# Bilingual cognitive map in the space of teaching public administration: a russian case

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#### **Abstract**

The introduction of bilingual programs for future bureaucrats turned out to be a great challenge. In Russia this is one of the "classic" areas, in which the spirit of conservatism and collectivism prevails. In this area, the idea of teaching in English may be perceived with hatred: English can invade the closed area communication of officials, to make the excessive diversity of their contacts and violate patriotism and national identity. We used a cognitive map approach. It allows us to create different kinds of cognitive maps and teaching materials for university students who need to learn in one course the terminology in both languages. The results show that the study of the subject/course in English is not harmful to the development of professional Russian language. It was confirmed by the individual discussion in Russian. At the same time, the skills of reading articles in English were significantly improved.

**Keywords:** Bilingual Cognitive Map, Facilitate Teaching in English, Resistance to Education in English

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# Mapa cognitivo bilíngue na área do ensino da administração pública: um caso russo

## Mapa cognitivo educación bilingüe en el ámbito de la administración pública: un caso de rusia

#### Resumo

A introdução de programas bilíngues para futuros burocratas revelou-se um grande desafio. Na Rússia, esta é uma das áreas "clássicas", onde prevalece o espírito de conservadorismo e coletivismo. Nesta área, a ideia de ensinar em inglês pode ser percebida com ódio: o inglês pode invadir a comunicação fechada de oficiais, fazer a diversidade excessiva de seus contatos e violar patriotismo e identidade nacional. Usamos uma abordagem de mapa cognitivo. Ele nos permite criar diferentes tipos de mapas e materiais de ensino para estudantes universitários que precisam aprender em um curso as terminologias em ambas as línguas. Os resultados mostram que o estudo do assunto/curso em Inglês não é prejudicial para o desenvolvimento da língua russa profissional, sendo confirmado por discussões individuais em russo. Ao mesmo tempo, as habilidades de leitura de artigos em inglês foram significativamente aperfeiçoadas.

**Palavras-chave:** Mapa Cognitivo Bilingüe, Facilitar Ensino em Inglês, Resistência à Educação em Inglês.

#### Resumen

La introducción de programas bilingües para futuros burócratas resultó ser un gran desafío. En Rusia, esta es una de las áreas "clásicos", donde prevalece el espíritu de conservadurismo y el colectivismo. En esta área, la idea de la enseñanza en Inglés se puede ver con el odio: Inglés puede romperse en los responsables de comunicación cerrados hacer excesiva diversidad de sus contactos y violan el patriotismo y la identidad nacional. Utilizamos un enfoque mapa cognitivo. Que nos permite crear diferentes tipos de mapas y materiales educativos para los estudiantes universitarios que necesitan aprender en un curso de la terminología en ambos idiomas. Los resultados muestran que el estudio del curso / Inglés sujeto no es perjudicial para el desarrollo de la lengua rusa profesional, siendo confirmados por las discusiones individuales en Rusia. Al mismo tiempo, los artículos en las habilidades de lectura en inglés mejoraron significativamente.

**Palabras clave**: Mapa Cognitivo Bilingüe, Facilitar la educación en Inglés, Resistencia Inglés Educación.

#### Introduction

The introduction of university bilingual programs for future bureaucrats turned out to be a great challenge (ARNÓ-MACIÀ; MANCHO-BARÉS, 2015; PAVENKOV, O.; SHMELEV, I.; RUBTCOVA, M. 2016). In Russia, Public and State Administration is one of the "classic" areas, in which the spirit of conservatism and collectivism prevails (RUBTCOVA; KAISAROVA, 2016; USIAEVA, A. et al. 2016; RUBTCOVA; VASILIEVA, 2015). In this area, the idea of teaching in English may be perceived with hatred: English can invade in the closed area communication of officials, to make the excessive diversity of their contacts and violate patriotism and national identity (RUBTCOVA, M. P.; PAVENKOV, O., 2016).

Future bureaucrats are learners with low-level proficiency, but the program «100% English» was created. Of course, the protest of students took place. Therefore, a compromise was reached. We agreed with the students that the part of the course will be in Russian (PAVENKOV, O. V.; RUBTCOVA, M. P., 2016).

Most of the materials are devoted to teaching in the secondary school level, while the problem is acute in the university level also (ANTONACCI, P. A.; O'CALLAGHAN, C. M., 2012). In general, there is very little information how to teach students for development of vocabulary discipline in two languages (Russian and English) (SAFONOVA, 2000).

