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DiaLogos:

Learning Language and Learning *through* Language in an IT environment

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This chapter reports on an internet-based sister class project between students at the primary school level in Canada and Greece that was carried out for two school years. The objective of the project was for the students to learn language: Each sister class pair had opposite target languages. The students in Greece were learning English as a foreign language and the students in Canada were learning Greek as a second language. Although the primary focus of the project was language, *what* the students were learning through language and *how* language was learned was of great importance. What was being learned dealt with their own identities and experiences in collaboration with others and *how* it was being learned dealt with a collaborative process of critical inquiry (Wells 1999, Cummins 2000).

Introduction

In his book “Dialogic Inquiry” Wells (1999), relying greatly on Vygotsky’s and Halliday’s concepts, makes the statement that the “very same conversations that provide the opportunity to learn language also provide the opportunity to learn through language (Wells 1999:51). In this perspective, learning language and learning through language are viewed as two interrelated processes that are supposed to be jointly pursued throughout the curriculum. In curricular units, for example, that deal with subject matters other than language, by using the language to learn a specific subject, the students are taught not only the content of the subject but also the appropriate discourse to it. This is not the same as eventually getting accustomed to this discourse with no particular reference to it. The eventual but not intended familiarity with a language mode or discourse is inherent in any kind of instruction or communication. Learning about the relevant discourse through learning a subject matter, however, involves conscious attention to language use. Nevertheless, Wells’ view of learning and learning through language does not necessarily apply in the context of traditional schooling. In the general context of traditional schooling it seems that the curriculum to a great extent is organised on a basis of dichotomies and

independent units rather than on complementarity of subject matters. This logic affects language considerably. Where language itself is the objective of instruction, it becomes the subject matter and is rarely used as a medium for other learning objectives. Language learning then becomes a distinct curricular unit that is (independent how highly it is placed in the curricular scale) isolated from other curricular units. Similarly, the use of language as a medium of instruction in any curricular unit rarely leads to a conscious engagement in the relevant discourse or language mode. Subsequent to this dichotomy in language use (language either as a medium of instruction or as a target subject), there are a series of other dichotomies like learning and use of one language only and specifically, the standard mode of this language. The above dichotomies, no matter how artificial they are, might apply in a context of language uniformity. In a context of language diversity as well as in IT learning environments, though, dichotomies become problematic. This is easily visible in the context of second and foreign language learning.

In foreign language learning, the object, obviously, is to teach/learn the target language. This is often done at the expense of the content through which it is taught. Text, oral and written, becomes the medium through which language is learned with no particular emphasis given to *what* is being taught. In DiaLogos, the target languages, English and Greek were taught; however, emphasis was given to *what* was being taught and *how* it was being taught. *What* was being taught dealt with utilising the identities and experiences of the participants and placing emphasis on the content of the texts. *How* it was learned dealt with collaborative critical inquiry (Wells 1999, Cummins 2000) and transformative pedagogy (Cummins 2000).

A. DiaLogos (<http://www.rhodes.aegean.gr/gr/progra/dialogos>)¹

Using as an example the internet-based sister-class network between Greece and Canada, DiaLogos (designed for second and foreign language learning / teaching), we will examine how far it was possible to replace the dichotomies by the complementarity of different languages, different modes, diverse proficiency levels, diverse cultural backgrounds and identities. As DiaLogos was a sister class project, the learning environments on each side of the connections were diverse; however, this

¹The Canadian side organized another site called Metro-polis (<http://www.metro-polis.com>). Both sites were used but we will concentrate here on DiaLogos.

diversity was also evident in each individual class. Therefore, the diversity of the identities and experiences of the students became the basis of learning. This same diversity was the subject matter or medium through which the target languages were learned. Through a collaborative process of critical inquiry (Wells 1999, Cummins 2000) the diversity of the languages and identities/experiences of the participants was utilised in learning.

