

PROFESSIONAL
DEVELOPMENT
FORUM



Linguistic mediation for higher education language instructors and students

The Forum is hosted and co-organised by the **Faculty of Linguistics, National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”**

Linguistic mediation for students in Engineering & Architecture

Dr Maria Stathopoulou



NATIONAL TECHNICAL UNIVERSITY OF ATHENS (NTUA)

CENTRE FOR FOREIGN LANGUAGES



[Apply](#)

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ESP at NTUA

English for
Specific
Purposes



NATIONAL TECHNICAL UNIVERSITY OF ATHENS – *CENTRE FOR FOREIGN LANGUAGES*

An overview



Languages

4 foreign languages, i.e. *English, French, German and Italian*, are offered at NTUA and students are required to choose one.



4 semesters

Language courses run for 4 semesters and the marks for the course count towards students' final grade for their degree.



Certificates & exempts

Students with B2 to C2 level certificates, are **exempt from the General English** courses and have to take only the ESP 4th semester course, which focuses on *scientific language*.

Course Objectives

(Semesters 1-3 *General English*)

English language study, for 3 semesters, aims at developing students': (a) competences to **use the language** in a variety of **social contexts**, (b) their **language awareness**).

At the end of their 3rd semester of studies, students are expected to have reached (CEFR) C1 level.

General English studies provide:

- A range of activities, designed to **develop and test understanding and production** of both spoken and written language.
- A range of activities, designed to develop and test students' ability to: (a) cross-linguistically mediate from language A (Greek) to B (English), less frequently from to language A to B, and (b) to translinguistically mediate from language B (English) to language B (English).

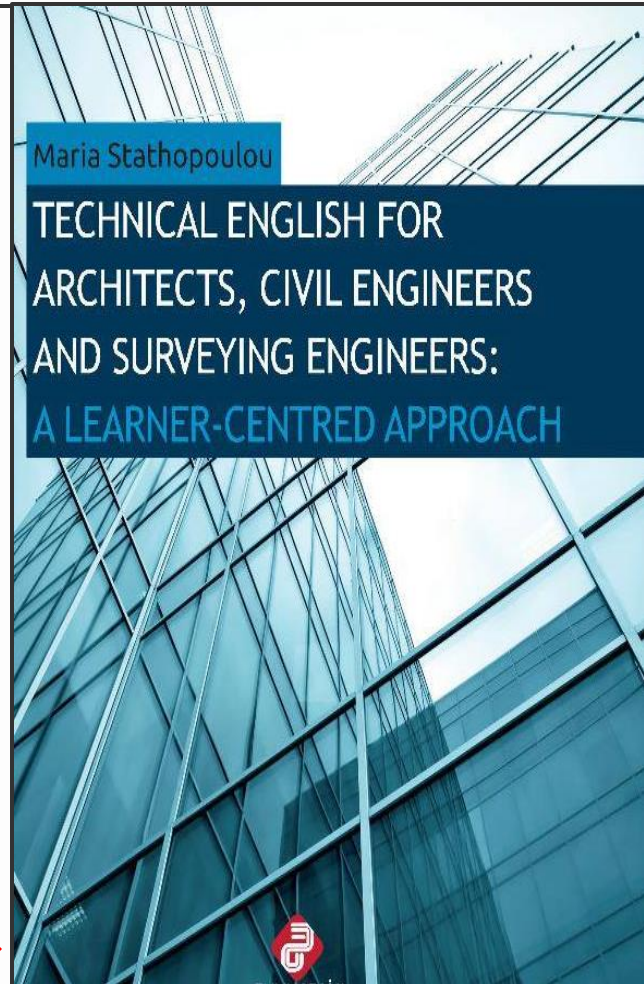


Objectives (Semester 4) *ESP*

- The ESP course focuses on developing students' **communicative competence** by covering a wide **range of topics** related to **specific disciplines** of engineering i.e., civil and surveying engineering, architecture etc. (*e.g., planning, designing and constructing buildings and other structures, materials and types of constructions, construction of bridges or tunnels, airports, harbours, earthquakes etc.*).
- The ESP course aims at increasing students' **vocabulary** range and familiarizing them with a **variety of text types** and **discourse environments** while it involves them in **using the language for a variety of purposes in a variety of contexts**.

The intention of the course is to develop students' competence to use technical English for their professional purposes.

Teaching is based on this textbook





Studies in HEIs and study materials

- According to the Greek Constitution, Higher Education is public, offered exclusively by the State, free of charge.
- Therefore, admission and enrollment in all HEIs and attendance in all fields of study are free of charge.
- Moreover, academic textbooks are provided to students through an official online system (Evdoxos) free of charge.

Platforms like Moodle or other online resources are also used to provide supplementary materials and learning activities.

