

Challenges of Library and Information Science (LIS) Education

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Agenda

- Trends Shaping Education
- Challenges for LIS education
- How Institute of Information Studies of Tallinn University Responds to Some of these Challenges
- Conclusions



Trends Shaping Education (OECD, 2010)

Dynamics of globalisation

- Our crowded planet
- Populations on the move
- Global environmental challenges
- International divides of affluence and poverty
- Towards a global economy
- New global economic powers

Evolving social challenges

- Changing age structures
- Changing patterns of social expenditure
- Inequality on the rise
- The persistence of poverty
- New forms of community engagement
- More satisfied with life

Changing world of work

- Changing life cycle patterns
- More flexibility in the labour market
- Knowledge-intensive economies
- Massification & globalisation of HE
- Women in the labour market

Transformation of childhood

- Living in more diverse families
- Smaller families, older parents
- Children's health
- Children's inheritance of life chances
- Expecting more of children

ICT: the next generation

- Towards universal access
- Extensive use of computers
- The evolving World Wide Web
- Rapidly growing participation online
- The world in your pocket



Europe 2020

- EC has been concerned about HE since the end of 90s (EU's Lisbon Strategy and the Bologna Process).
- HE as a key policy area, because of its links with research and innovation it plays a crucial role in society
 - creating new **knowledge**,
 - fostering **innovation** and
 - facilitating the development of necessary **competencies**.
- European universities have enormous potential but, overall, potential is not being fully realised:
 - Curricula are not always up to date,
 - not enough young people go to university,
 - not enough adults have ever attended university,
 - universities often lack the management tools and funding to match their ambitions.

EC's Modernisation Agenda for HE

5 priority reform areas (September 2011):

- to increase the number of HE graduates (40%);
- to improve the quality and relevance of teaching and researcher training, to equip graduates with the knowledge and core transferable competences they need to succeed in high-skill occupations;
- to provide more opportunities for students to gain additional skills through study or training abroad, and to encourage cross-border co-operation
- to strengthen the "knowledge triangle", linking education, research and business and
- to create effective governance and funding mechanisms in support of excellence.



Communication from the Commission

“Investment in education and training for skills development is essential **to boost growth and competitiveness**: skills determine Europe's capacity to increase **productivity**. In the long-term, skills can trigger **innovation** and growth, move production up the value chain, stimulate the concentration of higher level skills in the EU and shape the future labour market...”

Communication from the Commission... *Rethinking Education: Investing in skills for better socio-economic outcomes* (EC, 20.11.2012):



Trends in HE

- Massification of HE
- Changes in curriculum, teaching, learning and assessment
- Preparation of graduates to the labour market/ societal needs
- Stimulating open and flexible learning (still asymmetrical access/ retention/ graduation)
- The use of potential of ICTs and OER, MOOCs for learning
- Increasing collaboration & partnership
- Increasing international student mobility
- QA, accountability & qualification frameworks
- Development of transversal and basic skills (critical thinking, initiative taking, problem solving, collaborative work, digital and entrepreneurial skills).



Trends, Issues & Concerns in LIS Education: old and new

- *the core curriculum
- *librarianship vs. information science/identity crisis (practice/theory, people/technology)
- *organizational change (closure, name change, iSchools)
- *rapid development of ICTs
- *new pedagogical approaches
- *collaboration and partnership
- *the relationship between theory and practice
- *ALM perspective without falling back into institution specific education
- * from multidisciplinary to interdisciplinarity
- *the uniqueness of information science
- *match to the labour market and societal needs
- *accreditation
- *esoteric & irrelevant research
- *from vocational education to academic HE
- *securing recruitment



The Core Curriculum

- The curriculum is the best barometer to reflect the changes and challenges we face today.
- What should constitute the core in the LIS curriculum has always been the focus in the field (IFLA, ALA, ASIST, CILIP, *LIS Education in Europe: Joint Curriculum Development and Bologna Perspectives*, 2005, etc)
- Goblaskas (2012) compared core competencies in ALA and CILIP specifications and found the professional expectations nearly identical.
- Practices and views on this topic are converging