Our main objective was both that our students learn language by using it and use language while learning it. Learning in this sense refers rather to a process of making meaning or understanding than to a certain amount of knowledge (Wells 1986, 1999). The student population on both sides was diverse in that it included native speakers of English, native speakers of Greek and bilingual students in languages other than English and Greek, each having a different relationship to the target language. Since Rhodes is an area in Greece with a high percentage of culturally mixed families (Skourtou 1985), we had students who were native speakers of English grouped together with students with language competence in various degrees or even with little or no command of English. This is so because in the context of the Greek curriculum, the proficiency levels in foreign language learning in the primary school (i.e. the environment where DiaLogos was implemented) are not organised according to actual language competence but according to grade (Skourtou & Kourtis Kazoullis 2000). On the Canadian side, in the Toronto area, the diversity was caused by the fact that though of Greek origin, many students had limited experience with using Greek as a second language at home or elsewhere. The common feature between both sides was the motivation to learn each other's language. On the Greek side, English was taught as a foreign language as part of the curriculum in the primary school, while on the Canadian side, Greek was taught as a second language to students of Greek origin in classes mainly after school. DiaLogos provided an environment that allowed the simultaneous teaching / learning of English as a foreign language on the Greek side and Greek as a second language on the Canadian side.

B. Theoretical principles

Looking back at DiaLogos after a year of implementation as a pilot program, the two years of implementation of the main program and the accumulated outcomes, there are a few central theoretical issues that seem to be of pedagogical significance in the emerging IT-landscape in the schools. DiaLogos was organised largely on Cummins'

(1996, 2000, 2000a) concepts about bilingualism, learning in linguistically diverse contexts, academic language, learning through internet-based networks and transformative pedagogy. Complementarily, we worked with Wells' (1986, 1999) theoretical principles about language, learning through language, contextual support, and dialogic inquiry.

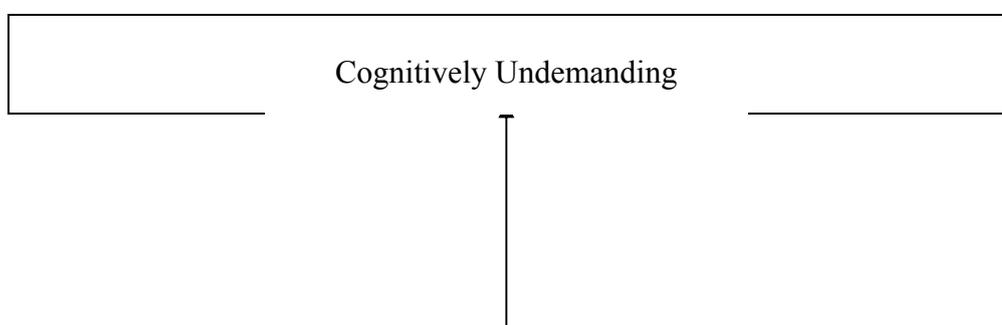
Here we will concentrate our attention, on the one side to Cummins' theoretical framework of academic language learning (Cummins 2000a) and, on the other side to Wells' theoretical framework about the process of knowing and the centrality of meaning making or understanding in this. There are many connecting points between the concepts, but for matters of the ability to implement them in our project, it is the *contextualizing* of learning, the provided *support* and the significance given to *written texts* that we will turn to.

