RESEARCH LABORATORY/ LABORATOIRE DE RECHERCHE

THE ROLE OF QUESTIONING IN EFFICIENT CLASSROOM COMMUNICATION

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Abstract

Efficient communication is a priority of a society in which interaction and interpersonal communication are essential to the success of an activity, of collaboration. Classroom communication, seen as a particular form of interpersonal communication, is the one that mediates the triad teacher-curriculum-student, providing the general framework for achieving the educational goals. The complexity of this activity makes it possible to address many and various aspects of classroom communication. Our study aims to highlight the impact that the correct wording of questions has on the efficiency of teacher-student communication. We adopt the perspective of a prospective teacher, whose experience in communicating with students is limited to the one gained during the teaching practice. Our investigation was carried out on a sample of 68 1st year Master's students of the Faculty of Letters, who are also enrolled in the Teacher Training Programme, Cycle II.

To carry out the research, we used the survey method based on questionnaire, more precisely the tool was an opinion questionnaire. Data collection and interpretation, i.e. of the answers provided by the respondents, enabled us to find out their opinion on the importance of formulating the questions for effective communication purposes, the types of questions used, the prerequisites, any mistakes or difficulties encountered.

The questionnaire also allowed us to identify the role that the Teacher Training programme palys in the development of teacher's communicative competence in the classroom.

Key words: Classroom communication; Communicative competence; *Question types; Efficient communication.*

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1. Introduction

The importance of classroom communication is widely acknowledged by any teacher, regardless of the subject or the level of education featuring the students. The need "to be understood", to interact appropriately with the students, to engage them in the activity is felt at any stage of the lesson or activity carried out by any teacher, regardless of his/her qualification and experience.

In this context, communicative competence is an important dimension of the teacher's aggregate competence, its development being a priority in pre- and inservice teacher training (Vladuţescu, 2014). Although it is based on elements specific to the personality of each teacher, as any competence, it can and it should be used in real life purpose situations, during the teaching process and in various educational settings.

One of the challenges that the teacher faces, especially in the first years of teaching, is related to how he/she addresses pupils, how he/she phrases questions, and how he/she gets the expected answers from the students. Given the complexity and variety of teaching contexts, of the variables involved, the typology of the questions is diverse. If we add the fact that the teacher should be flexible, creative, open-minded, sometimes able to improvise, questioning can be a stumbling block for him/her.

The review of mainstream literature, focusing on the ways of increasing classroom communication efficiency, from the perspective of how to phrase the questions, correlated with the practical experience, is able to provide answers and solutions to this basic component of the teacher's activity.

2. Theoretical background

In the teaching context, communication is considered instrumental as directly supporting the learning process (Saucan, 1999, in Bloju, Stan, 2013). Sălăvăstru (2004, in Samfira, Fărăgău-Dragoș, 2014) sees didactic communication as one of the most used interpersonal paideia relationships.

The purpose of teaching is to trigger, provoke or induce a change in the behaviour and attitude of the intended audience (Bloju, Stan, 2013, p. 107). Regardless of the field in which it is used, classroom communication favours the exchange of ideas and experiences, it helps overcome the difficulties that arise in the teaching process and cognitive activity (Arpentieva, Menshikov, Braitseva, 2018).

Questions, as a central element of communication, are envisaged by some authors as "a didactic tool pertaining to interactive teaching, interactive learning, interactive assessment" (Bocos, 2013, p. 226, our translation).

There are different types of questions, based on different criteria. Ilie (2006, pp. 126-128) and Bocoş (coord.) (2016, pp. 136-138) shortlist them based on the various points of view expressed by different scholars (Leroy, Nicola, 1996, Cerghit, 1997, Albulescu, Albulescu, 2000, Gagnon, Collay, 2001, Joita, 2005, *apud* Ilie, 2006, pp. 126-128):

1. According to purpose:

a) convergent or closed, which involve one single possible answer;

b) divergent or open - allowing for various answers, multisided perspectives;

c) stimulating and exploratory - engaging, stimulating the student to find the answer.

2. According to the cognitive aims:

a) factual (when ?, how long ?, what ?, which ?, who?)

b) conceptual (what?, how to prove ?, what should ?, what is it made up of?, where to find out, etc.)

c) procedural (how do we demonstrate, how do we solve it, how do we transcribe it, etc.)

d) analysis (what is the difference ?, what is the link?)

e) synthesis (how is it possible? what happens if?)

f) metacognitive (what do you think ?, what is more important?)