New Courses

- Digital libraries (27)
- Web site design; Web applications (24)
- Computer/information/Internet networks (22)
- Digitization; digital preservation/design (12)
- Information architecture (11)
- Cyberspace law & policy (11)
- Knowledge management (10)
- Competitive/business/ strategic intelligence (10)
- Human-computer interaction (HCI); user-system interaction (10)
- Interface; user interface (9)
- Metadata (9)
- Computer/network security (8)
- Internet reference/applications (8)
- Information seeking behavior (7) (Chu, 2010).

Revised Courses

- **Cataloging** (taxonomies, folksonomies, ontologies, tagging, etc,
- **Reference**



Specializations

- In the past:
 - public librarianship,
 - academic librarianship,
 - school media specialists,
 - law librarianship,
 - archives and records management, etc.
- In the digital age
 - digital libraries
 - Web design and technology,
 - digital preservation and digital image management, etc.



Organizational changes in LIS

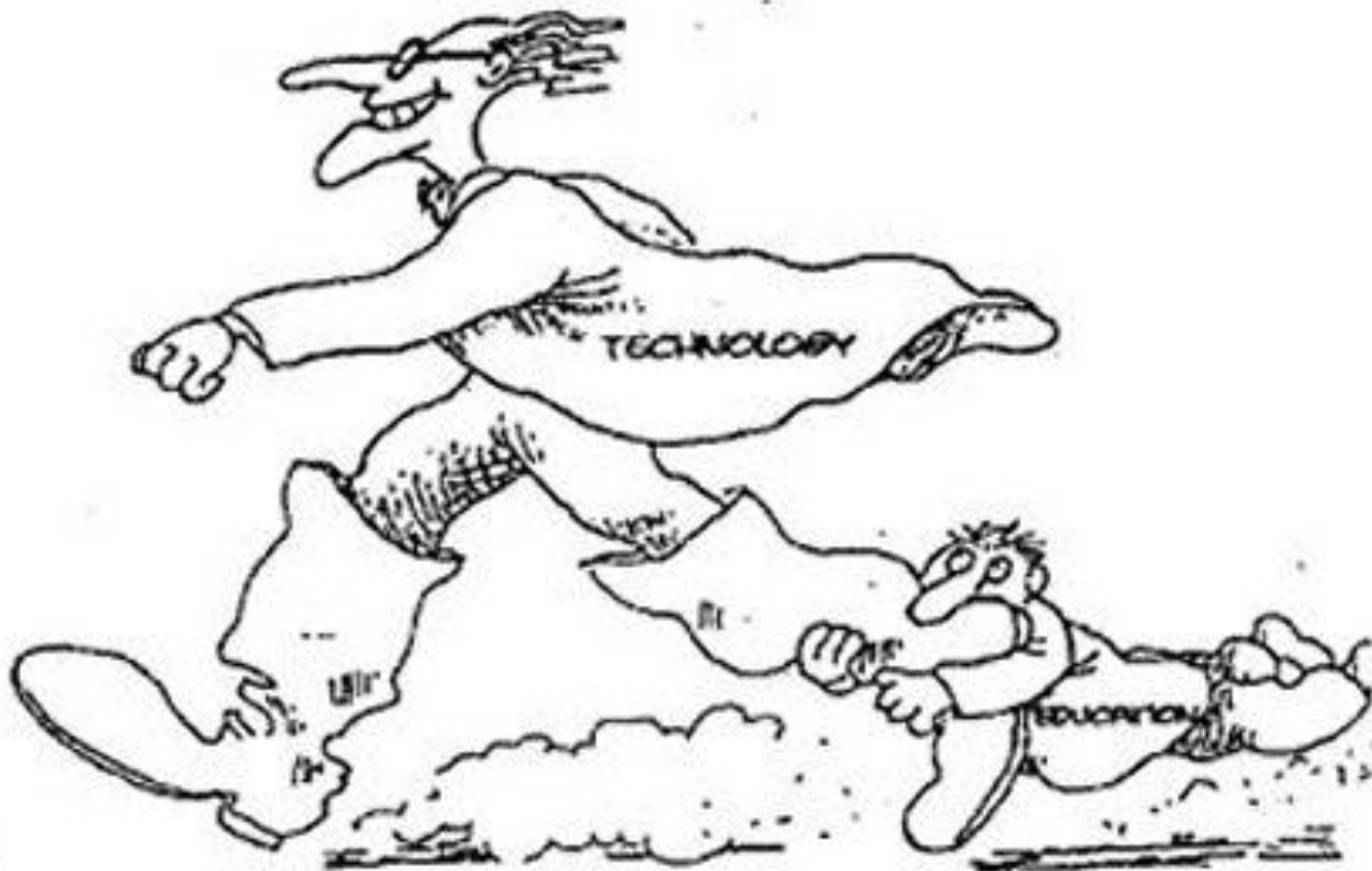
- Organizational changes in LIS education since 1980s typically take the forms of
 - repositioning (e.g. school name change)
 - relocation (e.g. merger with another academic unit),
 - closures (1/3 of the LIS programs in the US has closed down)
- Name changes can be categorized in two kinds:
 - the removal of the L word or the adding of the I word,
 - the establishment of iSchools, academic departments taking a broad view of information science, as the interaction of information, people and technology; mainly from LIS, computer science, and management; a labelling problem (Bawden and Robinson, 2012; Dillon, 2007).