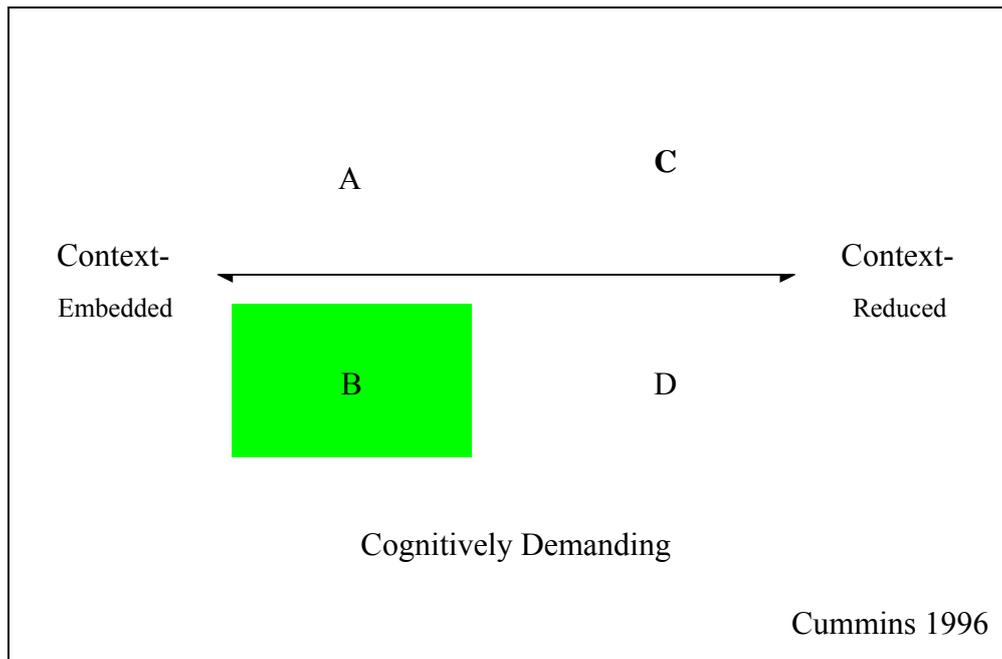
As regards Cummins, there are two interrelated frameworks we have employed in DiaLogos: (a) "The range of contextual support and degree of cognitive involvement in communicative activities" (Cummins 1996). This framework relates academic task, language of instruction and contextual support and (b) the recently developed framework that refers to academic language learning in a technology supported learning environment (Cummins 2000, 2000a).

As regards Wells, we relied on his synthesis of Vygotsky's (1978) and Halliday's (1978, 1993) concepts. According to this, the priority is given to the formation of a community of 'dialogic inquiry' in the classroom that enables students and teachers to work collaboratively in the context of each student's 'zone of proximal development' (zpd) using language and 'talking about texts'.

In Cummins' first framework we have the two intersecting axes one related to the degree of difficulty of the task and the other to the degree of contextual support provided to help students understand the task and solve it.

Figure 1: The range of contextual support and degree of cognitive involvement in communicative activities





These intersecting axis create interspaces where it becomes obvious that by proceeding in the school grades, the students face more complicated tasks and get less support in managing them. Furthermore, the contextual support has to do with the degree of allowed extralinguistic cues as opposed to the abstract and synoptic mode of academic language. The way traditional schooling employs the constructs of knowledge and language follows a pattern of a linear forwarding process: f

- From essential and everyday knowledge to abstract academic expertise,
- from cognitively undemanding tasks to cognitively demanding tasks,
- from contextualized language use to decontextualized academic language,
- from maximum contextual support to no contextual support.

It seems that traditional schooling puts decontextualized knowledge to the highest point of its priority scale.

In a linguistically uniform context this linearity might be more or less operational. In a linguistically diverse context though the teacher often faces the dilemma of how to proceed with a second language learner who, because of limited command of the academic form of the language of instruction, could not solve a task he/she would otherwise be able to handle. In the Greek context, the teacher with such a dilemma seems to have the option either to lower the demand of cognitive engagement by

solving the task or to keep the grade of difficulty as it is, offering additional contextual support in order to make the task comprehensible. Choosing the former, the teacher pushes the student below his/her cognitive maturity. Choosing the latter, the teacher retains the cognitively challenging character of the task, providing at the same time the scaffolding (linguistically or not) to it. This framework has a double function: on the one hand, it explains the way learning is organised in traditional schooling; on the other hand, it shows the options teachers have to help their linguistically diverse students catch up academically with their peers. In terms of Vygotsky and Wells, this framework shows the possibilities of working within one's zpd. In the long run though, this framework turns traditional schooling "up side down" because it gives contextualized learning the priority *throughout* the curriculum and not only as a starting point.

