and challenges of teaching L2 reading comprehension in a multimodal learning environment from the perspective of course design. In addition, we attempt to find answers to the following questions: what kinds of assignments are meaningful from the learner's perspective, and what added value does multimodality bring to a learning situation?

IV. METHOD

The design-based research approach was implemented in this study (see e.g. Barab 2006, Design-Based Research Collective 2003). Design-based research attempts to

understand the connections between theory and practice, as well as between different activity tools. According to Collins et al. (2004), design-based research is typified by the research being situated in a real-life learning environment; a lack of prior knowledge of all the research variables, which, instead, become apparent during the research; and flexible methods, which are specified as the research advances. The object of such research is often a learning situation in which different complex factors interact and affect the design of the research. These qualities are also typical of the present research. Nonetheless, it should be noted that the present research does not attempt to develop any specific theory, but to contribute to the field of multimodality in L2 language teaching, and furthermore, develop understanding of the literacy practices that become apparent as the new technologies emerge.
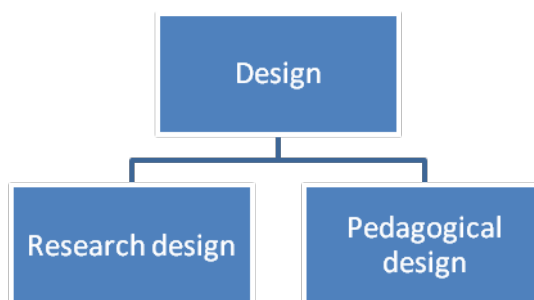

Figure 1. Concept of design used in this article.

With Figure 1 we aim to illustrate the divisions of the concept of design approach as it is understood in this article. Research design refers to the design-based research approach. Pedagogical design refers to a new way of thinking in language teaching and learning, where the shift in role of a learner's agency takes place as the learner creates his or her own learning environment.

The research-based course design was an essential part of the research. The design process was documented and analysed, as were the products of the students in learning tasks. The aims of the analysis were twofold: on the one hand, we wanted to create a model of the course that can be applied to other contexts, and on the other, understand how to support the students' agency in a multimodal environment.

V. PARTICIPANTS

The course considered in this article is part of the Finnish as a Second Language (F2) curriculum offered at the University of Jyväskylä Language Centre. The course's learning outcome is that, upon completion, students will have more confidence in reading Finnish texts and finding information even from difficult texts, as well as having developed their reading strategies. In addition, the students will improve their knowledge of Finnish vocabulary and structures. The pedagogical challenge that we attempt to address in this article stems from the short duration of the course, which is why it is particularly important to build a pedagogical progression that crosses course boundaries.

The course participants consisted of twelve F2 students from across Europe and Japan. Their language proficiency level varied, but nevertheless floated at around the B1-B2 level. Some of the students were in Finland for a six-month exchange period, whereas others had lived in Finland for several years. The proficiency levels of the students were also affected by how much they had previously studied Finnish and how many Finnish-speaking contacts they had acquired. The main subjects of the students were economics, educational science, intercultural communication, or languages.

VI. BROADENING THE WAYS OF THINKING

A change in the way of thinking is a central factor in the transition process of teaching and learning text comprehension. A long-held view within research into reading regards reading as the decoding of texts, which can still be noticed within many learners' learning cultures. Even though a social perspective on working with texts has indeed been part of the discourse surrounding literacy research for some time, engineering change within teaching practices is still a pedagogical challenge.

Lankshear and Knobel (2006) describe the change in operational practices via two mindsets.

Table 1. Mindsets 1 and 2.

Mindset 1	Mindset 2
Predictability	Unpredictability
Materiality	Immateriality
Individual's knowledge and skills	Community's knowledge and skills
Knowledge within institutions	Knowledge within individuals
Control	Openness
One-time occurrence	Continuity
Monomodality	Multimodality
Instrumental value of technology	Technology as operating culture

Among other things, typical of mindset 1 is a view of the world as being more technological even though the operational methods have remained the same as before. Here, individuals are the central units of activity, and expertise and authority concentrate on individuals and institutions. Moreover, learning spaces are closed and are intended for specific purposes, and books constitute the core literary media.

According to mindset 2, the world is significantly different from what it has previously been. This change is primarily associated with the development of new technologies and new ways of doing things as a result of this development. Tools are used in processing information, creating meaning, and in communication. Expertise and authority are shared and collective. Moreover, learning environments are seen as open, continuous, and flexible. In this view, texts are increasingly digital in nature.

The mindsets can be adapted for the purposes of teaching textual comprehension. In this process, the teacher may think that the lesson and the matters addressed therein should be predictable. In fact, the lesson plan may be oriented at this – what elements in the texts being addressed are probably new to the students and are likely to be examined within the lesson. The lesson may indeed be demarcated as a one-time entity, in which, aside from the teacher's knowledge and skills, the knowledge and skills of the individual students are emphasised. The means of exchanging information during the textual comprehension lesson easily follows the traditional IRC model. After all, we are dealing with "text" here. Therefore, students go to class with handouts under their arms, having clarified some difficult points in the text in advance; they may bring along some copies of grammar exercises to enhance their confidence and fill the time potentially left over from "actual text processing".