Technology

- The rapid development of digital technologies brings important opportunities to improve quality, access and equity in education and has shaped and influenced how LIS professionals are educated.
- Students can learn anywhere, at any time, following flexible and individualised pathways.
- The student profile has changed
- Social media presents challenge to universities
- **Have universities responded to this pace of change and providing the right sort of education for them?**
- In LIS education, technology can be either
 - part of the course content or
 - a means for pedagogy (delivering courses and entire LIS programs digitally becomes a widely adopted mode of education)





Pedagogy

New ways of learning, characterised by

- personalisation,
- engagement,
- use of digital media,
- collaboration,
- bottom-up practices
- facilitated by the exponential growth in OER where the learner or teacher is a creator of learning content are emerging.

Theory and Practice

- What extent LIS education should focus on theories & principles and on practical techniques.
- LIS practitioners complain that LIS graduates in the workplace lack practical skills.
- Many educators support the view that the nature of LIS education should focus on education, not on training for the workplace:
 - Bawden & Robinson (2012) strongly advocate the view that it is much more valuable for students to gain an understanding of principles and concepts on which they can build throughout their professional lives, rather than on practice



Inter-disciplinary approach

- LIS is inherently multidisciplinary & interdisciplinary and knowledge and experience from other disciplines are needed to provide quality LIS education.
 - sociology and psychology would help us become more knowledgeable about the kinds of information and services our users desire to have.
 - Computer science would enable us to take full advantage of technologies in educating LIS professionals.
- The best innovation happens when you put people from different disciplines and backgrounds together (Dillon, 2007, Bawden and Robinson, 2012).



Collaboration and Partnerships

- Efficient and effective LIS education can be realized through working collaboratively with all relevant stakeholders
 - Global Cooperation & Partnership
 - Regional Collaboration (EUCLID, ALISE)
 - Joint curriculum development (Italy-UK; DILL)
 - Joint courses (UK- Portugal, Denmark-Greece-UK, Finland-USA, Estonia-Norway)
 - partnerships between public and private institutions to ensure appropriate curricula and skills provision
- Collaboration is a tool to cope with changes and challenges in the digital world



Research field

- What is the research core, questions and its applications.
 - Does LIS research help to answer the big or important information questions of our time?
 - Is there any agreement within the LIS discipline of what constitutes a big question for LIS?
 - Is there of increasing relevance and connectedness with larger societal concerns, or one of increasing marginalization.
- How we measure the value of any proposed answer?
 - That it advances theory?
 - That it leads to better, cheaper, more efficient technologies and tools?
 - That it provides information resources for more people?
(Dillon, 2007)



Research field

- LIS research
 - is rarely in the centre of attention.
 - is not being seen as providing the answers to big questions
 - is diminished in the eyes of funding agencies, major publishing houses, and in the eyes of the media
 - 'application-oriented': most of the LIS research is aimed at systems level issues, services and products, which are developed for use.
 - method-bound and lacking a genuinely interesting question to answer (Dillon, 2007).



