

INTED **2019**

13th International
Technology, Education and
Development Conference

11-13 March, 2019
Valencia (Spain)

CONFERENCE PROCEEDINGS



Exploring New Frontiers in Education

INTED **2019**

13th International Technology, Education and Development Conference

11-13 March, 2019
Valencia (Spain)

C O N F E R E N C E P R O C E E D I N G S

Published by
IATED Academy
iated.org

INTED2019 Proceedings
13th International Technology, Education and Development Conference
March 11th-13th, 2019 — Valencia, Spain

Edited by
L. Gómez Chova, A. López Martínez, I. Candel Torres
IATED Academy

ISBN: 978-84-09-08619-1
ISSN: 2340-1079
Depósito Legal: V-247-2019

Book cover designed by
J.L. Bernat

All rights reserved. Copyright © 2019, IATED

The papers published in these proceedings reflect the views only of the authors. The publisher cannot be held responsible for the validity or use of the information therein contained.

INTED2019 COMMITTEE AND ADVISORY BOARD

<i>Agustín López</i>	SPAIN	<i>M^a Jesús Suesta</i>	SPAIN
<i>Alessandro Brawerman</i>	BRAZIL	<i>Marcelo Gaspar</i>	PORTUGAL
<i>Alessia Bevilacqua</i>	ITALY	<i>Marek Medrek</i>	POLAND
<i>Alexander Ziegler</i>	GERMANY	<i>M^a de Lourdes Machado-Taylor</i>	PORTUGAL
<i>Allison Spring</i>	UNITED STATES	<i>Maria Porcel</i>	SPAIN
<i>Amna Alobeidli</i>	U.A.E.	<i>Marina Encheva</i>	BULGARIA
<i>Amparo Girós</i>	SPAIN	<i>Mary Dempsey</i>	IRELAND
<i>Ana Tomás</i>	SPAIN	<i>Michael Collins</i>	IRELAND
<i>Andrew Cheuck Wing Tang</i>	HONG KONG	<i>Michela Tramonti</i>	ITALY
<i>Andriy Didenko</i>	U.A.E.	<i>Miguel Peiró</i>	SPAIN
<i>Angela O'Donnell</i>	UNITED STATES	<i>Mikhail Bouniaev</i>	UNITED STATES
<i>Antonio García</i>	SPAIN	<i>Mohd Hassan Abdullah</i>	MALAYSIA
<i>Cecilia Bjursell</i>	SWEDEN	<i>Mounir Ben Ghalia</i>	UNITED STATES
<i>Charles Weiss</i>	UNITED STATES	<i>Nerey Mvungi</i>	TANZANIA
<i>Chelo González</i>	SPAIN	<i>Norma Barrachina</i>	SPAIN
<i>David Martí</i>	SPAIN	<i>Peter Haber</i>	AUSTRIA
<i>Eladio Duque</i>	SPAIN	<i>Peter Mozelius</i>	SWEDEN
<i>Elena Grunt</i>	RUSSIAN FED.	<i>Petr Beremlijski</i>	CZECH REPUBLIC
<i>Fadia Nasser-Abu Alhija</i>	ISRAEL	<i>Priscila Berger</i>	GERMANY
<i>Gary Ross</i>	JAPAN	<i>Raja Nor Safinas Raja Harun</i>	MALAYSIA
<i>Glavio Paura</i>	BRAZIL	<i>Remigijus Bubnys</i>	LITHUANIA
<i>Harri Kuusela</i>	FINLAND	<i>Rivka Gadot</i>	ISRAEL
<i>Ignacio Ballester</i>	SPAIN	<i>Sanna Juwonon</i>	FINLAND
<i>Ignacio Candel</i>	SPAIN	<i>Sarah Louisa Birchley</i>	JAPAN
<i>Ilias Batzogiannis</i>	GREECE	<i>Sergio Pérez</i>	SPAIN
<i>Iván Martínez</i>	SPAIN	<i>Sheri Bias</i>	UNITED STATES
<i>Jalal Nouri</i>	SWEDEN	<i>Stephane Stephens</i>	UNITED STATES
<i>Javier Domenech</i>	SPAIN	<i>Susannah Quinsee</i>	UNITED KINGDOM
<i>Javier Martí</i>	SPAIN	<i>Suzan Girginkaya Akdag</i>	TURKEY
<i>Joanna Lees</i>	FRANCE	<i>Tara Hammar</i>	UNITED STATES
<i>John Gordon</i>	UNITED KINGDOM	<i>Tessai Hayama</i>	JAPAN
<i>Jorge Mendonça</i>	PORTUGAL	<i>Todd Brower</i>	UNITED STATES
<i>Jorge Reyna</i>	AUSTRALIA	<i>Uwe Matthias Richter</i>	UNITED KINGDOM
<i>Jose F. Cabeza</i>	SPAIN	<i>Valentina Gerasimenko</i>	RUSSIAN FED.
<i>Jose Luis Bernat</i>	SPAIN	<i>Victor Fester</i>	NEW ZEALAND
<i>Juanan Herrero</i>	SPAIN	<i>Wendy Gorton</i>	UNITED STATES
<i>Lorayne Robertson</i>	CANADA	<i>Xavier Lefranc</i>	FRANCE
<i>Lorena López</i>	SPAIN	<i>Xema Pedrós</i>	SPAIN
<i>Luis Gómez Chova</i>	SPAIN	<i>Zigrida Vincela</i>	LATVIA