Nevertheless, teachers are people who want to develop themselves and their own teaching. The teacher wants to be a good teacher both now and in the future. The ever-changing world requires that teachers become conscious of new ideas and continuously reflect on their own activities. How can one respond to students' changed idea of communality and, for example, sharing? Their knowledge and actions are not confined to institutions – rather their knowledge is that which they can find from their iPods, in open, social media information sources. However, learners' critical thinking and, overall, that which they consider to be information/knowledge, is not necessarily fully developed; instead, it is precisely in regards to this matter that they need guidance and counselling. Students should be provided with an idea about what matters they should focus on and what is advisable for them to know and understand.

The task of the teacher is to mediate and to orientate the activities between the two aforementioned ways of thinking (mindsets 1 and 2). This is not easy; however, it is much easier to walk to the lessons when one does not need to drag along texts, photocopies, dictionaries, and so forth. Instead, everything that may be required can be found online. It may in fact come as somewhat of a relief for the teacher him/herself to realise that s/he is not required to know everything; instead, s/he can think just as the learners do – no matter what, the answer can probably be found via Google!

From the perspective of a school, the challenge stems from the fact that both of the aforementioned ways of thinking are simultaneously present in the classroom. Most classrooms probably share a number of practices originating from both of these mindsets (Figure 2). The practices are in continuous interaction, with each shaping the other.
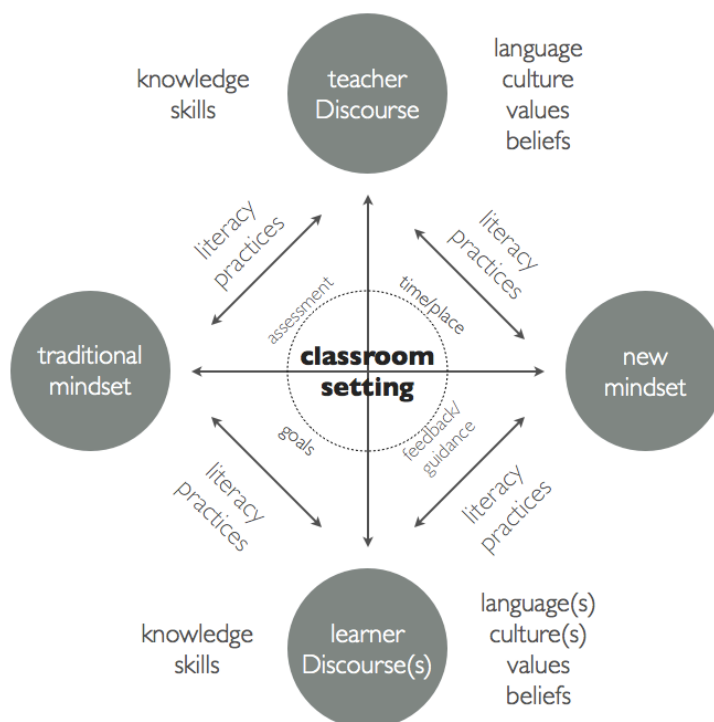
Figure 2. Traditional mindset and new mindset in a classroom setting.

In the figure above, we attempt to illustrate a new learning space in which elements of both ways of thinking are present (mindsets 1 and 2). In bringing together both 1 and 2, a hybrid way of thinking is born, in which characteristics of both ways of thinking can be detected, but which is nonetheless clearly different from either of the two original forms. Both participation and sharing are made possible in this space, in which the learner and the teacher are actors on equal footings. As Figure 2 illustrates, the learning situation is complex, and different kinds of variables are also present in the course at hand.

VII. WHAT KIND OF COURSE DESIGN CAN EFFICIENT LEARNING IN A MULTIMODAL ENVIRONMENT BE SUPPORTED WITH?

In recent times, there has been clear increase in research interest in learning environments and their role in supporting learning processes. Underlying here is the concept of learning by design (see e.g. Kalantzis and Cope 2004, Gee 2005, Healy

2008). According to our perspective, a course design includes contents, feedback-giving and evaluation practices, as well as operational methods and tools.

The Personal Learning Environment (PLE)[1] is one of the most interesting solutions for current education researchers. Attwell (2007: 1) has stated that the issue here is not one of a new programme but rather of a new approach to using technology in learning. We find this an intriguing approach, because attention to the pedagogical aspects is still somewhat scarce even if the amount of technology in schools has steadily increased (Cuban 2001, Taalas 2005). So the new media have not reformed the actual study processes.

The formal learning environment for this course was constructed as a combination of a virtual and a physical space. The Moodi learning environment, developed by the Centre for Applied Language Studies and the Language Centre at the University of Jyväskylä, served as the virtual space. Moodi is used at the University of Jyväskylä primarily in language learning and teacher education courses. The idea underlying the development of Moodi is one of a personal learning environment in which making use of different media and working practices enables different learner's paths, rather than the course content being hierarchically divided and teacher-driven. Instead, the aim is that the learning environment should, if anything, be the learners' own space, in which study-related activities (e.g. student-initiated discussions) have a place of their own.

