# Language Learners Communication in MOOCs

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**Abstract.** The article explores linguistic features of communication in massive open online courses (MOOCs), the possibilities of their usage in professionally oriented foreign language teaching at tertiary level. A number of linguistic features of various types of texts created by MOOCs participants are revealed, possibilities of this type of foreign language resources in teaching specific language are analyzed, the structure of foreign language competencies in professional and scientific spheres and foreign language competencies related to the usage of information and communication technologies (ICT) are determined.

**Keywords:** Massive open online course (MOOC) · Foreign language · Network interaction · Discussion forum · Online communication · Foreign language competence · Professionally-oriented teaching

#### 1 Introduction

## 1.1 Building a Research Problem

Professionally oriented foreign language teaching makes it necessary to combine foreign language courses and special disciplines. Currently, a foreign language teacher has to use modern teaching technologies and methods which allow forming professional foreign language competence of future specialists. In this regard, it is currently important to study the possibilities of using massive open online courses (MOOCs) in foreign language teaching process at tertiary level.

Currently, MOOCs is actively used in non-formal education, as well as in educational process at universities as a component of higher education programs, programs for additional vocational education and qualification upgrading courses.

Due to its features, subject MOOCs in foreign languages can act as a means for language training of students in various study fields. This article explores various aspects of online communication of massive open online courses participants as a tool for professional foreign language communicative competence development.

#### 1.2 Literature Review

As for researchers, certain aspects of this issue are covered in the works of the following researchers who studied the massive open online courses teaching experiences [1], the usage of MOOCs discussion forums [2], content analysis of MOOCs discussion forums and participants behavior [3], MOOCs participants interaction [4–6], communication patterns in massive open online courses [7], the features of self-presentation [8, 9], evolution of MOOCs communication means [10], motivation in asynchronous online discussions with MOOC mode [3, 11], features of self-presentation and self-awareness in computer-mediated communication [12, 13], and online discussion in educational process in tertiary organizations [14].

## 1.3 Basic Assumptions

Massive open online courses are understood as courses provided online and developed by the lead scientific, educational and cultural organizations all over the world. These courses are characterized by a potentially unlimited number of participants and open authorized access.

The authors of the study believe that the communication opportunities and features of the MOOCs discussion forums can be an effective tool for students language training in higher education. The possibilities of massive open online courses in integrated learning of special disciplines and foreign languages can be realized in the framework of such approaches as Language for Specific Purposes (LSP), Content and Language Integrated Learning (CLIL), English Mediated Instruction (EMI).

## 2 Materials and Methods

While conducting this research, the following methods were implemented: linguistic analysis of the features of different types of texts (self-presentation, comments, request/clarification of information) in MOOCs, quantitative data processing, and synthesis.

In the framework of this study an analysis of the texts of students' self-presentations, requests for information and comments in 8 different English and German MOOCs on technical, liberal and economic sciences, academic writing on the web platforms OpenHPI (Hasso Platner Institute, Potsdam), iversity (various European Universities, Berlin), Mooin (Lübeck University, Germany), FutureLearn (University of Liverpool, UK), Coursera (University of Pennsylvania, University of Illinois at Urbana-Champaign) was carried out.

Research materials included 400 texts of self-presentation, 200 comments and 200 information requests. The courses analyzed cover the disciplines in the field of information and communication technologies (OpenHPI), energy (Mooin), economics and business (iversity, Coursera), English for specific purposes (Coursera), electronics and electrical engineering (FutureLearn).

While analyzing the texts of self-presentations, comments and requests of information, the following criteria were used: content, structure, coherence, politeness and realization of communicative intention.

# 3 Research Data

## 3.1 Analysis of Self-presentation

Content components included nickname (presence/absence), indication of country and/or city, interests, hobbies, age, speciality(acquired)/profession, information about the available work experience in the relevant field, motivation for learning on the course chosen, expectations associated with the course, presence of greeting/farewell phrases, wishes for course developers and participants, course feedback provided by participants.