CONFERENCE SESSIONS

ORAL SESSIONS, 11th March 2019

Gamification

Augmented Reality in Education

Tutoring and Mentoring

Computational Thinking

Educational Management (1)

e-Content & e-Learning

Challenges of a Multicultural Society (1)

Teaching and Learning Mathematics

Serious Games & Game-Based Learning (1)

Collaborative Educational Environments

Adult and Lifelong Learning

Creativity and Design Thinking in Education

Experiences in Special Education (1)

Educating on Interactive Technology, Entrepreneur-ship and Participation

Challenges of a Multicultural Society (2)

New Technologies in Mathematics

Educational Software

Virtual Reality in Education

Next Generation Classroom

Innovation Procurement to Steer User-driven Innovations for Digital Learning

Experiences in Special Education (2)

Project and Problem Based Learning (1)

New Technologies in Health Sciences Education

Skills and Competencies for 21st Century Engineers

Serious Games & Game-Based Learning (2)

Learning Management Systems

Competence Evaluation

Quality Assurance in Education

Teacher Training for Multicultural and Inclusive Education

Flipped, Blended and Online –Digitalisation in HE Language Learning in Finland

Experiences in Health Sciences Education

Experiences in Engineering Education

POSTER SESSIONS, 11th March 2019

New Experiences in Education

New Trends in Education and Research

ORAL SESSIONS, 12th March 2019

Employability Trends and Challenges
e-Learning Experiences
Curriculum Design (1)
Technology Enhanced Learning in Computer Science
Challenges for the Teaching Profession
Blended Learning
Digital Media & Information Literacy
Assessment in Foreign Languages Education
Enhancing the Teaching Experience

Entrepreneur-ship Education
Technology Enhanced Learning
Curriculum Design (2)
Programming and Coding Skills
Pre-Service Teacher Education (1)
Active Learning Experiences
Student Engagement
Language Learning - from ESP to CLIL

Soft Skills Development
MOOCs and e-Learning Experiences
Intelligent Tutoring Systems & Learning Analytics
International Cooperation
Pre-Service Teacher Education (2)
Project and Problem Based Learning (2)
Ethical Issues in Education
Language Learning Innovations
ICT Support for Work-Integrated Learning: Sharing and Learning