According to Taalas (2005: 20), a pedagogical design must offer a space for different types of communities, allowing them to participate in negotiations regarding the aims and meanings of the tasks at hand. Such communities also need tools both for constructing their own design and then sharing it.

Taking leave from tradition, we wanted to implement the tasks in such a way that they would not specifically test how well a learner has understood a text, but rather what the learner is able to accomplish after having read the text. The follow-up task after the text had been read was thus primarily intended to offer multi-faceted information about the learner's level and, possibly, any support needs. In this way, each student could be provided with individually tailored and scheduled support (scaffolding).

The course was initiated by a consideration of what the desired teaching would be and in what form it would be recommendable to teach. In this way, the very core content of

the course was at the fore. It was decided that the course would be divided into nine themes, of which two would be left open. The open themes were determined on the basis of current affairs. The final themes were:

1) consumer behaviour

2) musical taste

3) educational exports

4) comic strips

5) blogs

6) information search

7) working life and job-seeking

The current affairs were chosen to be the Finnish winter and climate change. The intention here was that the course contents would be situated in the students' own world, in order that they would be meaningful for them.

Each of the themes was assigned a text or texts and assignments, the focus of which was language in practice, as well as assignments about vocabulary and structures. The structure and vocabulary assignments were intended to offer tools for analysing language adopted in formal and informal situations. Attempts were made to strengthen the sense of community on the course via the discussion forums for each of the themes, which were also intended to direct the learners towards a culture of more equal participation.

The aim was to provide the students with the tools needed to analyse prior learning, to promote their ability to take responsibility for their own learning, and to direct them in benefitting more effectively from affordances facilitated by the language learning environment. The concept of affordance also offers an interesting approach to the planning of learning objects (see Kuk 2003). In this context the concept of affordance is understood in such a way that the design of the course in question provides learners with an opportunity to become better aware of those language elements that are available to them, for example, via different media. In a more concrete sense, this means that the learners were directed towards going beyond the classroom and exploring their environments, and towards discussing with native speakers of Finnish. During the contact teaching lessons, these elements of student-directed exploration were analysed

and their contextual dependency was discussed on the basis of the learners' own observations.
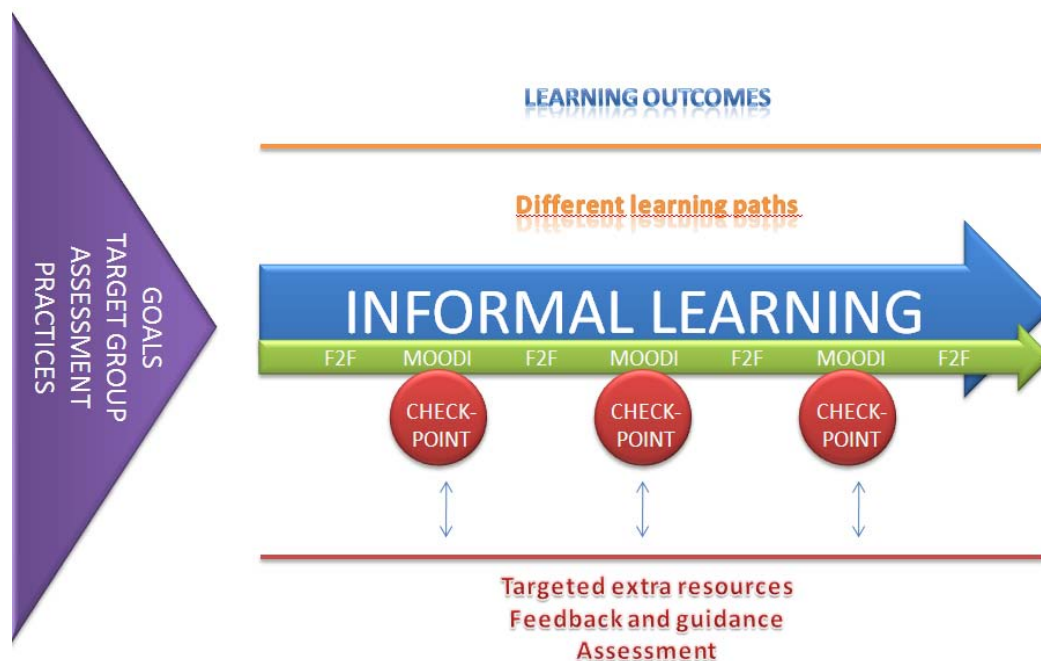

Figure 3. Course design (F2F = Face-to-Face), edited from Taalas (2005).

Definitions of the learners' language skill profiles were made at the beginning of the course, with the aim that the learners themselves would become more aware of their own language proficiency level and development needs. One of the aims of using the Moodi learning environment was to facilitate different learner pathways on the basis of each of the learners' needs.