The criterion concerning structure and coherence included a consistent and logical exposition, compliance with the structure, adequacy of information reported to communicative situation. In general, the texts of self-presentations were characterized by the preservation of structure and coherence: 42% of them fully met the requirements for structure and coherence, and 55% met them partially. There were occurrences of inconsistent presentation, for example, the participant expressed some value judgment and only then presented or described his experience in detail while forgetting to mention motivation in the course chosen and expectations associated with the course. The authors identified only 4% of self-presentations that had serious structure and coherence violations. Most of these texts included incomplete sentences, the absence of proposals and the formulation of a statement in the form of listing some information that is characterized by lack of concord. There was also information that appeared as a rationale for choosing a course and information that was not directly related to a course. A violation of the adequacy of the information reported in the communicative situation, for example, an indication of the non-substantiated choice of course interests was noticed.

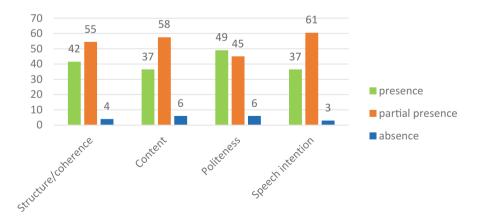
As for content, some participants did not specify such significant issues as specialty (acquired)/profession, occupation, existing work experience in the relevant field, and motivation. There were also self-presentations in which participants did not specify their name (with a significant percentage of fictitious names while registering - 21%), place of residence (country and/or city), and status. At the same time the majority of participants wrote their expectations related to the course and motivation to learn on the course. As a rule, some participants gave a positive feedback about the course. Despite the fact that participants were asked to fill out a questionnaire at the beginning of the course, where they have already answered these questions, many people considered it necessary in their presentations to write about their motivation and expectations related to the course again and in more detail.

A number of self-presentations expressed wishes to developers and other course participants. Participants of the previous version of the course indicated the reasons for re-registration for the course. Limitations and recommendations regarding the volume of self-presentations in the courses analyzed were absent. The volume of self-presentations varied from one sentence to several paragraphs. The most common volume of self-presentation text presented 60–80 words. The detailed degree of information provided by the course participants about themselves in most cases could be considered sufficient. Generally, name, place of residence, motivation for the course, goals and plans for completing the course were indicated.

The criterion of politeness included the greeting/farewell phrases, signature at the end of a message, various means of lexical, grammatical, syntactic and stylistic levels.

The analysis showed that in almost 50% of self-presentations the norms of politeness were observed, in 45% of self-presentations the norms of politeness were partially observed and only 6% of self-presentations pointed out the lack of politeness, manifested in ignoring the courtesy formulas, usage of greeting forms that are common among young people and in a special interests group, for instance, the exclamation "Huhu" (au!, hey!), the usage as a greeting word of Hawaiian origin, denoting at the same time "hello", "goodbye", "welcome", and just a wish for peace and joy "Aloha", the usage of little-known and consequently poorly used by many users dialectal expressions, for example: "Grüzi mitenand" (greeting in the eastern Swiss dialect of German language).

The criterion of speech intention realization included such components as the providing of necessary and sufficient information about themselves, nickname (presence of a full/incomplete real name or feigned name). In general, most of course participants indicated necessary and sufficient information about themselves. Realization of speech intention was noted in 37% of self-presentations. 61% of selfpresentation texts had a partial realization of speech intention. In a number of instances, information on the place of residence, occupation, interests and hobbies, information on available work experience in the relevant field, expectations associated with the course were not provided. Only 3% of self-presentations reflected an unrealized speech intention expressed in indicating unnecessary information that was not relevant to the course and not important to other participants and using little-known reductions or indicating insufficient information about themselves. The study of self-presentation texts showed that, in general, the components relating to content, structure, coherence, politeness and speech intention were being realized. The percentage of violation in the first three components was low, and did not exceed 6%. At the same time, the value of unrealized speech intentions in this genre of network communication was only 3% (Fig. 1).