University-Industry Collaboration
Social Media in Education
e-Assessment
STEM in Higher Education
Teacher Training (1)
Flipped Learning Experiences
Learning Space Design
New Technologies in Language Learning

International Student Mobility
Digital Literacy
Assessment of Student Learning
STEM in Primary and Secondary Education
Teacher Training (2)
Educational Management (2)
Student Resilience and Wellbeing
Communication Skills

POSTER SESSIONS, 12th March 2019

Emerging Technologies in Education

Pedagogical Innovations and Educational Issues

VIRTUAL SESSIONS

Apps for Education
Augmented Reality
Barriers to Learning
Blended Learning
Collaborative and Problem-based Learning
Competence Evaluation
Computer Supported Collaborative Work
Curriculum Design and Innovation
Digital divide and access to Internet
Diversity issues and women and minorities in science and technology
E-content Management and Development
e-Learning
Education and Globalization
Education in a Multicultural society
Educational Research Experiences
Educational Software and Serious Games
Enhancing learning and the undergraduate experience
Ethical issues in Education
Evaluation and Assessment of Student Learning
Experiences in STEM Education
Flipped Learning
Impact of Crisis on Education
Impact of Education on Development
Inclusive Learning
International Projects
Language Learning Innovations
Learning and Teaching Methodologies
Learning Experiences in Primary and Secondary School
Learning Management Systems (LMS)
Lifelong Learning
Links between Education and Research
Mobile learning
New projects and innovations
New Trends in the Higher Education Area
Online/Virtual Laboratories
Organizational, legal and financial issues
Pre-service Teacher Experiences
Quality assurance in Education
Research Methodologies
Research on Technology in Education
Science popularization and public outreach activities
Student Support in Education
Technological Issues in Education
Technology-Enhanced Learning
Transferring disciplines
Tutoring and Coaching
University-Industry Collaboration
Virtual Universities
Vocational Training

ABOUT INTED2019 Proceedings

HTML Interface: Navigating with the Web browser

This USB Flash drive includes all presented papers at INTED2019 conference. It has been formatted similarly to the conference Web site in order to keep a familiar environment and to provide access to the papers through your default Web browser (open the file named "INTED2019_Proceedings.html").

An Author Index, a Session Index, and the Technical Program are included in HTML format to aid you in finding conference papers. Using these HTML files as a starting point, you can access other useful information related to the conference.

The links in the Session List jump to the corresponding location in the Technical Program. The links in the Technical Program and the Author Index open the selected paper in a new window. These links are located on the titles of the papers and the Technical Program or Author Index window remains open.

Full Text Search: Searching INTED2019 index file of cataloged PDFs

If you have Adobe Acrobat Reader version 6 or later (www.adobe.com), you can perform a full-text search for terms found in INTED2019 proceedings papers.

Important: To search the PDF index, you must open Acrobat as a stand-alone application, not within your web browser, i.e. you should open directly the file "INTED2019_FrontMatter.pdf" with your Adobe Acrobat or Acrobat Reader application.

This PDF file is attached to an Adobe PDF index that allows text search in all PDF papers by using the Acrobat search tool (not the same as the find tool). The full-text index is an alphabetized list of all the words used in the collection of conference papers. Searching an index is much faster than searching all the text in the documents.

To search the INTED2019 Proceedings index:

1. Open the Search PDF pane through the menu "Edit > Advanced Search" or click in the PDF bookmark titled "SEARCH PAPERS CONTENT".
2. The "INTED2019_index.pdx" should be the currently selected index in the Search window (if the index is not listed, click Add, locate the index file .pdx, and then click Open).
3. Type the search text, click Search button, and then proceed with your query.

For Acrobat 9 and later:

1. In the "Edit" menu, choose "Search". You may receive a message from Acrobat asking if it is safe to load the Catalog Index. Click "Load".
2. A new window will appear with search options. Enter your search terms and proceed with your search as usual.

