University teacher's speech and self-presentation in e-learning and distance professional communication

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Abstract. The organization of professional communication in the context of e-learning is unthinkable without solving a number of issues related to the university teachers' speech behaviour. During the COVID-19 pandemic, the problem of studying of the teacher's vocal tract functioning, the prevention of occupational diseases of the vocal tract, as well as identifying the psychological and linguistic features of the teacher's speech during online classes, webinars and video lectures has become more than relevant. Basing on the study of the normative and methodological regulation issues of the online-speaker's speech in distance communication, the peculiarities of speech technique and oratory competency in conditions of distance learning, an interdisciplinary study was carried out, which made it possible to determine the factors that increase the effectiveness of e-learning, activate the students' attention and form a positive visual and audiolingual teacher's image. The use of empirical research methods made it possible to determine a number of features of the teacher's professional communication in the context of e-learning. The article offers recommendations for teachers and university authorities to improve professional qualifications in the field of the issues studied.

1 Introduction

The teacher's speech behaviour in the context of e-learning, as well as the speech technique competency and the pedagogical voice in the remote form of contacts with students, has a number of differences in comparison with the traditional face-to-face communication. This became especially evident during the transition of educational institutions to remote learning in dozens of countries around the world, which were forced to take decisive measures to prevent COVID-19 pandemic spread.

Naturally, the issues of compulsory training of teachers' voice, speech technique, phonation breathing, intonation [1], as well as the problems associated with occupational diseases of the teachers' voice [2-5], were considered earlier. The importance of using vocal features and head gestures in increasing students' motivation and enhancing their attention was reflected in the robot-mediated learning process, as a result of which online

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courses, which initially assumed the absence of a teacher, were supplemented with an electronic image simulating the teacher's head, capable of demonstrating various emotions and supporting eye contact with students [6]. To this it should be added that there is a specialized interdisciplinary scientific journal "Journal of Voice" [7], focused on the study of the structure of the vocal tract, various issues related to voice control, maintaining its functioning at the level of professional requirements, as well as determining the role of voice in life of the representatives of different professions. However, the period of lockdown and the subsequent remote training set the task of ensuring a sufficiently high-quality sound of the teacher's speech, and as it turned out, the problems in this area are not so much related to technical issues of tuning, for example, microphones, but to the particular difficulties of teacher's voice functioning in the distance mode [8-9].

However, if the voice is a mechanism for the external implementation of the teacher's speech, then the problems of organizing communication between the teacher and students in a distance mode are not limited to its loudness, clarity and intelligibility of diction. The teacher's speech is a mechanism for the manifestation of his/her linguistic personality, self-expression, translation of his/her spiritual values and worldview [10]. Therefore, along with the voice, the interest of researchers is also aroused by the teacher's speech in new remote communication conditions, as well as special requirements for the teacher's self-presentation, attracting attention to himself and the information being communicated, as well as speech techniques for activating students' work, increasing their efficiency and motivation for the educational process during communication with the teacher.

In this regard, the purpose of this study is to determine the characteristics of the teacher's speech behaviour in distance learning.

To achieve this purpose, we intend to solve the following tasks:

1. To conduct the analysis of the regulatory and methodological foundations that determine the requirements for the teacher's speech in a distance mode.
2. To determine the features of the teacher's speech functioning in distance learning.
3. To identify the role of the teacher's voice in professional activity and the requirements for its most effective functioning.
4. To conduct an empirical study of the teachers' speech behaviour in distance learning and present statistically processed results on the factors that provide the most effective distance professional communication.

2 Materials and methods

Our research in its methodological essence refers to interdisciplinary works lying at the intersection of such anthropological sciences as pedagogy (communicative culture of the individual; pedagogical communication; student motivation; methodology for organizing distance learning, etc.), rhetoric (rhetorical ideal, techniques of rhetorical art; speech technique; pedagogical voice, etc.), social psychology (verbal and non-verbal personality behaviour; linguistic personality; speech control techniques, etc.).

The study was carried out during 2020 - 2021 and consisted of the stage of determining the methodological basis, as well as conducting empirical research. At the same time, the study and analysis of theoretical sources continued throughout the entire period, since publications for the time period of interest to us began to appear only at the end of 2020 and in 2021.