3. According to the cognitive processes:

a) *classification* (what is it?)

b) *comparison* (is it more or less?)

c) *ordering* in space and time (where?, when?)

- d) *counting/quantifying* (how many? how much)
- 4. According to their function:

a) *mnemonic* (what is it? what was it?) or reproductive-cognitive (which?, what?, who?)

b) *productive-cognitive* (why?)

5. According to interaction patterns:

a) *front, general* or *whole* (What is the cause?, Why?)

b) *direct*, targeting an individual ("X, what makes you say that...?")

c) *reversed* (received by the conversation leader from a participant and sent back to him/her); e.g.: "Participant: what happens if....?"; Leader: "What do you think?"

d) *relay and communication* (received by the conversation leader from a participant and sent back to another participant); e.g.: "Participant Z: Don't you think that....?; Leader: Z raised a very interesting question. What do you thinl?"

e) return: "Z expressed his/her opinion on...How can it be influenced by....?"

f) *imperative* (counting as a request): Explain the causes! Describe the consequences"

g) *controversy*: "Is there life on Mars?"

6. According to the role played during the activity:

a) *questions calling for guidance, management*: What resources do we need? What materials do we need?

b) questions calling for anticipation (What is the outcome?)

c) questions calling for clarification (What does it mean ...?)

d) questions calling for integration (How can we use the newly acquired knowledge?).

Based on Bloom's taxonomy, Adams and Pierce (2004) propose a 6-level classification:

- Questions relating to the Remember dimension: "What is the correspondent of the verb in Spanish?"
- Questions relating to the Understand dimension: "What is the commercial method for producing hydrochloric acid?"
- Questions relating to the Apply dimension: "Can you give an example to illustrate this definition?"
- Questions relating to the Analyze dimension: "What resemblances and differences are there between ...?"
- Questions relating to the Evaluate dimension: "Providing they had equal resources, which do you think would be more competent: General X or General Y? Why?"
- Questions relating to the Create dimension: "Taking into account the qualities of the two leaders, what can we conclude about the qualities of a leader?"

Bloju and Stan (2013) consider that classroom communication through questioning proves its efficiency due to the following reasons: it stimulates the intellectual activity of students; it triggers positive feelings; it actively engages students in carrying out tasks; it creates a favourable environment for the teaching process.

Adams and Pierce (2004) start from the belief that the use of communication skills is a prerequisite for the efficiency of teaching, teachers having the role of using the different categories of questions to stimulate students' thinking so as to enable them to make intra- and interdisciplinary connections, as well as connections between the acquired knowledge and different situations in the real world.

Used in a virtual environment, facilitated by new technologies, communication becomes highly specific, being considered by some authors (Dauvarte, Dislele, 2015; Vaskivska, Kosianchuk, Skyba, 2017; Mendoza, Mendoza, 2018) to be an effective tool in achieving knowledge and learning, regardless of the subject.

There are several conditions, requirements to meet to formulate questions adequately. Thus, according to Tofadde, Elsner, Haines (2013), the main criteria run as follows: phrasing and clarity; the psychological safety of the individual who has to answer the question; sequencing and balance; wait time occurring between the teacher's question and a student's response. Mason (2010) puts forward some conditions that the teacher has to comply with when formulating questions: querying his/her own experience; reducing the frequency of control questions; creating a favourable, tension-free atmosphere; expressing interest in how the students think, not just in what they think; encouraging students to generate their own specific questions.

In line with Etemadzadeh, Seifi, Far (2013, pp. 1026-1027), we also mention: initially asking questions for oneself before posing them to students; avoiding asking students too many questions; provoking students, after asking the question, to think; promoting gender equality; involvement of all students; allowing a minimum amount of time for each student; stimulating students to volunteer to answer; actively

involving as many students as possible, depending on the questions; carefully correcting answers; the frequent use of praise and appreciation.

Yang (2017) lists several important criteria for formulating the questions:

• Scientifically well-grounded questions - they must be scientifically compliant, error free;

• Comprehensibility - the questions must be easily understood;

• Mastery - the questions must be formulated so as to maximize what students know and can do, while at the same time offering the opportunity to spot errors in a clever way.