What are the big questions?

- What is the essential nature of information that might relate diverse endeavors (communicating, maintaining biological life, learning and finding) where the term is employed meaningfully?
- How do we move from an information provision model (storage, retrieval, management etc.) to one where we identify and shape the manner in which information nourishes a culture, an organization or an individual?
- How might we positively influence the cyber infrastructure as the majority of the world joins us online? (**Dillon, 2007**).
- What are the features and laws of the recorded-information universe?
- How do people relate to, seek, and use information?
- How can access to recorded information be made most rapid and effective? (**Bates, 1999**)



The uniqueness of information science

- Many other professions are interested in components of the communication chain:
 - publishers are concerned with dissemination,
 - computer scientists with information retrieval, etc.
- Our main claim to a unique area is **the totality of the communication chain**; others are interested in specific aspects, but only the information sciences see their concern as being the totality (Robinson, 2009; Robinson and Karamuftuiglou, 2010; Bawden and Robinson, 2012).



**How Institute of Information Studies (IIS)
address some of the challenges that I have
covered?**



Structural Changes

The IIS at TLU (**established in 1965**), 8 full-time and 2 part time staff members.

Chair of Librarianship and Bibliography, 1966

- 1966 - The Faculty of Pedagogy and Primary Instruction,
- 1967-1975 The Faculty of Culture and Music
- 1975-1991 – The Faculty of Culture

The Department of Library and Information Science, 1991

The Department of Information Studies, 1992

1992-2008 The Faculty of Social Sciences

The Institute of Information Studies 2008



Changes in Curricula

- BA in Information Science (1965)

Systematic modernisation of the curricula started in 1988

- MA in Information Science (1992)
- PhD in Information Science (1992)

2001 – Bologna scheme

- MA in Information Management (2003)
- MA in Record Management (2003)
- Erasmus Mundus joint master programme *DILL: Digital Library Learning* (Oslo-Parma-Tallinn) (2007-2013)
- Digital Library Learning (DILL) – Oslo University College, Parma University & Tallinn University (2012-2015).
- Merging MA in Information Science, Information Management & Record Management. Specializations (2012)



Collaboration and Partnership

Systematic collaboration in 1993

- Training of Trainers (the joint project of LIS schools of the Nordic and Baltic countries in 1993-1998, PHARE Multi-country programme in DE 1995-1999 -> **revised curricula**)
- Student/staff exchange since 1999 – 24 Erasmus agreements: Austria, Denmark, Finland, Germany, Greece, Hungary, Italy, Latvia, Norway, Spain, Sweden, Turkey, UK, etc;
- 42 international projects (e.g. Phare, Tempus, Leonardo da Vinci, Comenius, Minerva, Grundvig, eLearning programme, Lifelong Learning Programme, NORFA, Nordplus, ESF project, Interreg, Erasmus Mundus and UNESCO projects)



Current projects

- **2010-2012:** *Open Educational Innovation and Incubation (OEII)* (European Commission, Lifelong Learning Programme, Modernisation of Higher Education)
- **2010-2012** *Cross Boarder Virtual Incubation (CBVI)*(EC, Lifelong Learning Programme, Erasmus University-Enterprise Cooperation)
- **2010-2012** *Networked Curricula - Fostering Transnational Partnership in Open And Distance Education and Blendid Learning (NetCU)* (EC, Lifelong Learning, Erasmus Virtual Campuses)
- **2007-2013:** Erasmus Mundus joint master programme *DILL: Digital Library Learning* (Oslo-Parma-Tallinn) (collaboration, curriculum development, using ICTs, pedagogical innovation, developing intercultural competencies, securing recruitment, etc)



