



# Digitisation and Language Technologies in the Learning Process of Information Sciences – Approaching the EU Standards

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Faculty of Humanities and Social Sciences  
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# Agenda

## 1. Introduction

## 2. Multilingualism in Information Society

## 3. Changes at the Faculty

- Curriculum changes
- Bologna process and e-learning
- Research
- Student mobility

## 5. Conclusion



# 1. Introduction

- **need for digital content** that represents basis for
  - multilingual and multicultural environment
  - enabling multilingual information retrieval, use of LT
  - e-learning environment
  - preparation of the learning materials (LT use, student mobility, e-learning)
  
- The problem of **multilingualism in IS**
  - in the context of the Bologna process
  - student mobility
  
- **learning process of information sciences** at **Croatian university level** education in correlation with the European context
  
- **e-learning environment** implemented at the university level
  - research made among the users of the system



## Department of Information Sciences -

### Faculty of Humanities and Social Sciences, University of Zagreb

- one of 23 departments
- part of **two majors** (another study group is mainly philological)
- **principal study group**
  - classic knowledge (programming, mathematics, databases, information retrieval, ...)
  - special knowledge (LT, lexicography, knowledge management, digitisation, e-learning)
- Technology + presentation and communication skills
- **integration** of the university into its economic environment
  
- **Faculty** - nearly 80 undergraduate programs, 6100 students, postgraduate programs -
- **lack of space and time** for education process, technology changes
- individual work or team project - **e-learning**
- university - principal provider of well-educated professionals and experts



# Implementation

**Educational and organisational changes**

Educational  
policy  
statements  
in Croatia

the Bologna  
process

European  
standards  
(use of ICT)

Alliance  
with  
market

Evaluation  
process,  
teamwork,  
mobility



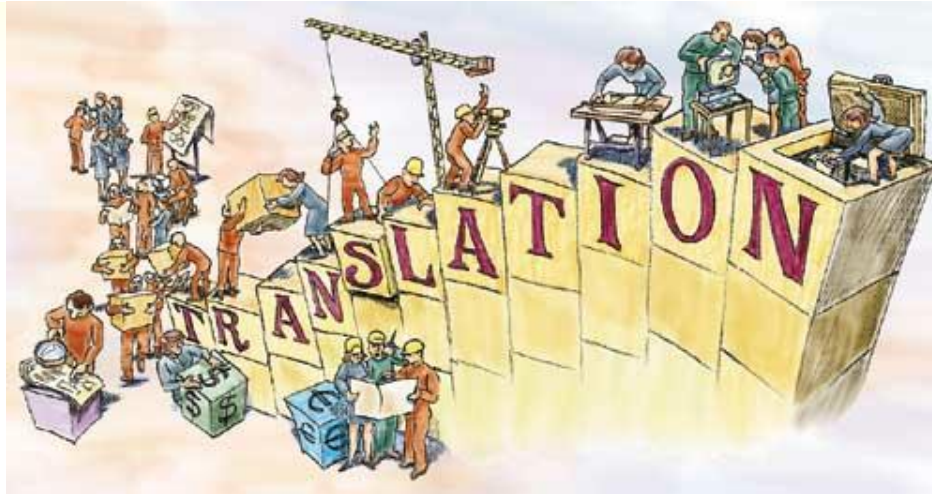
## 2. Multilingualism in Information Society

- **Need for multilingual** information retrieval, translation, communication, language learning at different levels
  - document / information access in various languages
  - language technologies – in industry, education, business, culture, entertainment
  - policy for language preservation
  - need for fast and consistent translations
  - promoted through different actions of education, training, research





# Translation?



## Translation in EU

21 official languages = **420** directions

### ***Translation needs:***

- *in Croatia*
- *in EU*
- *at incontinental level*



# Integration

## Higher education (HE)

- answer to the national need and international standards
- integration into multilingual environment
- building of electronically available Croatian language resources
- adoption of standards (lang. tools and resources, data exchange, translation tools)
- educational and professional demands