We also add other general conditions that should be observed when wording the questions: to be clear and concise; to be logically ordered; to follow a gradient, from simple to complex, from concrete to abstract; to stimulate students' thinking, their higher cognitive processes; to encourage multiple approaches and interpretations; to stimulate critical, reflective, interrogatory attitudes; to train metacognitive capacities; to stimulate creativity.

3. Research methodology

Our research was aimed at identifying the opinion of prospective teachers about the importance of classroom communication, in general, of the questions raised by the teachers, in particular. The objectives pursued were the following:

• Know the opinion of the subjects regarding the conditions to be met for the correct formulation of the questions addressed to the students;

• Identify the type of relationship that is established between the formulation of the question and the phrasing of the answer;

• Know the difficulties encountered by students in phrasing the questions addressed to their peers, and their causes;

• Know the students' opinion on the importance of the ability to correctly formulate the questions and the extent to which it was developed during the teaching practice.

In accordance with the purpose and objectives of our research, we sought to validate the following working hypotheses:

1. In achieving effective classroom communication, the correct formulation of the questions is an essential condition.

2. The experience gained by students during the teaching practice period contributed to the development of the ability to correctly phrase the questions addressed to the students.

To this end, we used the survey **method** based on questionnaire design and administration. The research tool used, namely, the opinion questionnaire, covered 16 items of different types: closed, single-choice items, multiple choice items, semiclosed items that gave subjects the possibility to formulate a response other than the variants offered, and open-ended items. The tool applied was consistent with the intended purpose and assumptions.

The questionnaire was administered to a sample of 68 1st year Master's students of the Faculty of Letters (specializations: Romanian, English, French,

Translation-Interpretation, Communication, Music), also enrolled in the 1st year of the Teacher Training programme, Cycle II, after the successful completion of the Teacher Training programme, Cycle I, when they completed the teaching practice in compulsory pre-university education. Most subjects surveyed were aged between 21-25 years. Out of them, only 4 subjects (5.88 %) were in-service teachers.

4. Data collection and interpretation

We shall present the findings according to how and to what extent they contributed to the validation of our working hypotheses.

Thus, in order to test the first hypothesis, i.e., *In achieving effective classroom communication, the correct formulation of the questions is an essential condition*, we used the answers provided by the students for items 1, 2, 3, 4, 5, 6, 7 and 16.

The answers recorded for the first item of the questionnaire indicate that most respondents consider that the questions are important in achieving effective classroom communication, as indicated in Figure 1.

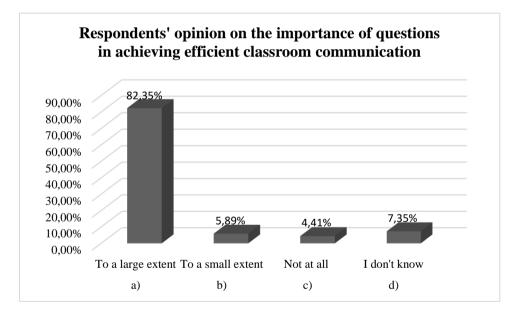


Figure no. 1. Respondents' opinion on the importance of questions in achieving efficient classroom communication

Item 2 was a multiple choice one and investigated the views of the subjects on the conditions that teachers meet in formulating the questions. The answers are shown in the Figure 2.

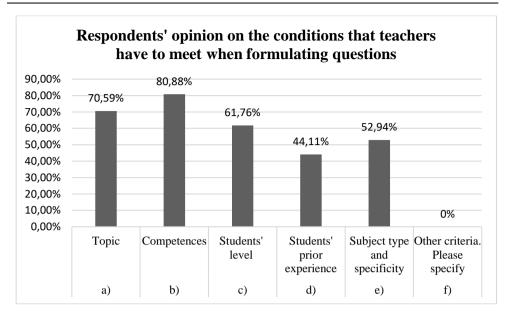
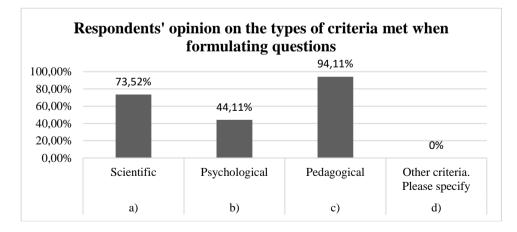
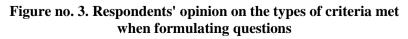


Figure no. 2. Respondents' opinion on the conditions that teachers have to meet when formulating questions

As shown in Figure 2, the respondents top rank the criterion of the competences pursued and of the subject type and specificity, with high scores also for the other variants.