During the study, the following methods were used:

1) a method of theoretical analysis and comparative analysis of research data carried out by scientists from different countries in the pre-pandemic period and after the introduction of social restrictions during the COVID-19 pandemic;

2) empirical methods for analysing video and online lectures, online classes posted in

the public domain in the Internet on the websites of different universities, educational institutions and individual lecturers;

3) method of statistical data processing.

We observed recorded distant lessons and online lectures by teachers of different ages and genders who worked in educational institutions of different levels of education (federal universities, colleges, private teaching courses, etc.) and taught different subjects.

3 Results

3.1 Analysis of the regulatory and methodological basis that determines the requirements for the teacher's speech in a distance mode

Speaking about the normative regulation of issues related to the teacher's speech in distant conditions, we can note that today such documents do not yet exist. It is possible that in view of the unexpected for all the inhabitants of our planet and the almost universal transition to remote forms of contact, communication and training, including, the practical issues of conducting e-learning, outstripped the machine for developing and implementing the legislative framework.

Practically the only document that, to a greater or lesser extent, can relate to the range of issues under study is State Standard of the Russian Federation 50840-95 "Speech transmission over various communication channels. Techniques for measurements of speech quality, intelligibility and voice identification»" (1997), designed to obtain a comprehensive assessment of the quality of speech transmission through telephone wire and radio channels, which use an analogue speech signal, as well as devices and speech synthesizers containing speech signal converters into digital form. Although this document was adopted long before computers began to be actively used in the educational process, it is the only normative act regulating methods for measuring the indicators of intelligibility and speech quality of a speaker using technical communication channels in remote communication. In this standard, the following terms were first enshrined at the federal level:

- "intelligibility of speech", i.e. the relative number (in percentage) of correctly accepted elements (syllables, words, phrases) of the articulation tables;
- "speech quality", which is understood as a value characterizing the subjective assessment of the sound of speech in the tested tract;
- "recognisability of the speaker's voice", i.e. a value characterizing the degree of preservation of subjectively perceived individual features of the speaker's voice;
- a number of "selective features", i.e. specific subjectively perceived characteristics of speech sound, for example, rhinophonia, rhotacism (burr), mechanical voice, hoarseness, etc.

There are also qualifications for employees of state owned television and radio broadcasters. However, in them, as in any qualification characteristics, all the points related to the mastery of the speech technique, the art of artistic reading, the norms of modern literary pronunciation, knowledge of the basics of general and social psychology, the ethics of business communication are extremely generalized and are given in the form of listing.

Thus, today university teachers can only rely on their personal pedagogical experience in conducting classes by means of electronic conference platforms. Unfortunately, even in the system of commercial proposals in the field of improving the teachers' communication skills in distance learning, proposals appear very rarely. A pleasant exception is the online course "Professional e-learning teacher. Master of Effective Communication, Engaging and Managing Listener's Attention Online", developed by the Russian commercial company

Rakurs and inviting listeners to comprehend the laws of effective online communication, psychology and communication style in e-learning, ways to motivate students and other issues of professional communication.

If we talk about foreign organizations that determine the requirements for the working conditions of teachers in distance learning, here it should be especially noted the activity of the American Speech-Language-Hearing Association (ASHA) [11] that is the national professional, scientific, and credentialing association for audiologists, speech-language pathologists, speech, language, and hearing scientists and students. To preserve the most precious teachers' instructional resource, i.e. their voice, ASHA has recommended the teachers:

- practice healthy habits: to avoid smoking, shouting and throat clearing; to refrain from talking over loud noise or push your voice when you are sick;
- use a microphone and not to talk loudly;
- take breaks and give the voice an opportunity to rest;
- reduce noise in the room, use a room free of noise from appliances and other family members, encourage students speaking one at a time, and use helpful video platform features such as the “mute” button to eliminate loud student chatter and cross-talk [11].