The definition of the proficiency levels was conducted in accordance with the level descriptions of the Common European Framework of Reference (CEFR). The learners familiarised themselves with these descriptions during the first course meeting and thereafter used their blogs to write about what, in their own opinions, were their development needs regarding their language skills, as well as about the ways in which they could develop these areas. In addition, we asked the learners to describe themselves as readers and to reflect on their relation to texts and reading. With the help of an image describing different types of texts, the learners were challenged to reflect on their own idea of what a text is. In reviewing the answers to this question, the learners'

concepts of what constitutes a text were shown to be very traditional: according to many of them, a text is a written whole consisting of words and sentences.

In addition to written texts, we wanted to focus the learners' attention on other kinds of semiotic systems which, to an increasing extent, connote meanings (Kress and van Leeuwen 1996). Images are not haphazard decorations, rather they are often specifically chosen, and their significance in directing the reading and interpretation process cannot be ignored. In the image task, we asked the learners to choose the best news image related to the theme and then justify their choice in the discussion forum. There were various types of images, and the choices were diverse indeed. The same image was often chosen for various reasons. Among the reasons given were the information offered by the image and the feelings and/or associations it evoked. All in all, the choices were very conscious, and no real problems presented themselves in offering reasons for them.

The open design was intended to facilitate different learner pathways. By 'open design', we mean that it was usually possible to complete the assignments on the basis of one's own interests, in terms of content, but also at different language proficiency levels. In addition, the support and accompanying extra resources were individualised. We attempted to guide the learners towards finding materials that were suitable for them, with the intention of committing them to the idea of over-arching learning outcomes. Checkpoints were used during the course in order that the learners would stop at regular intervals to examine what they had learned up until then, what they still wanted to learn, and with which methods they could achieve their goals.

VIII. WHICH KINDS OF TASKS ARE MEANINGFUL FROM THE PERSPECTIVE OF THE LEARNERS?

On the basis of sociocultural theory, an assignment is defined as an activity that the participants construct when completing a task. The sociocultural approach emphasises the dialogical processes associated with the completion of an assignment (e.g. scaffolding) and the ways in which these affect language use and learning. (Ellis 2000: 193).

Ellis (2000: 199–200) also notes that assignments which lead to negotiations about meaning are efficient from the point of view of learning.

Earlier studies indicate that tasks that promote a learner-centred approach and encourage negotiations about meaning share certain factors. Among these factors, our article highlights the following:

1. tasks without a predefined answer
2. tasks requiring multifaceted working methods
3. tasks in which meaning occupies the prime position
4. tasks directed at a specific goal
5. tasks in which the activity is evaluated on the basis of output
6. tasks connected to the real world
7. tasks with a required information exchange
8. tasks involving a two-way (as opposed to one-way) exchange of information
9. tasks that are not familiar to the interactants
10. tasks involving a human/ethical type of problem
11. tasks without a context (in the sense that the task does not provide contextual support for communication), involving considerable detail.

(statements 3-6, cf. Skehan [1998: 268], statements 7-11 Ellis [2000: 200])

Instead of only focussing on the production of an intelligible output, teaching should offer students the possibility to learn how to act in situations that they might encounter outside of the classroom. Our aim was to increase the learners' awareness of their own reading practices and to become actively aware of the study and free-time literacy events to which different literacy practices are closely attached.

We asked the course participants to keep a blog for the period of one week, using the Moodi learning environment. The intention here was that the students would be able to access each other's blogs and above all else we, as the course teachers, would gain knowledge of what the students read in their free time. To our surprise, we noticed that the participants linked the online texts that they had read to the blogs, e.g. different newspaper articles, links to articles in their own fields, and points of personal interest. As a task, the reading blog fulfilled many of the good task criteria: it did not typically have a predefined outcome. Moreover, the task was connected to the reader's real world and the outcome – links to the texts read by each of the students – which gave the other learners genuinely new information. For their part, the numerous links to online texts

consolidated our original thought regarding the need for dealing with online texts in F2 teaching.

IX. THE SIGNIFICANCE OF THE TASKS

The use of authentic texts in second/foreign language teaching still appears to be a subject for debate (see e.g. Gilmore 2007). Ultimately, the choice of texts depends on what kinds of textual conventions we want the learners to focus on. Nevertheless, we would like to focus attention on another area – that of the authenticity of the activity. Furthermore, rather than authenticity, we would like to address the significance of the activity. In asking whether the learners understand what, and above else, why they study certain things, we can come closer to the aim of significant activity. We illustrate this matter via two examples: a student who has not had any problems in reading seldom understands why reading strategies need to be taught. Similarly, if a student needs to read texts the understanding of which requires some familiarity with the subject matter, which the student does not possess, or, alternatively, is not even interested in the subject, reading may be seen to lack significance. In other words, significance may be learner-based, with his or her life situation, for example, adding significance to a certain subject. Nevertheless, particularly in education, attention should be paid to the fact that signification sometimes requires a pathway including different stages via which the learner becomes committed to understanding the matter at hand.