Furthermore, in relation to the correct phrasing of the questions posed by the teacher to the students, the respondents rank the pedagogical criteria first - see Figure 3. We mention that this item was equally a multiple choice one.





The respondents unanimously think that the communicative competence of the teacher is very important, as evidenced by their answers to one of the items of the questionnaire (item 3).

Regarding teachers' mistakes when formulating questions to be addressed to students, the respondents chose the variant that refers to ambiguity and use of abstract language. Figure 4 shows the respondents' options for all item variants (multiple choice item).

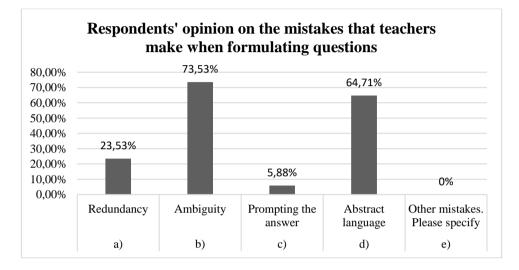


Figure no. 4. Respondents' opinion on the mistakes that teachers make when formulating questions

In spite of these mistakes, most of the investigated respondents (77.94 %) consider that the teaching practice tutors achieved efficient classroom communication from the point of view of the phrasing and clarity of the questions, while the rest of the respondents (22.06 %) chose the "I don't know" variant.

To a large extent, most of the respondents (82.35 %) consider that there is a correlation between the correct wording of a question by the teacher and the elaboration of the expected answer from the student. Other respondents argue that this connection is poorly visible (11.77 %) or simply lacking (5.88 %).

Regarding the consequences arising from an incorrect phrasing of the questions asked by the teacher to the students, the prospective teachers mentioned as a priority:

- Confusing students;
- Misunderstanding the student's question;
- Lack of an adequate answer from the student, of an incorrect answer;
- Hindering the understanding of the newly taught content;
- Misunderstanding the concepts and new ideas;
- Diminishing students' interest and involvement in the activity;

• Diminishing the students' self-esteem and, implicitly, their academic performance;

• Triggering students' feelings of fear of failure.

The responses to items 8, 9, 10, 11, 12, 13, 14 and 15 allowed for the validation of the 2nd working hypothesis: *The experience gained by students during the teaching practice period contributed to the development of the ability to correctly phrase the questions addressed to the students*.

According to the respondents' answers, about half of them (44.12 %) admitted that they had experienced difficulties during the teaching practice, while the rest (55.88 %) claimed that they had not faced difficult situations.

Among the difficulties mentioned by the investigated respondents, we highlight:

• Ambiguous, unclear, abstract expression that made it difficult to understand the meaning of the questions;

• Establishing the degree of difficulty of the questions due to insufficient knowledge of the students' profile and of their level;

• Fear not to provide the wrong information;

• Insufficient correlation of the question with the expected answer from the students;

- Students' poor knowledge of the subject;
- Students' lack of attention, lack of motivation;
- Insufficient knowledge of the prior experience of the students, of their learning and teaching routines.

Most of the students in the sample of respondents (73.53 %) stated that the experience gained as a result of the teaching practice contributed significantly to the development of communicative competence, while the rest considered that the objective was hardly achieved (16.18 %) or could not provide an answer (10.29 %).

In the opinion of the majority of respondents (70,59), the questions they asked the students during the lessons they taught were correct to a high degree. Only 19.12 % of the respondents consider that the questions were correct to a small degree, and the remaining 10.29 % could not appreciate at all.

In the cases where the students' answers did not meet the expectations, the prospective teachers indicated as overriding reasons the insufficient knowledge of the students' profile and the students' lack of interest, motivation and attention (See Table 1).