Maria Stathopoulou

TECHNICAL ENGLISH FOR
ARCHITECTS, CIVIL ENGINEERS
AND SURVEYING ENGINEERS:
A LEARNER-CENTRED APPROACH



The book for Technical English



Focused and
contextualised
reading



Authentic texts



Real life tasks



Different types of
vocabulary-building
activities



Practice for reading
and writing



CL/IL Mediation
activities

English for
Specific
Purposes

ESP and Mediation

NATIONAL TECHNICAL UNIVERSITY OF ATHENS – *CENTRE FOR FOREIGN LANGUAGES*

Teaching mediation:

General philosophy

- The materials are based on contemporary approaches to teaching ESP by including **mediation activities**
- There are activities designed to help learners act as **intermediaries** in situations where they need to convey information/ideas/meanings
 - ✓ from one language to another
 - ✓ within the same language but across genres/discourses/modes

Teaching mediation:

Rationale for Including Mediation Activities

1. Alignment with the CEFR:

Mediation is a key component in the CEFR/CEFR CV, which emphasizes the ability to process and convey information in multilingual and multicultural settings -making it highly relevant for learners who will operate in international professional environments.

2. Relevance to Technical Fields:

Engineers, scientists, and technical professionals often need to **mediate knowledge**:

- **Explaining** technical concepts to non-experts.
- **Translating** meanings in technical language.
- **Adapting** content to different cultural or professional contexts

3. Focus on Critical Thinking:

By engaging in mediation, students learn to **analyze** and **interpret** complex technical content, and develop greater linguistic and cultural awareness as well as critical thinking.

Teaching mediation:

Rationale for including mediation activities

4. Promotion of plurilingual competence:

Mediation activities prepare students to handle cross-linguistic and cross-cultural communication challenges.

5. Active Learning:

Mediation activities encourage active participation, collaboration, and problem-solving, which are more engaging and effective than rote memorization of terminology.

6. Preparation for Academic and Professional Needs: Many students at NTUA will need to:

- **Write** research papers in the foreign language
- **Present** at international conferences
- **Collaborate** with international colleagues

Types of mediation:



Intralinguistic mediation tasks

Discussion in class in Greek based on English texts or visuals



Cross-linguistic mediation tasks in class

Discussion in class in English/Greek

Writing tasks (mainly assigned as homework)



Cross-linguistic *test*-tasks

Written mediation tasks as part of the official exams at the end of the semester

Requirements of mediation tasks

SUMMARIZING TECHNICAL TEXTS	read complex technical documents (e.g., user manuals, research articles) and summarize them in simpler English or home language in order to achieve a communicative purpose
PARAPHRASING	reformulate technical explanations to suit different audiences (e.g., a layperson vs. a specialist).
RECREATING INFORMATION	transform diagrams, charts, or tables into descriptive text in English, or vice versa.
TRANSLATING TERMINOLOGY	translate key technical terms or phrases between English and Greek, emphasizing accuracy and context.
COLLABORATIVE MEDIATION	work in pairs or groups to discuss technical concepts and resolve language challenges, simulating real-world teamwork in multilingual environments.
CLOSED RESPONSE ACTIVITIES	read one or more texts and, in using information from these texts, to respond to multiple choice tasks

Characteristics of mediation tasks



Mediation tasks

Authenticity

Real life purpose

Focus on meaningful information

Relevance

Learner centredness

Attractive layout & user-friendliness

Collaboration and teamwork

The texts provided in their materials are **authentic** (of **different text types** e.g *dictionary entries, website texts, abstracts of theses, or papers, job advertisements, book descriptions*, etc.) while the tasks are **realistic** and close to their scientific **interests**

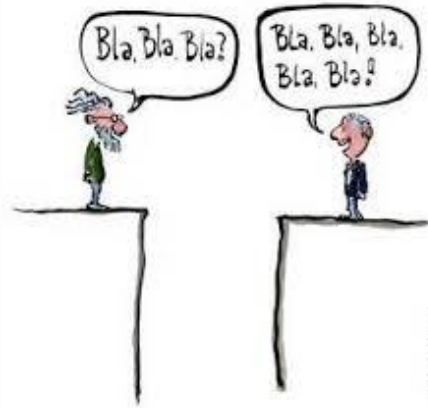
Taking into account students' **needs** and the different learning **styles**



Mediation examples from the book

— IntraLinguistic mediation —

Relay information in the **same** language



HikingArtist

1.

Oral mediation
– brainstorming
activity based
on visuals/
headings

The photos below show different fields of engineering. Using your personal experience and knowledge, what do you think each one of them refers to?

Orally discuss
in class



Civil Engineering



Mechanical Engineering



Electrical Engineering



Chemical Engineering



Aerospace Engineering



Structural Engineering



Genetic Engineering



Biomedical Engineering



Computer Engineering



Software Engineering



Military Engineering



Nuclear Engineering



Forensic Engineering



Reverse Engineering



Environmental Engineering

Intra-linguistic mediation

2.

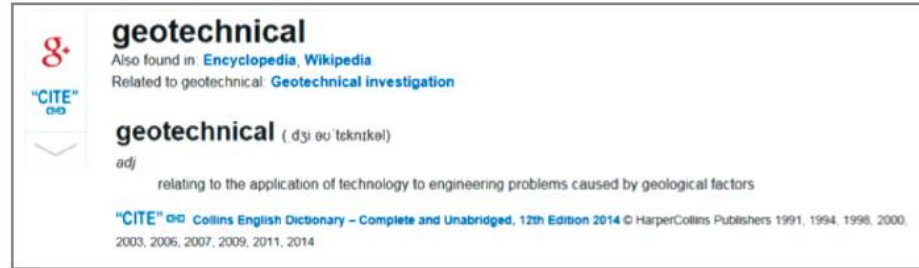
Oral mediation
Brainstorming
activities based
on short texts