Demographics

2007: 18 st. 16 countries

- **Gender:** 11 female, 7 mail st.
- **Age:** 22<52 (33,9)

2008: 21 st. 15 countries

- **Gender:** 14 female, 7 mail st.
- **Age:** 24<44 (29,6)

2009: 20 st. 14 countries

- **Gender:** 10 female 10 mail st.
- **Age:** 24<49 (28,8)

2010: 17 st. 16 countries

- **Gender:** 9 female, 8 mail st. **Age:** 23<37 (29,2)

2011: 16 st. 15 countries

- **Gender:** 12 female, 4 mail st. **Age:** 23<35 (27,3)

TOTAL 92 st. 48 countries

- **Gender:** 56 female, 36 mail st.
- **Age:** 22<52

Applications

2007 -101

2008- 204

2009 – 247

2010 - 280

2011 - 320

48 Countries Represented

Australia	Ethiopia (8)	Laos	Serbia (2)
Azerbaijan	Germany	Lithuania	Spain
Bangladesh (5)	Ghana (3)	Malaysia	South Africa
Bosnia and Herzegovina (2)	Greece	Maldives	Zimbabwe
Botswana (2)	Hungary	Netherlands	Taiwan (2)
Brazil	India (3)	Nigeria (2)	Tanzania
Canada (2)	Indonesia (3)	Norway	Thailand (3)
Colombia	Iran (3)	Pakistan	Turkey
China (2)	Italy (5)	Philippines (3)	Uganda (4)
Cuba	Kenya (2)	Poland (2)	USA (3)
Denmark	Kosovo	Romania	Venezuela
	Kyrgyzstan	Russia	Vietnam (5)



Pedagogical innovation

- New pedagogical & didactic concepts and approaches
- Implementation of student-centred learning approaches and basing our teaching on constructivist models of learning (PBL, project-based learning).
- An attempt to improve and innovate traditional education as well as to provide new and alternative learning opportunities - e-learning
- Blended model



Pedagogy -Multiple perspectives & representations of content in IKM



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Technological innovation

One area where the Institute has demonstrated leadership in the use of ICT is education.

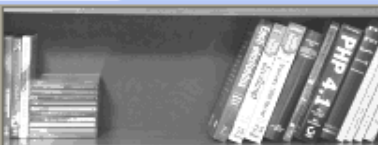
- 1993 - first Internet courses in curriculum
- 1995 - first ICT-based DE program for school librarians
- 1996 – Infoforum, electronic journal
- 1996 – audio- and videoconference technology
- 2003 – online MA in Information management,
- 2003 - Information Literacy e-learning tutorials
- 2007 – extensive blended learning
- 2009 – development of OER
- 2012 – development of MOOCs



ICT and Media Integration in DILL

- Virtual Learning Environment IVA
- Learning Objects [OER]
- Vidoconferences with the leading experts (Austria, France, USA, etc.)
- Virtual shared classrooms: Estonia-France; Estonia-Oslo-Tallinn
- Skype - communication with teachers/tutors and with fellow students
- Web 2.0 or social networking tools (Facebook, blogs, wikis, etc.)
- Echo 360 Videolecturing System





