Techniques for oral communication during project implementation among student-teachers - Research

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## **Abstract**

The present research investigates the views of student teachers on effective oral communication techniques among members of a working team. The anonymous written questionnaire, completed by future teachers of the Department of Primary Education of Democritus University of Thrace that worked in teams during ten programmed weekly meetings, served as a research tool. The results clearly show that the students, in their discussions within their team, try to maintain the interest of their fellow-students unmitigated, using various techniques; as regards the factors that stimulate the interest and the attention of the audience, they consider as most important: the use of examples and arguments, the utilizing of audiovisual media, the degree of interest on the subject under discussion, as well as the tempo and length of speech of the person who is talking. Finally, they consider as more communication-effective those team members that cooperate, take interest in others' views, discuss with other team members the possibilities and the change prospects within their work, care for team member emotions and use arguments to persuade.

**Keywords:** project, teacher education, communication, group, oral communication, arguments, cooperation

## Introduction

Every individual is preparing – through their education – to become a complete personality, that is invited to change the world. In order to achieve on this mission, they have to receive a global education. School education will have to include, besides academic knowledge, general skills such as the competency to collaborate, communicate and solve problems (Cheng, Lam, & Chan, 2008: 206).

A teaching approach that can contribute in this direction is the project method, during which the participants collaborate having a common learning goal (Prichard, Bizo & Stratford, 2006). It is a special way of learning that is based on the investigating efforts of students, while learning is achieved via authentic questions and problems in real situations (Al-Balushi & Al-Aamri, 2014-Wurdinger, Haar, Hugg, & Bezon, 2007). It is a teaching strategy in the frame of which students collaborate in small teams, undertaking certain duties (Cheng, Lam, & Chan, 2008: 206) in order to

realize a collective work, while knowledge is constructed through social interaction (Cheng, Lam, & Chan, 2008: 206).

Within a team, whose main characteristic is cooperation, individuals are asked to actively participate, to receive but also to provide the information necessary for the collaboration procedures, to reflect on the content and the form of individual behaviours etc (Hertz-Lazarowitz, 1990: 14). In addition, in the framework of effective collaboration, the members offer the information they have collected and are related to the subject under negotiation, publicly discuss on this subject, reflect upon the ideas of other members, pose questions and reply to questions posed by other team members and recapitulate what has been said (Hertz-Lazarowitz, 1990: 14).

The team members enter a discourse by exchanging viewpoints, with the intention to contribute on the subject under discussion (Littlejohn & Foss, 2011: 195). They interact and communicate in the form of conversation (Littlejohn & Foss, 2011: 179). However, the feeling that they can converse without fear of being criticized by others is a prerequisite (Green, 1998).

The conversations among them – as any conversation among individuals –comprise a sequence of interactions which have a specific goal, rules and structure, while the conversing individuals make use of language as well as of non-verbal communication (Littlejohn & Foss, 2011: 179). Thus, when students apply the project method, they enhance – among other things – skills related to team communication and correct expression, as shown in the research by Menzies, Hewitt, Kokotsaki, Collyer, & Wiggins (2016).

The project method has been a subject of research in all grades of education (Kokotsaki, Menzies, & Wiggins, 2016: 268). Our interest is focused on teacher training, because future teachers, through the reflection procedure that they will necessarily undergo while implementing it, will better comprehend their role and their work in education (Tsybulsky & Muchnik-Rozanov, 2019: 50).

Thus, in the framework of their training in the Department of Primary Education of Democritus University of Thrace and more specifically in the course "Teaching Methodology II<sup>1</sup> – project method<sup>2</sup> (6<sup>th</sup> semester of studies) – the students, after having received theoretical

<sup>&</sup>lt;sup>1</sup> At this point, we consider it useful to make a reference to the subject "Teaching Methodology I – microteaching", that precedes in time in the Department Curriculum, and in the framework of which the students have been practicing since 1993 – the year when professor Eleni Taratori applied microteaching for the first time in the Department-addressing specific social, pedagogical and teaching skills.