During the course, texts were examined in many different ways and via many different tasks. In the following, we explore the significance of these tasks from the perspective of the learners. As a set of exemplary tasks, two themes were selected from the aforementioned nine thematic wholes:

> 1) climate change (non-fiction text)
> 2) working life and job-seeking

IX.1. Climatic change

Reading non-fiction texts was practiced with the aid of an online article entitled "Information about climate change". Climate change is the most serious threat of our

time". The article is available in the "C02 report" journal,[2] which is an independent online news publication founded in 2008. The journal reports on news connected to climate change and energy. The long article contains basic information about climate change, images, figures, and, in conclusion, instructions on how the reader can have an effect on climate change. The students began familiarising themselves with the subject via a task in which they completed an online carbon footprint test. Upon completion of the test, the students shared their results by completing a poll with the others and also got to see the size of the other students' carbon footprints. Polls were commonly used in introducing students to modules. Afterwards, the students had to scan through the text and think about under which headings they could find information on

> a) what climate change means
>
> b) what causes it
>
> c) what are its consequences

The answers were written, briefly and in the students' own words, into a chart. For the next stage in this learning assignment, the students chose three images from the article and then told what, in their opinion, the images communicated about climate change. In the vocabulary task, the learners had to build sentences around words separated from the article, for example:

_____ the most serious threat _____

On the Moodi learning platform, the students have the opportunity to see their peers' answers already before they have begun to write their own. On the one hand, this supports the less advanced students in completing the assignment, but it may also encourage students to tell about their personal experiences and spark an interest in unpredictable solutions. For example, one student offers a vision of the consequences of climate change and adds his/her own comment: "There is a great ice-age, just as was the case in Roland Emmerich's disaster movie The Day After Tomorrow".

When the students choose three images from the article and explain their connections to climate change, they complete an assignment in which the answer is not predefined and is, instead, genuinely open. In doing this assignment, the students get to practice using vocabulary related to climate change. They can also present their prior knowledge about the subject from outside of the text, as well as expressing their opinions about climate

change, and thus fulfil one of the criteria of a good task by considering ethical questions.

Moreover, the vocabulary task does not have either correct or incorrect solutions; instead, the students write different kinds of statements around the key words.

	THE MOST SERIOUS THREAT	
Student A: Humans are		to nature and animals
Student B: For the glacier,		is climate change.
Student C: Nuclear power can be/might be		to the environment.
Student D: It is said that climate change is		for people, the planet, and health.
Student E: Terrorism is		to humanity.

Sample 1. Students' statements.

In this way the task enables the students to write about the matters that are significant to them.

IX.2. Working life and job-seeking

Literacy skills associated with working life and employment are vital to students who require guidance in applying for work during their studies – this topic was taken up on the course upon the specific request of the students. In other words, the whole assignment had an explicit connection to the real world. As usual, the set of assignments started with a poll. The students told whether they had been in work and how they had been treated as foreign employees. In this way the students had already formulated a general idea of each other's work experience before the contact teaching sessions. The text used in the assignment was the Employment and Economic Development Office's job search web pages, on which the students searched for summer work according to criteria suitable to themselves. The students were not given any direct links but, instead, they navigated the Finnish web pages, looking for new information. Afterwards, the students had to complete the form below:

	What does the job advertisement state...	Write here what you would say about the matter in your application
About the salary?		
About the period of employment? (duration)		
About the working hours?		
About work experience?		
About education?		

Sample 2. Students' form.

In a continuation assignment, the students completed a profession choice task on the Office's web pages. They were required to first read and then answer 72 questions, the intention of which was to suggest a few professions suited to them. After this, they commented on the professions that the programme had suggested for them. One student commented, for example:

> Subject teacher (history, languages, home economics, sport, mathematics, music, industrial arts, crafts, or mother tongue), class teacher, driving instructor – nice that I've chosen the right profession. In other words, according to the AVO test, I could become whatever kind of teacher. Certainly not a music teacher or driving instructor, but all of the others are possibilities. I'll hopefully become a class teacher. I like working with children and with different types of people. I'm calm and a good listener. But I also like talking. This usually works out better with children. I think that it'd be fun with them at school, because children are nice. Of course, there are also lots of problems, but I'm of the opinion that there's a solution to everything.

In this assignment the focus is on significance and not on linguistic structures. The task is directed at a specific goal, i.e. towards the student being prepared for job application. The learners' work is then evaluated on the basis of how they react to the job application and how they comment on the profession that the programme proposes for them; in other words, it is grounded in the learners' own output. In addition, the task is connected to the real world: it increases the students' readiness for applying for jobs. As such, the set of assignments is significant for the learners and meets the aforementioned criteria of a good task.

IX.3. New literacies in the assigments

The new literacy skills can be examined from two perspectives in the assignments. First and foremost, in many cases the text at hand did not take the form of a traditional, written text; instead, it was, for example, an image, comic/cartoon, video, voice recording, or a hypertext. Secondly, the work on the texts addresses activities such as information searches and textual intervention. Videos were also used to aid the text comprehension: for example, an interview with an author might have opened up alternative perspectives on a text.

