



*Sounds in European E-Learning - SEEL*  
Grant Agreement No.: 2014-1-DE02-KA200-001631  
Project No.: 2014-1-DE02-KA200-001631  
Report concerning the results of interviews  
Research document for Intellectual Output No. O1/A1  
Project Partner – P4, CTI – RO



# REPORT CONCERNING THE RESULTS OF INTERVIEWS

*Sounds in European E-Learning - SEEL*

*Research document for Intellectual Output No. O1/A1  
April 2015*

P4 – Colegiul Tehnic Ion I. C. Bratianu – CTI - Romania

## **THE FRAME OF TAKING OUR INTERVIEWS**

The interviews have been designed to evaluate teachers' and students' perception on using sound in teaching-learning activity.

In order to have a clear image on the purpose of our interviews, the moderator has made a short presentation of SEEL project, an ERASMUS+ project, as well as its objectives.

Each of the interviewed individuals was asked to refer to the ways of using and integrating sounds within didactic process on the school subject that he/she teaches. There had also been requested by the moderator some particular examples of using sounds in those situations the teachers have used them in his/her didactic activity.

There have been interviewed four teachers who teach different school subjects on different educational levels, as it follows:

- ☞ a technical and economical teacher, on high school level;
- ☞ a foreign languages teacher – French, on high school level;
- ☞ a musical education teacher, on elementary school level;
- ☞ a primary school teacher.

The dialogue our moderator had with the group of students has been developed as a “round table” design, the structure of discussion being similar to the interviews with the teachers.

## **THE FIRST INTERVIEW**

### **ABRUDAN ZARAZA**

My name is Zaraza Abrudan and I'm a teacher at Colegiul Tehnic Ion I. C. Bratianu from Timisoara, Romania. Our school is a partner within the Erasmus Plus “Sound in e-learning” project, coordinated by Paderborn University, Germany. Another partners in this project are Ingenious Knowledge, from Germany and Zakladni School, from Czech Republic. One of the activities within our project is a study of sound in Romanian educational process. On this purpose, we will interview a few teachers from Colegiul Tehnic Ion I. C. Bratianu and Elementary School no. 12, both from Timisoara. Please, introduce yourselves and tell us what do you teach!

### **MICLUTA VIOLETA**

My name is Violeta Micluta. I'm a mechanical engineer, as profession, being specialized in textile machineries. I have a didactic experience which started 24 years ago. I teach technical subjects specific to mechanical field since 1998.

ABRUDAN ZARAZA

We would like to know what's your opinion about use of sounds in education activities.

MICLUTA VIOLETA

Sounds are playing an important role in our daily lives; they help us to communicate with our family, our friends, to receive information and to assimilate different things. Also, the sounds are warning us on different dangers, made us be careful when something unusual is happening around us, or even enjoy them when we hear a beautiful song. Scientifically, the sound is a vibration produced by a body which propagates in the air and reaches at the mechanism of the ear. Technical acoustics is a part of acoustics which involves studying sounds produced by running machines and tools and the interaction of sounds with different materials; it studies the effect of sounds on humans and environment.

ABRUDAN ZARAZA

Taking into account that you very nicely have defined, physically, the sounds, I'd like to ask you to give examples of the way you are using sounds in teaching technical school subjects.

MICLUTA VIOLETA

Technically, we have to make a clear difference between sound and noise. The noise is a complex of sounds, very loud and unpleasant for our ears. Professional noise or the noise met in a job sector is that kind of sound produced by running machineries, measurement tools, devices.

ABRUDAN ZARAZA

Do you have some certain examples?

MICLUTA VIOLETA

Yes, of course: every single machine produces a specific sound when it is running in a regular working regime. Any kind of modification of this sound leads, in our mind, to a possible mechanical breakdown for that machine. For example, a very strong, creaking sound makes us think about the over use of gears, while a metallic hoarse sound makes us think that lubricant is missing and the entire mechanism is about to crash. Meanwhile, a very loud and discontinuous noise makes us think about a wrong setup of the gears, fact that our students should be used to and eventually they should recognize and analyze sounds in order to determine the possible machine crashing factors.