Dictionary entry

Intra-linguistic mediation

TASK 1

1. Read the dictionary entry below. In pairs or groups, discuss what you think geotechnical engineering is.



geotechnical
Also found in: [Encyclopedia](#), [Wikipedia](#)
Related to geotechnical: [Geotechnical investigation](#)

geotechnical (dʒi ˈtɛknɪkəl)
adj
relating to the application of technology to engineering problems caused by geological factors

"CITE" Collins English Dictionary – Complete and Unabridged, 12th Edition 2014 © HarperCollins Publishers 1991, 1994, 1998, 2000, 2003, 2006, 2007, 2009, 2011, 2014

2. Read the following extract about geotechnical engineers. Using your knowledge of the topic, what are their responsibilities? What would you add to the extract to improve it?

*“Everything you see around you is supported by soil or rock.
Geotechnical engineers are responsible for that. Anything
that is not supported by soil or rock, either floats, flies or falls down.”*

(Taken from: <http://www.whatisgeotech.org/>)

3.

Intra-linguistic mediation

Read the website article below and do the tasks that follow.

The effect of large dams on nature

Mar 10, 2011 • By Rekon • 309 Views



Dams are used to manage water resources for irrigation, hydroelectric projects and water supply to the population. The ambitious goal is now to build bigger dams, particularly the high-end technology. With the increasing demand for water, the most mountainous regions are now faced with the proposals on the horizon for the construction of large

dams in several states. Unfortunately, the planning and execution of these large dams are not within the base.

The dam projects promise many things: drinking water, flood control, soil fertility increased, in addition to providing jobs to local people. Large dams have come to define the prestige and national honor, to provide the parameters for the



TASK 6

Send an email to the administrator of the blog in which the article “The effect of large dams on nature” appeared. Say that you disagree with the views expressed in the particular article, and also argue in favour the construction of big dams.

**Written
mediation –
Production/
interaction**

4.

Closed-type of
mediation
activity

TASK 4

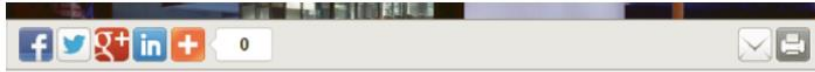
Read Texts 1-4 again and using your background knowledge as well, respond to the following question: *What does a transportation engineer do...?* Using your background knowledge as well as information from the texts, choose the correct answer(s) from the options (i – vii) below.

- i. reviews plans of a proposed city centre development to determine the effect on the traffic system.
- ii. redesigns the runways of an airport in order to accommodate new jets.
- iii. develops a system of crosswalks so that pedestrians can move safely through a busy intersection.

Intra-linguistic mediation

TASK 8

You wish to take part in the following competition organised by the Institution of Structural Engineering. Write a 250 word opinion text on what structural engineering means to the world and sent it to the Institution.



Institution of Structural Engineers > Events and awards > People and Papers Awards > Young Structural Engineering Professional Award

Young Structural Engineering Professional Award

Aimed at young professionals in structural engineering who demonstrate outstanding performance and show exceptional promise for the future.



The Young Structural Engineering Professional Award 2015 is now open for entries

[Enter your submission](#)

Our goal is to promote the accomplishments of young structural engineers – showcasing the diverse and skilled individuals who are driving the profession forward. Winning the award is a unique opportunity to be singled out as “one to watch” among the Institution’s global membership, and an internationally recognised mark of achievement in structural engineering.

5.

Written
mediation –
Production/
interaction

Intra-linguistic mediation

To enter the competition, complete and send the submission form by **Friday 10 April**. **The submission must include a 250 word opinion text on what structural engineering means to the world.**

DOUBLE mediation –
Written Text > Notes >
Oral Text

Then use these notes to (orally) convince your friend study engineering.

Explain in note form why engineering is a great profession according to Herbert Hoover.

IMPORTANT PEOPLE



Herbert Hoover

"Engineering training deals with the exact sciences. That sort of exactness makes for truth and conscience. It might be good for the world if more men had that sort of mental start in life even if they did not pursue the profession.

The engineer learns through work with his own hands not only the mind of the worker but the multitude of true gentlemen among them. And men who love a fight with nature, who like

to build and see their building grow, men who do not hold themselves above manual labor, men who have the moral courage to do these things soundly, some day will be above to move to town, wear white collars every day, and send out the youngsters to the lower rungs and the frontiers of industry.

It is a great profession. There is the fascination of watching a figment of the imagination emerge through the aid of science to a plan on paper. Then it moves to realization in stone or metal or energy. Then it brings jobs and homes to men. Then it elevates the standards of living and adds to the comforts of life. That is the engineer's high privilege.

The great liability of the engineer compared to men of other professions is that his works are out in the open where all can see them. He cannot bury his mistakes in the grave like the doctors. He cannot argue them into thin air or blame the judge like the lawyers. He cannot, like the politicians, screen his shortcomings by blaming his opponents and hope that the people will forget. The engineer simply cannot deny that he did it. If his works do not work, he is damned. That is the phantasmagoria that haunts his nights and dogs his days. He comes from the job at the end of the day resolved to calculate it again. He wakes in the night in a cold sweat and puts something on paper that looks silly in the morning.