Recently, Cummins has elaborated a framework for second language learning in the context of internet-based sister class networks. Looking at the outer features of this framework, we see that the central component is school classes in geographically remote areas that they are organised in a network through the Internet. In this sense, it is not the mere employment of computers but the possibilities for networking that are of pedagogical significance (Cummins & Sayers 1995). Looking at the inner components of the same framework, we realise the importance that is given to the notion of meaning. Cummins builds upon the notion of 'comprehensible input' (Krashen 1985), bringing it beyond literal comprehension. Texts become - not only comprehensible - but also meaningful. This happens when the students are encouraged to activate their prior knowledge, i.e. to relate the meaning of the text to their actual experience, share this with peers and teachers within 'a collaborative process of critical inquiry' and proceed from the initial 'experiential phase, to literal, to personal, to critical and eventually to the creative phase'. In this process what has been learned becomes 'action' and takes the shape of a text. This brings us to the notion of 'text' and its significance in our project. Going back to Halliday, text is here understood as anything written or spoken that entails meaning. Extending this, we include in it anything 'meaningful' the students produce. Cummins speaks of 'identity investment' and of 'identity texts'. An identity text according to him is a text in any form (e.g. written, spoken, visual, musical) that the students can identify themselves with (Skourtou in press). Going back to Cummins' first framework, working with

texts could be considered as ‘a form of problem solving’ in the way Wells also states (Wells 1999:279). This means that in order to make texts comprehensible for linguistically diverse students, the learning environment should be organised in terms of quadrant B of the framework (See figure 1).

In the second framework there is a strong initial focus on meaning of the language, followed by a focus on the form of the language that lead to a focus on using the language creatively, i.e. producing new texts. The framework does not operate in vacuum but within the interpersonal space between the students and their teacher. It is within this space that the ‘process of knowing’ occurs (in Wells’ words) or ‘knowledge is generated’ (in Cummins’ words). It is within this ‘interpersonal space’ that Cummins sees the potential of working within one’s zpd (Cummins 1996). In this perspective, knowledge becomes the outcome of a process of identities in negotiation with each other. As Cummins states, there is a reciprocal relationship between cognitive engagement and identity investment’ (Cummins 2000a:42). This framework functions well in an electronic learning environment. As regards the students, the framework aims at maximising both ‘cognitive engagement’ and ‘identity investment’.

In focusing on language, Cummins suggests that teaching the formal features of the target language should be part of an extensive investigation into language and into its actual use in different contexts, including cross-lingual comparison. Finally, in focusing on use of the language, Cummins emphasises that generating new knowledge includes the production of texts or artistic displays for an ‘authentic audience’ that encourages ‘two-way communication’ and reflection on social realities.

We applied the framework starting with *focusing on language use*. We extended the notion of ‘use’ to encompass the notion ‘domain of language use’. Starting with language use, we tried to create a domain where the use of language was meaningful to the students.

The use of texts in DiaLogos

According to Wells, it is mainly the work on and with written texts that give the students the opportunity to construct meaning. He uses analogies and metaphors to

emphasise the central importance of texts, referring mainly to written ones. For Wells, texts represent:

- ‘thinking devices’,
- ‘artifacts’, in the sense that they can be the outcomes of a learning process,
- ‘tools’, in the sense that they can be used as means in producing new texts;
- ‘improvable objects’, in the sense that they are not completed untouchable objects, but that they are constantly under construction and the reader makes his / her own interpretations and suggestions.

Because they represent all the above, texts do not only have a communicative function but also an archival and an instructional one. Specifically, “meaning is made in constructing and interpreting of texts and this involves the interplay of different components of meaning – interpersonal, textual, logical, as well as experiential” (Wells 1999:33).

There are a few points in this statement that we should turn our attention to:

- Texts represent the resource for meaning,
- Interpreting texts (i.e. by reading) or constructing texts (i.e. by writing) does not merely rely on linguistic (i.e. textual) components,
- Interpersonal and experiential components have to be activated in order to construct meaning.

The above features do not necessarily apply in the context of traditional schooling. By pursuing the maximum possible decontextualisation of knowledge, traditional schooling reserves for both interpersonal and experiential components of meaning merely a starting point in the academic development of students. In the higher school grades these components play a rather peripheral supporting function. This is understandable in relation to the significant distinction between spoken and written mode, between everyday knowledge and scientific expertise in the traditional schooling. In a linguistically diverse learning environment, however, in order to activate the interpersonal and experiential components of meaning, the students inevitably employ more than the standard mode, often a language other than the school language or cultural everyday knowledge, unknown in the school context.