ABRUDAN ZARAZA

So, let us understand: the students should hear these sound multiple times to recognize them, right?

MICLUTA VIOLETA

Yes, they should hear these sounds; it would be recommended if the classes were held inside mechanical workshops of different companies. If we don't have this chance, to bring students there, we should use audio-video support to provide these sounds.

ABRUDAN ZARAZA

OK. So, for the students to get used to these sounds, they should hear them multiple times; and I understand that you use these audio-video support systems in this matter. But, I would also like to ask you something concerning phonic pollution. We know that technical noise, especially those made in a technical environment, may cause this technical pollution, which can affect health, at some point: what kind of information can you provide to your students about that type of phonic pollution and the negative effects of sounds and our health?

MICLUTA VIOLETA

During the school module concerning healthy and safety in work experience, we teach our students both about the level and intensity of sounds and present them the negative effects upon the mechanical environment workers. The teacher should present them and the teacher really presents them the ways of protection against very strong noise and the methods of how to reduce noise inside their working environment.

ABRUDAN ZARAZA

Thank you very much! Here is the way that sounds may be integrated within teaching mechanical school subjects.

## **THE SECOND INTERVIEW**

ABRUDAN ZARAZA

Hello. Please, introduce yourself and tell me what school subject you teach?

MONICA BAN

My name is Monica Ban; I'm a primary school teacher at School no. 12, Timisoara.

ABRUDAN ZARAZA

I'd like to know what's your opinion about use of sounds in teaching activities.

MONICA BAN

Sounds represent a very important ingredient in our activity, as well as you cannot bake a piece of bread with no flour. So, the sound is one of the most important condiments used in mass education during primary school. The sound is not only taught at the preparing\* (zero class graders, Author's Notice\*) or first graders, but also on the higher primary education graders, as the 2-nd, 3-rd and 4-th, where you cannot teach the kids what a nightingale is without playing on

a device the specific sound a nightingale provides; you cannot teach them about the wind without playing the sounds that wind produces in nature, or any other educational element that we met in our classes.

ABRUDAN ZARAZA

I understand that you can give us more examples about use of sound, other than those mentioned before, right?

MONICA BAN

Yes. During the preparing graders\* (zero class graders, Author's Notice\*) we use a method named the phonetic–analytic–synthetic method, which means cutting out a text from an enounce, identifying the words, counting them, splitting them into syllables, splitting syllables into sounds, and, finally, associating sounds with the necessary letter or the letters for providing that sound and all the way out backwards. Here, also, the sound has an essential role...

ABRUDAN ZARAZA

Did you notice a particular kind of attention that young students have shown while sounds were used? Also, did you notice their improved capability for learning?

MONICA BAN

Yes. There are four types of basic teaching activities. All of these are there present in education. Part of the students are learning visuallyprevalent, another part, aural. There are other categories of students, who are learning kinesthetic or tactile. But we are using sound all along and, of course, the kids are more tempted when the sound...

ABRUDAN ZARAZA

...provides some sensations?

MONICA BAN

Exactly! You are right; we have to be more and more attentive with these types of learning situations, because we have to satisfy each student's needs. We need to talk more with those kids who are learning aural prevalent; we have to make them repeat the notion they have learnt and to assure ourselves that they will hear as many sounds as possible.

ABRUDAN ZARAZA

I'd like to ask you one more question. Have you noticed if music helps children to get calm, to be more receptive, and, if you did, could you tell me what kind of music do they like or how music influence them?

MONICA BAN

Music is one of my hobbies, I can admit it. When I was a child, all the students in my classroom started learning how to play a musical instrument since we were in the first grade. This is why I cannot imagine music classes without... sounds, with no musical instruments, on the first hand. We use musical backgrounds on different kind of activities and lessons, as well as those that involve creation: handmade crafts, painting. It depends only on the theme that we chose for the musical background rhythm to be faster – the kids will develop activities in a faster way, too. When we prefer listening music in a slow rhythm mode, their reaction is visible, slowing down their own rhythm, but improving their focus.

ABRUDAN ZARAZA

Thank you very much!

## **THE THIRD INTERVIEW**

ABRUDAN ZARAZA

Please, introduce yourself and tell me what's the school subject that you teach.