Its establishment in the above-mentioned department was the work of professor Eleni Taratori since academic year 2001-2002 and was accompanied by several theoretical and research attempts by herself and together with her associates (Taratori- Tsalkatidou, 1996: Taratori, Chatzidimou, & Chlemes, 2001: Chatzidimou & Taratori, 2001:

information on the project method<sup>3</sup>, undertake a project to implement, faithfully following all the steps. They define the topic that they will involve themselves with, they set their goals, they divide in teams and they cooperate in preparing the final collective product of their work, as well as its presentation. They collect information, share them in their teams, discuss their own ideas as well as the others' ideas, defend their viewpoints by providing arguments and they support or criticize an idea (Blumenfeld, Kempler, & Krajcik, 2006).

However, what is the framework that defines the communication among them and specifically the oral communication during project implementation? Our own personal interest and our involvement in the implementation of the project method in the above-mentioned department has triggered our interest to further involve ourselves in this subject.

## Methodology

A **starting point** to conduct this experiential research regarding the investigation of the views of students on effective oral communication techniques among members of a collaborating team during a project implementation, has been the fact that Greek bibliography is lacking in papers researching this topic as well as our own personal interest in it.

The **main aim** of the present research is to investigate the views of students of the Department of Primary Education of Democritus University of Thrace in their third and fourth academic years regarding the techniques that they applied during oral communication within their team, the behavior of the most effective team members, and the factors that stimulate the attention and interest of the audience.

To achieve the research goal, the **written questionnaire** was used as a **research tool.** It comprised 27 closed-ended questions.

Student-teachers (both male and female) of 5<sup>th</sup> and 7<sup>th</sup> semesters of the Department of Primary Education of Democritus University of Thrace, who had received training on the implementation of the project method during the course "Teaching Methodology II", were our **research sample**.

**Data collection** took place in January 2019 and lasted three weeks.

Taratori-Tsalkatidou, 2005· Taratori, 2005· Taratori-Tsalkatidou, 2006· Taratori, 2007· Taratori-Tsalkatidou, 2015), where the possibilities of its implementation in primary school are presented.

<sup>&</sup>lt;sup>3</sup> Their theoretical education refers to the different models of a project (regarding duration and content), the prerequisites for implementing the method, the stages and phases of its implementation as well as to the advantages and disadvantages of its application in primary school.

**Statistic processing** and **data analysis** was conducted using the SPSS programme – Statistical Package for the Social Sciences, Version 21.0.

## **Results**

The results of the resent research were drawn from 265 student teachers at the Department of Primary Education of Democritus University of Thrace. 18.1% of them were men and 81.9% were women, while 48.3% studied in the 5<sup>th</sup> semester, 47.5% in the 7<sup>th</sup> semester, and 3.8% were "out-of-circle". The greatest majority (74.2%) were between 20 and 21 years of age, while 68 students (25.8%) were over 21 years old. Seven (7) students already had a Bachelor Degree from another University and five (5) had a Master's Degree. The educational level of the father was "low"(12-year education) in 54.3%, "medium" (15-year education) in 13.9% and "high" (16 years of education and more) in 31.7%; mother educational level was "low"(12-year education) in 46.8%, "medium" (15-year education) in 15.2% and "high" (16 years of education and more) in 38,1%.

The research outcomes that emerged from the thematic fields referred in the views of future teachers regarding effective oral communication techniques among members of a collaborating team, the factors that stimulate audience interest and attention, as well as the attitude of the most effective team members in oral communication within a team working on project implementation, can be outlined as follows:

a) Regarding the techniques that they used in the framework of oral communication within their team, the research subjects reported that they would more often ensure that they used comprehensible vocabulary (Mean=3.749). Nevertheless, they would not omit to begin their speech by informing the audience of its main points (Mean=3.183) and complete it with a summary (Mean=3.30).

Subsequently, a new variable emerged from the mean of the questions regarding the oral communication with "the use of comprehensible vocabulary", with "the start of the speech by informing on its main points" and with "the culmination of the speech with a summary". This new variable was named "structured presentation". The higher the value of the variable "structured presentation", the more structured the student's speech, i.e. having beginning, middle and ending, which makes it more comprehensible.

The students that took part in our research have also stated that during their oral communication in the framework of their meetings to implement the project, in their effort to attract the attention of the other team members, they would more often try to maintain eye contact

with them (Mean=3.937), to assume a mild tone of voice and to use appropriate body language (Mean=3.83). Moreover, they claim to have made sure that they would have adequate time at their disposal in order to express their thoughts and emotions (Mean=3.617), to have made a joke (Mean=3.458), to have made a comment (Mean=3.431) and to have praised one of the team members (Mean=3.391). Finally, they would pose questions both interesting (Mean=3.277) and facilitating (Mean=3.273) with the aim of promoting the work of the team, while more seldom they would resort to a self-sarcastic comment (Mean=3.008) and even more seldom to comments on the conditions of the meeting place (Mean=2.455).