Table no. 1. Respondents' opinion on the students' wrong or incomplete answers

a)	Poorly formulated question	14.71 %
b)	Insufficient knowledge of the students' profile	38.24 %
c)	Students' poor knowledge of the subject	19.11 %
d)	Students' lack of interest, motivation and attention	27.94 %
e)	Other causes. Please specify.	0 %

One of the items in the questionnaire asked for the opinion of the respondents about the types of questions used predominantly in the activities carried out with the class of students during the teaching practice. Dealing with a multiple choice item, the respondents chose several variants. The frequency of their choices, expressed in the form of percentages for each variant, is presented in Table 2.

	Question type	Frequency		Question type	Frequency
a)	Clarification	66.18 %	h)	Explanation	26.47 %
b)	Guidance	63.24 %	i)	Comparison	30.88 %
c)	Integration	55.88 %	j)	Opinion	19.17 %
d)	Return	4.41 %	k)	Interpretation	14.70 %
e)	Imperative	2.94 %	1)	Support for ideas	22.05 %
f)	Controversial	1.47 %	m)	Evaluation	32.35 %
g)	Defining	51.47 %			

 Table no. 2. Respondents' opinion on the question types mainly used in classroom communication

As it can be seen in Table 2, the most commonly used were questions calling for clarification, guidance, integration and definition. For the other categories, percentages indicate a lesser frequency of use, although some of the categories are recommended for critical, analytical, reflective thinking, creativity (such as interpretation, support for ideas, opinion). The explanation may lie in the insufficient practical experience of the prospective teachers.

Evidence in this respect is also given by the respondents' answers to one of the items that called for their opinion on the conditions/factors that ensure the development of the teachers' competence of formulating meaningful questions. Similar percentages were recorded for the variants referring to the practical experience (39.71 %) and the teacher training (36.76 %), as indicated in Figure 5.

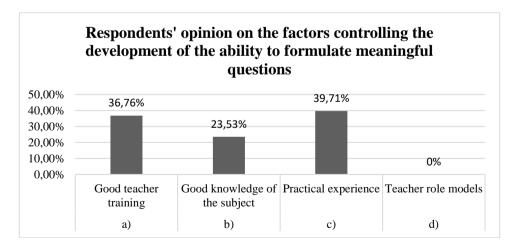


Figure no. 5. Respondents' opinion on the factors controlling the development of the ability to formulate meaningful questions

The answers provided by the respondents allowed for the validation of the two working hypotheses.

5. Conclusions

Our research sought to thoroughly describe the importance of classroom communication, more particularly, with reference to the appropriate and meaningful phrasing of the questions addressed to students. We believe that this is one of the difficulties faced by a prospective teacher or an inexperienced teacher at the beginning of his/her career. Everyday practice confirms that students often fail to provide the correct answers to questions asked by the teacher, not necessarily on account of insufficient preparation or lack of knowledge of the subject, but due to misunderstanding or inadequate decoding of the question, of the request, the task formulated.

Mainstream literature investigates a wide range of methods that are within the reach of the teacher and which can be capitalized according to the specificity of each teaching context and the variables it implies. The competence of the teacher lies first and foremost in choosing the types of questions most suited to the situation, and, secondly, in the way the questions are formulated so as to generate the expected answers.

Our theoretical investigation was also supported by applied research, having a constative character, identifying the main aspects and difficulties that classroom communication raises to the prospective teachers during the teaching practice period. Trainees admit that, to a considerable extent, the success of their work also depends on how they communicate and interact with the students in the classroom and on how they phrase the questions so that they will become meaningful. Although trainees stated that they had encountered difficulties from this point of view, however, they acknowledged the role of the teaching practice in the development of communication skills. Besides, their answers demonstrate awareness of the criteria, factors, conditions of efficient communication, which can function as a normative framework for the design and implementation of the teaching activities. It is obvious that, in interpreting the answers given by the respondents, we should take into account their specialization/academic background and the subject they taught (mostly, Romanian and foreign languages). It is necessary, in this context, to enlarge the group of respondents, by integrating other specializations than those already mentioned.

We conclude by saying that, beyond the norms and requirements that classroom communication should meet in order to prove its effectiveness and efficiency, the current teaching methodology pleads for flexibility, a creative approach to the teaching contexts, and the design of methodological and actionoriented variants.

REFERENCES

 Adams, C.M., & Pierce, R.L. (2004). Characteristics of effective teaching. In Traditions and innovations: Teaching at Ball State University. Muncie, IN: Ball State University, 102-107. Available at: https://it.ibu.edu.ba/assets/userfiles/ell/Characteristics %20of %20effective %20teaching.pdf, [online, 23.11.2018].