POPA DANA

My name is Daniela Popa; I teach French at Colegiul Tehnic Ion I. C. Bratianu from Timisoara.

ABRUDAN ZARAZA

It means that you also use sounds pretty much in teaching French, because sound is very important when learning a foreign language. I'd like you to tell me, please, which are the advantages of using sounds in teaching and learning a foreign language.

POPA DANA

I could say that we cannot teach one of the essential components of a foreign language, I mean the listening part, without a sound file. This sort of file, and this is the most important advantage of its usage, will consist always into a shutter element of communication between a transmitter and a receiver. Without this shutter element, communication couldn't exist. So, a sound file can provide an authentic communication mode with a student and also it can take him apart from that situation which makes him a spectator in front of a foreign language that he or she has to acknowledge. He's already becoming a real actor in that certain communication.

ABRUDAN ZARAZA

Can you give me a practical example of how this type of class should develop, please?

POPA DANA

Sure. A sound file can be used in two manners in order to be ensured that our student has accomplished the task. During the listening of sound file, the student may imagine assumptions on different circumstances. For example, there might be listened the background sound from a restaurant. The student will have to identify the moment of the day when meal is served and also identify the noise of the objects, the environment, the dialogue between the customers. All the time, listening of that sort of file takes two steps: listening to the background noise, and, than, listening to both background noise and conversation part. This last part will always happen subsequent to the listening the background part, when the student applies the knowledge accomplished during the foreign language classes, for example, elements of vocabulary used inside a restaurant, as a role play, with a costumer and a waiter.

ABRUDAN ZARAZA

So, the conclusion is that, at first, the student will listen to the noise background and he or she will have to say what was heard in that foreign language, followed by the second part, the listened dialogue, which means understanding; practically, there is also tested a dialogue understanding.

POPA DANA

Yes, there may be tested a dialogue understanding or there may be tested a student's ability to reproduce the replies from that certain situation, using the aural sound recording of the dialogue, as a correction of the dialogue studied during the class; we can work on this level, too.

ABRUDAN ZARAZA

As a foreign language teacher, French teacher, I'd be interested to know what kind feedback you have, concerning the use of sounds as didactic means; I would like you to answer me as a foreign language teacher.

POPA DANA

The students are very apprehensive when they use such a document during their class; they have a very favorable answer reaction. They also very quickly acknowledge a linguistic knowledge and behavior thanks to that type of document. There can very easily be observed, using a file like that, the progress of the student. At the beginning of the class, the student has got a baggage of knowledge, but, at the end, due to a particular sound file, the student will enrich his or her knowledge with a supplement of baggage. The student responds very well on such of communication situation and these things happen also ensure a perspective, because he or she develops his or her musical perception of the language and a very correct pronunciation. The

student has also got the possibility to learn things like that subsequent to the verbal part from the respective sound file. As a plus, such a document offers me, as a French teacher, the possibility of using the means that I have used; their proficiency in use during the class; this is very important. It also allows me to select, between a plenty of sound files, the one that fits to students' specific features on a way which allows him or her to practice the already acknowledged baggage based on the listened sounds. The sound file doesn't have to be very complicated if the student's level is an average one.

ABRUDAN ZARAZA

Let me understand that it's very important to be used that type of sound files in teaching and learning a foreign language and the qualitative accumulation leads to a qualitative leap for the students.

POPA DANA

That's for sure!

ABRUDAN ZARAZA

Thank you very much!

POPA DANA

Me, too.

## **THE FOURTH INTERVIEW**

ABRUDAN ZARAZA

Good afternoon. I understood that you teach musical education at the elementary school and the first two high school graders. Because we have a sound research project used in educational process, we'd like you to tell us some words about yourself and your activity during musical education classes.