Subsequently, a new variable originated from the mean of the questions regarding the actions of team members during their oral communication such as "tell a joke", "make a general comment", "comment on conditions of the meeting place", "praise one of the team members", "make a self-sarcastic comment", "pose interesting questions", "pose facilitating questions", "maintain eye contact with the rest of team members», «maintain mild tone of voice and appropriate body language" and "possess adequate time to express thoughts and emotions". This new variable was named "techniques for stimulating audience attention".

From the correlation of the variables "structured presentation" and "techniques for stimulating audience attention" has emerged that there is marginally strong, positive, statistically significant correlation between them (r=0,502 p<0,001). This shows that the speakers that had structured speech, made according use of techniques to maintain audience attention unmitigated.

Upon investigating the alteration of the means of the variables "structured presentation" and "audience attention stimulation techniques", in relation to demographic data, no statistically significant differences were found. It was, however, observed that: a) women (Mean=3.45) are more structured in the delivery of their speech as compared to men (Mean=3.22), whereas men (Mean=3.38) utilize more attention stimulation techniques, as compared to women (Mean=3.35), b) those who are over 21 (Mean=3.42) deliver their speech in a more structured way compared to the others, while in using techniques to attract audience attention, the 21year-olds (Mean=3.42) have a lead over the others, c) the students of the 5<sup>th</sup> and 7<sup>th</sup> semesters (Mean=3.41) have a better-structured speech in relation to "out-of-circle" students (Mean=3.33), whereas in the field of using techniques to stimulate audience attention, the students of the 7<sup>th</sup> semester (Mean=3.44) outclass the others, d) out of the participants having done further studies, University BA graduates (Mean=3.67) have a more structured speech as compared to MA graduates (Mean=3.27); on the other hand, in the

field of using techniques to attract audience attention, MA graduates (Mean=3.40) have a lead, e) those whose father had a "medium" educational level (Mean=3.59) have a better structured speech in relation to the rest; the same is true in the field of using techniques to stimulate audience attention (Mean=3.45), f) those whose mother had a "high" level of education (Mean=3.48) have a better structured speech compared to the rest, while in the field of using techniques to attract audience attention, those whose mother had a "medium" level of education (Mean=3.44) come first.

b) With regard to the most effective team members and the oral communication among them, the subjects of our research have stated that these individuals a) cooperate (Mean=4.015), b) care for the opinions of others (Mean=3.882), c) discuss with other team members the possibilities and the prospects of changes in their project (Mean=3.855), d) care for the emotions and the needs of other team members (Mean=3.855) and finally e) use arguments to convince others on making certain decisions (Mean=3.794).

There is a statistically significant difference of means in the responses between the qualities that refer to the will to cooperate and the will to discuss, according to the t test of dependent samples ( $t = 3.149 \, p = 0.002$ ). From this big difference in means it is inferred that students appreciate as a more important factor of efficiency the will to cooperate.

c) With regard to the factors that stimulate audience interest and attention, the students in our research consider as more important the use of examples (Mean=4.019) and arguments (Mean=3.996). Next most important are the use of audiovisual media (Mean=3.892), the interest for the topic under discussion (Mean=3.888), the tempo and length of speech of the person talking (Mean=3.822). The speaker's eloquence (M=3.73), the comfort of the listeners (M=3.668), the overall presence of the speaker (M=3.622) and, lastly, his/her experience (M=3.483) hold – according to the speakers - the last four positions hold.

There is a statistically significant difference in means of the replies between "use of examples" and "interest in the topic" according to the t test of dependent samples (t = 2,486 p = 0,014).

Similarly statistically significant differences occur between the means of the question that regards "the use of examples" and the questions that regard "the tempo and length of speech of the person talking", "the speaker's eloquence", "the comfort of the listeners", "the overall presence of the speaker" and "speaker experience".

## **Conclusion - Discussion**

In conclusion, the prospective teachers, in the frame of their work to plan and implement a project they had undertaken, worked as a team, for the smooth operation of which there has been cooperation, offering of ideas, thoughts and proposals, reflection and final decision-making.

