

*Materials of Conferences***OVERCOMING COMMUNICATION FAILURES IN TEACHING CHEMISTRY IN BILINGUAL CONTEXTS**¹Davydenko L., ²Butenko L.¹Linguistic University, Pyatigorsk,
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Teaching is stimulating, satisfying, and real fun. Furthermore, it is educational. Chemistry teachers guide students in discovering the marvelous logic, efficient simplicity and design behind myriads of complex events in nature. Chemistry education today provides access to new knowledge, helping students understand how things happen in the real world.

The goal of our investigation is, first, the problem of correlation between conception systems of linguistic categories in chemistry and modern Russian and, second, the problem of overcoming communication failures in the process of chemistry acquisition by foreign students in bilingual contexts. A lot of failures occur because Russian and the language of chemistry are different in systems, to say nothing of the foreign students' proficiency which is rather restricted.

Education is to acquire knowledge, skill and values, both personal and social. Nowadays, education components are conventionally expressed as Cognitive, Personal and Social domains, the cognitive domain being stressed (Holbrook, 2005). To optimize successful communication in the process of teaching basic chemistry concepts to foreign students, it is quite necessary to teach them decode the most important notional systems encoded in the chemistry picture of the real world. That is why we will focus our attention on the communication failures which inevitably appear at the meeting-points of the two linguistic systems – the language of chemistry and the Russian language. In the process of teaching the felicity conditions are actually not always kept to.

The approach called *chemistry through education* means learning fundamental chemistry knowledge, concepts, theories and laws, and hereby the acquisition of communicative skills is related to oral, written and symbolic/tabular/graphic formats (Sanderson, 1962). No doubt, teaching and learning chemistry as a body of knowledge is on the whole rather a difficult occupation.

Our investigation of communication failures is carried out, first, from the point of view of pragmatics, second, from the point of view of cognitive linguistics, and third, interculturally, i.e. studying chemistry in intercultural communication in profes-

sional contexts. Sorry to say, it is unavoidable to fail in cross-cultural communication because our foreign students are not likely to understand all that they hear in Russian.

Cultural difference may lead to socio-pragmatic failures and then to communication ones. Grice (1975) advanced the Cooperative Principles, Leech (1983) put forward the Politeness Principle. To succeed in such a kind of communication as teaching and learning chemistry, neither the teacher nor the students should ever break the Cooperative Principles or violate the Politeness Principle. In cross-cultural communication foreign students have to overcome the pragmatic failures by improving their linguistic competence, communication competence and their cultural quality (Xiaorong). We consider these principles their «*felicity conditions*».

According to J. Habermas's theories of communication failures, there are three types of them explicated. *The first type* consists of errors, confusions and misunderstandings that occur within everyday «lifeworld» communication aimed at agreement and understanding (*communicative action*). *The second type* consists of failures to attain strategic goals within broader macrosocial communication processes aimed at technical or social success (*strategic action*). *The third type* occurs when the social system's mechanisms of strategic action interfere with *everyday processes of linguistic agreement* (Hove 2007).

To sum up, the fundamental feature of communication on the whole and the teaching process in particular is not domination but cooperation. «Reaching understanding is the inherent telos of human speech» (Habermas).

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