Looking back to Cummins’ framework, we realise that it is exactly these components that are central to the construction of meaning in a linguistically diverse learning environment. It is the interpersonal relationship between the teacher and his / her students that allows for the former experience of the students to be brought into the knowing process. How else could a text be meaningful to linguistically diverse students but through connecting it to their own experiences? And how could linguistically diverse students refer to these experiences if they do not feel secure in their relationship to their teacher?

Building bridges

In reading both Cummins and Wells one might have the impression that they pay less attention to the role of oral speech in their concepts. To our understanding, the point that they make is that both consider academic language as the dominant language mode of the school. This mode is to be found mainly in written texts, i.e. in books. They both stress the importance of making meaning as the first condition for learning. Wells, relying mainly on Vygotsky and Halliday, emphasizes that understanding or making meaning should be the objective of an ongoing knowing process. It is like starting with meaning and continuing with understanding. Cummins, on the other hand, starts with the importance of making input comprehensible (relying mainly on Krashen 1985) and takes this comprehension a step further than literal comprehension when he refers to ‘focus on meaning’. Cummins refers specifically to linguistically diverse students; Wells refers generally to all students. Both rely on Vygotsky when they stress the importance of creating the conditions in the classroom for working within the students’ ‘zone of proximal development’. Finally, both stress the notion of ‘inquiry’. Wells calls it ‘dialogic inquiry’; Cummins calls it ‘critical inquiry’. In both cases, the context for inquiry is offered exclusively by the human relationships in the classroom. As regards the relationship between written and oral modes of language, Wells is very clear when he refers to the necessity of ‘building bridges between ways of knowing’ (Wells 1999:147): there is no single route for understanding. Understanding can be achieved only through a combination of language modes, of discourses and ways of making meaning. A community of dialogic inquiry offers its members multiple opportunities to engage in diverse ways of making meaning. Cummins refers to the same thing when he stresses the importance of creating the conditions that would allow linguistically diverse students to ‘activate their prior knowledge’. This prior knowledge refers both to the first language as well as to any kind of everyday or academic cultural knowledge they bring from their homes.

We employed the above points in DiaLogos in a way that would allow:

- use of both languages
- use of different modes of language
- Contextual support from many resources
- Use of texts as ‘improvable objects’ throughout the activities but also after an activity was completed
- Talk about texts
- Combination of everyday and academic knowledge
- Combination of cultural and school knowledge.

In following section we describe a specific activity from DiaLogos in order to make the points discussed above clear.

C. The Dance of the Ostriches: An Activity Designed to Foster Sister Class Collaboration and Creative Expression

During DiaLogos' implementation a number of activities were carried out. The example we are giving here has to do with comprehending and jointly constructing a literary text. The introduction of an unpublished children's story written by a well-known writer in Greece, Evgenios Trivizas, was circulated via the internet to the sister classes with instructions as to how the story could be continued by the participants. The story dealt with a grouchy man who sent away different animals who came to his home for protection. Thus, there was an element of dialogue repetition each time a new animal came into the story. This repetition helped students construct the plot of the story by basing new dialogue formation on old ones. There was also a problem to be solved. Finding an ending meant finding ways of negotiation between the man and the animals and finding a joint ending means negotiation between groups of students from both sister classes. The introduction of the story was in Greek (as it was originally written) and an English version was published on the DiaLogos web page. The objective was that the students could continue the introduction of the story in their target language but had to collaborate with members of their sister class on a joint ending. The students were free to use their first language when needed – or could even use both languages in the same text.

Learning language and learning through language

As stated in the introduction of this chapter, learning language can be combined with learning through language (Wells 1999). In the activity described, the students were creating literature in their target language. The act of using language in a creative manner served as a basis for learning language. The students had to find ways in which to make meaning, according to how they wanted their story develop. Thus, learning the language was an active and creative process that was dictated by use. What the students wanted to use was what they had to learn. In the same sense, the students had to comprehend the texts of others and jointly decide on an ending to the story. This involved negotiation of meaning. Students were thus learning language through what they themselves, in collaboration with others, were creating. The language diversity in the different learning environments served here complementarily as each side was able to complement the knowledge of the other (i.e. each side had different target languages and different knowledge about different environments, experiences, identities, etc. to contribute).

