



# **Distance Education Part of Mainstream Educational Practice**

## **Some Findings from an Empirical Study**

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# Outline

- **Project Presentation**
- **Methodology**
- **Data Analysis & Major Findings**
- **Summary**

# Distance Education

- **Desmond Keegan (1980):**
  - separation of the teacher and learner,
  - influence of an educational organisation,
  - use of technical media,
  - provision of two-way communication,
  - possibility of occasional meetings for pedagogical and social purposes,
  - the participation in an industrialised form of education
- **Björe Holberg (19984)**
  - ... the various forms of study at all levels which are not under the continuous, immediate supervision of tutors present with their students in lecture rooms or on the same premises.”

# Impact's Classification

- **Distance education**
- **WWW on campus**
- **E-learning**
- **Mobile learning**
- **Synchronous e-learning systems**

**In addition, the impact of technology on learning for**

- **Women & men**
- **Older & younger learners**

# The Impact Approach

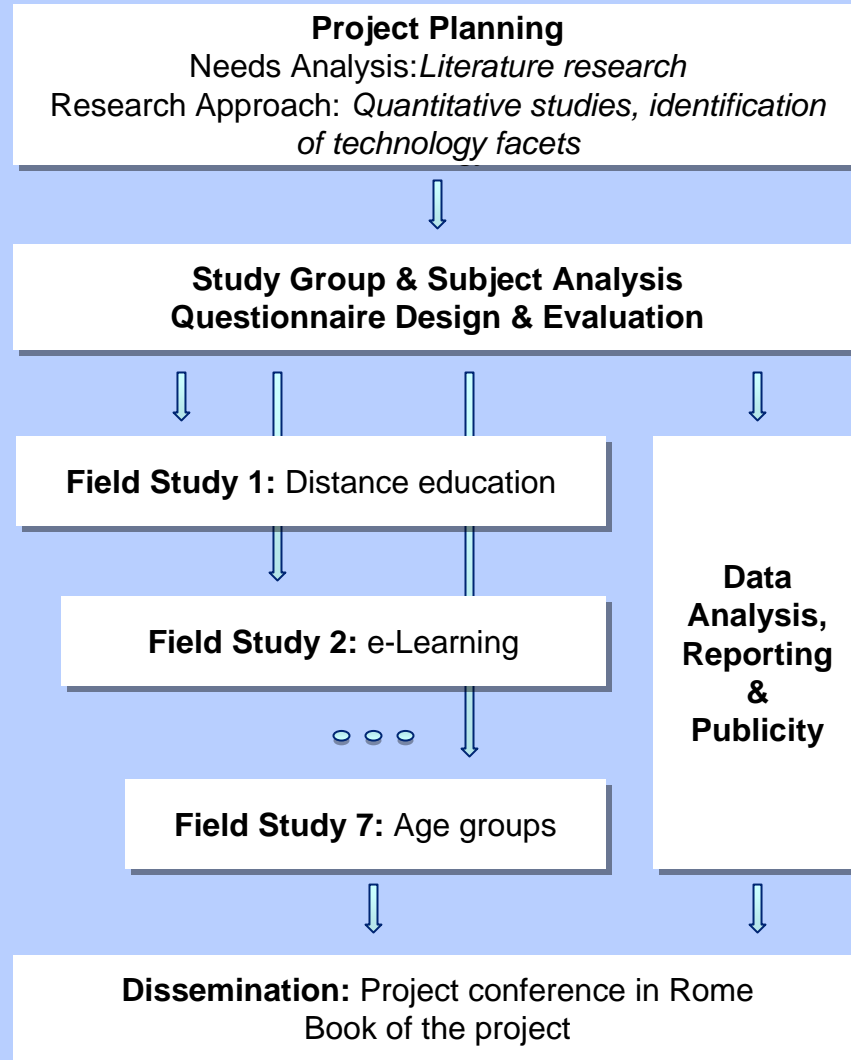
## Motivation

- **Higher Dist. Edu. not well investigated**
- **Fragile & inconclusive literature**

## Hypotheses

- **Technology does have an impact on learning**
- **Technology does, in fact, have a beneficial impact on learning**
- **Additional hypotheses refer to characteristics of distance learning classes**