We used a cognitive map approach (MCCARTEN, 2007; HARMON; BUCKELEW-MARTIN; WOOD, 2010). It allows us to create different kinds of cognitive maps and teaching materials for university students who need to learn in one course the terminology in both languages.

We use the terminology in two languages because:

 On the one hand, students will work in Russia in positions related to the governance of the state. Of course, their degree of knowledge of Public management special terminology in Russian should be excellent.  On the other hand, they have to support at the state level the contacts with foreign governments and international investors. Therefore, they should be familiar with the terminology in English.

Usually, representatives of public administration in Russia think they always can get a translator. However, numerous failures of such negotiations have shown that a person with public status should speak English at least at a basic level.

## Theoretical background

Who can be considered as bilingual? The least strict definition is "bilingual is a person who can make a second language communicative act, to achieve mutual understanding". According to the criteria, each student can be considered as bilingual who studies, at least one foreign language. According to the most stringent criteria, only a student who can equally speak and think like a native speaker both language can be considered as bilingual (LIVOV, 2000, p.133).

According to Vereshchagin, a person is able to use two different languages in everyday situations is bilingual, and a set of relevant skills is bilingualism. If a person is capable of using only one language system, only the native language may be called monolinguals (VERESHCHAGIN, 1969, p. 20).

In Russia, in the second half of the XVIII century, French as the language of diplomacy, cultural, even everyday communication was considered as the main for the educated gentry environment. It was also studied the German language: it has been used in science, military affairs, technology. Italian was popular in music. English meet its popularity in the end of XX century. So, Russia has a big history of bilingual programs. Nevertheless, there were doubts: Can the second language harm the first - mother tongue?

In 1928 Vygotsky addressed to this controversial issue. In his article "On the question of multilingualism as a child" (1983) he was entered into polemics with Epstein, who

held in 1915 in Swiss study of early childhood bilingualism. Epstein argued that there is antagonism between linguistic systems, each of which is associated with the idea of associative, so it eventually leads to the impoverishment of the native language, and even the general mental retardation.

L.S. Vygotsky, based on their own research, as well as the publication of the French linguist Ronge, says the opposite: in his view, the interaction of different language systems not only lead to the inhibition of mental development but also contributes to it is the development of (VYGOTSKY, 1983, p. 331). L.S. Vygotsky appreciated the fact that two or even three language system developed independently of one another, i.e., translation is not required. In difficult cases, the child, as an adult, may apply to the native language.

Now there is a return to the multilingual/translanguaging paradigm and interaction of languages during learning process. According to Cenoz (2015, p. 348), translanguaging is a concept that refers both to pedagogical strategies that use two or more languages and to spontaneous discursive practices with shifting boundaries between languages. Full description of translanguaging paradigm and its epistemologies we can see in J. Cenoz and D. Gorter (2015) and K. Heugh (2015). However while there is a very general description of translanguaging paradigm, not much has been done to show its application in the content subject university class. This is related to the initial focus on the secondary school education and the beliefs that at the university level teachers and students have a very good level of the English language. This led to the gap between the rationale for multilingualism and its practical implementation in the content subject university class.

When we talk about use cases of Multilingual support, we can think about creating of cognitive maps that are widely used in natural language dictionaries, computer software and management-information studies (see e.g. MAMMEN, 2016; BALAID, A.; ABD ROZAN, M. Z.; HIKMI, S. N.; MEMON, J.). At the same time, they are quite rarely used in Multilingual format (if it is not a foreign language

dictionary). Therefore, despite the fact that the methodology of cognitive maps using in education has long been evolving (NESBIT, J. C.; ADESOPE, O. O., 2006; ELORRIAGA, J. A.; ARRUARTE, A.; CALVO, I.; LARRAÑAGA, M.; RUEDA, U.; HERRÁN, E. 2013; JIRÁSEK, I.; PLEVOVÁ, I.; JIRÁSKOVÁ, M.; DVOŘÁČKOVÁ, A. 2016), its use in the content subject university class has a very little spread.

## 3. State hypothesis

So we can check the following hypothesis:

- The use of cognitive maps in two languages reduces the resistance of students against the course in English
- The use of cognitive maps in two languages increases English competence of students in the study discipline: New Tendencies in Public Administration (NTPA)
- The use of cognitive maps in two languages increases professional competence of students in the study discipline: New Tendencies in Public Administration (NTPA)

### 4. Determine the design

- We did not measure the level of English among our students and professors before the course. This is a very strong stress factor (SANTOS, A.; CENOZ, J.; GORTER, D., 2015). Therefore, we avoided focusing on negative emotions. However, students and professors confirmed that they have the required level. Three students were opposed. They believed that they could not understand the information in English. However, they agreed to learn if the explanation would be in Russian. Therefore, we use the Russian language according to translanguaging as a new pedagogical strategy (CENOZ, 2015).
- Before the course (March, 2015) the cognitive maps for complex terms were developed. For instance based on suitable literature (KOOIMAN, 2008; RUBTSOVA, 2007; VOLCHKOVA, L. T.; PAVENKOVA, 2002; RUBTSO-

VA, 2011) the cognitive map of the concept of Governability was created (see full example in Appendix 1).