Identities and Experiences

The reciprocal relationship between cognitive engagement and identity investment that Cummins (2000a) refers to was evident in the activity. The activity was cognitively demanding, but at the same time, the story was based on the identities of the participants and their own experiences. The task was cognitively demanding enough in the students' first language as creative writing was something the students were not very familiar with. In the target language, the task was even more cognitively demanding. However, the element of identity investment served to facilitate cognitive engagement. The students could base what they were learning on what they already knew about themselves and their own environments. This utilization of different identities and experiences lead to a learning environment where diversity was a tool rather than an obstacle. The information, therefore, that one side of the sister class connection had, had to be shared with the opposite side. This served as support for the sister class.

Providing Support

Based on quadrant B of Cummins' framework dealing with the range of contextual support and the degree of cognitive involvement in communicative activities, cognitively demanding tasks were complemented by a system of support. In this particular activity, support was provided in a variety of ways:

a) Support provided by the members of each group

Each class in Greece was divided into smaller units of two or three students who jointly worked on the activity. In the traditional Greek school setting, collaboration of this sort was something new and unfamiliar to the students. This arrangement served as support for the students (who were at different levels in reference to target language knowledge), however, also posed difficulties in the beginning as students were not familiar with this type of negotiation and collaboration.

b) Support provided by the sister class

As the students learned how to work collaboratively in their own group and in their own class, they learned how to collaborate with a sister class in a different and far way environment. The support provided by the sister class was of

fundamental importance as there were things that the sister class did not know and the knowledge of each side complemented the other. This knowledge dealt with the target language, identities, experiences, etc.

c) Support provided by an external expert

An external expert who gave suggestions and provided positive feedback gave the students extra support in completing the task.

d) Support through electronic texts

The students were given support in writing the story through electronic texts that had prompts. The prompts dealt with: a) the actual authoring of the story, i.e. suggestions on how the story could be written, and b) assistance in language use, i.e. explanations/translations of unknown words. These prompts were activated when the students moved the cursor over the unknown word. With the movement of the cursor a “bubble” appeared sometimes providing the support and other times providing suggestions to the students to find the answer to their questions elsewhere: a) in the text, b) by comparing the word in the target language to his/her own language, etc. For example, when the students asked for information about the word “story”, they were asked to think about what the word sounded like in Greek. The Greek word for story is “istoria”. The high frequency of Greek roots in English words facilitated learning but also prompted students to utilize their prior knowledge, i.e. knowledge of their own language.

e) Support provided through explicit directions

Explicit directions in story writing helped to demystify this genre. Students had read stories or heard stories many times before, however, when asked to write their own story, i.e. text, they had difficulty understanding how a story could be constructed. They were made to be aware of things that they were familiar with in stories that they had heard or read before such as repetition a story, the role of the introduction and the conclusion, etc.

f) Support in the form of providing the beginning of the story

The introduction of the story served to set the mood of the story and dictate the plot. By reading and comprehending the existing text, the students were able to

create their own texts in similar formats. The text provided by the author became the “tool” in with which the students were able to produce new texts (Wells 1999).

At the end of the year when all the students participating were interviewed, it was evident that the students would not have been able to carry out such a task in English or Greek had they not have had the necessary support.

In reference to support provided, examples will be given in reference to (b) and (c) above, i.e. support provided by the sister class and support provided by an external expert. Both forms of support were facilitated through the use of IT. In traditional classroom settings, the support provided is often limited to support from the teacher. Through sister class connections via the Internet, the scope of this support is extended.

Support provided by the sister class

As part of the communication between the sister classes, some of the students asked for information from their sister classes in order to complete the story or sent information about the author. For example, students in Rhodes wrote to their sister class in Toronto and asked for information about the raccoon, as they wanted to use this animal as a character in their story. They knew that raccoons existed in Canada but did not know anything more about them.