❖ HE changes- educational changes, research projects, cooperation activities

## Framework Strategy for Multilingualism:

- to encourage language learning and promote linguistic diversity in society,
- to promote healthy multilingual economy, and
- to give access to EU legislation, procedures and information in their own language in order to promote multilingualism in the information society and media industries





## 4. **Changes**

# at the Faculty of Humanities and Social Sciences

- **Curriculum changes**
  - According the Bologna requirements
  - at undergraduate, graduate and postgraduate levels
  - Integration into professional environment
  - Research projects, cooperation activities
  
- **The Bologna process and e-learning**
  - Bologna process from 2005/2006 (smaller groupes, teamwork, individual activities, online access, student mobility)
  - open-source Moodle (named **Omega**), interface in Croatian
  - Omega (2006): 170 professors, 2,500 students, 180 courses
  - Complementary tool to traditional teaching
  - Student mobility requirements (65 interface languages)
  - Digitisation of teaching materials

## Kolegiji

Omega ► Popis kolegija

### Popis kolegija

Anglistika	22
Antropologija	12
Arheologija	7
Centar za strane jezike	2
Doktorski studij medievistike	2
Etnologija i kulturna antropologija	11
Filozofija	1
Fonetika	8
Germanistika	1
Indologija i dalekoistočni studiji	10
Informacijske znanosti	69
Klasična filologija	6
Komparativna književnost	3
Kroatistika	15
Lingvistika	4
Pedagogija	5
Poslijediplomski specijalistički studij konferencijskog prevođenja	1
Poslijediplomski specijalistički studij prevoditeljstva	1
Povijest	17
Povijest umjetnosti	4



# Omega

the last e-learning solution you'll ever have to choose



# Research of the users

Last 5 years

1st year - students of Information Sciences

**Technological knowledge** of students of the 1st year?

- before work on Omega
- trends among the students of Information Sciences, Faculty of Humanities and Social Sciences
- the average student of Information Sciences



# Research of the users

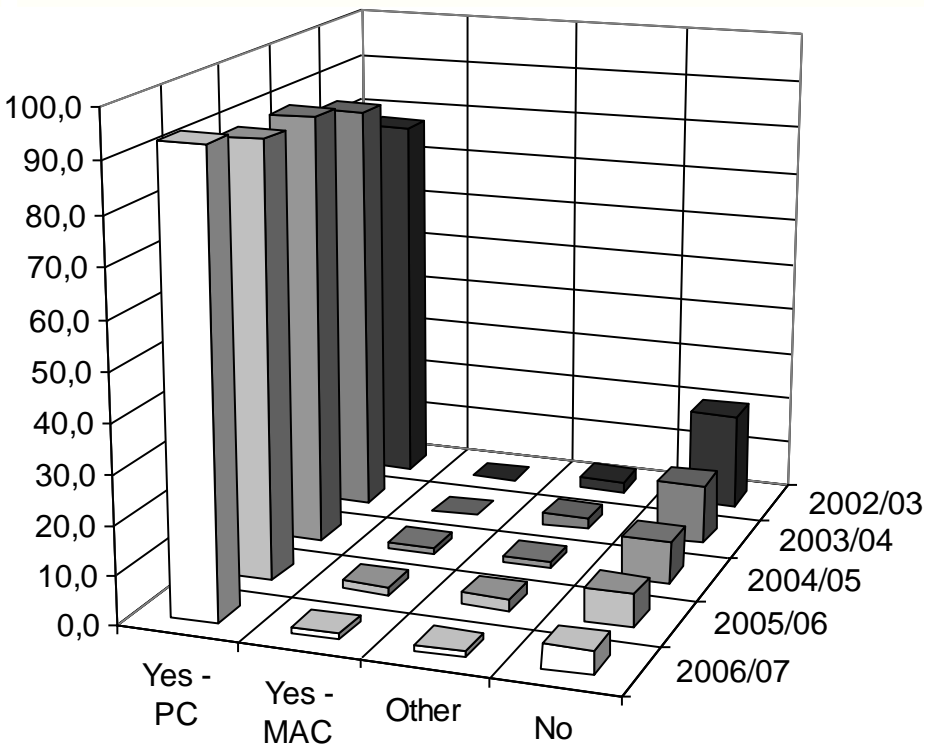


Chart 1: The **number** of students **owing computer**.