- (1) Formal Interviews of university students after course NTPA in English (N=21) was conducted as well as (2) Test for Grade in the University Computer Program (like Black Board). The format of the test is similar to a program: http://www.vocabularycoach.com/vocab\_1AtATime.aspx (Level Easy). Students had to choose the correct definition of the English term; Test 100% English. (3) Individual Discussion with the professor in the Russian language scientific articles in English, which students see for the first time (30 minutes preparation time) finished the evaluation process
- The research was carried out in April –May 2015, St. Petersburg
- The sample is not representative. The obtained data are of limited use.
- The information was written from participants words. All participants were asked to participate in the study and informed about the purpose and aims of the research. Participant consent to participate was gained. They were assured of the anonymity of their responses through the use of pseudonyms to report the results, and were guaranteed of the confidentiality of collected data. They allowed to use the data for the research and educational purposes. This study was conducted in according with the Professional Ethical Code of Sociologists by the Russian Society of Sociologists (RSS), informed consent form to the participants was not asked.

### **Results and Discussion**

The results of the interview. All participants evaluated the course positively. The main advantages were: the improvement of professional skills (82%); ability to work in two languages (75%); improvement of English language skills (62%). All participants agreed to continue their education in two languages. The most part of students said they like Cognitive maps like (67%), however, 24%

of them offered to improve them. Improvement of the maps can be one of the tasks for students. Despite the fact that in Russian culture such instruments as cognitive maps are considered as primitive, students noted their usefulness. However, they offered to re-name «cognitive maps» in «schema and table». The term «cognitive map" they evaluated as bombastic and inappropriate.

The results of the Test for Grade. All students passed the test. Average score (6 of 10) is lower than in Russian (7.5 out of 10). However, the students were proud to have passed the test in English and calmly accepted results. Since it was one of three evaluations for the course, it does not seriously affect the grade of the whole course.

The results of the Individual Discussion. In fact, the results of individual discussions do not affect the final grade, but students do not know about it. Students read an article in Russian and had to find three advantages and three disadvantages in the approach of the author. Articles have been specifically chosen so that a methodological approach would not be easily found.

We used the following indicators:

**Public Administration Review** (It has a complex language, a complex system of reasoning, a lot of references to other articles, requires a deep immersion in Western science)

- Students understand the main content of the article and could find the advantages and disadvantages – 19%;
- Student named dignity and disadvantages, but he/she relied on the assumption of a methodological approach. In fact, the response was not associated with an article clearly 24%. The student is not able to do the task 57%.

**The Chinese Public Administration Review** (It has a lighter English as a lingua franca, many theories have similar origins and sound like the familiar)

- Students understand the main content of the article and could find the advantages and disadvantages – 33%;
- Student named dignity and disadvantages, but he/she relied on the assumption of a methodological approach. In fact, the response was not associated with an article clearly – 52%.
- The student is not able to do the task 15%.

Thus, the three hypotheses were confirmed and learning outcomes were "satisfactory".

The study the subject in English does not harm the development of professional Russian language. This was confirmed by the Individual Discussion in Russian. At the same time, the skills of reading articles in English were significantly improved.

In the discussion we would like to say the following. In fact, the greatest threat to the program is English teachers–perfectionists' behavior (PAVENKOV, O.; PAVENKOVA, M., 2016). They require a more serious development of English language skills. For this purpose, they want to replace the Russian professors on foreign «native speakers». They also want to tighten the selection of students for the program. As history of such discussions shows, teachers of English quickly remain in the minority and lose their jobs at the first opportunity. Of course, the peaceful co-existence, and perhaps the ability to work together over the course - would be a priority.

Requirements for the language using are different in different countries (SOKOLOVA, 2015). Reorientation from the US to the Chinese direction, allowing us to use a lighter version of English as a lingua franca. In addition, such a turn changes the perception of phonetics, since it is the ability to recognize accents and simplify the figures of speech. In China "native speakers" sometimes asked Russians to translate from their «fluent» English to Russified English that is more understandable for Chineses.