For Acrobat 8:

1. Open the Search window, type the words you want to find, and then click Use Advanced Search Options (near the bottom of the window).
2. For Look In, choose Select Index.
3. In the Index Selection dialog box, select an index, if the one you want to search is available, or click Add and then locate and select the index to be searched, and click Open. Repeat as needed until all the indexes you want to search are selected.
4. Click OK to close the Index Selection dialog box, and then choose Currently Selected Indexes on the Look In pop-up menu.
5. Proceed with your search as usual, selecting other options you want to apply, and click Search.

For Acrobat 7 and earlier:

1. In the "Edit" menu, choose "Full Text Search".
2. A new window will appear with search options. Enter your search terms and proceed with your search as usual.

PHRASEOLOGICAL OPTIMUM IN TEACHING FOREIGN LANGUAGES

D. Kuzmanovska, S. Kirova, B. Ivanova, V. Mrmeska

University "Goce Delcev" Stip (MACEDONIA)

Abstract

The paper is based on a research of the representation and knowledge of German phraseology, for which several phraseological dictionaries and dictionaries of German as a foreign language have been used and native speakers of German were surveyed, i.e. a total number of 1,112 German phraseologisms have been analyzed.

The list of the 143 most widely used and well-known German phraseologisms for which the authors say that it is the "phraseological optimum" for German as a foreign language is in the focus of our research. Out of this, a total number of 50 most popular German phraseologisms and their equivalents in English are chosen for our research.

Therefore, we will use this optimum as the starting point for our research. We will also try, by using an appropriate questionnaire, to find out what the state of the so-called "phraseological optimum" is with students studying German and English as foreign languages at the Department of German Language and the Department of English Language at the Faculty of Philology at the Goce Delcev University in Stip, R. Macedonia, with students from the first to the fourth year.

Keywords: Phraseologism, representation, equivalence, recognizability.

1 INTRODUCTION

Nowadays more and more scientific articles and research are directed towards the educational process and to detecting their weaknesses and their timely removal to improve it. Such is the project titled "Supplemental instruction as a tool for improving students' language competence at the Faculty of Philology" at the University "Goce Delcev" in Stip, the Republic of Macedonia, which tries to offer a number of interesting solutions for the detected problems occurring during foreign language teaching, among which one of the most creative ones is determining the so-called "phraseological optimum" required for students of foreign languages at the Departments of German language and literature and English language and literature. The question to be answered is why we need this phraseological optimum.

Daß der Phraseologie für den Fremdsprachenunterricht eine besondere Bedeutung zukommt, dürfte außer Frage stehen. Die Befähigung zu einer auch nur begrenzten Kommunikation in einer Fremdsprache ist ohne eine minimale Beherrschung der Phraseologie nicht möglich.

(Fleischer 1982: 32)

The answer was given by Fleischer in 1982 when he said that phraseology is, without any doubt, of particular importance for foreign language teaching, and that the ability to communicate, even limited to a foreign language, is not possible without a minimum knowledge of phraseology. So, in 1982 he announced that the knowledge of the phraseological optimum is of great importance for a successful communication in both German and English as the two most common languages in the world, and in 2006 a group of authors Erla Hallsteinsdottir/Monika Šajankova/Uwe Quasthoff's in their work with the title *Phraseologisches Optimum für Deutsch als Fremdsprache*, provided a tabular view of their research, citing 143 phraseologisms as the so-called phraseological optimum. In 2017, through our project, we are trying to take over a part of this table for the analysis of the so-called phraseological optimum and its vision in our students-learners of German and English as foreign languages. Since we are talking about an extensive phraseological material of 143 phraseologisms, we have tried to reduce it to a total of 45 phraseologisms taken from the tabular display of the phraseological optimum according to the criterion "known phraseologisms" that carry the index from 91 to 100 of the same table.