During the oral communication among them in the context of their team, they made effort to be as comprehensible as possible. As Littlejohn & Foss (2011: 184) point out, individuals with richer vocabulary, when communicating with other individuals that may be disadvantaged in this field, tend to use simpler vocabulary, or even to slow down their speech. Similarly, the participants in our research, when they undertook to speak, ensured that the vocabulary they used, would be understood by all team members.

Upon commencing their speech, they would announce to the team the main points they intended to cover, while they concluded their speech doing a recapitulation of what had been previously said<sup>4</sup>.

Throughout their speech, it was considered by them essential to attract team members' interest and retain it unmitigated to the end. This is the reason why they would try to maintain eye contact with their audience i.e. the other team members. They would, also, make sure they kept a mild tone of voice, without tension. The mild tone of voice was accompanied by appropriate body language. Besides, it is characteristic to all people – when conversing, in any context – to manifest many kinds of non-verbal behavior such as eye contact, body posture, body orientation etc (Littlejohn & Foss, 2011: 179).

A basic concern of the participants in our research was to conclude the expression of their thoughts and emotions without pressure, and this is the reason why they made sure they had ample time at their disposal. Moreover, to make the atmosphere among them more pleasant, they would often tell a joke, make a comment or even praised one of the team members. Tsybulsky & Muchnik-Rozanov (2019: 53) believe that within the framework of a project, the comments of participants can affect the learning of the other team members, while Littlejohn & Foss (2011: 263) consider the use of a joke to be a factor that can release possible tension during team work, on condition that it takes place in moderation, because many jokes can distract attention and this can seriously undermine the result of the team's work.

<sup>&</sup>lt;sup>4</sup> Besides, starting a speech or conversation by giving the main points and ending by recapitulating show respect on behalf of the speaker towards the audience (Stamatis, 2011: 125).

The student teachers who participated in our research, in order to better promote the work of the team and to be led more easily to solving a problem or making a decision, would often pose interesting and facilitating questions. One question can activate the entire team. It can simply trigger a reply that will solve the problem, or it can become the "spark that will ignite the fire" for a new topic, promoting, thus, the team's work<sup>5</sup> (Littlejohn & Foss, 2011: 263).

Team member attention, in our opinion, can be triggered by the use of examples, arguments and audiovisual media, how interesting is the topic under discussion as well as the tempo and the length of speech of the person talking<sup>6</sup>. They value as more effective in oral communication those people that show interest towards the views, the emotions and the needs of others, who converse with other team members and use arguments to persuade. In other words, the most effective members are those who – during oral communication –show respect towards all team members. On the contrary, oral communication that is characterized by lack of respect and careful listening of the others can be fatal to the functionality of a team (Webb, Ing, Kersting, & Nemer, 2006).

It should, however, be stressed that the will to cooperate is recognized as the most important factor of effectiveness in oral communication. Besides, cooperation and good interpersonal relations that develop within team members during project implementation, is what will make their participation a pleasant and memorable experience (Kougiourouki, 2019). Nevertheless, it has been observed in certain cases of application of cooperative learning methods, that the behaviours within the teams can be characterized as anything but "cooperation" (Cohen, 1994).

Thus, it is obvious in the present research, that the students who participated in the implementation of a project, have developed skills related to communication within the team and proper expression.

<sup>&</sup>lt;sup>5</sup> However, ignoring and passivity are also possible reactions of team members to a question (Littlejohn & Foss, 2011:

<sup>&</sup>lt;sup>6</sup> To attract audience attention see P. Stamatis (2011: 124).

## References

Al-Balushi, S.M., & Al-Aamri, S.S. (2014). The effect of environmental science projects on students environmental knowledge and science attitudes. *International Research in Geographical and Environmental Education*, 23(3), 213-227.