The engineer performs many public functions from which he gets only philosophical satisfactions. Most people do not know it, but he is an economic and social force. Every

Intra-linguistic mediation

<i>NOTE-TAKING</i>	
Writing a good summary demonstrates that you clearly understand a text. The ability to take notes from readings is an essential academic skill and has many uses not only in college/university but also in the professional world. Make notes as complete as needed and as clear as possible so they can be used meaningfully later. Skim the text to read topic headings and notice how the text is organised. Be selective.	
Note-taking entails:	
<ul style="list-style-type: none"> ■ identifying the main ideas and what source information is relevant to your task ■ reducing the information to note or diagram format ■ where possible, putting the information in your own words (paraphrasing) 	

6.

Intra-linguistic mediation

TASK 6

You have just come across the following description of a recently published book on Geotechnical engineering. Send an email suggesting the book to your Greek friend studying geotechnical engineering in Sweden. Inform him/her about the author and the content of the book. Your email can be either in English or Greek.

Book Details

Title: Geotechnical Engineering: Soil and Foundation Principles and Practice, Fifth Edition

Publisher: : New York, Chicago, San Francisco, Lisbon, London, Madrid, Mexico City, Milan, New Delhi, San Juan, Seoul, Singapore, Sydney, Toronto

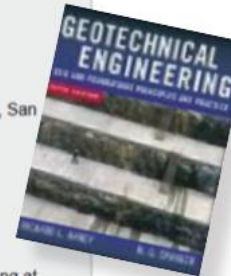
Copyright / Pub. Date: 2007 The McGraw-Hill Companies

ISBN: 9780071481205

Authors:

R. L. Handy Ph. D., is Distinguished Professor Emeritus of Civil Engineering and Construction Engineering at Iowa State University. He is also the founder of Handy Geotechnical Instruments, a company that manufactures innovative soil testing devices. Dr. Handy is the author of *The Day the House Fell* and co-author of the Third and Fourth Editions of *Soil Engineering*. Recognized as a scientist as well as an engineer, he is a Fellow in the Geological Society of America and also in the American Association for the Advancement of Science.

Description: This is a complete revision and reorganization of one of the field's most popular textbooks, *Soil Engineering*, updated to include the latest soil testing methodologies, mechanical engineering topics, and technologies.

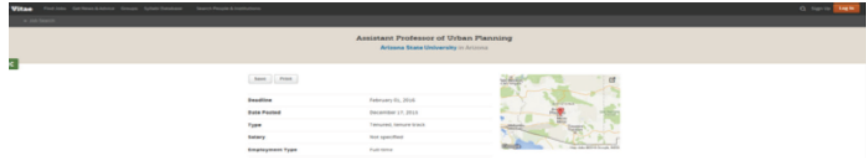


8a
8b

Intra-linguistic mediation

TASK 4

Below is a job advertisement. Using information from the text below write an email to your university teacher who now lives in Arizona informing him about the university position in which he may be interested.



The School of Geographical Sciences and Urban Planning at Arizona State University invites applications for a tenure-track Assistant Professor in Urban Planning. We are open to candidates with a range of specializations in planning, with a preference for those that intersect with urban design or land use. A Ph.D. in Planning or a related field is required at the time of hire. We are particularly

TASK 10

You are an MA student in Structural Engineering and you wish to submit a paper for publication. Write a letter to the editor of the journal below asking:

- When the deadline for submission is
- When the issue is going to be published
- Whether you have to pay in case your paper is accepted for publication
- What the *Palmer Prize* entails.

The screenshot shows the ICE Virtual Library website. The page is for the journal "Proceedings of the Institution of Civil Engineers - Structures and Buildings". The journal is published by ICE Publishing. The journal is listed as "Open Access" and "Peer-reviewed". The journal is listed as "Open Access" and "Peer-reviewed". The journal is listed as "Open Access" and "Peer-reviewed".

ICE Publishing
ICE Virtual Library
essential engineering knowledge

Home Journals Books Subjects Information About Contact

Enter words / phrases / DOI / ISBN / authors / keywords / etc. Search

Home Proceedings of the Institution of Civil Engineers - Structures and Buildings List of Issues Volume 169, Issue 2

Proceedings of the Institution of Civil Engineers - Structures and Buildings
ISSN 0965-0911 | E-ISSN 1751-7702

Structures and Buildings publishes peer-reviewed papers on the design and construction of civil engineering structures and the applied research associated with such activities. Topics include the design, strength, durability and behaviour of structural components and systems.

Topics covered: energy conservation, people movement within and around buildings, strength and durability of steel and concrete structural components, and the behaviour of building and bridge components and systems.

To submit to this journal is free. Papers appear Ahead of Print (below) as soon as they are ready to be published. Ahead of print articles are fully citable using the DOI system.

Awards: Each year, the paper rated best by the Editorial Panel is given the ICE's prestigious *Palmer Prize*.