SFETCU ADRIAN

Hello. I'm pleased to talk to you. I can tell you that musical education subject is the most important for the use of sound in all possible patterns. Concerning use of sound during school classes, we can do it in many ways. I have studying students' psychological features, how to induce an optimistic state, because we use major and minor gamutons, faster or slower. We know that both minor gamut and slow tons induce a melancholic state; if you know the song, for example, "Look at the poor cuckoo baby", for elementary graders, this reflects a minor tonality and it brings a melancholic state. But, we have also a minor gamut with a faster rhythm, as well as it happens in the song called "Who knows the living chicken?" which brings an optimistic state. Well, here we can make a link with the words used in "Who knows the living chicken?",



especially used for the 5-th to 7-th graders. There appear different animals or birds in the song, as well as the “meow” cat, associated to their specific sound.

ABRUDAN ZARAZA

Let me understand that our student is learning about animals and recognizes them due to their specific sounds.

SFETCU ADRIAN

Sure. We will rank the students, now, on their school level: I can see them split in two specific music knowledge categories: from the 5-th to the 7-th graders, and from the 8-th to the 10-th graders, when music isn't thought in our schools anymore.

ABRUDAN ZARAZA

Do the students learn a particular type of songs correlated with their class level?

SFETCU ADRIAN

Yes. From the 5-th to the 7-th grade, I stick to easier melodies as the ones that I mentioned before. Being young students, they get entertained when they hear about animals, about their specific sounds; for the older category of students, they start to hear other types of music, intentional or not. It doesn't mean that they develop their musical sensibility, but there appears an explosion of information; they don't want to hear anymore childhood animal songs.

ABRUDAN ZARAZA

Of course

SFETCU ADRIAN

Yes; they'd like to get to a superior level. This way, I've tried to make some negatives, the instrumental part of a song, where they should add the voice.

ABRUDAN ZARAZA

Yes

SFETCU ADRIAN

I came with these negatives on some modern instruments, some remixes, used in nowadays music, in order to attract them.

ABRUDAN ZARAZA

So, I can understand that you've used modern technology, too.

SFETCU ADRIAN

Of course; we are using all the resources: Smartphones, Tablets, with lots of musical applications for, let's say, pianos, drums... The students are delighted with them.

ABRUDAN ZARAZA

I'd also like to ask if you've noticed students learning easier the lyrics of a song when it's about a type of melody and harder when it's about some other sort of melody?

SFETCU ADRIAN

Well, it depends how you attract them. If you come with a modern technique, it doesn't matter how new or how old that song is; if you deliver a proper negative or use a particular instrument in order to get their motivation, because everything sounds well, as they've seen on the television, the lyrics doesn't matter anymore.

ABRUDAN ZARAZA

They can easily learn the song if they like the sound background.

SFETCU ADRIAN

Yes, exactly. They feel like the sounds they've seen at the television.

ABRUDAN ZARAZA

It's very interesting to hear; I'd also like to ask you what's the feedback regarding the influence of sound, the influence of songs that students learn with you on their education process, of designing a state of creation for students, to give the best they can do?

SFETCU ADRIAN

Yes. About feedback, my biggest satisfaction comes at the end of a celebration or a well developed music class, when they did great, I can hear them on the halls singing the same new song.

ABRUDAN ZARAZA

So, this becomes a "hit", right?

SFETCU ADRIAN

Yes, right! It becomes a "hit", for sure!

ABRUDAN ZARAZA

Tell me, please, have you collaborated with other colleagues in the matter of using sounds in education process, in different activities including students?

SFETCU ADRIAN

Of course; working in a school, we, the teachers, we need to collaborate. Music is also met at Romanian classes, when they learn particular texts; they hear sounds at English or French classes, too. So, yes, we had nice collaborations.

ABRUDAN ZARAZA

Where have you noticed a more important effect while using sound? Which of these school subjects presented a definite effect?

SFETCU ADRIAN

That definite effect is felt especially on languages, as well as English.

ABRUDAN ZARAZA

English...

SFETCU ADRIAN

Yes, English. Because many songs are sang in English.

ABRUDAN ZARAZA

I'd like to ask for one more question: on the way we know that colors influence our psychological part - and there are denoted frequently certain colors for particular children, inside the room, around them, for example, in case of apathetic children, red is recommended and also red or orange spots; for the most feverish children there are recommended green or blue spots – did you see that, on this context, knowing many ADHD children, can we use a certain melodic line both for getting them out of apathetic state or to calm them down?