IX.4. Blogs

A blog is a form of participatory publishing, which is clearly connected to the media culture revolution. Anyone at all can start to write a blog about whichever subject he/she likes, and do so either in his/her own name or under a pseudonym. An abundance of blogs have appeared in recent years, about different themes (e.g. fashion, music) and hobbies (e.g. reading, equestrianism). In addition, autobiographical, diary-type and social (e.g. written by politicians) blogs have maintained a presence in the 'blogosphere'. Some of the newcomers to the scene are the different types of video and image blogs. Similarly, the limits between specific forms and formats are blurred in such a way that blog texts have also been published in book form. (More specifically on blogs in e.g. Lankshear and Knobel 2006.)

We wanted to incorporate blogs into the textual content of our course also because of their content-related and linguistic diversity. For the blog tasks, we asked the students to familiarise themselves over the course of a week with some Finnish blogs that they found interesting. In other words, the students got the opportunity to choose the blogs themselves. We did, however, provide some guidance regarding finding blogs in thematic lists/directories. After the familiarisation period, the task was to answer some questions relating to the blogs. These questions concerned the blogs' themes, style, content, and visual aspects. The answers then provided the bases for the conversations held during the contact teaching sessions, in which each student got the opportunity to present the blogs that they had read. To our surprise, it became apparent that only a few

of the students had previously read blogs. In the blog-related vocabulary tasks, the learners analysed, among other things, the productivity of coining verbs used in social media (to tweet -> tweetata, to facebook -> facebookata).

IX.5. Text types and intervention

The blurring of boundaries between different text types is a central phenomenon in the textual world of the 2000s. It is precisely for this reason that we wanted to see how the learners dealt with the relationship between traditional and newer text types. The task was realised in the form of a textual intervention, in which the learners were split into three groups, with each group given its own text to discuss. The first text was a piece of radio news written in the form of an online text, which was also available as an audio file. The text had to be developed into a letter to the editor in a youth magazine. The second text was a discussion thread from an Internet forum, and this had to be changed into a piece of news. The third text was a letter to the editor published in a newspaper, which had to be transformed into an online discussion text.

The group work was conducted on the Etherpad platform, which allowed each of the groups' members to edit a joint text in real time and in a different colour. A chat feature was also available in the programme, and this was used by the writers to engage in a meta-discussion process. The intervention task proved to be a challenge. This was, in part, due to the word-processing software, which was new to all of the students. Moreover, the specificities of the text types and switching between them were also seen to bring about difficulties. Negotiation was also required regarding the content and aims of the tasks at hand. With enough guidance, the text editing succeeded, and, in the end, the changes made in the texts were discussed in class. The most significant changes were made regarding language (spoken–written language, signs, smileys), but structural changes were also made in the texts. For example, the group responsible for developing the letter to the editor into an Internet discussion text clearly attempted to break with the singular argumentative voice of the original, transforming it into a multi-voiced conversation.

IX.6. Information search

In addition to the new texts, the focus was also on textual activities. One core activity is searching for information, which is not quite the same thing in the context of a second language as in that of a mother tongue. How do learners find the information they need on Finnish websites? What kinds of skills does a learner need in order to be able to navigate these sites? Particularly with novice learners, such reading strategies as scanning and skimming play an important role in helping the learner to find the essential information even in long and complex texts. But can strategies for information searching be taught to L2 learners? If they can, then how and, above all else, is it even necessary? We decided to elucidate on this matter.

In one round of questions, we asked the learners for what purpose they use search engines. The most commonly stated uses were 1) searching for study-related information, 2) the need to find a quick answer to something, 3) looking for items of news. In relation to their studies, the students cited books as being the most common sources of information, after which came search engines and e-journals from their own fields. In their free time, however, search engines were cited as the most important tools for information retrieval; with different kinds of online resources, which they directly accessed without the need for a search, being cited as the second-most important.

In the information search task, the students had to look for information about sleep as a resource (cf. Kiili et al. 2008). In selecting the subject, we went over many options before settling on this because it was a suitably abstract subject. The Google search does not yield results with the exact phrase. In other words, the learner has to break down the subject into smaller pieces: what is meant by the word resource, and what about sleep as a resource? The type of knowledge that a learner needs is determined by his or her individual conceptions and preconceptions about the subject. In other words, the end result in this kind of a task is very open. Precisely because students may come to a specific conclusion by following very different pathways, we wanted to phase the task in such a way that these pathways, or at least certain points of reference, would become visible. This occurred via the implementation of pauses between the phases, during which the learners had to stop and communicate what they intended to do next, and why. The pauses were organised as follows:

1) List the search terms that you intend to use to look for information

2) List the web pages that you have chosen and explain what makes them good

3) Become more closely acquainted with the pages and then report on some details: who publishes the site, what is the appearance of the pages like, is it easy to navigate the pages?