Author information

- Submit a paper
- Author resources
- Open Access Policy

User actions

- Email alerts
- Subscribe
- Recommend to library

No search history
No recently viewed articles

Editorial panel

— Cross-linguistic mediation —

Transfer of information *across* languages

MEDIATOR



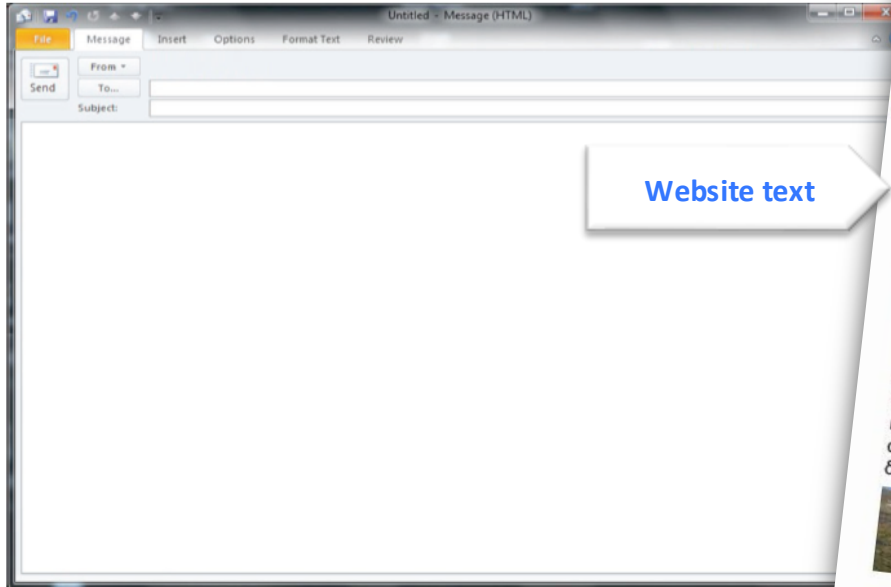
Here comes
our mediator!

9.

Cross-linguistic mediation

Read Text 2 again. Write an email to your friend Coreen who lives in France but coming to Greece this summer via the Kalamata airport. Inform her about the news in relation to the new Kalamata-Athens road.

Note: Your text should have informal style and personal register since you are writing to a friend.



Website text

The image shows a screenshot of the website ypodomes.com. The page title is "TEXT 2". The website logo is "ypodomes.com" with the tagline "Το μοναδικό website για όλες τις υποδομές στην Ελλάδα". The date is "Σάββατο, 2η Ιανουαρίου 2016". The main navigation menu includes "Αυτοκινητόδρομοι", "Μέσα σταθερής τροχιάς", "Αναπλάσεις", "Αστική ανάπτυξη", "Ενέργεια", "Λιμάνια - Αεροδρόμια", "Άλλες υποδομές", and "Υποδομές εξωτερικού". The main content area features a large article titled "Μορέας: Προ των πυλών η λειτουργία για τη μεταλλική γέφυρα Τσακώνας". The article text reads: "Ένα από τα πλέον πολύκροτα σήριαλ στον κατασκευαστικό χώρο ετοιμάζεται για αιώλα. Η κατασκευή του τμήματος Παραδείσια-Τσακώνα, ολοκληρώνεται και όπως όλα δείχνουν, τον επόμενο μήνα με την παράδοση της μεταλλικής γέφυρας Τσακώνας. Έφτασε η στιγμή για τους Μεσσήσιους περίφημη «τοξοτή γέφυρα». Η ονομασία δεν είναι τυχαία καθώς με συνολικό μήκος 390 μέτρα, διαθέτει 44 σπόνδυλους, και έχει σχήμα τόξου. Μέχρι τις 17 Ιανουαρίου στις εκατέρωθεν της γέφυρας περιοχές και οι διυλιστήρια αυτοκινητοδρόμου θα περιοριστούν στην αριστερή πλευρά του αντίστοιχου κλάδου, για εργασίες τελικής διαμόρφωσης στις δεξιά πλευρές και τις πλευρικές οριογραμμές του αυτοκινητόδρομου." Below the text is a small image of the bridge. On the right side, there is a "Download Box" with links for "Φωτογραφίες", "Χάρτες", and "Αρχεία". Below that is a "Αυτοκινητόδρομοι" section with a list of links: "Αστική", "Περιφερειακή Οδός Θεσσαλονίκης", "Αττική Οδός", "Υπεραστική", "Βόρειος Οδικός Άξονας Κρήτης", "Λοιποί Αυτοκινητόδρομοι", "Αυτοκινητόδρομος Μορέας", "Ολυμπία Οδός", "Ιόνια Οδός", "Κεντρική Οδός - Ε65", "Νέα Οδός", "Αυτοκινητόδρομος Αιγαίου", "Εγγατία Οδός", "Νέα Μεγάλα Έργα Σε Παραχώρηση", and "Λοιπά Οδικά Έργα".

TASK 1

Read the English and the Greek text (MA thesis abstract) and spot the strategies used by the writer while transferring information from one language to another. Is this a typical example of translation?



open archives.gr

Αναζήτηση...

