

INNOVATIVE TEACHING STRATEGIES ON THE DIACHRONIC VIEW OF GREEK AS MOTHER TONGUE: FROM ANCIENT TO MODERN GREEK LANGUAGE

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Abstract

In this chapter we present the implementation of new technologies in mother tongue learning and teaching based on the principles of cooperative learning. The data quoted come from an educational project named 'Nereides', which involved the creation of educational software in support of mother tongue teaching in both obligatory and non-obligatory Greek secondary education, and thus addressed schoolchildren aged from 12 to 18 years.

Aiming at the optimization of the learning and teaching procedure, the educational tool presented here has sought to combine elements from mother tongue didactics and the use of new technologies in education. At first, educational scenarios were designed based on cooperative learning and teaching of mother tongue in combination with new technologies. This tool was then tested, first, and implemented, after, in the framework of an empirical research, in the school year 2007–2008 in certain Athens schools. The results of this empirical research were encouraging for the research team: pupils responded positively to the learning software, working groups were effective and Greek language teachers highlighted the participation even of students not particularly active in a conventional learning and teaching environment.

Key words: *mother tongue, Modern Greek, Ancient Greek, teaching, cooperative learning, New Technologies in education.*

Cooperative Learning and New Technologies: Two Modern Aspects of the Curriculum for Greek Language Teaching as Mother Tongue to Greek Students

During the 20th century spectacular changes have taken place in the economic, political and social field. These have also influenced education at an international level both in terms of the concept and content of the curriculum and of the day-to-day teaching practice.

As far as the Greek education system is concerned, these changes involve the curriculum reform for the nine-year compulsive schooling from 2000 onwards. This reform consists in a reformulation of the objectives and goals of every subject, the production of new textbooks and the adoption of new teaching and learning methods.

Within this new framework for the educational reality the teaching method of Greek language as mother tongue is being redefined. Two main approaches echo this new perspective: the communicative one and the cross-thematic one. These two dimensions in the field of mother tongue teaching and learning are implemented through cooperative learning and the use of New Technologies in education (Cross-thematic Framework for Compulsory Education, 2000).

The theoretical grounding of the new thematic and cross-thematic curricula reads as follows: 'the potential dynamics of student groups may well be used either as a frame for the collective data processing or as a frame of support on the way to individual learning. The cooperative forms of teaching are best suited for the preparation of projects that favour the development of cross-thematic activities' (Cross-thematic Framework for Compulsory Education, 2000) in each and every subject including the teaching of Greek as mother tongue.

Cooperative learning, regarded as an effective method for mother tongue teaching among other subjects, encourages students to work in groups to the achievement of a common goal, e.g. to solve a problem or prepare a project. In this way they become able to collect and embed information, to extend – not just memorise – existing knowledge, and at the same time develop social skills by discussing, opposing or accepting group members' arguments (Johnson, Johnson and Smith, 1991).

In contrast with traditional teaching methods where students worked individually they now work in groups to achieve the common group goal, they undertake initiatives and learn how to learn (Lebrun, 1999) by interacting with other group members and by showing eagerness and ability to cooperate (Johnson, Johnson, Holubec, 1990).

Within the framework of cooperative learning the role of teachers is also different, as they now coordinate and help students actively discover new knowledge; students are no longer passive receptors. In fact, according to a study on Greek language teaching through cooperative learning, participating students have improved their verbal and communication skills, which was not the case for students that worked individually. In this light cooperative learning enables students to develop thinking skills and apply them in mother tongue learning, increases their satisfaction in the learning experience, promotes and develops interpersonal relationships, and stimulates critical thinking. All the above can be achieved to the fullest in combination with the use of computers (Charalabous, 2000).

In the Greek curriculum for all taught subjects of the nine-year compulsory education, among which mother tongue teaching and learning is of particular importance, the significance of the use of New Technologies in individual as well as in cooperative learning is highlighted: 'New information and communication technologies offer a valuable tool to knowledge acquisition, the promotion of education and the assurance of lifelong learning. It is thus imperative that educational software be developed with explicit instructions for its best possible use' (Cross-thematic Curriculum Framework for Compulsory Education, 2000).

In these terms, it is obvious that the introduction of New Technologies in education creates hope for resolving many teaching and learning problems with the use of powerful means of communicating, searching, processing and disseminating information (Cox, 1998). In addition, New Technologies can play catalyst role in the expansion and enrichment of teaching practices

by contributing to the creation of learning environments that stimulate students' interest, active participation and knowledge construction.