**Fig. 1.** The features of learners' self-presentation in MOOCs.

## 3.2 Analysis of Comments

While analyzing the texts of comments (Fig. 2), the content criteria included the following: nickname (presence/absence), expression of gratitude (if necessary), usage of greeting/farewell phrases. The structure and coherence criteria included a consistent and logical presentation and compliance with the structure. The politeness criteria included the same components as in the previous genre of network communication. While analyzing this and subsequent types of texts (requests for information), such a component of the realization of speech intention criterion as presence of comments/ requests of information remarks, reflecting conversation partner verbal response, was used.

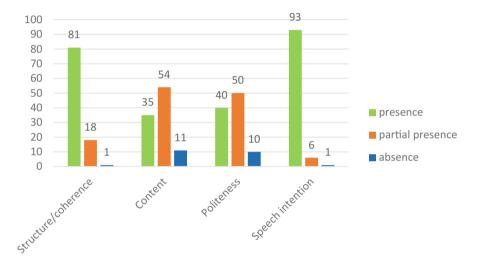


Fig. 2. Features of learners commenting in the MOOCs.

The analysis of comment texts content showed that 35% of the material examined revealed all the necessary components, 54% of the texts lacked some content components, 11% lacked such significant components as gratitude, exhaustive explanation where this would be necessary. In rare cases, non-constructive criticism was noticed. In this case, nickname was presented for all participants. 81% of message texts retained structure and coherence, 18% of them generally retained structure and coherence but had some violations, concerning incorrect choice of communicative strategy for speech intention expression. At the same time errors in statements structure were noted: incorrect word choice, large volume and complexity of the message, illogicality, absence or insufficiently convincing arguing. A number of errors can be explained by spontaneity which is a characteristic of informal speech. Comments with significant violations in the structure and coherence (1%) were almost not found.

The analysis of courtesy phrases usage and politeness strategies showed that courtesy was present in 40% of comments and in 50% of materials it was present partially. In 10% of comments neither polite phrases nor politeness strategies were

used. It should also be noted that the usage of greeting/farewell phrases was taken into account in the analysis only at the beginning of the discussion. Then the participants focused on discussing certain problems and issues in which the courtesy phrases were superfluous. Despite the absence of courtesy phrases in some cases, participants used communicative strategies of politeness [15], for example, the expression of approval, sympathy for conversation partner, offer of help, an expression of apology and gratitude, encouraging wishes, etc.

Almost all participants' remarks received a verbal response from the interlocutors (93%). 6% of comments also followed a reaction but in some cases due to incorrect, incomplete or inaccurate information clarification was required because the interlocutor did not quite understand any details of the discussion issue. Only 1% of comments did not receive a verbal reaction from conversation partner. There was no response in some cases because the issue was already solved or the questions were rather rhetorical.

## 3.3 Analysis of Request/Clarification of Information

While analyzing the information requests/clarifications texts (Fig. 3), content criteria included the following components: nickname (presence/absence), usage of greeting/farewell phrases, expression of gratitude for the answer, clear and correct asking a question, presence of an explanation before a question, constructive criticism (if necessary). The structure and coherence criterion included a consistent and logical presentation, for example while explaining the situation before asking a question for better partner understanding of an issue essence, and as well as using arguments, observing the structure. The politeness criteria included greeting/farewell phrases, signature at the end of a message, various means of lexical, grammatical, syntactic and stylistic levels.

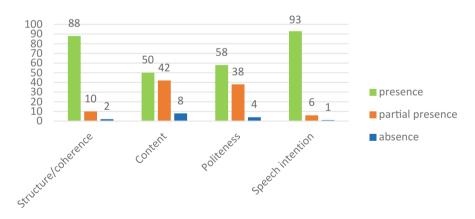


Fig. 3. Features of the learners request/clarification of information in MOOCs.

The analysis conducted showed that in most requests/clarification of information texts (88%) the structure and coherence were observed. 10% of the texts had deviations in relation to this criterion, they concerned inaccuracy in the formulation of the request.

Only 1% of the materials had significant errors that made their understanding difficult. 50% of the texts revealed all the necessary content components, in 42% of materials examined some content components were missing, there were no significant components such as clear/correct formulation of the question, explanation before a question (where it would be necessary) in 8% of instances.