SFETCU ADRIAN

Yes, sure. On many of their scheduled classes, especially on their first classes in the morning, when they need additional time to accommodate, I use to play on a device Vivaldi, “The seasons”. These sounds “refresh” them; they really start their day.

ABRUDAN ZARAZA

I have to admit that I also listen to Vivaldi, in the mornings, in my car!

SFETCU ADRIAN

Yes, sure. It's very important. As a complement, even flowers grow-up happier with that sort of music.

ABRUDAN ZARAHA

So, as a conclusion, we may say that sounds are everywhere and they have a great influence on us and we can use them to train youngsters.

SFETCU ADRIAN

Sure

ABRUDAN ZARAHA

Thank you very much!

SFETCU ADRIAN

Thank you!

## **THE FIFTH INTERVIEW**

ABRUDAN ZARAHA

Good afternoon. We met here with some of the final class graders, the 12-th, from Colegiul Tehnic Ion I. C. Bratianu. We especially chose 12-th graders because they have a longer learning experience and they can tell us more about it. Please, present yourselves. We know that you all are from the final year of study, but make yourselves known for the audience.

MARINEL GEANI

My name is Marinel Geani; I'm a student at Colegiul Tehnic Ion I. C. Bratianu, in the 12-th grade.

SZABADAI DANIEL

My name is Szabadai Daniel; I'm a student in the 12-th grade at Colegiul Tehnic Ion I. C. Bratianu.

MATEI GEANINA

My name is Matei Geanina; I'm a 12-th grade student.

GAL ALEXANDRA OANA

My name is Gal Alexandra Oana; I'm a 12-th grade student.

CIUCI FLORINA BIANCA

My name is Ciuci Florina Bianca; I'm a 12-th grade student.

DRAGOI ADELINA NICOLETA

My name is Dragoi Adelina Nicoleta; I'm a 12-th grade student.

AMARIEI ALEXANDRU

My name is Amariei Alexandru; I'm a 12-th grade student.

ABRUDAN ZARAZA

Our discussion will be about sound; in fact, sounds, thinking that around us there is plenty of sounds. Based on your experience, not only as students' experience, but life experience, could you tell me, please, what kind of sounds are there around us and what's their effect on us, on our mood, on our psychical part?

MARINEL GEANI

Some of them are positive, some other, negative effect. Positive effect, when we refer to music; negative, when we consider the noise made by vehicles, the traffic...

ABRUDAN ZARAZA

How does it influence us?

MARINEL GEANI

Music influences us on a positive way: we relax; the traffic does it in a negative way: we feel sound pollution.

ABRUDAN ZARAZA

Practically, we can say that there are two types of sounds: pleasant sounds and unpleasant sounds or noise, not only made by vehicles; there are also other kind of unpleasant sounds.

MATEI GEANINA

Sounds influence our psychical part, too, because they may produce wellbeing mood or a less pleasant one, as well as a depressive mood, of nervousness...

ABRUDAN ZARAZA

Yes; the sounds may also feverish us, making us have an aggressive mood. Meanwhile, we meet pleasant sounds. Can you mention some?

CIUCI FLORINA BIANCA

Music...

ABRUDAN ZARAHA

Music. Which makes us have a better mood. What I would also like to ask you is if you use sounds while you're learning.

MATEI GEANINA

Not all the time!

ABRUDAN ZARAHA

Not all the time... But?!?

MATEI GEANINA

I prefer learning in a silent background.

MARINEL GEANI

Me, too.

MATEI GEANINA

I consider that I can focus better, like that!

ABRUDAN ZARAHA

But, do you consider that background sounds could influence our capacity of learning, of memorizing? Could they capture our attention on some things that we want to remember and associate them with some certain sounds?

MARINEL GEANI

Yes, they can help us in learning foreign languages. I mention that, while learning, sounds don't help me; I prefer learning on a silent background and focus on the subject.

ABRUDAN ZARAHA

OK. Tell me now: with your experience, as students, as a 12-th grade long experienced students, have you used sounds at school? Have your teachers used sounds while teaching you certain things?

MARINEL GEANI

Yes. Especially in kindergarten, or primary classes.