In the information society school mother tongue teaching and learning is particularly enriched. Students use technology to experiment with language elements, investigate complex linguistic phenomena, understand various language functions, and practice their communication skills, such as text production or text understanding. Apart from the creation of computer and network infrastructure in school, a prerequisite for the achievement of this goal is an educational software and digital content that can be immediately put into use as part of the daily teaching, learning and communication practices. Discovery learning, the cross-thematic approach to language and the reinforcement of cooperative learning form fundamental pedagogical principles, as well as the basis for the development of mother tongue educational software. Such educational software should encourage students' active participation and offer them room for further development and approach of the themes defined in the curriculum; it should offer the education community flexibility in structuring and presenting the software, focus on the acquisition of skills, and utilise the internet and computer environment for various simultaneous language representations.

The use of New Technologies and specifically of educational software in mother tongue teaching aims at filling the gaps and shortcomings of conventional teaching material, mostly by employing the means offered by New Technologies in cases of complex projects, e.g. interconnection and multiple information representation. According to Johnson, Johnson and Stanne (1985) cooperative learning with the assistance of New Technologies reinforces mother tongue learning and helps students utilise knowledge in order to resolve problems on their own.

Furthermore, the combined use of New Technologies and cooperative learning seems to enable students' interaction, since the cooperative computer or educational software environment, where teaching takes place, contributes to group working and resolving simple or complex problems presented on the computer (Fisher, 1984).

Papert (1991) sustains that computers and educational software designed according to contemporary learning theories and promoting discovery, could provide students with an interaction environment in a way that they can actively construct knowledge. Computers and software are thus tools, like hammers and scissors, which can externally represent concepts in a variety of representation systems. They are in this sense psychological tools that can modify human behaviour (Confrey, 1995).

However, in order to achieve the expected learning outcomes in terms of cooperative learning and the use of New Technologies, it is necessary to set explicit ground rules for the cooperation among students prior to its implementation and to highlight the concept of interdependence. The sheer dividing into groups does not necessarily entail cooperative learning (Bennett, 1991).

In conclusion, the measure of success of cooperative learning and New Technologies in the classroom seems to depend to a great extent on changing traditional teaching practices and developing new pedagogical methods on part of the teachers (Salomon, 1996), as well as on the new roles assigned to teachers and students. In this case, computers are not merely an information pool; they are rather a tool with which students cooperate and construct knowledge. Students become creators insofar as they implement and organise knowledge themselves (Underwood, 1994: 158).

Cooperative Learning of Greek as Mother Tongue with the Use of New Technologies

Presentation of educational material – Psychological-pedagogical grounding

For the organisation of teaching Greek as a mother tongue in Greek secondary education the Cross-thematic Curriculum Framework and the Analytical Curriculum propose group research projects for students with the use of New Technologies either through the use of educational software developed by the Pedagogical Institute or through the use of the internet.

We are now going to present an example of a cooperative activity in the field of mother tongue teaching. It is part of a comprehensive educational package called ‘The evolution of Greek language’, which was developed by the authors following the official assignment of a project on producing educational material by the Pedagogical Institute.

This example involves the presentation of a work sheet, which forms part of the software and is designed to support teaching of Greek as mother tongue through the use of New Technologies and of state-of-the-art teaching and learning principles and techniques, such as cooperative learning. Here it should be highlighted that this example is particularly interesting since it does not only involve the synchronic view of Greek as mother tongue, but it also applies cooperative learning principles through the use of computers to the diachronic dimension of language. In other words, students consider both forms of the Greek language, ancient and modern Greek: first they form groups and then they search, contemplate, discover, discuss analogies, similarities and differences in the two forms of language by using New Technologies until they reach through discovery the phenomenon of polysemy which is of interest here. In this way the principles of cooperative learning and their application through the use of New Technologies are combined with concepts such as interdisciplinarity and cross-curricularly thereby becoming all the more relevant in the current context.

The work sheet reads as follows:

Words changing meaning

Suggested duration: 2 teaching hours

Name:

Date:

Class:

1. Divide into three groups. Each group should undertake one of the following tasks:

1st group: Study the word ‘αρχή’

α. Use the software ‘Ancient Greek Prose’ to study fragments of Isocrates’ ‘Against the Sophists’, 1-3 and ‘On the peace’, Main Part, 67-68; find the word ‘αρχή’ and record how it is translated in each text.

β. Go to the website, click on **LINKS<ON LANGUAGE**, go to the address: <http://www.komvos.edu.gr/dictionaries/corpora/Corpora.htm>, type ‘αρχή’ in the *word* field and study the outcome. Record some of the meanings of the word.

2nd group: Study the word ‘βουλή’

α. Use the software ‘Ancient Greek Prose’ to study fragments of Lysias’ ‘For Mantitheus’, Narration – Proof, 18-19 and Thucydides’ ‘Histories A’, chapter 138, find the word ‘βουλή’ and record how it is translated in each text.

β. Go to the website, click on **LINKS<ON LANGUAGE**, go to the address: <http://www.komvos.edu.gr/dictionaries/corpora/Corpora.htm>, type ‘βουλή’ in the *word* field and study the outcome. Record some of the meanings of the word.