EXT
ΕΘΝΙΚΟ ΚΕΝΤΡΟ
ΤΕΧΝΟΛΟΓΙΑΣ
ΝΑΤΙΟΝΑΛ
DEPOSITARIUM
CENTRE

EA · EN | f t y

Χρήση ινοπλεγμάτων ανόργανης μήτρας για την ενίσχυση πλακών οπλισμένου σκυροδέματος δύο διευθύνσεων

Δείτε το αρχείο <http://hdl.handle.net/10889/1036>

Φορέας Πανεπιστήμιο Πατρών

Συλλογή Νημερτής

Νημερτής

Επιμέρους συλλογή Τμήμα Πολιτικών Μηχανικών (ΜΔΕ)

Θέματα Ενίσχυση πλακών ινοπλέγματα ανόργανης μήτρας Διάτρηση πλακών Θεωρία γραμμών διαρροής 624.183 41 Strengthening of two way slabs Textile reinforced concrete Punching failure Yield line theory

10

Cross-linguistic mediation

Δημιουργός Μπαλιούκος, Χρήστος

Ημερομηνία 2008-07-07

Γλώσσα Ελληνική



Mediation test tasks

Test-task 1

English to English

You plan to publish a paper in an academic journal about the Athens Olympic Sports Complex known as the *Calatrava Stadium*. Send a summary (100 words) of the following extract from your thesis to the Editor of the journal.

When the world watches the opening of the Athens Olympics this August, an engineering marvel will appear before their very eyes: the Athens Olympic Stadium's suspended arched roof construction. Designed by the Spanish architect Santiago Calatrava, the roof is the most visually striking part of the original stadium's total refurbishment. This is actually a project which combines athletics and culture.

Technical features

- The roof is a dynamic structure whose main pendants are two arched metal supports of three meters in length which rise in the center to 78 meters in height. Each arch consists of two 3.5 meters diameter steel tubes with a span of 304 meters supporting the cables that hold the new state-of-the-art roof.
- The center of the stadium is not covered by a roof, but is open.
- The graceful sweeping roof structure is constructed of metal and glass, with a special coating designed to reflect 60% of the sun.
- The polycarbonate roof panels cover the left and the right sides of the stadium. 75,000 spectators can be protected from the sun and rain, while giving spectators the opportunity to enjoy a view of the Greek sky via the uncovered centre part of the roof.
- The arches and roof were constructed separately in two halves, positioned 230 feet from opposite sides of the stadium. But this remote construction led to a critical question: How to move and position the two roof halves, each weighing 8,500 tons.

Test-task 2

English to Greek

NATIONAL TECHNICAL UNIVERSITY OF ATHENS
School of Civil Engineering
Instructor: Dr M. Stathopoulou



EXAMINATION IN TECHNICAL ENGLISH
27-08-2014

EXAMINATION IN TECHNICAL ENGLISH: TEST B

(4th Semester)

Επίθετο..... Όνομα.....
 Αριθμός Μητρώου..... Εξάμηνο.....
 Εξάμηνο παράδοσης εργασίας (για παλαιότερα εξάμηνα)

1 You have just read the following text. Explain to your Greek friend, who does not understand English, what aspects have to be taken into account by a civil engineer when building houses. Use information from the text below.

When a house is to be built, a great consideration should be given to the type of the soil on which the house is to be located. If the soil is found to be proper, the house is founded on spread footings, beam footings, piles or mat foundations. The type of foundation, which is to be selected, depends on the type of the soil, the weight of the structure and its location. These footings are constructed of reinforced concrete and rest on firm ground, which has been excavated at the required depth.

.....

[15 points]

2 You are about to publish a paper in an academic journal. The editor has asked you to write your abstract in Greek (along with the English one). The following text is part of your abstract that is going to be published.

In building construction, the word concrete is used to describe a variety of materials having one thing in common: the use of a binding agent to form a solid mass from a loose, inert aggregate. The three basic ingredients of ordinary concrete are water, a binding agent (such as cement) and a large volume of loose aggregate (such as sand and gravel). Tremendous variation of the end product is possible through the use of different binders and aggregate and with the use of special chemical and air-void-producing foaming agents.

.....

Test-task 3

English to English

You have just found the following advertisement of a bachelor degree in Geodetic Engineering in the Philippines. You are interested in applying, but you need a recommendation from the principal of your school. Write an email to him/her, briefly describing this programme, expressing your interest in attending it and asking for a recommendation letter.



The screenshot shows the website finduniversity.ph with a search bar containing 'Any Location', 'Bachelor's', and 'Geodetic Engineering'. Below the search bar, the results for 'BS in Geodetic Engineering in the Philippines' are displayed. The website header includes 'ABOUT PROGRAMS LIBRARY TOP SCHOOLS' and social media icons for Facebook, Twitter, Email, and a plus sign.

The Bachelor of Science in Geodetic Engineering programme provides the knowledge, skills and relevant experience to students in the fundamentals of surveying and mapping work, geodesy, remote sensing, geographic information systems and oceanography. It also focuses on the laws relating to public lands and natural resources, land registration laws, obligations and contracts and professional ethics.

What are the admission requirements for the BS programme in Geodetic Engineering in the Philippines?

- Must submit a recommendation from either your High School Principal or Guidance Counselor
- Must submit most recent medical and dental health record
- Must take and pass the college entrance examination
- Must have an NSO-authenticated birth certificate

How long does it take to complete the programme?

The Bachelor of Science in Geodetic Engineering takes 5 years to complete.