3.2 Features of the teacher's speech functioning in distance learning

The myth that distance learning can completely copy traditional face-to-face education, but only with the help of electronic means, was dispelled during the first weeks of the transition to distance learning during the period of social constraints caused by the COVID-19 pandemic. In the course of distance learning, university teachers, according to Avi Besser, Sari Lotem, and Virgil Zeigler-Hill, were constantly experiencing psychological stress caused by a radical change in the quality of life, teaching conditions, fear for the health of their loved ones, uncertainty and instability on a global scale [8]. It has become clear to every university teacher that it is much more difficult to retain the attention of students in the process of delivering online lectures or practical classes than in regular classrooms. Among the factors that reduce the attention of the audience and its motivation to perceive the educational material the following are usually called:

- psychological difficulties caused by stress due to the lack of skills to study remotely, in isolation from other students, in a home environment, using unknown conference platforms, etc. [8];
- the paradox of the ‘black window’ mode (off cameras), when the reluctance of students to turn on the webcam not only complicated communication with other participants in the educational process, but also formed the status of “incognito”, which allowed students to leave the computer / phone, to do other work during classes, freely “go out” of the network, and then again join the lesson after a while, etc.;
- a decrease in the teacher's motor activity and a reduction in the use of non-verbal means of communication in a sitting position in front of a computer;
- monotony of the teacher's speech and / or too fast a pace that interferes with deep perception, his/her lack of ability to maintain the attention of listeners through the use of special techniques and electronic tools (animation, change of screen colours, change of intonation, emotions, pitch of the voice).

In the early weeks of remote learning, educators couldn't understand why traditional teaching methods weren't working as well as expected, or why they felt like they couldn't “hold” the audience's attention if they had done so well before. Having found recommendations in the scientific literature on organizing communication in remote conditions, the teachers exclaimed indignantly: “I am not a showman to clown around in

front of the camera!" However, after some time, they themselves came to the conclusion that the new electronic environment of pedagogical communication requires new skills in verbal and non-verbal behaviour.

In some studies, scientists have clearly identified issues that can improve the effectiveness of distance learning. Special attention is now paid to "electronic" or "virtual" lectures [12] and visual distance rhetoric [13]. According to Svetlana I. Kuzina, Inga G. Sagiryan, Elena A. Krasnova, Valentina K. Barashyan, "the format of the online lecture and the lecturer's image" [1, p. 662] should become objects of close attention of the academic community. Remote contact forms can be organized without video, for example, as happens when using Intelligent Personal Assistant (IPA), i.e. an electronic application incorporated into the information educational environment of the university and allowing the student to receive instant answers, and in his/her native language, to any questions that arise in the learning process. Consequently, the absence of a video image of the teacher further accentuates the importance of the clarity and intelligibility of his speech [14].

Therefore, we will try to formulate how the teacher's speech behaviour in distance learning differs from the traditional full-time form of contacts:

- 1) online synchronous teaching suggests mainly teacher-centered approach instead of student-centered one, which is more popular for F2F learning [8], so the duration of teacher's speaking grows dramatically;

- 2) an increase in the psychological stress of the university faculty is due to unconventional means of electronic education, necessity to quickly accommodate to new digital environment that can be a real physical threat for an older part of the teachers;

- 3) loudness of teachers' voice: some of the teachers try to speak louder and more distinctively as they think that the students cannot hear or understand them properly, though according to the research conducted by Avi Besser, Sari Lotem, and Virgil Zeigler-Hill, only one-third of the respondents felt that they raised their vocal loudness while teaching online synchronically, whereas 60 % reported maintaining the same vocal loudness as in regular campus teaching. 50% of the teachers indicated making more vocal effort during remote classes/meetings; moreover, 65.8% of these, were sure that this intensified vocal effort negatively impacted their professional performance [8].