## The Impact of New Technologies on Distance Learning Students



# Project Consortium

- Distance Education International, Ireland
- Ericsson Education Ireland
- Corvinno Technology Transfer Center, Hungary
- Plovdiv University, Bulgaria
- University Roma Tre, Italy
- FernUniversität in Hagen, Germany



# Where are We?

- Project Presentation
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# Methodology

## Survey

- **Randomized controlled trials**
- **Separation in intervention & control group by experiences in special investigation topic**
- **Sample size: 300 persons**

## Learning in Open & Distance Universities

- **Intervention group:**  
**Students from FernUniversität**
- **Control group:**  
**Students from all other partners**

# Questionnaire Design

- 1. Personal information, e.g., age, gender, profession**
- 2. Impact of technology on learning in general, covering**
  - Impact on students with disabilities
  - Intensity of contacts
  - Frequency of communication
  - General estimation about the impact of technology
  - Concrete effects of ICT on learning
- 3. Impact of technology on learning referring to special topic of investigation**

**Closed questions, typical five-level Likert item**

# Special Hypotheses

**It is generally accepted that:**

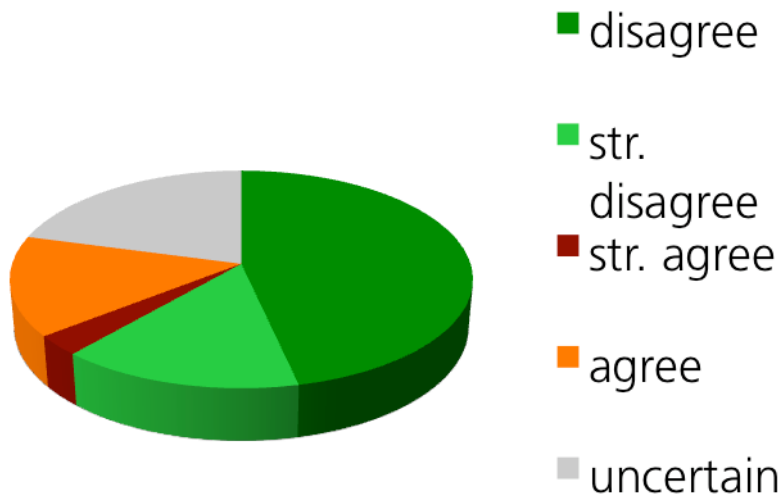
- **University degrees awarded by traditional & by distance teaching universities are comparable**
- **There is no difference in learning outcomes between both systems**

# Where are We?

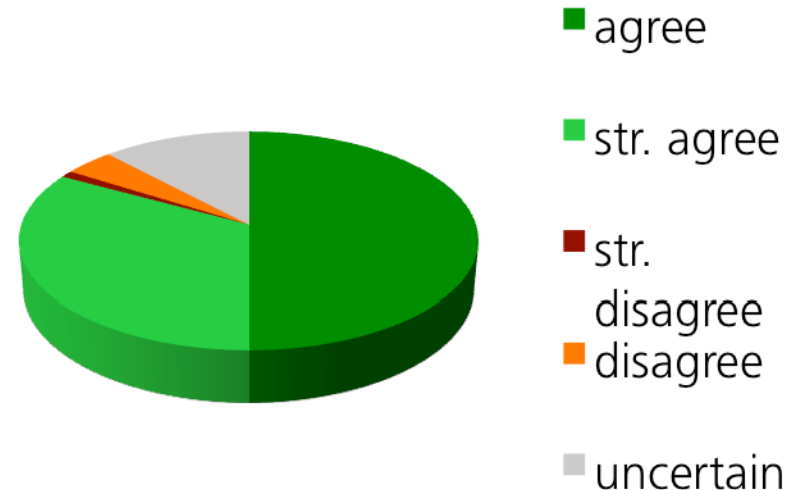
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# Descriptive Statistics

## Only optimistic people



## personal study experience

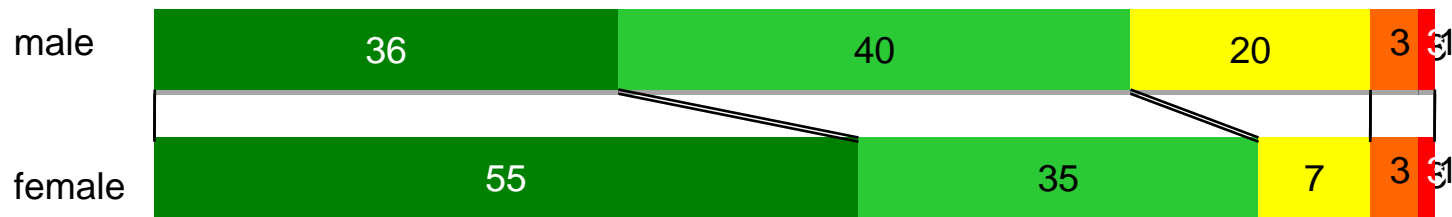


# Cross Table: Variable Gender

Thanks to technology, the problems of access to learning for students with disabilities have been resolved (in %).