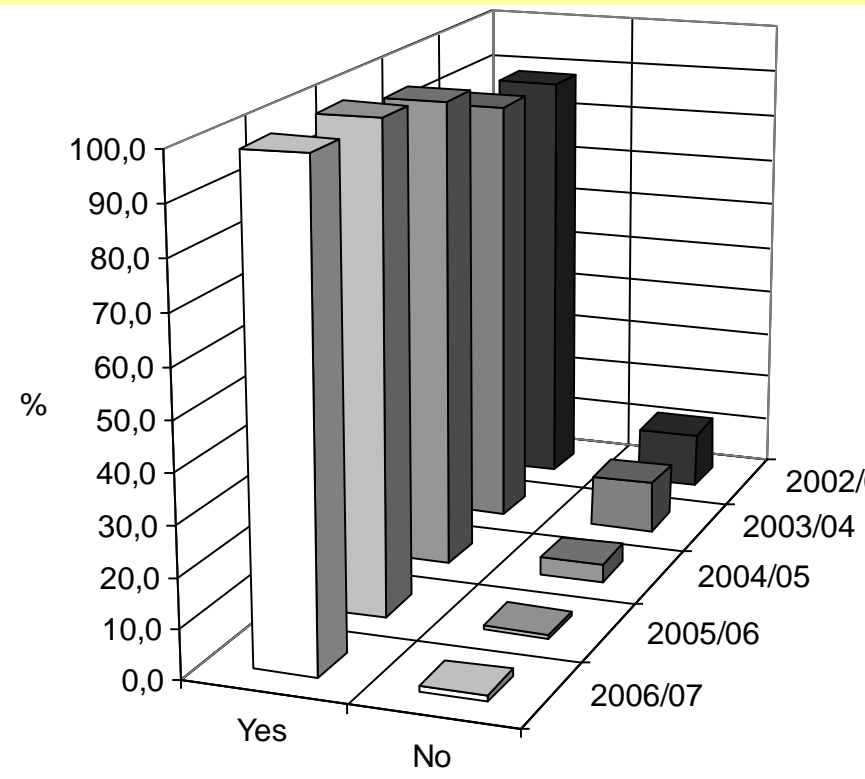


Chart 2: Students' **Internet usage**.