Help Logout

Webtop Bookshelf Workshops Management

Mailbox

Course info
Welcome page

Useful links

MODULE 1: Research
Methods and Theory of
Science

MODULE 2: Digital
Documents

MODULE 3: Information and
Knowledge Management

MODULE 4: Human
Resource Management

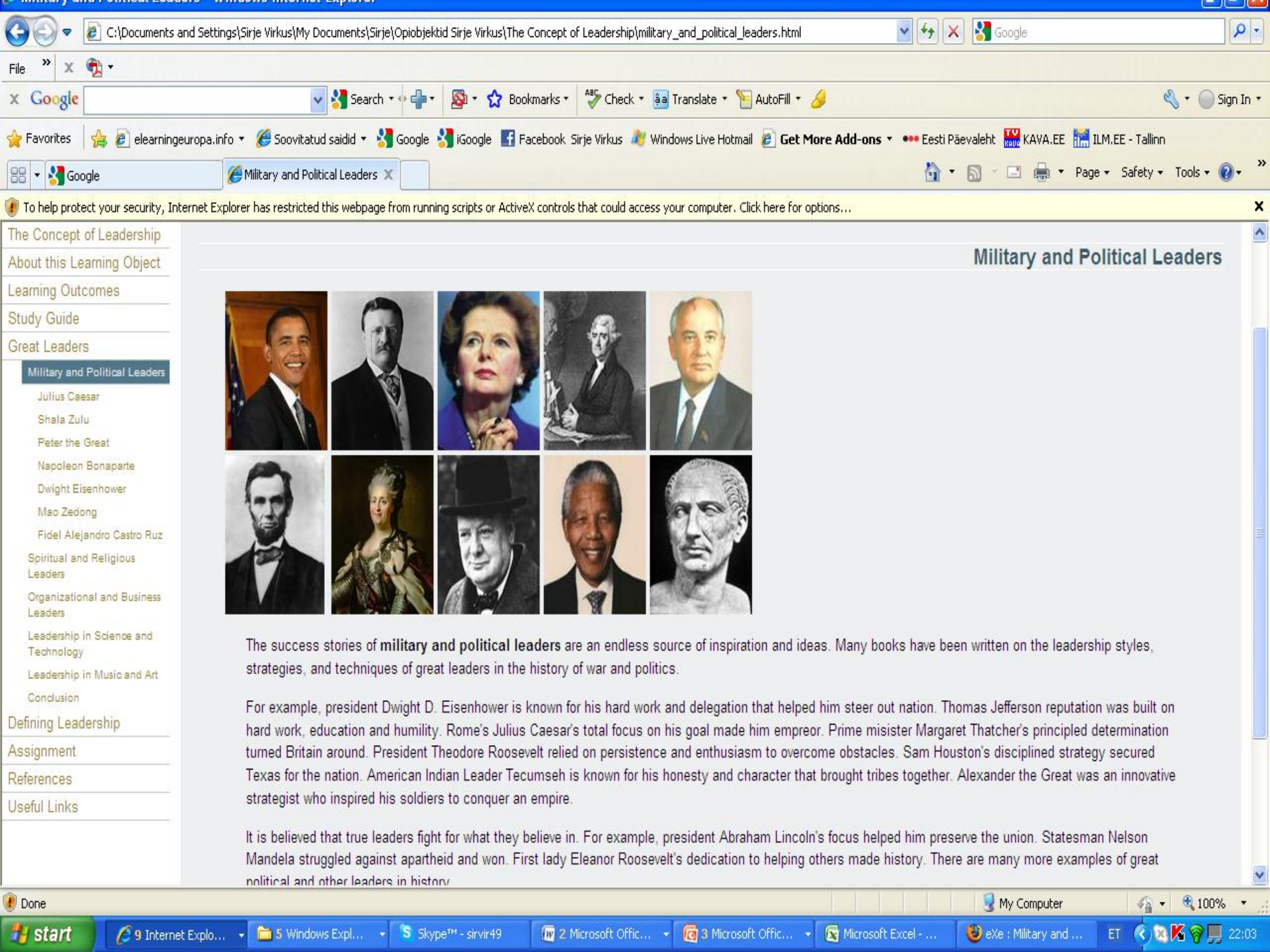
MODULE 5: Access to
Digital Libraries

MODULE 6: Users and
Usage of Digital Libraries:
Quantitative and Qualitative
Evaluation

Sirje Virkus > Lobby > Digital Library Learning (DILL) > Bookshelf > MODULE 3: Information and Knowledge Management
> Module Units