2 RESEARCH DESCRIPTION

The aim of this paper is, above all, descriptive, that is, we insist on determining the general and dominant attitude of students regarding the representation of phraseology in the teaching of a foreign language. This research involved 50 students from the first to the fourth year from the Departments of German Language and Literature and English Language and Literature, the Faculty of Philology at the University "Goce Delcev" in Stip, the Republic of Macedonia, who voluntarily and anonymously participated in the survey and had the task of answering 4 questions related to each of the 45 most well-known phraseologisms listed as the phraseological optimum with an index of 91 to 100, indexed by the degree of their recognizability. Through the offered questions, the students were to express their knowledge and experiences related to phraseology and thus help to confirm the so-called phraseological optimum that would be proposed in the curricula and classes in a foreign language. The teachers who conducted the survey had the role of observers and were not allowed to suggest or influence students' responses in order to get a realistic picture of the phraseological optimum through which the place and role of phraseology in modern foreign language teaching could be determined. The students did not have a time limit, and, on average, they took about 15 minutes to answer the questions. The questionnaire consisted of the 50 most mentioned well-known phraseologisms listed as questions to which students responded according to the Likert scale method, where five attitudes were offered:

- 1 DK - I don't know this phraseologism;
- 2 K- I know this phraseologism (I have heard/read it), but I don't use it in communication;
- 3 KU - I know this phraseologism and use it (or could use it in a given context);
- 4 KEU - I know the equivalent phraseologism in my mother tongue and use it;
- 5 KEDU - I know the equivalent phraseologism in my mother tongue but don't use it.

Students gave answers to each question, which were subsequently calculated. This research was conducted in order to determine the so-called phraseological optimum to help learners of foreign languages, in our case German and English, in R. Macedonia and get a clear picture of the most represented and well-known German and English phraseologisms that each connoisseur of these two foreign languages should have in his/her vocabulary. This research is just one part of a more elaborate project dedicated to phraseology in general, but in this paper, we try to give an overview of the obtained initial results of field research and dedicated to phraseology in the direction of improving the language competences of the learners of these foreign languages in the Republic of Macedonia. The goal is to identify the weaknesses or the advantages of this phenomenon in the teaching process and to take concrete steps for their improvement.

3 RESULTS AND DISCUSSION

The following table presents the statistical data resulting from the processing of data obtained from the students' questionnaires:

Table 1. Questionnaire in German language.

	K	DK	KU	KEU	KEDU
1. auf Anrieb	80,5%	5,5%	14%	/	/
2. jn/etw. im Auge haben	91%	/	5%	4%	/
3. jn/etw. aus den Augen verlieren	35%	10%	20%	35%	/
4. Bescheid wissen	91%	/	5%	4%	/
5. unter Dach und Fach sein	75%	/	15%	10%	/
6. jn. um die Ecke bringen	10%	5%	20%	10%	55%
7. etw. auf Eis legen	75%	/	15%	10%	/
8. etw. auf eigene Faust tun	35%	45%	10%	10%	/
9. jm. auf den Fersen bleiben/sein	55%	25%	/	15%	5%
10. jm. auf die Finger sehen	75%	/	15%	10%	/
11. etw. in den Griff bekommen	91%	/	5%	4%	/
12. im Großen und Ganzen	91%	/	5%	4%	/