The results of the first stage were mostly as expected. The searches were performed with the inflected forms of the Finnish word uni (meaning 'sleep'), e.g. unen, unta, unet; with its synonyms (e.g. lepo, nukkuminen, meaning 'rest', 'sleeping'), and with different combinations of the elements in the original phrase (e.g. uni voimavarana/ voimavarana uni). The first part of the compound voima+vara was also used separately as a search term, which demonstrated strong deductive skills in linguistics. In addition, other words were used as search terms; for example, terveys, elämäntavat, liikunta and psyyke (health, way of life, sport, and psyche), which demonstrated the learners' skills to conjoin related concepts to the theme. Of interest, here, is the fact that one student's search words included an academic article and research finding, demonstrating the learner's attempts to find scientific information. On the whole, the search terms were very informative insofar as they revealed why some students' sources of information differed so much from those of the others. Indeed, the sources varied between leisure portals and scientific articles published by universities.

X. STUDENT FEEDBACK

After the planning and implementation stages of design-based research, focus is on local-level impact assessment, on the basis of which a broader, general-level evaluation is conducted. The role of the participants (subjects) is also seen as active in design-based research. In the current research, detailed feedback was collected from the participating students for the purpose of developing the Texts in Finnish 2 course: they completed a broad-ranging feedback form, from which we then selected a few key items to investigate.

The students were asked, among other things, whether they had used other web-based learning environments during their studies. Contrary to our expectations regarding the answers, it became apparent that half of the students had only seldom used web-based

learning environments. Hence, we cannot always expect that students would be on the better side of the "digital divide" and would master the use of new learning environments.

The students also gave feedback on the supervision offered during the course. Not all of the assignments uploaded to the net by the L2 students were looked over in detail; the primary and most important focus of the course was not on the form of language used but, instead, on developing textual comprehension and understanding the different functions of language. Feedback on the tasks completed by the students was usually given during the contact teaching sessions, during which attention was paid to a specific problem that was clearly common to all of the group members or, alternatively, a particularly good outcome. According to the collected feedback, however, the students did not deem this as sufficient and would have hoped to receive more specific feedback on their answers/texts. Due to the sheer volume of the texts produced by the students during the course, and the limited time available to the teachers, it is impossible to comment on all of the students' work. In the future, the course design should include "check points", at which students receive feedback on their output, as agreed in advance.

Generally speaking, the students gave positive feedback about the course assignments – they regarded the text selection on the course as successful, the texts as suitably challenging, and the questions relating to the texts as relevant. The overall structure of the course assignments – the poll section, the text and question section, the form and meaning section, and the words section – was also regarded as successful. When the students were asked whether they would make use of the course materials at a later date, there was a degree of uncertainty in their answers. It is interesting to consider the ways in which the students conceptualise 'course material' – does it only refer to material produced by the teacher, or do they also regard the material they themselves have uploaded to the learning environment as learning material? Indeed, one of the key ideas behind the course was that the students would be able to make use of the course material after the course, for example, in looking for jobs.

The following things were mentioned by the students as having provided support in completing the assignments: dictionaries (4 mentions), online dictionaries (3 mentions),

Google, grammars, web links, and material from previous courses. Some students had also used academic articles, online journals, and doctoral dissertations. The problem with using dictionaries arises from the lack of context and the fact that some of the dictionaries used by the students were hopelessly outdated. On a text course, the idea is actually to prompt students to also read texts other than those handled on the course.

When the students were asked what they had learned during the course, they responded that they had learned a lot about matters pertaining to the use of language. This complied with the aims of the course. Furthermore, they mentioned that they had received a lot of useful information regarding different topics, for example, applying for a job. They had learned how to search for information and become aware of different text types. One of the students mentioned that the most important thing he had learned was the observation that texts occupy a major role in his own learning process.

In commenting on the working methods used on the course, some of the students drew attention to the fact that, during the contact teaching sessions, there were learners of different levels in the groups. In their opinion, the task at hand would have been completed better if the groups had consisted of learners of the same level. Situating students of different levels in the same group was, however, a deliberate act, with the intention of promoting the learners' well-timed support to each other (scaffolding).

On the whole, the students gave the course good or extremely good feedback. They noted that the course was not time- and space-dependent, as it could be completed at home, with not even trips abroad preventing or disrupting course participation. One student noted: "It didn't seem so much like university and was a little nicer."

XI. HOW DID THE USE OF THE ONLINE LEARNING ENVIRONMENT CHANGE THE LEARNING PROCESS?

During the course, new literacies became a clearly more visible part of the learning activities. One example of this is the Internet, which became the key media for learning. The different types of text offered via the Internet and the different ways of working with them made the course content more multifaceted. The learners were guided towards making use of, for example, Google as a corpus, and they did indeed quickly adopt search engines as a resource. Among other things, they commented on the ways in

which they had made use of discussion forums and blogs in studying new words and their meanings.