As for the politeness criterion, 58% of the texts fully complied with all the requirements determined by the criterion. 38% of the materials had deviations, for example, an expression of gratitude for the answer. Only 4% of the texts did not contain all the criterion components. However, only cases where this was really necessary were taken into account.

Upon that, 93% of the texts had a speech intention, 6% of materials explored had a partially realized speech intention (it was required to clarify the interlocutors due to an incorrectly formulated request), and only 1% of the texts did not show the speech intention realized.

While analyzing the usage of nicknames (Fig. 4), it was found that the percentage of using full and incomplete genuine names is higher in self-presentations (51% and 35%) than while commenting (28% and 36%) and requesting for information (21% and 29%). This can be explained by the fact that there was a discussion in the last two types of texts, it was characterized by the speed of messages exchange, the concentration on joint solution of important issues and more free communication.

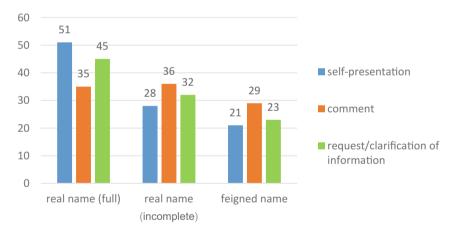


Fig. 4. Usage of nicknames in MOOCs.

Within the framework of the courses analyzed, two types of communication were offered: academic discussion and free (spontaneous) discussion of course participants. Therefore, an opportunity for implementation of formal and unofficial foreign language communication in professional area (area of knowledge studied) and an opportunity for implementation of speech intentions in different communication situations were created.

## 3.4 Linguistic Features of Communication in MOOCs

Linguistic analysis of online communication in MOOCs was carried out on phonetic-graphic, lexical, morphological and syntactic language levels [16–18]. The following features of communication in MOOCs were revealed:

- Phonetic-graphic (reduction of sounds, word merging and other cases, emoticons, cases of multiple spelling of punctuation marks, use of capital letters instead of lowercase letters, multiple repetition of the same letter, use of graphic means in messages),
- 2. Lexical (use of alphabetic-syllable and alphabetic-digital words writing, typical vocabulary for the subject of the course is found),
- 3. Morphological (active voice was used more often than passive voice; there were no significant deviations in the usage of grammatical categories),
- 4. Syntactic (the presence of complete and incomplete sentences and also sentences with inverted word order).

Thus, communication in MOOCs has the evidence of oral-written form of speech with a great emphasis on written speech.

## 3.5 Foreign Language Competencies

Teaching with the implementation of MOOC can make a significant contribution to formation of the following set of competencies that is necessary for successful students communication in the professional sphere.

#### I. Foreign language competencies in the professional and scientific sphere

#### 1. Communicative competencies

- 1.1 Linguistic competence
  - knowledge of linguistic and speech means that are necessary for self-presentation in the global network;
  - knowledge of linguistic and speech means that are required for communication within the relevant professional subject;
  - knowledge of terminology within the specialty mastered;
  - knowledge of necessary vocabulary including professionalisms in the field of the specialty mastered;
  - competence in linguistic and speech means for creating a self-presentation, writing a request, clarifying, etc.;
  - mastery of the language means of expressing politeness.

#### 1.2 Sociolinguistic competence

- usage of colloquial clichés in constructing dialogue/polylogue in situations of verbal communication (when addressing, greeting/farewell, requesting information, expressing a wish, gratitude, consent or disagreement, etc., taking into account the status of the addressee, communication situation, relationship nature between communicants);
- ability to complete the necessary documents (application form, registration form, etc.).

## 1.3 Pragmatic competence

## 13.1 Discursive competence:

- ability to discourse on a topic given, get into touch with foreign mates;
- oral and written language skills in a language acquired, coherence observance in terms of content and expression, the logical structure of a message, rhetorical effectiveness, reasoning and completeness of an utterance;
- ability to prove personal point of view reasonably.

## 1.3.2 Functional competence:

- ability to get into touch with the interlocutor;
- ability to ask for interesting information.