Letter from Greece

Dear friends from Diefenbaker class,

We are team E in Class E3 from Rhodes. Our names are Vivian, Aliko, Eleni and Michaela. We are team E in Class E3 from Rhodes. We are working on the project with Triviza’s story and we need some information about Canadian animals. We want to add a racoon to our story. Vivian has seen a raccoon in Canada because she was born in Toronto. Can you tell us where a raccoon lives? What kind of food do they eat? Are they good or bad animals? Bye.

[from E3 Rhodes]

Reply from Canada

Racoons live in North America. They live in the forest cornfields and make their homes in a hollow tree called a den. Racoons eat frogs, fresh fish, mice, insects, fruit, birds, corn and their favorite food is crayfish. Racoons are curious, mischievous and annoying. But they don’t make good pets

The information exchanged also dealt with language. In the letter below, one student asks, “How do we say *kakarizo* (the sound of a chicken) [in English]?” and “How do we say *sthrouthokamilos* (ostrich)?” Another student asks (in the student’s own words) “What is a sound of a cat? [what sound does a cat make?]”.

Letter from Greece

Letter from E3 (Rhodes) to the Diefenbaker P.S.

Dear children,

We are trying to write the story of Evgenios Trivizas. Do you know things about him.

We will try to bring information about him. Spiros from D team asks how do say “kakarizo” (the sound of a chicken)?

How do we say “strouthokamilos”?

Maria S. from team F asks what is a sound of a cat.

Bye for now

Write to us soon to see what you are doing.

The E3 class

In the letter above, it also evident that the students also exchange information about the author. In other letters, information about the author was circulated and students in Greece who were more familiar with the author’s work (as he is a Greek author) made suggestions about further reading of books written by the same author.

Support provided by external expert

An external expert provided extra support to the students. When students are engaged in creative work, they are impatient to get feedback. When the sister classes were not able to provide feedback to the students fast enough, an external expert provided this support through comments that were designed to give positive feedback and further suggestions for improvement or corrections. The external expert was a literature teacher (from the University of the Aegean) who sent the students feedback on their work as they were working on it. This acted as inspiration and motivation for the students to keep working. Thus, it was a *safety valve* to keep the students motivated when communication between students through IT connections were not fast enough. (This was in part due to the time difference between Canada and Greece). The

external expert also gave the students tips on how to write and made some suggestions regarding grammatical errors. The comments were in two forms: a) directed to the class as a whole, but also b) to each individual group according to their own individual work. There were approximately eighty comments sent.

Letter from external expert (written in English)

“What a delightful surprise!

Nikos, Alexandros and Yiannis, hello! Your work is short in length but very well written. It keeps to the point, it is ‘compact’ and the dialogue is very natural with a twist of events that give Stripsidis [*character in the story*] a lesson in the end. One of the things that transpires through your writing is that if one possesses an unpleasant character, such as Stripsidis does, then he or she will have an unpleasant ending. The rest is up to the reader to think about. For what you write suggest certain things. What you leave unwritten (but are there for the reader to think about) creates more food for thought. Your English is excellent. (Just notice some minor printing errors – (a) a “deep” net instead of “dip”, b) you might want to insert “and” (or a comma or another) in the phrase said by the rabbit “...crunch crunch [*and*] I will just crunch once”, c) “Then [*the*] little rabbit...” In any case these don’t interfere at all with the meaning, but I just thought I should mention them to you. Your computer drawing of the rabbit is a very fine one, too, Perhaps at a later date you might wish to insert more elements in your story or write something that refers to the title of the story, “The Dance of the Ostriches”. Very good work, though, and impressive. Your style of writing English shows you have a natural flair and it is really very good. Congratulations

(A. M. Tsoutsoulopoulou, May 27,1999).

Editing of Texts

A major feature of texts is that they have to be considered as ‘improvable objects’ (Wells 1999:129) i.e. as texts under construction and not as completed untouchable objects. In a way, this happens in any context when the readers make their own interpretations and suggestions. However, the body of a written text remains in fact unchangeable when it leaves the writer and it is published.