The multimodal design of the course was intended to achieve controlled flexibility. This flexibility was indeed realised regarding the time, place, content, and language proficiency level. Hence the students were able to relatively freely affect their own schedules in completing the assignments. The only temporal constraints imposed on the students stemmed from the contact teaching sessions: the assignments had to be completed before the sessions. This nonetheless raised a few problems, as some students returned their assignments just before the start of the sessions. Due to the fact that the content of the contact sessions was structured around the work uploaded by the students to the learning environment, this usually resulted in the teacher having to hurriedly go over the last few replies before going to teach, and making any necessary changes to the content. In their feedback, the students remarked on having spent many hours completing each of the tasks. One explanation for the late handing in of the tasks might be the fact that draft-stage work cannot be saved in Moodi. Once a task had been responded to, the response could no longer be altered. The students were also granted freedom regarding space. The contact teaching sessions committed the students to being in a specific place once a week, but the assignments could be completed wherever there were suitable technological resources. In principle, the contact teaching sessions also allowed a certain degree of flexibility, insofar as each of the students was able to see and learn from the others' answers in Moodi. After all, the learners did not make much use of this feature. With regards to the content, the open nature of the assignments enabled a flexible approach. Particularly in tasks related to language knowledge, the learners could write about subjects that they found meaningful. Flexibility in terms of language proficiency level was yet the most significant feature. The assignments completed via the online learning environment allowed the students to demonstrate their language skills almost without limits. Moreover, even the less advanced students were able to shine and demonstrate the kind of expertise that might not have otherwise come to light. This was essential in relation to both evaluation and supervision. Nevertheless, on the basis of this research, the need to develop new types of guidance, feedback giving, and assessment methods was identified, in order to take into account the character of working in a multimodal environment. (See also Figure 2.)

The learning environment opened up the learning process to the world outside of the academic setting, and vice-versa.

XII. SUMMARY

In this article we have discussed the benefits and challenges of teaching L2 reading comprehension in a multimodal learning environment, from the perspective of course design. One of the central outcomes of this study is the design model of a multimodal course presented in Figure 3. When learners are directed towards going beyond the classroom and to utilise language used in informal settings as a learning resource, it is vital that support is provided. Therefore, checkpoints are essential; learners need to pause at crucial points in the course to revisit their learning objectives and to rethink the ways in which they accomplish them. In this particular case, the face-to-face lessons functioned as secondary level checkpoints.

In addition, our aim was to find out what kinds of assignments are meaningful from the learner's perspective. Our data reveals that L2 learners read mainly for functional purposes (e.g. work-related texts) and the informal textual landscape is primarily digital. It is important, then, that tasks assigned to students meet these needs. It seems that motivation is related to the meaningfulness of the task. In some cases, it might make more sense that the teacher makes decisions on the materials chosen, and in such cases it is important that attention is paid to designing activity paths that make the task meaningful to a learner.

Our third aim concerned the added value that multimodality brings to a learning situation. As we have argued, multimodality introduces a great deal of new elements to a learning setting. It is, however, important to note that multimodal course design allows learners to take different paths, and in doing so, choose the resources and tools that promote one's own learning. Moreover, the multimodal course design allows flexibility in terms of time, place and language proficiency level.

In comparison to traditional reading comprehension courses, it seems that L2 learners benefit from reading digital texts and using a web-based learning platform. The digital environment enabled the learners to read relevant texts and to actively learn through texts and assignments.

However, the course feedback did not support the view that students would automatically be on the "better" side of the digital divide. Instead, they do need assistance in order to understand the new learning mindsets and especially learner autonomy.

XIII. CONCLUSIONS

Reading is in a transition state. The way of reading and understanding reading is changing. The reader has previously been thought to be alone in the action of reading. Now the reader is seldom alone: texts can be read and commented on simultaneously, and even in such a way that all of the readers are aware of this. Reading is becoming an online activity, and the ways in which we read are transforming from linear to inter-textual. The concept of a text has also changed – texts no longer exist merely in printed form; instead, a text is constituted by every social act associated with reading. Multimodality further blurs the boundaries of individual texts.

The change in the very nature of reading poses a wealth of challenges for L2 literacy pedagogy. It requires us to consider the criteria of a good task from a new perspective, for example, that of how to create a task that genuinely encourages interaction. The learners also have easier access to texts that are meaningful for them – and this blurs the roles of teacher and learner.

Another interesting aspect is that the accessibility of texts has changed. No matter where we are, the repertoire of texts available to language learners is almost unlimited. It is possible to define the Internet as a language environment. This puts the concepts of second language and foreign language in a whole new light, as they have traditionally been defined by the surrounding language environment.

In this article, we have examined new multimodal literacies from the perspective of teaching textual comprehension. The roles of the teacher and student are in a state of continuous change as new, multimodal learning environments are being adopted. Nonetheless, the change is a process and not an individual event. The expanding of learning spaces onto the web is just the first step in the pedagogical shift in second language teaching. Negotiating new working methods and objectives therein is vital.

Notes

[1] The concept of PLE in higher education, see Laakkonen (forthcoming).

[2] CO2-raportti Online journal. 9 April 2010 <http://www.co2-raportti.fi/index.php?page=ilmastonmuutos>

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