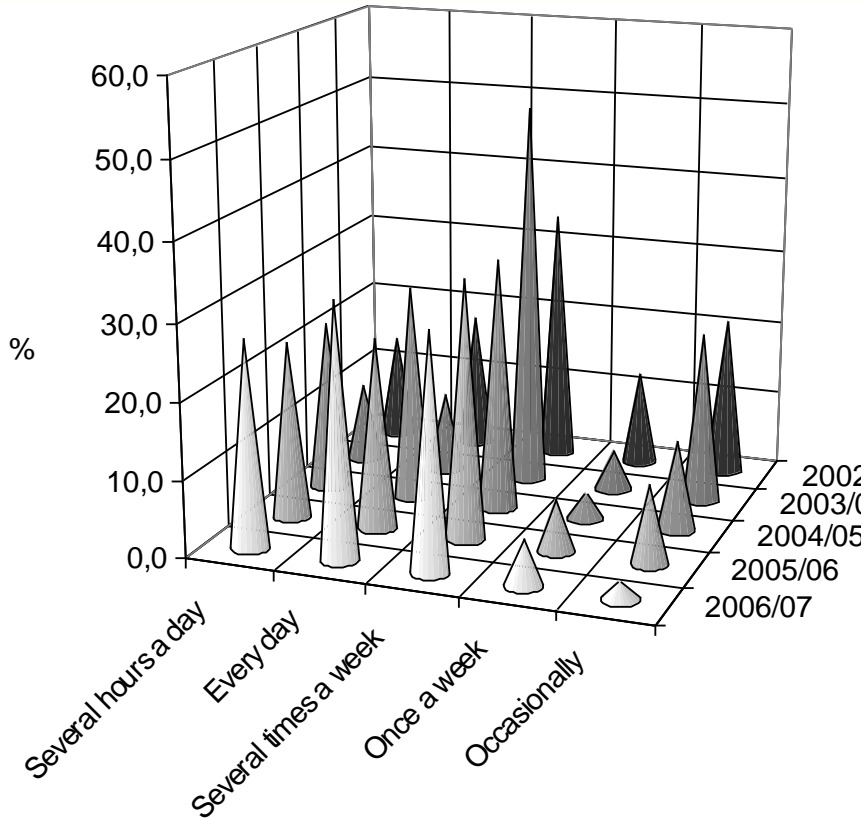


Chart 3: The **frequency** of student's **Internet usage**

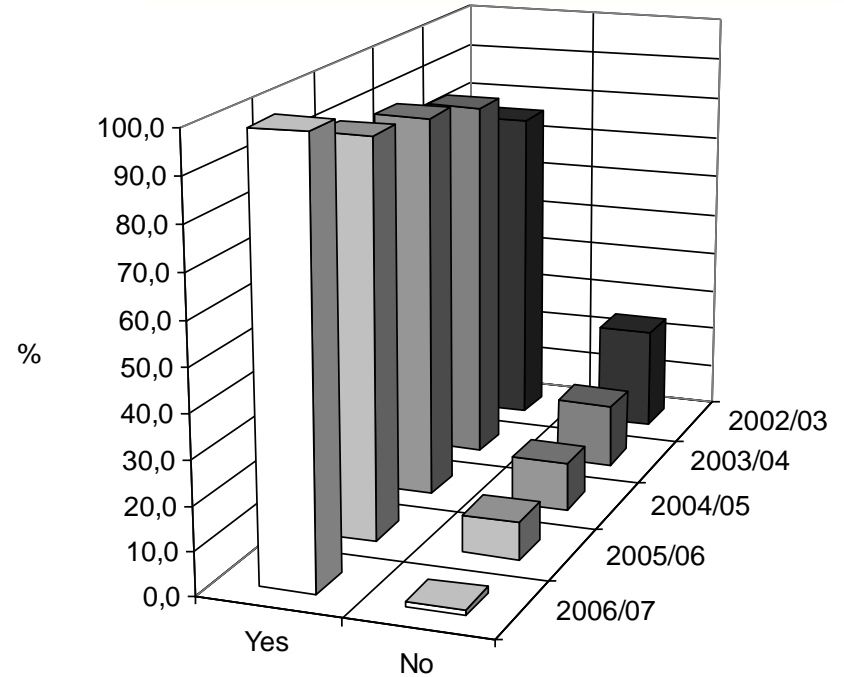


Chart 5: The percentage of students having **e-mail address**.