- 4) fixed changes in the teachers' voice quality and uncomfortable feelings in the vocal tract: the data received by the scientists in different countries during the pandemic are controversial. When Svetlana Kuzina et al. supposes that online lecture allows to preserve teacher's voice without straining vocal chords [1], other researchers have received results demonstrating worsening of voice quality of some part of teachers [8, 9]. Though according to the research conducted by Avi Besser, Sari Lotem, and Virgil Zeigler-Hill, only 12% of teachers felt worsening of their voice during pandemic, whereas 58% did not experience any change in their voice quality [8], the teachers cited the following symptoms during the pandemic: dry throat (43%); general feeling of tiredness (27%); more frequent drinking of four to eight glasses of water per day (42%). The mostly common vocal problems during remote classes included: hoarseness (37.4%), vocal fatigue (43.5%), effort in producing the voice (38.3%), pain or soreness in throat (30.4%), weakening of the voice (21.7%), irritation or dryness of the larynx (36.7%), frequent need for clearing the throat or coughing (21.1%), and frequent need to sip water (41.9%) [8].

- 5) The role of speech pauses: though in conventional speech we are not so much aware of pausing in our communication, speech pauses play an important role while online classes as they are usually inserted after rhetorical questions and give a listener the opportunity to think over some answer, memorizing and analysing the information obtained. "In the online environment the ability to use pauses and correctly insert them into the text becomes especially relevant" [1].

- 6) Vocal comfort and vocal control: every online-speaker should know about

limitations and problems of distant communication and be especially attentive towards his voice. "Vocal control can be defined as the capacity to selfregulate vocal behaviour" [5].

3.3 The role of the voice in teacher's health and working ability

Traditionally, teachers are considered to be a professional group that has a chance to develop moderate or severe voice problems, depending on a number of factors: individual characteristics, emotional background, their working environment, duration of teaching hours, etc. As Amanda Corrêa do Amaral, Fabiana Zambon, et al. put it: "Teachers often speak for a long time, increase their vocal intensity, compete with environmental noise, have inadequate postures, strain the cervical muscles, and are not usually aware of vocal hygiene habits; they also normally face situations of anxiety, stress, and distress, as well as long working hours" [2].

Although the implementation of distance / remote learning is unthinkable without the use of various electronic devices and network communications, the main "tool" for organizing teacher-student communication continues to be his/her voice. The teacher's voice is viewed as:

- 1) an element of speech technique, the so-called "pedagogical voice",
- 2) the leading component of general and communicative culture [15],
- 3) the most important element of teacher's professional excellence,
- 4) one of the risk factors and areas of occupational diseases [2, 16-18].

The concept of "pedagogical voice" is a subjective perception of the teacher's speech, which is usually characterized by high clarity, sonority, special intonations, large modulations and emotional colouring.

The teacher's voice is his/her "teaching tool", as well as the most important component of communicative culture, through which the teacher's personality, his/her inner world, attitude towards students and the subject of study are expressed. Loudness, flight of the voice, clear diction, controllability, endurance – these are not all indicators, by which we can distinguish a professional teacher.

In recent years, a lot of studies have appeared [2, 16, 17], devoted to the identification and prevention of teachers' occupational diseases. The most frequent diseases of teachers associated with their professional activities are:

- 1) psychosomatic diseases (hypertension, coronary heart disease, gastric ulcer and duodenal ulcer, neurosis, psychasthenia, etc.);
- 2) pathology of the voice-forming apparatus, laryngitis;
- 3) eye fatigue, decreased visual acuity, myopia;
- 4) chronic venous insufficiency;
- 5) hypodynamia, lack of physical activity, osteochondrosis;
- 6) chronic fatigue syndrome;
- 7) viral and colds.

Due to the daily heavy load on the vocal tract, teachers often develop laryngitis, which over the years turns into a chronic disease. Many teachers complain of hoarseness, tickling and scratching in the throat, coughing, rapid voice fatigue, which can occur 5-10 minutes after the start of the lesson. They start constantly "clearing their throats", coughing, and so on. Over time, the fatigue of the larynx increases, which leads to incurable changes in the voice: hoarseness, trembling appear, its timbre changes. Any attempt to amplify the sound results in a cough, and the voice breaks down. The voice on low ranges is interrupted, and, in the end, aphonia sets in, i.e. a complete loss of sonority of the voice.