ABRUDAN ZARAZA

Can you give me one example, about kindergarten?

MARINEL GEANI

Kindergarten? Yes, when we've learnt the animals due to their specific sounds! We imitated them to achieve knowledge easily.

ABRUDAN ZARAZA

OK. Can anyone remember anything about primary classes?

CIUCI FLORINA BIANCA

Yes. We used them to learn the musical notes, the alphabet, the letters...

ABRUDAN ZARAZA

You have practically associated a certain written letter with the sound that we issue while seeing it.

MATEI GEANINA

We used sounds during physical education classes, when the teacher captured our attention during sport games, as well as basketball, football, when he whistled on the beginning or at the end of the game, or during some special practice that we need to accomplish in sports, on the starts...

ABRUDAN ZARAZA

So, you knew the sound and you also knew that it's the start or the end of the game... or you had to execute a certain thing...

SZABADAI DANIEL

...or that we have to apply some rules...

ABRUDAN ZARAZA

Exactly! So, you've heard the sound, did a certain thing... you respected the issued rules. I'd also like to ask you to think how sound could be integrated in education; in the way that lessons are taught for you. In the information that you get, in such way to make you feel more attracted, to gather easier your knowledge, by association with certain things? Do you have any idea? Your opinion matters for us, no matter what...

MARINEL GEANI

In order to be helped by the use of sound, we are the first who should make the association. There is no one who has to play some music or to start lessons with music... we have to do it in our way, in our brain, first. This is a thing that gets trained since childhood: to associate something when we learn something else.

ABRUDAN ZARAZA

It's true! But it's also true that, subsequent to some requests, it was proven that there are sounds which influence us. Exactly as well as you found that noise make us feverish – for example, in case of loud noise, we definitely cannot learn; if there is someone working with a drilling machine outside, we cannot learn; if there is noise made by vehicles, by trams, we cannot learn and this noise disturbs us while trying to read a novel, to get relaxed – while some specific sounds, as well as music, turns into some special mood, a tendency for an easier retaining, for an easier association. Thinking on it, what kind of sounds do you consider as appropriate in order to help us learning or help teachers to teach you better? Let me be clear enough: they are not supposed to come to a lesson with a recording which imitates a drilling machine or... I don't know what! Because you won't have learnt anything, right?

SZABADAI DANIEL

First of all, the quality of sound should be a good one, to help us hearing instantly. For example, on foreign languages: if there appears a lack of sound or if the sound is not good enough, we cannot learn proficiently.

ABRUDAN ZARAZA

So, the quality of sound should be appropriate. But have you thought about what I was asking you earlier? For example, during history classes, how could be sound integrated?

MARINEL GEANI

Do you mean musical background?

ABRUDAN ZARAZA

No! I mean a lesson taught on History subject, with sounds...

MARINEL GEANI

Yes...

ABRUDAN ZARAZA

How could it be? Please, you can all express your opinion!

AMARIEI ALEXANDRU

Hmmm...



ABRUDAN ZARAZA

Sorry?

AMARIEI ALEXANDRU

I'm thinking about a documentary film, similar to our lesson.

ABRUDAN ZARAZA

A documentary similar to the lesson... And?

MARINEL GEANI

When the teacher tells us about weapons, he can play movies with the sound made by a particular weapon...

ABRUDAN ZARAZA

Let's allow Alex to continue his idea. Will you, please?

AMARIEI ALEXANDRU

The history teacher can associate the documentary, on the background, when he is teaching us information, when he explain us about the use of weapon, the noise they made. He can associate information with seeing the weapon, with listening to the noise it makes...

ABRUDAN ZARAZA

Yes! And you realize it better what it's all about, using sounds. Did I get it right?

MATEI GEANINA

Yes

ABRUDAN ZARAZA

Let me tell you something else: you, graduating a technological high school, learn some particular specialty subject modules and you all have acquired information about safety and protection in working environment. Is it correct?

MARINEL GEANI

Yes

ABRUDAN ZARAZA

So, we know about safety and security in working environment... Here, we can be warned of poor state of labor in case of some machines because of their sound... Right?