## 2. Sociocultural competence

- knowledge of cultural traditions of the target language countries and their manifestations in communication situations and significance in the context of corporate and internal communication;
- understanding of dialectal differences and importance of using dialectisms in communication with different age groups;
- taking into account the social characteristics, status and interests of an addressee while establishing and maintaining contact;
- following the rules of speaking etiquette in the framework of academic and professional communication;
- adequate reaction to critical remarks.

## 2.1 Intercultural competence

- knowledge of conflict situations communication features of target language speakers, taking into account the preservation of the positive/negative behavior of communication partner;
- tolerance to national and cultural features (to students from different countries);
- overcoming of other cultures stereotypes that impede effective communication.

#### 2.2 Existential competence

- open, friendly tone of communication in relation to an interlocutor;
- readiness for ideas exchange and cooperation;
- respectful and courteous attitude to an interlocutor;
- tolerance to the others opinion;
- readiness to acquire new experience, share experiences and acquire new knowledge;
- readiness for collaboration:
- readiness for foreign language communication;
- ability to reflect and sum up the results of personal activities;
- ability to self-evaluation and evaluation of course mates.

## II. Foreign language competencies related to the usage of ICT

## 1. Communicative Competencies

## 1.1. Linguistic Competencies

- knowledge of the course interface terminology;
- knowledge of the genre and style features of communication in MOOCs;
- knowledge of the techniques for dialogue linguistic expression and dialogue construction.

## 1.2 Sociolinguistic competence

- knowledge of the netiquette rules (taking into account the status of an addressee, communication situation, the nature of relations between communicants), self-positioning in the network;
- adequate reflection in subject and text of a message of an addressee's speech intention;
- knowledge of the foreign punctuation rules;
- knowledge of greeting and farewell formulas;
- knowledge related to the architectonics of a message text (the possibilities of varying the structure of a message, using or ignoring greeting and farewell, etc.);
- ability to use style of communication in accordance with a type of a text in foreign language.

## 1.3 Pragmatic competence

## 1.3.1 Discursive competence

- ability to predict the communicative relevance of the speech means in accordance with the style/genre of communication in different types of online resources;
- ability to carry on a dialogue;
- usage of communication strategies (prompt reaction, argumentation, error recognition, expression of gratitude, request, etc.);
- discussion of professional problems.

#### 1.3.2 Functional competence

- skills in the usage of functional capabilities and tools in MOOCs;
- knowledge of technical and functional capabilities and limitations in MOOCs.

#### 2. Sociocultural competence

- observance of the rules of educational and professional etiquette in the framework of oral and written communication (rules are universal and adopted in a foreign culture);
- observance of the rule of obligatory reply to a message;
- adequate reflection of a speech intention in the subject of addressee message;
- sending messages (tasks, documents) on time.

## 2.1 Intercultural competence

- understanding of the role of using national customs and traditions in communication:
- knowledge of traditions, customs, norms and rules of foreign language culture.

## 2.2 Existential competence

- readiness for collaborative work in MOOCs;
- readiness for foreign language communication in professional area with the usage of different types of electronic resources.

## 4 Conclusion

This teaching and learning format can organically combine the possibility of mastering an impressive amount of complex materials (placement of a large number of learning materials) with the possibility of implementing collaborative work and realization communication with mates and course developers. In addition, professional foreign language communication is realized in the form of official communication (while performing assignments, official appeals) and in the form of informal communication (while discussing the issues that arise on forums). Thus, students acquire professional communication experience at different levels. In official communication the most important special terminology (of area studied) is mastered, and while communicating informally, acquaintance with professionalisms and professional slang occurs, i.e. acquaintance with the other important side of the specialists communication, which makes it possible to master the volume of terms necessary for professional communication, it also gives an opportunity to gain an impression of "live" communication that is outside the official communication but also appears as an integral part of specialists communication. Such courses unite absolutely different people, when they solve problems jointly they learn to work together, come to mutual understanding and tolerant attitude to another culture. The opportunities for communication offered by massive open online courses contribute to development of two blocks of important competencies: foreign language competencies in the professional and scientific spheres and foreign language competencies related to the usage of information and communication technologies (ICT).

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