- Arpentieva, M., Menshikov, P., Braitseva, S. (2018). Didactic communication in the training of specialists in aerospace engineering. *MATEC Web of Conferences 158*, 1-5. Available at: https://doi.org/10.1051/matecconf/201815801004, [online, 22.11.2018].
- Bloju, C. L., Stan, R. V. (2013). Didactic Communication Key Element for Any Successful Teaching Activity. *Procedia - Social and Behavioral Sciences*, 76, 105 – 109. Available at: https://doi.org/10.1016/j.sbspro.2013.04.082, [online, 21.11.2018].
- 4. Bocoș, M.D. (2013). *Instruirea interactivă. Repere axiologice și metodologice*. Iași: Polirom Publishing House.
- 5. Bocoș, M.D. (coord.), Răduț-Taciu, R., Stan, C. (2016). *Dicționar* praxiologic de pedagogie, vol III, I-L. Pitești: Paralela 45 Publishing House.
- Dauvarte, L., Dislele, V. (2015). Didactic Usability of the Information Communication Technologies in Home Economics and Technologies Lessons. *Rural Environment. Education Personality*, 188-197. Available at: http://llufb.llu.lv/conference/REEP/2015/Latvia-Univ-Agricult-REEP-2015proceedings-188-197.pdf, [online, 22.11.2018].
- Etemadzadeh, A., Seifi, S., Far, H. R. (2013). The role of questioning technique in developing thinking skills: The ongoing effect on writing skill. *Procedia - Social and Behavioral Sciences* 70, 1024 – 1031. Available at: https://core.ac.uk/download/pdf/82188148.pdf, [online, 20.11.2018].
- 8. Ilie, V. (2006). Semnificația pedagogică a întrebării. Annals of the University of Craiova, Psychology-Pedagogie Series, V (11-12), 124-132. Caiova: Universitaria Publishing House.
- Mason, J. (2010). Effective Questioning and Responding in the Mathematics Classroom. Available at: http://mcs.open.ac.uk/jhm3/Selected %20Publications/Effective %20Questioning %20& %20Responding.pdf, [online, 20.11.2018].
- Mendoza, D.J., Mendoza, D. I. (2018). Information and Communication Technologies as a Didactic Tool for the Construction of Meaningful Learning in the Area of Mathematics. *International Electronic Journal of Mathematics Education*, 13 (3), 261-271. Available at: http://www.iejme.com/download/information-and-communicationtechnologies-as-a-didactic-tool-for-the-construction-of-meaningful-3907.pdf, [online, 23.11.2018].
- Samfira, M., Fărăgău-Dragoş, M. (2014). Role of nonverbal behaviour in didactic communication. *Research Journal of Agricultural Science*, 46 (2),191-196. Available at: http://eds.b.ebscohost.com/eds/pdfviewer/pdfviewer?vid=1&sid=8c2efa81-e08d-4089-955f-1c1afaaff727 %40pdc-vsessmgr01, [online, 22.11.2018].
- 12. Tofadde, T., Elsner, J., Haines, S. T. (2013). Best Practice Strategies for Effective Use of Questions as a Teaching Tool. *American Journal of Pharmaceutical Education*, 77 (7), 1-9. Available at:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3776909/pdf/ajpe777155. pdf, [online, 20.11.2018].

- Vaskivska, H. O., Kosianchuk, S. V., Skyba, H. M. (2017). Didactic Possibilities of Information and Communication Technologies in the Process of Development of Educational Environment in Upper Secondary School. *Information Technologies and Learning Tools*, 60 (4), 17-27. Available at: http://lib.iitta.gov.ua/708500/1/VHO-KSV-SHM_ICT-18.pdf, [online, 20.11.2018].
- Vlăduțescu, Ş. (2014). Didactic Communication as Tool in European Integration. *Communications in Applied Sciences*, 2 (1), 85-96. Available at: http://www.infinitypress.info/index.php/cas/article/view/765, [online, 23.11.2018].
- 15. Yang, H. (2017). A Research on the Effective Questioning Strategies in Class. *Science Journal of Education*, 5 (4), 158-163. Available at: doi: 10.11648/j.sjedu.20170504.16, [online, 25.11.2018].