3rd group: Study the word ‘γνώμη’

α. Use the software ‘Ancient Greek Prose’ to study fragments of Isocrates’ ‘Areopagiticus’ and ‘Panegyricus’, chapter 138, find the word ‘γνώμη’ and record how it is translated in each text.

β. Go to the website, click on **LINKS<ON LANGUAGE**, go to the address: <http://www.komvos.edu.gr/dictionaries/corpora/Corpora.htm>, type ‘*γνώμη*’ in the *word* field and study the outcome. Record some of the meanings of the word.

2. Form two groups, each having members from all three previous groups and perform the following activities:

1st group: Present the outcomes of the previous triple research and compare them. What can be said about the differentiation in meaning of ancient and Modern Greek words? Attempt to justify this differentiation.

2nd group: Compare ancient and modern Greek meanings of each word after having presented them and record any convergence or divergence in meaning.

3. After completing the previous activities, go to the webpage, click on **LINKS<ON POLYSEMY**, study the relevant material and then go to **ACTIVITIES<FIND THE CORRECT CIRCUMSTANCE** and perform the activity. Next, decide on a committee that will organise and coordinate a discussion on polysemy, provided that terms like meaning, homonymy, homophones, linguistic environment, and differentiation will be used. You may use the outcomes from your previous research to ground your opinion.

4. Go to **TEXTS<FUNNY MISUNDERSTANDING**. After reading the text you will realise that polysemy is not ... a Greek privilege. You will also notice there is a dominant sense of humour.

Go to **LINKS<ON HUMOUR**, study the information material and organise in your classroom an event intended for the whole school under the title: ‘Humour in our life’. Enrich your presentation with anecdotes from ancient Greek, available under **LINKS<ON HUMOUR** clicking on: <http://www.mikrosapoplous.gr/iliada/border2.htm>; with a joke of your own, a funny picture or comic; with any part of Aristophanes’ comedies, which you could also dramatize, or with a text you will write on the role and the importance of humour in our life.

In the *first phase*, after dividing students into three groups, we ask them to use the software ‘Ancient Greek Prose’ (an educational tool with various texts written in the Attic dialect, accompanied by glossaries and exercises that contribute to their processing and understanding) and to search for the meaning of the word undertaken by each group in the context of an ancient text. Thus, the first group studies the word ‘*αρχή*’, the second one the word ‘*βουλή*’ and the third one the word ‘*γνώμη*’. There are two texts destined for each group, in order for the students to understand the way the same word can change meaning in different contexts or/ and text sorts. Each group then is advised to go to the appropriate website and search for the difference in meaning of this same word in Modern Greek using text bodies. Students in each group record different meanings of the same word according to the communication instance where it is used.

In the *second phase*, students form two groups in a way that each group has members from all three previous groups. The reason for this is to empower the concept of the group on the one hand, since students are required to integrate and adapt to new circumstances, and on the other hand to guarantee participation in the group activity for each and every student.

So the first of the two groups undertakes the task of highlighting and trying to interpret the differentiation of ancient and Modern Greek words in terms of context and function. To this end students are asked to present and utilise the findings of their previous research. In this way, this double and different class division into groups does not work autonomously and by itself. There is interdependence since the activity of one group depends on the activities of the previous ones.

The second group in this phase is asked to compare the meanings of the word in ancient Greek texts and Modern Greek text bodies, based on the outcomes of the previous group research. Thus students come to perceive similarities and differences. The word ‘*αρχή*’ has preserved the two ancient meanings in the Modern Greek context and has acquired new ones, i.e. the word

expanded. The word ‘βουλή’ has only preserved the meaning of the parliament body in the Modern Greek context, and has acquired a new one, gradually losing the meaning of ‘spirit’ it had in ancient Greek. The word ‘γνώμη’ does not present any similarity in meaning in the two language forms.

The above observations will be processed by the students, who with the help of the teacher should assign the similarities and convergences in meaning to the cohesive character of the Greek language, and the differences and divergences to the different contexts as well as the evolution of language as communicative means.

In the *third phase* students are asked to organise and coordinate a class discussion on polysemy and its characteristics, drawing upon information from the websites suggested earlier. They are not supposed to do this without any guidance at all; on the contrary, they are given key words to base the conversation on and they are advised to utilise research findings as evidence to justify their stances and opinions. Thus their deductive ability is promoted but they also practise controlled verbal skills excluding useless information.