It is important to be realistic in the development of language skills possibilities. People can not to do it quickly because of deep cultural differences (WIERZBICKA, A., 1985, 1992, 1997) So these problems require time and benevolent support. Therefore, the use of techniques that offers cognitive linguistics can be very useful.

#### References

ARNÓ-MACIÀ, E.; MANCHO-BARÉS, G. The Role of Content and Language in Content and Language Integrated Learning (CLIL) at University: Challenges and Implications for ESP. English for Specific Purposes. n. 37, p. 63–73. 2015. doi:10.1016/j. esp.2014.06.007.

ANTONACCI, P. A.; O'CALLAGHAN, C. M. Essential strategies for teaching vocabulary. In: Promoting literacy development: 50 research-based strategies for K–8 learners. Thousand Oaks, CA: Sage Publications, 2012.

BALAID, A.; ABD ROZAN, M. Z.; HIKMI, S. N.; MEMON, J. Knowledge maps: A systematic literature review and directions for future research. International Journal of Information Management, v. 36, n. 3, p. 451-475, 2016. doi:10.1016/j.ijinfomgt.2016.02.005.

CENOZ, J. Discussion: Some Reflections on Content-Based Education in Hong Kong as Part of the Paradigm Shift. International Journal of Bilingual Education and Bilingualism, v. 18, n. 3, p. 345-351, 2015.

CENOZ, J.; GORTER, D. eds. Multilingual Education: Between Language Learning and Translanguaging. Cambridge: Cambridge University Press. 2015.

ELORRIAGA, J. A.; ARRUARTE, A.; CALVO, I.; LARRAÑAGA, M.; RUEDA, U.; HERRÁN, E. Collaborative concept mapping activities in a classroom scenario. Behaviour and Information Technology, v. 32, n. 12, p. 1292-1304, 2013. doi:10.1080/014492 9X.2011.632649

JIRÁSEK, I.; PLEVOVÁ, I.; JIRÁSKOVÁ, M.; DVOŘÁČKOVÁ, A. Experiential and outdoor education: The participant experience shared through mind maps. Studies in Continuing Education, v. 38, n. 3, p. 334-354, 2016. doi:10.1080/0158037X.2016.1141762

HARMON, J. M.; BUCKELEW-MARTIN, E.; WOOD, K. D. The cognitive vocabulary approach to word learning. English Journal, v. 100, n. 1, p. 100–107, 2010.

HEUGH, K. Epistemologies in Multilingual Education: Translanguaging and Genre - Companions in Conversation with Policy and Practice. Language and Education, v. 29, n. 3 p. 280-285, 2015.

KOOIMAN, J. Exploring the Concept of Governability. Journal of Comparative Policy Analysis: Research and Practice, v. 10, n. 2, p. 171–190, 2008. doi:10.1080/13876980802028107.

MAMMEN, J. R. Computer-assisted concept mapping: Visual aids for knowledge construction. Journal of Nursing Education, v. 55, n. 7, p. 403-406. 2016, doi:10.3928/01484834-20160615-09

MCCARTEN, J. Teaching vocabulary: Lessons from the corpus: Lessons for the classroom. New York: Cambridge University Press, 2007.

LIVOV, M.R. Fundamentals of Speech Theory. Moscow: Publishing Center "Academy", 2000.

NESBIT, J. C.; ADESOPE, O. O. Learning with concept and knowledge maps: A meta-analysis. Review of Educational Research, v. 76, n. 3, p. 413-448, 2006 doi:10.3102/00346543076003413.

PAVENKOV, O.; PAVENKOVA, M. Discourse analysis based on Martin and Rose's Taxonomy: A Case of Promoting Student Discourse on the CLIL PhD Programme in Religion Philosophy. Reveleteo-Revista Electronica Espaco Teologico, v. 10, n. 17, p. 129-139, 2016.

PAVENKOV, O. V.; RUBTCOVA, M. P. Interaction of Russian and English academic genres in CLIL doctoral programmes of Management Sociology: a gap in the process of implementation. Dilemas Contemporaneos-Educacion Politica y Valores, v. 3, n. 2, 2016.

RUBTCOVA, M. P.; PAVENKOV, O. Introduction of CLIL approach in sociological doctoral programmes: the ethnolinguistic focus on theses written in Russian or in English. Revista Cientifica Hermes, v. 15, p. 34-53, 2016.

RUBTCOVA, M.; VASILIEVA, E. Managing Human Capital: How Public Servants Support the Governance's Performance Conception in Russia. Proceedings of 2015 International Conference on Public Administration, p. 237-247, 2015.