13. etw. auf den Grund gehen	25%	15%	5%	45%	10%
14. jm. um den Hals fallen	75%	/	15%	10%	/
15. alle Hände voll zu tun haben	80,5%	5,5%	14%	/	/
16. etw. in die Hand nehmen	91%	/	5%	4%	/
17. klar auf die Hand liegen	35%	10%	20%	35%	/
18. jm. am Herzen liegen	75%	/	15%	10%	/
19. von ganzem Herz	35%	10%	20%	35%	/
20. auf heiterem Himmel	25%	15%	5%	45%	10%
21. nach langem Hin und Her	75%	/	15%	10%	/
22. etw./jn in Kauf nehmen	91%	/	5%	4%	/
23. auf der Kippe stehen	65%	5%	10%	5%	15%
24. sich über etw. im Klaren sein	10%	5%	20%	10%	55%
25. sich etw. durch den Kopf gehen lassen	91%	/	5%	4%	/
26. sich etw. in den Kopf setzen	35%	45%	10%	10%	/
27. auf dem Laufenden sein	80,5%	5,5%	14%	/	/
28. hinter/auf dem Mond leben	75%	/	15%	10%	/
29. jm auf die Nerven fallen/gehen	75%	/	15%	10%	/
30. die Nase voll haben	20%	15%	/	/	65%
31. Pech haben	91%	/	5%	4%	/
32. etw. auf die Punkt bringen	91%	/	5%	4%	/
33. jn zur Rede stellen	75%	/	15%	10%	/
34. an der Reihe sein	91%	/	5%	4%	/
35. eine große Rolle spielen	91%	/	5%	4%	/
36. aus der Reihe tanzen	35%	45%	10%	10%	/
37. über die Runden kommen	75%	/	15%	10%	/
38. Schlange stehen	75%	/	15%	10%	/
39. schwarz auf weiß haben	91%	/	5%	4%	/
40. in den Sternen stehen	75%	/	15%	10%	/
41. jn im Stich lassen	15%	/	25%	40%	20%
42. Tag und Nacht	100%	/	5%	4%	/
43. jm über den Weg laufen	35%	10%	20%	35%	/
44. das letzte Wort haben	91%	/	5%	4%	10%
45. zwischen den Zeilen lesen	75%	/	15%	10%	/

4 CONCLUSION

Analyzing students' responses in the research, we can conclude that our students, German and English language learners, as two of the most widely used foreign languages, are aware of the importance of phraseology in the process of learning a foreign language and, accordingly, try to gain more additional information about them from their teachers, the Internet and dictionaries. This study gives us a clear picture of the presence or, rather, of the insufficient representation of phraseology in foreign language teaching and in foreign language textbooks. We can freely state that foreign language teachers are those who try to complement students' knowledge of phraseology through their additional engagement, which is commendable when it comes to such a kind of characteristic language category. As additional conclusions based on this research we present the following:

- students are interested in studying phraseology as an important communication tool;
- there is no sufficient representation of phraseologisms in foreign language textbooks;
- a greater level of knowledge of phraseology is the merit of the individual additional engagement of the teacher;

- an appropriate approach is needed in relation to phraseologisms in the teaching process, as well as developing appropriate techniques for their successful implementation in the teaching process in order to facilitate students' acquisition of these phraseologisms.

The answers provided by the surveyed students give us hope that there is an interest in studying phraseology in the teaching of a foreign language, in their inclusion in the curricula envisaged by the Bureau for the Development of Education, in order to emphasize their importance in the process of everyday communication and find a more serious approach to their study.

REFERENCES

- [1] J. Buscha, *100 Phraseologismen in Bildern*, Leipzig: Deutsches Übungsbuch, 1979.
- [2] W. Fleischer, *Phraseologie der deutschen Gegenwartssprache*. Tübingen: VEB Bibliographisches Institut, 1982.
- [3] E. Hallsteinsdóttir, Das Verstehen idiomatischer Phraseologismen in der Fremdsprache Deutsch. Hamburg (PHILOLOGIA – Sprachwissenschaftliche Forschungsergebnisse 49). http://www.verlagkovac.de/0435_volltext.htm, 2001.
- [4] E. Hallsteinsdóttir, M. Šajankova, U. Quasthoff, „Phraseologisches Optimum für Deutsch als Fremdsprache. Ein Vorschlag auf der Basis von Frequenz- und Geläufigkeitsuntersuchungen“. *Linguistik online* Bd. 27, Nr. 2, 2006.
- [5] E. Piirainen, *Widespread Idioms in Europe and Beyond. Toward a Lexicon of Common Figurative Units*. New York: Peter Lang Publishing, 2012.