Among the main factors affecting the state of the teacher's voice are the following:

- 1) psychological stress, which plays a leading role among the factors affecting the teacher's voice [8];

- 2) overstrain of the voice-forming apparatus in the classroom due to the duration of the contact hours (up to 40%);
- 3) voice breakdown due to the need to overcome noise in the audience (up to 20%);
- 4) an uncomfortable sitting position, which leads to changes in the functioning of the lungs and cardiovascular system (25%);
- 5) the frequency of colds due to the high density of epidemic contacts with students (15%) [19].

Visually, the frequency of factors that negatively affect the state of the teacher's voice is shown in Fig. 1.

Fig. 1. Factors that negatively affect the state of the teacher's voice.

When studying the functioning of the teachers' voice, researchers most often paid attention to the following diseases [3, 5, 17, 18]:

- vocal tract discomfort (VTD), i.e. physical problems or psychological feeling in the cavity of human beings where the sound produced at the sound source, i.e. larynx, is filtered;
- muscle tension dysphonia (MTD), i.e. deterioration of the sound caused by increased muscle tension of the muscles surrounding the voice box: the laryngeal and paralaryngeal muscles;
- vocal fatigue when the voice is used for long periods and and/or with increased vocal effort.

However, it should be noted that, according to studies [2], teachers experience discomfort in communication not only because of acquired occupational diseases, but also because of individual sensations, when it seems to them that their voice is tired, has ceased to sound clearly and loudly and wheezing is heard in it. In fact, these sensations are purely subjective and do not affect the physical characteristics of the sound of the voice.

Therefore, to study all the processes associated with the voice, its sound and voice formation, as well as accompanying sensations, both objective and subjective, various methods have been developed.

To investigate the vocal symptoms that lead to the occupational illnesses or already testify their availability, several methods are used in assessing the work of vocal system in the work-related activities:

- The Voice Symptom Scale (VoiSS), which explore three domains (subscales): impairment (15 items), emotional response (eight items), and physical symptoms (seven items) [16];
- The List of Vocal Signs and Symptoms (LVSS) [17];

- the Vocal Tract Discomfort Scale (VTD scale), a method of self-assessment to identify the individual's discomfort using eight qualitative descriptors: burning, tight, dry, aching, tickling, sore, irritable, and lump in the throat, according to the frequency and severity of the symptoms [18].

During the period of forced remote learning caused by the COVID-19 coronavirus pandemic, all teachers had to spend 10-12 hours a day near the computers. As a result, due to the decrease in physical activity during the lockdown period and the subsequent period of long self-isolation, many teachers noticed that it became more difficult for them to walk, climb stairs, they felt shortness of breath and a feeling of heaviness in the chest. In addition, many began to complain about the overstrain of the vocal tract, although the new situation did not imply the need to greatly strain the vocal cords. However, the constant state of stress in which the teachers were forced to conduct classes in completely new conditions for them, problems with the operation of electronic equipment and the need to conduct classes using the tools of unfamiliar conference platforms, "freezing" of computers, as well as situations when it was necessary to repeat educational tasks or to summon students several times, expressed in the fact that the most vulnerable mechanism of professional activity, namely the teacher's voice, suffered.

And although research data by Avi Besser, Sari Lotem et al. [8], Katia Nemr, Marcia Simões-Zenari et al. [9] mentioned above show that a small part of teachers experienced discomfort associated with the functioning of the voice during remote learning, we believe that still a very short time has passed after the intensive participation of teachers in online learning and the data may change upon repeated research.

3.4 Teacher's self-presentation and his/her image in distance learning

The problem of the teacher's image that students see in front of them during online classes is also very relevant. In real life, students are accustomed to perceiving teachers "completely" as a real, living person, moving through the audience, in other cases - calmly standing at the pulpit or emotionally gesturing, smiling and nodding approvingly in response to the students' remarks.

However, the conditions of distance learning and online classes suggest that the teacher must constantly be at the table, in front of the computer screen and a webcam. Accordingly, the maximum that students can see is the face and upper body of their teacher. A sitting position forces even the most emotional person to be more restrained, use gestures less often, constantly monitor their facial expressions on the screen, completely abandon such means of non-verbal communication as proxemics and haptics.