PAVENKOV, O.; SHMELEV, I.; RUBTCOVA, M. Coping behavior of orthodox religious students in Russia. Journal for the Study of Religions and Ideologies, v. 15, n. 44, p. 205-224, 2016.

RUBTCOVA, M.; KAISAROVA, V. Implementation of Content and Language Integrated Learning (CLIL) programmes in Public Administration: Russian students' and matriculants' opinion about their first CLIL experience Teaching Public Administration. Volume 34, Issue 3, p. 229-246, 2016.

RUBTSOVA, M.V.V. Governmentability in interactions of subjects. Traditional and new practices. Sotsiologicheskie Issledovaniya, n. 2, pp. 46-53, 2011.

RUBTSOVA, M. V. Manageability: sociological theoretical analysis of notions. Sotsiologicheskie Issledovaniya, n. 12, p.32-38, 2007.

SAFONOVA, O. Anglijskij lingvisticheskij komponent v jazykovoj situacii sovremennoj Rossii. In: Teoreticheskaja i prikladnaja lingvistika. Jazyk i social'naja sreda. - Voronezh, 2000.

SANTOS, A.; CENOZ, J.; GORTER, D. Communicative anxiety in English as a third language. International Journal of Bilingual

Education and Bilingualism, 2015 (in Press) doi:10.1080/13670 050.2015.1105780.

SOKOLOVA, A. O pidzhinizacii anglijskogo jazyka. Mir lingvistiki i kommunikacii. Izdatel'stvo: Tverskaja gosudarstvennaja sel'skohozjajstvennaja akademija Tver'. v. 1, n. 42, p. 113-118, 2015.

USIAEVA, A. et al. Sociological Diagnostics in Staff Competency Assessments: Evidence from Russian Museums. International Journal of Production Management and Engineering. Volume: 4 Issue: 1, p. 29-33, 2016.

VYGOTSKY L.S. On the question of multilingualism as a child. Collected Works. V. 3. Moscow, Nauka, 1983.

VOLCHKOVA, L. T.; PAVENKOVA, M. V. Sociology of management. Theoretical principles. Sotsiologicheskie issledovaniya, n. 3, p. 141-144, 2002.

VERESHCHAGIN E.M. Psychological and methodological characteristics of bilingualism. Moscow, Nauka, 1969.

WIERZBICKA, A. Different Cultures, Different Speech Acts. Journal of Pragmatics n. 9, p. 145-178, 1985.

WIERZBICKA, A. Semantics, Culture, and Cognition: Universal Human Concepts in Culture- Specific Configurations. Oxford University Press, 1992.

WIERZBICKA, A. Understanding Cultures through Their Key Words (English, Russian, Polish, German, and Japanese). New York: Oxford University Press, 1997

Recebido em 11 de novembro de 2016 Aceito em 30 de novembro de 2016 Appendix 1. Preparing a Cognitive Map in two languages

Let's look at draft of a cognitive map (fig.1). In fact, English and Russian languages do not coincide completely. Only the terms are fully duplicated, and an explanation of the terminology is given in two languages. The definition is often given in Russian (the students will take the exam after university in Russian). However, the examples are usually in English.

Figure 1. Cognitive map - Governability

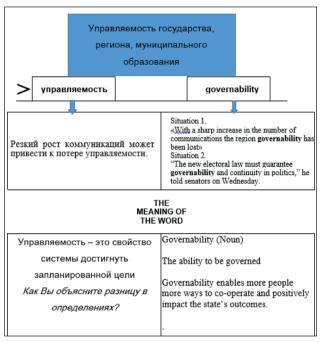
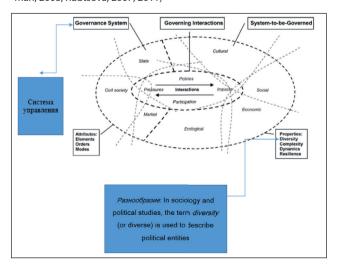
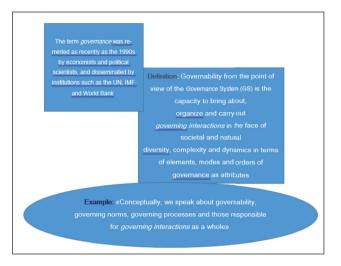


Figure 2. Integrated framework for governability (adapted from Kooiman, 2008; Rubtsova, 2007, 2011)



At the third stage, we begin our preparing to work with a serious scientific article in which some concepts and definitions are established in their connections. See Figure 3.

Figure 3. Preparation for work with the scientific article in English I



The proposed approach allows us to solve the task of the creating a vocabulary in two languages in the framework of one program.