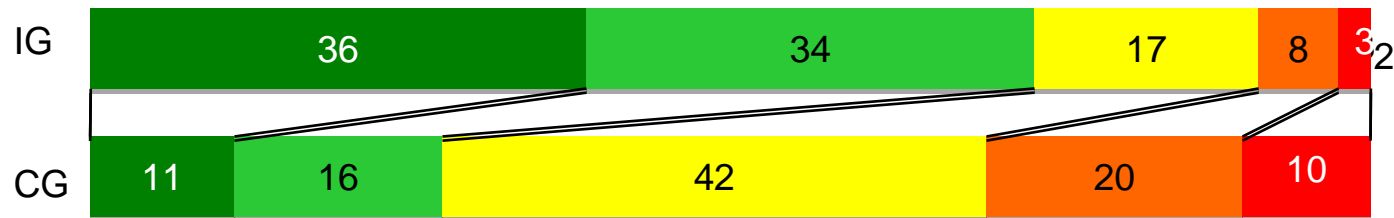


Application of new ICT concepts has improved distance education.

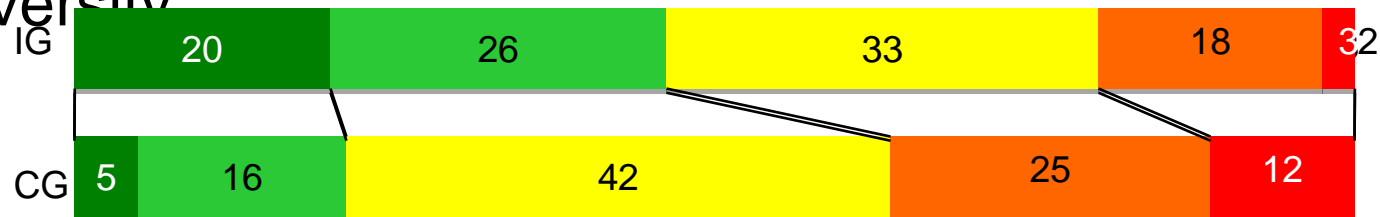


# Cross Table: Experience w. D.L.

University degrees awarded by open universities may be comparable to degrees from face-to-face universities.

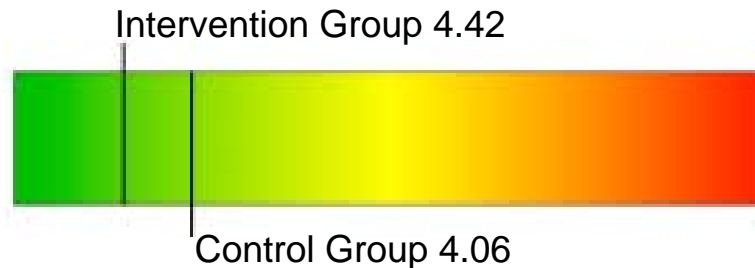


There is no difference in learning outcomes between studying at an open university or at a face-to-face university.

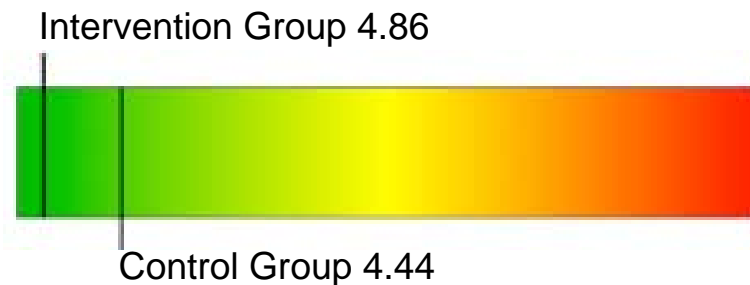


# T-Test

Application of new ICT concepts has improved distance education.