As the study conducted by Svetlana Kuzina et al. shown, the opportunity to see only the lecturer's head on the screen and to listen to the monotonous teacher's voice during an hour and a half as well as to try to understand the information delivered by a person who does not use non-verbal means of communication and stops gesturing reduces students' attention and negatively influences their cognitive process [1].

Speaking about teacher's online image, there are also certain recommendations for the selection of clothes and accessories for online classes:

- men are recommended to wear a classic suit in dark colours, preferably with a tie; women can also choose clothes in soothing colours, preferably with long sleeves;
- teachers who wear glasses should take care that the frame is not wide and that their eyes are clearly visible to the audience;
- female teachers are advised to wear discreet jewellery: earrings, brooch or chain with a pendant.
- hair should be clean and neatly combed, women with long hair can make a "ponytail";
- when choosing cosmetics, one should focus on the eyes and try to keep the skin from

shining on the screen;

- special attention should be paid to hands, since they practically remain the only moving object, and therefore attract special attention: the manicure should be fresh, in calm tones, it is allowed to wear a bracelet or watch.

However, as Svetlana Kuzina et al. write, such strict rules for the appearance of a teacher seem somewhat outdated to students. They even prefer bright clothes on their teachers, if they match their character. However, it is believed that the chosen background, the environment that also falls into the lens of the webcam, should adjust to the working atmosphere. At the same time, students pay the greatest attention to the teacher's ability to be in a good mood, to be able to relieve fatigue with a joke, a smile, etc. "Listeners want to see on the screen a smiling person in a good mood and with positive emotions. Students are attracted primarily by a harmonious and integral image that includes intelligence, charm, friendliness and respect for the audience" [1].

Our survey, which involved more than 120 students of different genders, ages, programs, etc., showed that modern students who were asked to score from 1 to 5, reflecting their preferences, support the informal style of the teacher's dress during online learning (72%). However, they would like the teacher to look neat (85%), business-minded, strictly observe the beginning and end of the lesson, and take breaks on time (92%). According to the respondents, a sense of humour, the ability to joke on himself during some technical failure (88%), a willingness to seek technical advice (54%) raise the teacher's image in the eyes of students. At the same time, they highly appreciate the teacher's ability to freely use all the tools of the conference platform and online learning (82%). Students have a negative attitude to the appearance of strangers on the screen (74%), since, in their opinion, this indicates the teacher's inability to plan their work space, but they feel a pleasant emotion if pets appear in the teacher's room during an online lecture (52 %), as they believe that this fact testifies to the kindness and ability of the teacher to take care of his/her pets. Fig. 2 demonstrates the attitude of students to various aspects of which they form the image of a teacher.

Fig. 2. Students' evaluation of the teacher's image components in the distance learning.

3.5 An empirical study of teachers' speech behaviour in distance learning

Fifty video lectures on the sites Cultura RF, Cameralabs as well as several lectures on the video hosting YouTube were randomly selected as the objects of empirical research.

As a result of viewing randomly selected 50 online lectures, we managed to identify several factors related to the peculiarities of the teacher's speech behaviour in remote

conditions and the organization of the recording of the lecture itself, which, in our opinion, increase or, conversely, decrease the effectiveness of the lesson and the degree of memorization of the material presented. The results are shown in Table 1.

Table 1. The factors influencing the effectiveness of teacher's speech and presentation in online lectures.

No	Factors increasing the effectiveness	Frequency of use	Factors decreasing the effectiveness	Frequency of use
1	Presence of the audience / students	40%	Absence of the listeners	60%
2	Average speech rate	55%	Too fast or slowed speech	45%
3	Presentation of the material in an accessible language, explanation of complicated terms	30%	Complicated scientific high style of speech	70%
4	Use of humour, figurative comparisons, historical anecdotes, memorable facts	40%	Strict adherence to the presentation of the topic without any deviations	60%
5	The dialogical nature of communication with the audience	20%	Strictly monological character of presentation	80%
6	Video image of the full teacher's figure in its movement or screening of the upper part of the body	30%	"Talking head" mode	70%
7	Alternation between the teacher's image and video clips, screensavers, animations, etc.	40%	Fixation on the teacher's face or the chalkboard	60%
8	Bright and changing background	30%	The chalkboard or stable monochromes background	70%