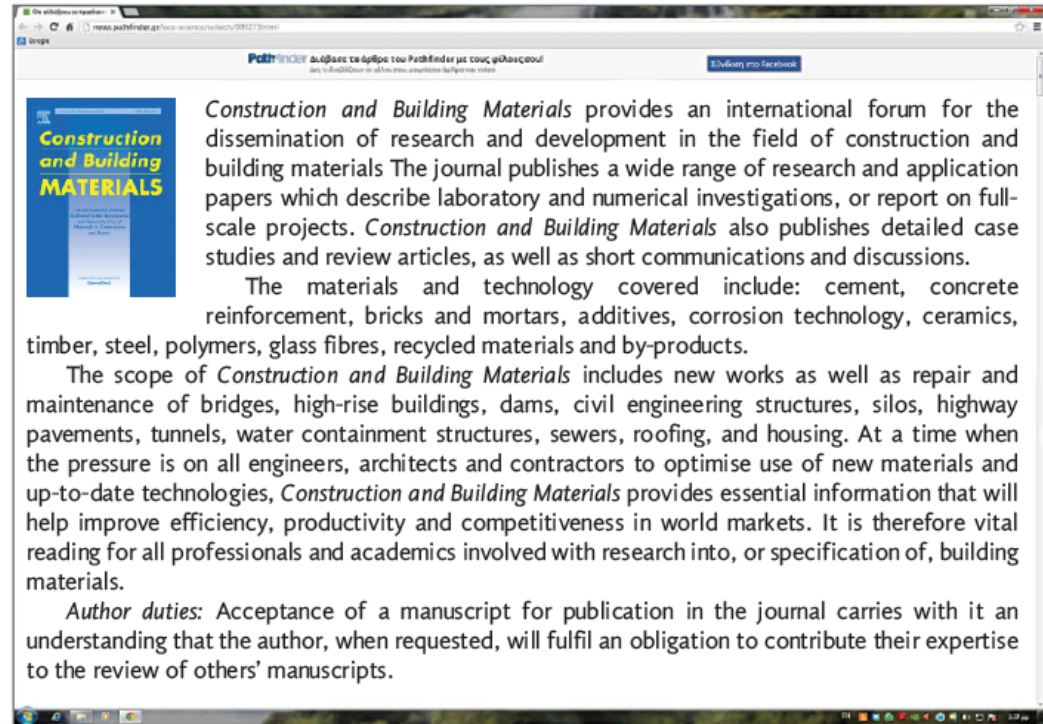
What subjects are included in the BS in Geodetic Engineering programme?

- Adjustment Computations for Spatial Data Analysis
- Adjustment Computation for Geodetic Applications
- Mathematical Methods in Geodetic Engineering
- Remote Sensing: Theory and Applications
- Vertical and Gravity Network Laboratory
- Horizontal Control Network
- Construction & Industrial Surveying
- Land Development and Valuation
- Satellite Positioning Systems
- GIS Theory and Applications
- Modern Photogrammetry
- Laws on Natural Resources
- Geodetic Control Network
- Hydrographic Surveying
- Geospatial Engineering
- Astronomic Geodesy

Test-task 4

English to English

You have just found the text below about an engineering journal and you wish to submit an abstract of an article you have written to the journal editor for consideration. Write an email to your university teacher letting him/her know about your idea and explaining why you think you should publish your article in the particular journal.



The screenshot shows a web browser window displaying the journal's website. On the left is a blue cover image for 'Construction and Building Materials'. The main text describes the journal's focus on research and development in construction and building materials, listing various materials covered and the journal's scope. It also includes a section on author duties.

Construction and Building Materials provides an international forum for the dissemination of research and development in the field of construction and building materials. The journal publishes a wide range of research and application papers which describe laboratory and numerical investigations, or report on full-scale projects. *Construction and Building Materials* also publishes detailed case studies and review articles, as well as short communications and discussions.

The materials and technology covered include: cement, concrete reinforcement, bricks and mortars, additives, corrosion technology, ceramics, timber, steel, polymers, glass fibres, recycled materials and by-products.

The scope of *Construction and Building Materials* includes new works as well as repair and maintenance of bridges, high-rise buildings, dams, civil engineering structures, silos, highway pavements, tunnels, water containment structures, sewers, roofing, and housing. At a time when the pressure is on all engineers, architects and contractors to optimise use of new materials and up-to-date technologies, *Construction and Building Materials* provides essential information that will help improve efficiency, productivity and competitiveness in world markets. It is therefore vital reading for all professionals and academics involved with research into, or specification of, building materials.

Author duties: Acceptance of a manuscript for publication in the journal carries with it an understanding that the author, when requested, will fulfil an obligation to contribute their expertise to the review of others' manuscripts.

► Adapted from: <http://www.journals.elsevier.com/construction-and-building-materials/>

Test-task 5

English to English

Test-task 6

Read the book abstract below. Write an email to your colleague, Alex, who studies Structural Engineering in Bristol, urging him to buy the book.