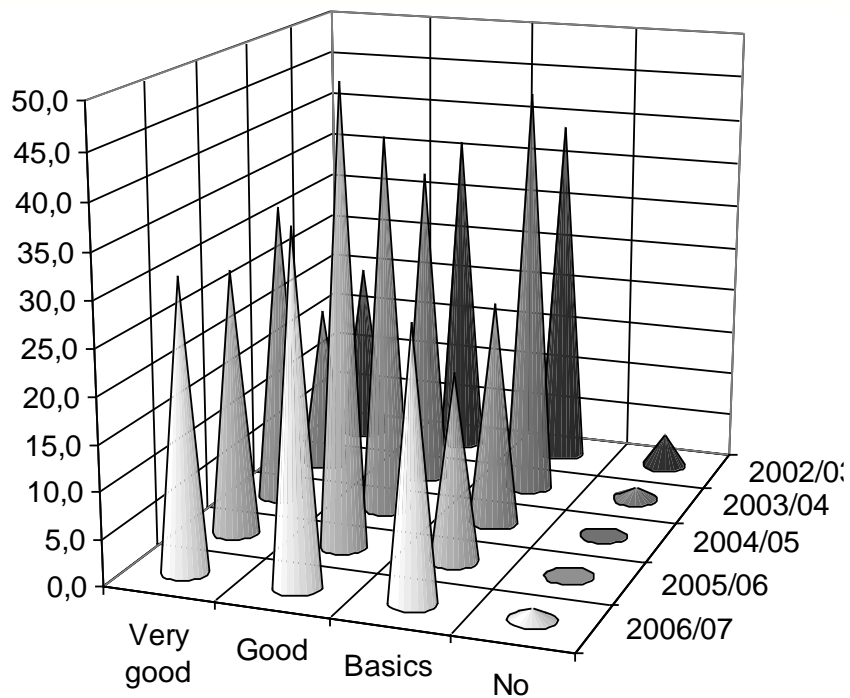


Chart 7: Students' assessment of their **knowledge of MS Windows OS.**

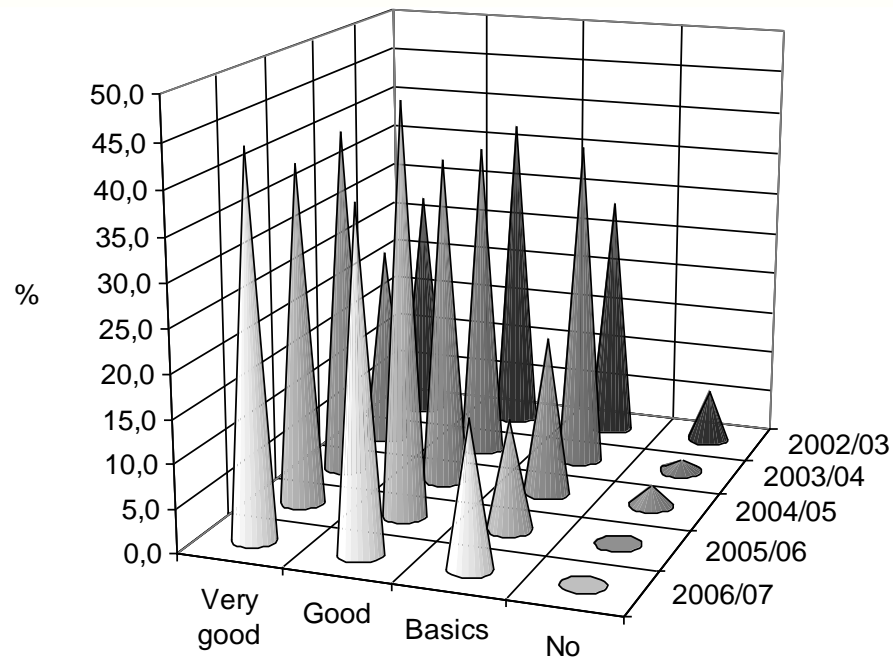


Chart 8: Students' assessment of their **knowledge of MS Word.**



## 5. Conclusion

Following the **international tendencies** regarding

- multilingual digital content and knowledge,
- preservation of cultural heritage through digitisation,
- online access to teaching material (e-learning)
- preparing textual materials for processing (knowledge management, cross-linguistic retrieval, indexing, CAT)
- adoption of standards (digitisation, language resources, language learning, data exchange)





## 5. Conclusion

The use of **ICT in educational process**

- answer to national/international demands (research + practice)
- new organisational forms, professional changes
- new types of jobs (interdisciplinary knowledge, language skills, computer literacy)
- flexibility in problem solving