MARINEL GEANI

Right

ABRUDAN ZARAZA

...because, when they're working appropriately, the machine makes a particular sound, while, when it's working scanty, the noise is different. Also, think about safety: what have you been told?

SZABADAI DANIEL

In case of danger, as fire or earthquake, there are particular siren sounds; they differ on the each kind of danger.

ABRUDAN ZARAZA

And, while you're instructed, you hear these sounds. Correct?

SZABADAI DANIEL

Very correct!

ABRUDAN ZARAZA

Think about the moving machines inside a workshop, when they turn backwards: do they make any noise?

GAL ALEXANDRA OANA and MATEI GEANINA:

Yes!

ABRUDAN ZARAZA

So?

SZABADAI DANIEL

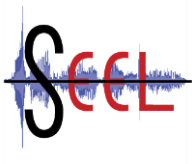
We can realize that it goes backwards, as well as...

ABRUDAN ZARAZA

As well as? As well as you can realize that a machinery moves backwards or forwards and if you can move in the area. The same thing happens with the vehicles on the streets: they have a specific sound when they move backwards. Am I right? And you know that you shouldn't cross from the back part of the vehicle... so, can sounds help us? Not only during our school preparation, but getting some life experience?

MARINEL GEANI

Sounds are everything! It's normal that we need them and they help us sometimes!



ABRUDAN ZARAZA

I think they help us all the time!

All:

Right!

ABRUDAN ZARAZA

Thank you, all of you, very much!

All:

Welcome!

## CONCLUSIONS

Subsequent to the interviews with the teachers we may come along with three ideas:

Within technical domain the sounds produced by machineries during work stages are very important, because they differ in case of normal use comparing to a situation of a failure. Also, within laboratory themes, on technical school subjects, the students learn how to recognize these sounds and to act appropriately. There exist critical situations when recognizing in time of a noise produced by a failing tool, and its turning off, may lead to avoiding a worse failure of it or even avoiding possible working accidents.

On the school subject “Health and safety work”, the students learn how to recognize different warning sounds, specific for their field, as well as warning sounds in case of natural disasters alarms, etc..

Foreign languages also use plenty of audio materials within didactic activity on the purpose of forming a correct audacity and pronunciation.

Musical education refines students’ sensitivity on sounds and simultaneously creates different states into their souls. Different tonalities, the teacher was saying, may induce different states of mind and they may increase perception capacity. If the information that teacher wants to transmit are in verses, and they are associated to a certain musical structure, the students will retain everything much easier. This method is specific for pre-school, primary school and elementary school students, but it might also be adapted to the superior education levels.

Within primary education system, another teacher said, music is one of the most important flavors of teaching activity. There even exists a didactic method, called the phonetic-analytic-synthetic method, by which application the student learns how to associate the letter (the graphic sign) to its corresponding sound, to correctly pronounce words and to break them up into syllables.

Likewise, when the students are nervous at the beginning of the class, there are some certain melodies which are chilling them out, and, if they’re apathetic, there are some certain melodies which activate their focusing capacity.

In conclusion, within Romanian education system, sound is part of different teaching activities, in a bigger matter on pre-school and primary school education, being remissive on elementary school and high school education (it’s used only in punctual situations on some certain school subjects).

***There doesn’t exist a set of didactic methods supposed to correlate the effects of sounds on psychic with the specific technology, yet, as well as these might be adapted to the teaching activities for each school subject.***

Subsequent to the discussions with our students, we concluded that they know the sounds studied along laboratory classes on specialty school subjects (technical sounds, warning sounds, etc.), but they do not know the psychological impact of sounds on human mind.

Part of them have noticed that music may chill them out or make them nervous, that noise is bothering them anytime, but especially in those studied situations, but they didn't associate the benefic effects of music with increased focusing capacity, with easier retention of information or with understanding phenomena.

*So, following this fact, the students should be aware of the benefic effect of sounds on psychic, on the level of human brain and on the features of each level. It's also important for the teenagers to know the possibility of passing from a level to the other one level of brain, getting helped by sounds, as well as the sounds that may induce a specific focusing, learning, creativity state.*

*The final conclusion is that it's normal for both students and teachers to be informed about psychical effect of sounds and to learn how to use them during their learning process.*