HOME SUBJECTS ▾ INDUSTRIES ▾ TITLES (A-Z) CURRICULUM MAPS ▾

FREE TRIAL SIGN IN

Home > Schaum's Outline of Engineering Mechanics: Statics

Schaum's Outline of Engineering Mechanics: Statics

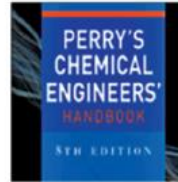


by E. Nelson, Charles Best, William McLean, Merle Potter

Abstract: Modified to conform to the current curriculum, Schaum's Outline of Engineering Mechanics: Statics complements these courses in scope and sequence to help you understand its basic concepts. The book offers practice on topics such as orthogonal triad of unit vectors, dot or scalar product, resultant of distributed force system, noncoplanar force systems, slope of the Shear diagram, and slope of the Moment diagram. You'll also get coverage of the laws of friction, rolling resistance, the centroid of a continuous quantity, and the theorems of Pappus and Guldinus. Appropriate for the following courses: Engineering Mechanics; Introduction to Mechanics; Statics; Mechanical Engineering, Engineer-in-Training Review. Features hundreds of solved problems and support for all the major textbooks for static courses. Topics include: Vectors, Forces, Coplanar Force Systems, Noncoplanar Force Systems, Equilibrium of Coplanar Force Systems, Equilibrium of Noncoplanar Force Systems, Trusses and Cables, Forces in Beams, Friction, First Moments, Centroids

[Full details](#)

Featured Content



► Found at: <http://accessengineeringlibrary.com/browse/schaums-outline-of-engineering-mechanics-statics>

NATIONAL TECHNICAL UNIVERSITY OF ATHENS
School of Civil Engineering



EXAMINATION IN TECHNICAL ENGLISH
Instructor: Dr M. Stathopoulou

6. You plan to publish a paper about the Rio-Antirion Bridge in the academic journal of the Deep Foundations Institute. Send to the editor of the journal a summary (100-120 words) of the following text which has been taken from your thesis.

THE RION-ANTIRION BRIDGE: AN ENGINEERING MARVEL

Foundation construction for a bridge spanning the Gulf of Corinth, founded in 65-m (200-ft) deep waters on marginal soils was not without risks. The key for the Contractor in mitigating these risks was identification, assessment of probability, and development of contingency and/or risk management plans. Risks due to construction cost overruns were mitigated by the fact that the Concessionaire and the Contractor were solely responsible for all design and construction methods and associated costs and had the foresight to heavily invest in the design and achieve a combination of minimum cost and practical time allocation.



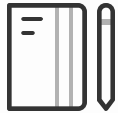
The Contractor obtained critical highly specialized and often custom pieces of equipment at the start of the project to achieve the desired results. The availability and capabilities of this equipment were factored into the design. The risk of potential accidents that could result in short term or permanent loss of this equipment was covered by insurance policies. Another form of risk was the shortage of skilled laborers for the unique type of work involved in this project and the strong labor unions in Greece. To mitigate these risks, the Contractor undertook a proactive approach by establishing an on-site training center and program designed to develop a skilled labor pool of foremen, gang leaders and laborers necessary to meet the project demands. The Contractor opted to train locally rather than import skilled labor due to the language advantages and the local workers' good spirit and willingness to learn. While proper training may have caused some initial delays in the early stages of construction, the long term benefit has been justified. Partnering among the various team members was key to achieving the desired end results. The Concessionaire fostered an unprecedented spirit of collaboration and focus to a common goal. The design and construction process was a remarkable experience that allowed significant challenges to be identified, solutions prepared and construction executed.

The Rion-Antirion Bridge was completed within budget and opened four months ahead of schedule to allow for the Olympic Flame to cross on August 8, 2004. The project set numerous world records including: longest cable-stayed bridge deck 2,400 m (8,000 ft); deepest bridge foundations set at sea depths of 65 m (200 ft); largest bridge foundations – each pylon base is 90 m (300 ft) in diameter; first use of deep steel pipe inclusions to reinforce weak

In a nutshell..

1. **Course main goal:** concentrate more on language **in context** than on teaching language structures
2. **Approach: genre-based:** students are exposed to a **variety of genres** and **authentic texts** while new language is presented in context; students involved in using language for a variety of purposes | purposeful reading
3. **Tasks:** of varying complexity/
 - a) *consciousness raising tasks* to make students familiar with the subject matter and activate their background schemata, and closed response tasks (multiple choice, matching etc) to become aware of the lexis
 - b) *Speaking and writing activities* (cross-linguistic and intralinguistic mediation tasks):
 - Students develop their mediation and academic skills (paraphrasing, note-taking, summarising)
 - become familiar with the discourse structure of specific text types and with the relationship between type of writing and conventions for text organization
 - learn to use the appropriate mediation strategies so as to select the relevant information from the source text
 - learn to select the appropriate style according to the generic conventions of the target text
 - use the new language in context

What to consider when designing mediation tasks for ESP/academic purposes



Considerations

View language as context specific & be used for functional purposes (Halliday/Matthiessen, 2004)

Use the CEFR CV to decide on the scales

Consider the objectives and the content of the course, what texts to use, what text types to introduce

Have in mind the mediatory requirements of the tasks (summarising, picking up information, transforming numerical information etc (Stathopoulou, 2015))

Conclusions – future steps



Teach mediation...

...through a variety of tasks/
different types of
mediation/variety of genres



Further research

-analysis of data (20 students'
texts) collected online through 10
different mediation tasks



Test mediation...

...through a variety of genres and
processed involved (also depending on
student population)



Further steps

To design a platform with online
mediation activities (a database)
initially for students at HEIs in Greece

Thank you for your attention!

Any questions?

mastathop@enl.uoa.gr