Add folder Add document Add link Add memo Add Wiki Unzip

	Name	Size	Date	
<input type="checkbox"/>	Unit 1: Introduction to the Module IKM	Sirje Virkus 639.4 KB	2008-02-10	▲ ▼
<input type="checkbox"/>	Unit 2: Dimensions and Approaches to IKM	Sirje Virkus 1.5 MB	2008-02-11	▲ ▼
<input type="checkbox"/>	Unit 3: Knowledge Management Cycle	Sirje Virkus 11.3 MB	2008-02-10	▲ ▼
<input type="checkbox"/>	Unit 4: Knowledge Management Processes	Sirje Virkus 11.8 MB	2008-02-10	▲ ▼
<input type="checkbox"/>	Unit 5: Knowledge Management Technologies	Sirje Virkus 9.8 MB	2008-02-10	▲ ▼
<input type="checkbox"/>	Unit 6: Implementation of IKM. Case studies.	Sirje Virkus 6.1 MB	2008-02-10	▲ ▼
<input type="checkbox"/>	Unit 7: Philosophical framework for KM. KM and CRM	Sirje Virkus 126.5 KB	2008-02-24	▲ ▼



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Military and Political Leaders Page 2 Page 4

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Culture and Leadership

About this Learning Object

Learning Outcomes

Study Guide

Introduction

Context for Cultural Leadership

Definitions of Culture

Dimesnions of Culture: Geert Hofstede

Page 2

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Page 5

GLOBE Project

Clusters of World Culture

Leadership Behavior and Culture Clusters

Universally Desirable and Undesirable Leadership Attributes

Strengths

Criticisms

Conclusions

Assignment

References

Useful Links


Reflection

After reading the descriptions of the Hofstede's cultural dimensions and watching these videoclips take a minute and think how these dimensions appear in your country context. After that compare the results of your thinking exercise with Hofstede's descriptions of your country and Cultural Dimension Scores. You will find the list of country description on the page <http://www.geert-hofstede.com/>

Click here

power distance


★★★★★



0:00 / 1:23

Collectivism and Individualism

★★★★★



0:00 / 1:45

start

9 Internet Explo...

5 Windows Expl...

Skype™ - sirvir49

2 Microsoft Offic...

3 Microsoft Offic...

Microsoft Excel - ...

eXe : Page 3 - Mo...

ET

22:12

Development of Entrepreneurial Skills

- Entrepreneurship Seminar on European Virtual Venturing (EVV)
- Tallinn University, Institute of Information Studies and Ecole supérieure d'Informatique, réseaux et systèmes d'information in Cergy-Pontoise, France (ITIN)

Goal:

- to develop knowledge and skills that could help students to understand the value, nature and practice of **entrepreneurship**
- to improve students' awareness of and competence in **virtual teamwork**
- enhance their intercultural understanding and develop **intercultural and interdisciplinary competencies**



Entrepreneurship Seminar on European Virtual Venturing (EVV)

- a synchronous cross-university video classes
- students' virtual teamwork
- face-to-face consultancy in France and Estonia for local students and via Skype for partners.
- Collaborative cross-country and cross-disciplinary final project





Interdisciplinary approach is teaching and research

- Influences from other disciplines (educational technology, computer science, social sciences)
- Interdisciplinary research:
 - **2008-2013:** Target-financed research project SF0130159s08 „***E-learning systems with distributed architecture, their interoperability and models of application***” (Institute of Informatics and Institute of Information Studies)
 - **2012: Digital Learning Ecosystems** (Institute of Informatics, Baltic Film and Media School and Institute of Information Studies)



Conclusions

- LIS education has developed in the past decade through curricular revision, educational reposition, ICT implementation and other actions.
- LIS programs have introduced new courses and specializations while revising existing ones in the curricula.
- The digital age has brought new opportunities to LIS.
- Issues persistent in LIS education: the core curriculum, organizational change, development of ICTs, new pedagogical approaches, collaboration and partnership, match to the labor market and societal needs, the relationship between theory and practice, etc.
- Discussion of the issues, old and new, should continue because debates and exchanges, if carried out properly, would keep the field attentive and clear about what is the best for LIS education (Chu, 2010).



Thank you for your attention!



- Questions?
- Comments?

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