Furthermore, we suggest the following activity, which should be performed on a computer, in order for the students to realise the concept of context and to identify it on the basis of the content of the given information. In this activity students are asked to match each of the sentences to the appropriate thematic subject. There are nine sentences in total and they correspond to the following themes:

Find the correct circumstance

- * Biological effect of ionizing radiation on humans. (medicine)
- * Every action has an equal reaction. (physics)
- * Volcanoes, history and activity. (geology)
- * Top Greek athletes will participate in the games tomorrow marking the start of this year’s season. (sports)
- * In the meantime, there are investments going on of a total budget of circa 750,000 Euro. (economy)
- * The main question is whether a common course of action is possible. (politics)
- * The main part of the play with more concrete action has been chosen, because it can be easier represented on stage. (art)
- * The objective is to memorise past events and draw conclusions about individuals’ and smaller or larger groups’ thinking and acting. (history)
- * Despite research projects carried out for over a century, there is not yet a satisfactory explanation for the activity of Hofmeister anions. (chemistry)

Let us note here that in case students have difficulties completing the activity, the programme offers them the possibility to discover it on their own through a riddle relating to the theme in question; it does not reveal the answer right away. In this way critical thinking is promoted and students do not get used to ready-made answers.

In the *fourth phase*, based on a text about a funny misunderstanding caused by polysemy students are urged to contemplate on the concept of humour, to study the relevant website and texts, to enrich the research with personal data, to make use of Aristophanes’ works and present their project organising as a group an event about humour.

After having completed the above work sheet students:

- a) have implemented the principles of cooperative learning participating in various and different groups at each stage;
- b) combine cooperative learning principles with New Technologies, searching and

organising data on the computer;

c) make use of the computer in a broader sense since they use software, browse different websites to collect data and perform interactive activities, all at the same time.

d) There is no distinction made between ancient and Modern Greek. Students study the same linguistic phenomena in both language forms and compare them, thereby realising the cohesive character of their mother tongue both at the morphological and the semantic level.

e) The cross-thematic dimension – especially with regard to language teaching – is particularly evident here since the Greek language is regarded as a whole through various perspectives.

Teaching practice – Research data based on the empirical research

The actual use of the software in the classroom took place in the school year 2007-8 in the first grade of 2nd High School, Peania, Athens, where the empirical research was carried out. The theme we chose to focus on was polysemy, i.e. the different meanings a word can have according to the context in which it is embedded and used. There were 20 students in the classroom and the IT teacher was also present. This lesson took up 2 teaching hours.

We chose to teach the specific subject to the specific class, because we wanted to stimulate students' interest in the Greek language and help them realise the cohesive character of their mother tongue. The impulse to search for and 'discover' polysemy offered to the students by the software on the basis of the diachronic study of the language has had positive results in a twofold way:

a) it helped students overcome the difficulties in understanding the structure and function of ancient Greek language, since the analogy between the ancient and the modern form of the language is more than obvious and this makes it easier for them to approach ancient Greek language and literature, and

b) it helped students develop their communication skills, since they realised that communication is a complex but also logical procedure.

At the end of the lesson students were excited and impressed, because as they said this had been a different lesson. They were particularly impressed with the use of the computer lab for teaching ancient Greek, which originally seemed kind of odd, modern technology meeting tradition! Their active participation in the whole process, the conquest of new knowledge in an autonomous and cooperative way, and the constant rewarding and feedback provided by the software have contributed to the success of the teaching procedure. It is worth noting that the IT teacher thought that the software met the 'technological' knowledge level and skills of first year high school students and that it was particularly practical and user-friendly.

Concluding Remarks

It goes without saying that suggestions such as the above do not aspire to solve the problems related to teaching and learning of the mother tongue, in this case Greek. They do however aspire to offer alternative ways of organising day-to-day school practice and of implementing modern and effective principles, values and theories such as cooperative learning and the use of New Technologies in the teaching reality.

Teaching practice and more specifically the implementation of the above presented work sheet has shown that innovative strategies like the above in teaching the diachronic view of Greek as mother tongue are not merely theoretical considerations; they can be put into practice. This is evident as students after completing this work sheet:

a) have realised the cohesive character of Greek language after studying the same linguistic phenomena in both language forms and comparing them in terms of morphology and semantics,

b) have implemented cross-curricularity in the subject of language since they approached their mother tongue through multiple perspectives,

c) have obviously implemented cooperative learning principles by joining many different groups in each phase. Students adapted to the groups to a satisfactory extent since they did not find it difficult to present and produce work, in fact collective work, during the activities proposed to them. Group members cooperated smoothly, exchanged opinions, talked with each other, even argued until they completed their assignment. Working in groups proved to be effective and useful; effective in terms of the learning outcome and useful in terms of the communication among group members,

d) combined cooperative learning with the use of the computer environment, since groups had to search for and organise data on their computer.

At this point the principles of social constructivism theory were fully implemented since students 'discovered' knowledge and combined already known elements to create new knowledge,

e) made use of the computer in a broader sense since they used the software, browsed suggested websites to collect data, and performed interactive activities, all at the same time.

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