Basing on our own pedagogical experience, conversations with colleagues and watching video lectures, we were able to notice that teachers are most effective in presenting material in conditions when they see the audience and can be sensitive to the reaction of listeners. In the case, when the teacher records a lecture in the studio / classroom, and no one except the operator sees or hears him, one feels stiffness, tightness, lack of emotions, especially a smile, speech becomes monotonous, facial expressions are lethargic. The teacher's attention switches to the object of presentation, as well as to the literacy and correctness of speech, therefore, while maintaining a high level of speech quality, other indicators that affect the effectiveness of perception are reduced, namely: emotionality of presentation, the use of non-verbal means of communication, contact with the audience, eye expression, eye contact, etc.

No less effective, in our opinion, is the rejection of the "talking head" image and the transition to shooting the entire figure of the teacher, which allows you to create an augmented reality effect and perceive the image of the teacher in the entire complex of his/her emotions, non-verbal means of communication, etc.

Equally important from a psychological point of view is the choice of the background behind the speaker's back: if it is a chalkboard with formulae, then it is recommended to alternate the teacher's image with animated graphics or video clips; if it is a classroom, then in order to activate the attention of listeners, one can repeatedly replace the screensaver, use different colours and moving images.

4 Discussion

The analysis of 50 online lectures, selected according to the principle of random sampling, suggests that the following points should be taken into account in order to increase the effectiveness of online classes in the field of the teacher's professional communication skills and perception of his image by students:

1) online classes should be conducted in rooms specially adapted for this purpose [5], with good acoustics, preventing the appearance of unwanted people or objects in the frame, as well as reducing the load on the teacher's vocal tract;

2) to record online classes, high-sensitivity microphones and webcams should be used, which will reduce the load on the teacher's voice; in addition, given that sometimes it is required to do several takes, the teacher should start recording the lecture rested, and his vocal tract should also be relaxed and in a healthy state [9, 10];

3) video lessons recorded in the presence of listeners / audience have the most positive effect, since in these conditions, modelling the usual interaction with students, the teacher can fully reveal his/her communicative competence, demonstrating oratory, the ability to fascinate the audience, emotional accompaniment of speech by non-verbal and paralinguistic means of professional communication;

4) in the case of a studio recording, the use of a “flashing” or constantly changing screensaver, which serves as a background on which the teacher speaks, activates the attention of the audience; however, if the teacher makes the recording on his own, he needs to take care of the screensavers, animation, and other means that condition the transition from one module of his lecture to another and attract the attention of students;

5) the least effective in the field of self-presentation is the “talking head” mode, since in this situation only the face of the teacher is visible, who speaks, looking into the camera, which completely eliminates the possibility of using non-verbal means and emotions; especially since, not being professional artists, teachers are not used to close-ups;

6) when shooting in full growth, the teacher should pay close attention to makeup, clothes, the degree of behaviour liveliness and gestures, think over the means of rhetorical and psychological activation of the audience.

5 Conclusion

New opportunities for distance learning that digital technologies provide us, as well as the valuable experience of interacting with students acquired during the pandemic, pose challenges for modern university teachers to master the practical skills of conducting online classes or recording electronic lectures.

If we speak about further development of distance or blended modes in higher education, it is quite necessary to introduce voice training courses in the professional development system for professors in order to prepare them for durable and tensed regimes of speaking during the whole lesson. And what is really significant, the university professors are not aware of the health risks in their profession and especially of importance of voice care during all the years of their teaching experience. In the process of creating an electronic lesson library, teachers should be especially careful with their voices, achieving the greatest performance from the microphones and acoustics used in the rooms.

Each teacher should pay special attention to the psychological and linguistic patterns of speech perception through electronic communication channels. Therefore, when starting to record his/her electronic lecture or conduct a webinar, each teacher should have an idea of the most effective technologies for remote communication, the features of presenting his/her image on the monitor screen, activating the attention of listeners and preventing

them from losing motivation to interact remotely with their professor.

In the near future, these issues should become objects of theoretical research and topics for improving the professional qualifications of university teachers, as well as receive regulatory support at the state level.

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