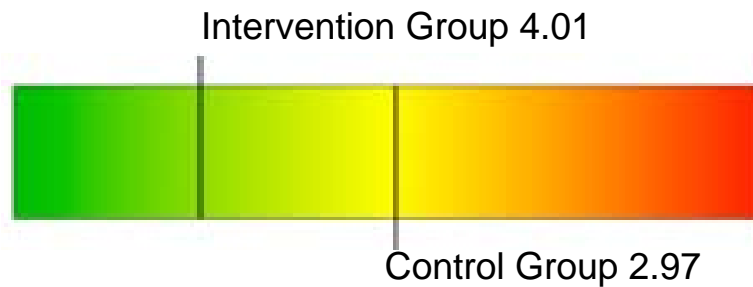


Study at an open university is especially of advantage to adults who have work and family obligations.

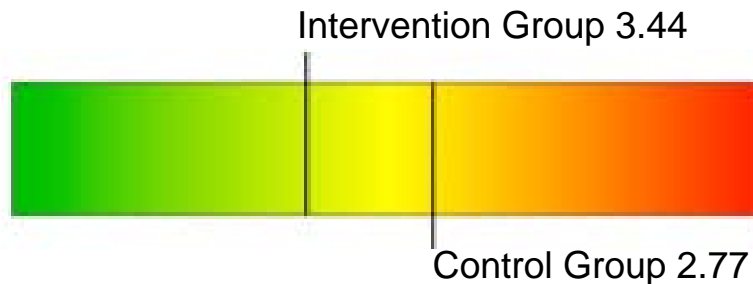


# T-Test (continued)

Degrees of campus & distance universities compare.



There is no difference in learning outcome.



# Spearman's Rho Correlation

	(17)	(18)	(19)	(20)	(21)
(17) Application of new ICT concepts has improved distance education.					
(18) Technology facilitates easier access to material for those studying part-time.	0,443				
(19) University degrees may be comparable.	0,223				
(20) No difference in learning outcomes.	0,149		0,614		
(21) Advantage to adults who have work and family obligations.	0,358	0,336	0,328	0,264	

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# Impact on Learning in General

**People think, that:**

- **Technology does have an impact on learning**
- **Impact on learning of Technology is beneficial**

**⇒ Daily use of ICT justified!**

# Impact on Learning in Open or Distance Universities

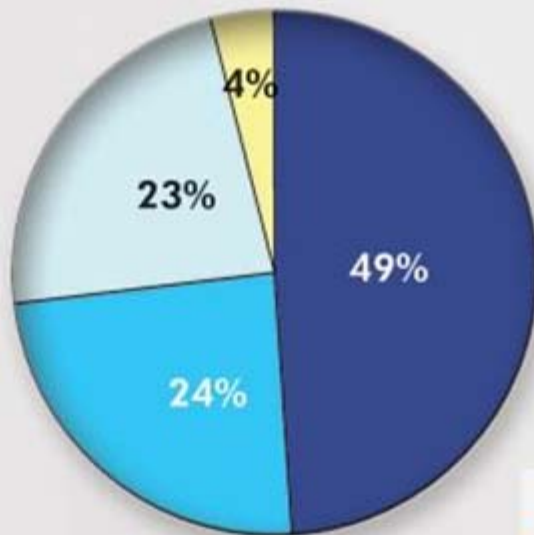
**People think, that:**

- ***University degrees may compare only widely accepted by distance learning students***
- ***No difference in learning outcomes not accepted***

# High Acceptance of Distance Students among Employers

<http://www.fernstudium-rundschau.de/forsa-studie-hohe-akzeptanz-von->

Für welchen Bewerber würden sich Personalchefs entscheiden, für den Absolventen eines Fernstudiums oder den Absolventen eines Präsenzstudiums?



- Ich mache dazwischen keinen Unterschied
- Bewerber mit abgeschlossenem Fernstudium
- Bewerber mit abgeschlossenem Präsenzstudium
- weiß nicht/k. A.



**Thank you for your attention!**

**Questions, Remarks?**

**Reports on project website or at:**

**<http://deposit.fernuni-hagen.de/62/> (data analysis O&D U)**

**<http://deposit.fernuni-hagen.de/1097/> (annot. bibliography)**