- Blumenfeld, Ph.C., Kempler, T.M., & Krajcik, J.S. (2006). Motivation and Cognitive Engagement in Learning Environments. In: *The Cambridge Handbook of The Learning sciences*, Chapter 8, 475-488.
- Cheng, R.W., Lam, S., & Chan, J.C. (2008). When high achievers and low achievers work in the same group: The roles of group heterogeneity and processes in project-based learning. *British Journal of Educational Psychology*, 78, 205-221.
- Cohen, E.G. (1994). Restructuring the Classroom: Conditions for Productive Small Groups. *Review of Educational Research*, 64(1), 1-35. Doi: 10.3102/00346543064001001.
- Green, A.M.. (1998). Project-based Learning: Moving Students through the GED with Meaningful Learning. ED 422 466.
- Hertz-Lazarowitz, R. (1990). An Integrative Model of the Classroom: The enhancement of Cooperation in Learning. Paper presented at the *Annual Meeting of the American Educational Research Association*. ED 322 121.
- Kokotsaki, D., Menzies, V., & Wiggins, A. (2016). Project-based learning: A review of the literature. *Improving Schools*, 19(3), 267-277.
- Kougiourouki, M. (2019). The contribution of the project method in establishing relationships among student-teachers Research. *Educational Sciences*, 2, 37-53. (in Greek)
- Littlejohn, St. W. & Foss, K.A. (2011). *Theories of Human Communication*. 10<sup>th</sup> edition. Long Grove, Illinois: Waveland.
- Menzies, V., Hewitt, C., Kokotsaki, D., Collyer, C., & Wiggins, A. (2016). *Project Based Learning. Evaluation report and executive summary*. Education Endowment Foundation.
- Prichard, J.S., Bizo, L.A., & Stratford, R.J. (2006). The educational impact of team-skills training: Preparing students to work in groups. *British Journal of Educational Psychology*, 76(1), 119-140. Doi: 10.1348/000709904X24564.
- Remedios, L., Clarke, D., & Hawthorne, L. (2008). Framing Collaborative Behaviors: Listening and Speaking in Problem-based Learning. *Interdisciplinary Journal of Problem-Based Learning*, 2(1), 1-20.

- Stamatis, P. (2011). Communication in the educational and administrative process. Basic concepts and strategies. Athens: Diadrasi. (in Greek)
- Taratori-Tsalkatidou, E. (1996). The project method and its contribution to the student-teacher interpersonal communication. *School and life*, 2, 49-55. (in Greek)
- Taratori, E., Chatzidimou, D., & Chlemes, D. (2001). The professions, Implementation of the project method. *Kinitro*, *3*, 161-172. (in Greek)
- Taratori-Tsalkatidou, E. (2005). The project method from the view of the simulated educator (research). In: A. Trilianos, & Ig. Karaminas (ed.), Proceedings of the 5<sup>th</sup> Greek Conference with international participation of the National and Kapodistrian University of Athens *Learning and Teaching in the Society of Knowledge* (512-520). Athens: K.Ε.ΕΠ.ΕΚ.. (in Greek)
- Taratori, E., Bardaka, A., Giouzelis, A., Daroglou, E., Kasparidou, P., Melissopoulos, S., Tembridou, A., & Chabidis, Th. (2005). *The project method in practice The example of the Pomaks of Western Thrace*, Thessaloniki: Kyriakides Bros Publications. (in Greek)
- Taratori-Tsalkatidou, E. (2006<sup>2</sup>). *Pedagogy and teacher training of teachers in primary education. Theoretical and practical approach* Thessaloniki: Kyriakides Bros Publications. (in Greek)
- Taratori, E. (2007). Dictionary entry "Project method". In: P. Xochellis (ed.), *Dictionary of Pedagogical Terms* (435-436). Thessaloniki: Kyriakides Bros Publications (in Greek)
- Taratori-Tsalkatidou, E. (2015<sup>3</sup>). *The Project Method in Theory and in Practice*. Thessaloniki: Kyriakides Bros Publications (in Greek)
- Tsybulsky, D. & Muchnik-Rozanov, Y. (2019). The development of student-teachers' professional identity while team-teaching science classes using a project-based learning approach: A multi-level analysis. *Teaching and Teacher Education*, 79, 48-59.
- Webb, N.M., Ing, M., Kersting, N., & Nemer, K.M. (2006). Help seeking in cooperative learning groups. In S.A. Karabenick & R.S. Newman (Eds.), *Help Seeking in Academic Settings: Goals, Groups, and Contexts* (65-121). Mahwah, NJ: Erlbaum.
- Wurdinger, S., Haar, J., Hugg, R., & Bezon, J. (2007). A qualitative study using project-based learning in a mainstream middle-school. *Improving Schools*, 10(2), 150-161.

Chatzidimou, D. & Taratori, E. (2001). The Project method in school. In: I. Pirgiotakis (ed.), Whole-day school – Function and perspectives (115-130). Athens: Textbook Publishing Agency. (in Greek)