In this sense, the way that the students used the bulletin board was significant. Although the bulletin board was designed only for story endings, the students used it in a way that had not been planned. They used the window to send corrections to the web master. This gives some picture as to how conscious the students were of having their work published and viewed by others. The text was treated as an *improvable* object. Whereas in traditional classroom settings, corrections on papers handed to the teacher are not always terribly important, corrections on the Web page were of vital

importance to the students. The students became impatient when the web master took too long to make the corrections they asked for.

Editing dealt with the content of the story as well as with the correctness of the form. The students often wanted to make changes in their stories, even a long time after they had written the original version. Although the activity was begun in the first year of DiaLogos' implementation, the edition of the texts was a process that went on throughout the two years. The students often went back to the texts, adding information and making changes. The students' occupation with one particular text, was something very unusual.

Letter to web master in Greece

Name: Maria M.
Class: E3 Team F
Date: 26/2/2000
Time: 10:10:44

Story:

I would like to put a new ending to my story. Please add it. I do not want to change anything in the story,
The Dance of the Ostriches.

Language used by students

The story, originally in Greek, became bilingual as the contributions written by the students were in English and Greek. Eighty (80) different stories were written. Fifty nine (59) stories were written by the students in Greece [thirty five (35) stories in Greek and twenty four (24) stories in English] and twenty one (21) stories were posted on the bulletin board from students in Canada [nine (9) in Greek and twelve (12) in English]. Some texts included both languages, symbolic of the students' attempt to use the target language. It is evident from the level of Greek of the students in Toronto how hard they tried to write in Greek. They often used English words to express what they could not express in Greek. The students were not confined to only the standard forms of the languages, as is usually the case in school. They used words and expressions that were closely tied to their identity. For example, the Greek-

Canadian students in Toronto often used words characteristic of the Greek-Canadian lexicon such as “tzara” (written in Greek) for the word “jar”. The students from Canada also used words that the students in Greece would not normally come across in their English books (which contained only standard English) such as “zapped him”. It is interesting that the students learned the form of the target language that the members of their sister class were using. For example, when one of the students in Canada uses the expression, “So, it is cool”, a student in Greece, not only discovers the meaning of this expression but also learns it and uses it in communication with the sister class.

Conclusion

Our understanding of the educational perspectives of networking in second language learning has been affected greatly by the response of the participants on both sides. This response reflects the process of understanding that was developed on both sides. The sites we created served as a meaningful domain of language use for the participants. The diverse ways they used both their languages (either filling in gaps, or asking their peers for help in vocabulary) demonstrates their efforts to communicate meanings to their peers. It seems also, that the text itself represented for the participants a meaningful domain of language use. Coming back in order to edit it long after the task was completed shows in a clear way how the theoretical concepts we employed became operational tools: There has been a focus on meaning that was guided by both the teacher and the students. The students wanted to understand the given story and used their language(s) creatively in a domain that was meaningful for them. The dialogic inquiry was an ongoing process of negotiation between peers, students and their teacher, students and expert, students and tools, students and website-administrator. The texts were interpreted and produced on the basis of other texts and with support from diverse sources.

Looking back at the amount of texts produced and exchanged in this context we realised that they were far beyond the amount of texts produced in a traditional class. It seems that our attention has to be moved from trying to motivate students to produce or to interpret texts to following up what happens in these texts, what language, what language forms or registers are used, what is the content of the texts. Learning language and learning through language in an IT environment moves second language from a peripheral to a central placement in the curriculum, then

searching through WWW or connecting electronically to peers or experts in order to solve a task often depends on the use of an additional language. However things do not develop automatically. There has to be a conscious attention on combining language learning and learning through language throughout the curriculum. This involves a new kind of collaborative working and inquiry among the teachers of the different curricular units who are asked to complementarily provide the navigation and the learning scaffolding to their students. Our experience from DiaLogos was that language diversity as well as diversity of learning environments and experiences can productively serve as basis, tools and scaffolding for learning, in the ways Wells and Cummins have elaborated. However, in order to develop sustainable conditions for ‘collaborative learning’ and ‘critical inquiry’ (Cummins 1996, 2000) or ‘communities of dialogic inquiry’ (Wells 1999) there is a need for working within teachers’ zpd, so that they can play their new role as navigators and learners at the same time.

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