ETD Programs after Two Decades



Exploring Impact





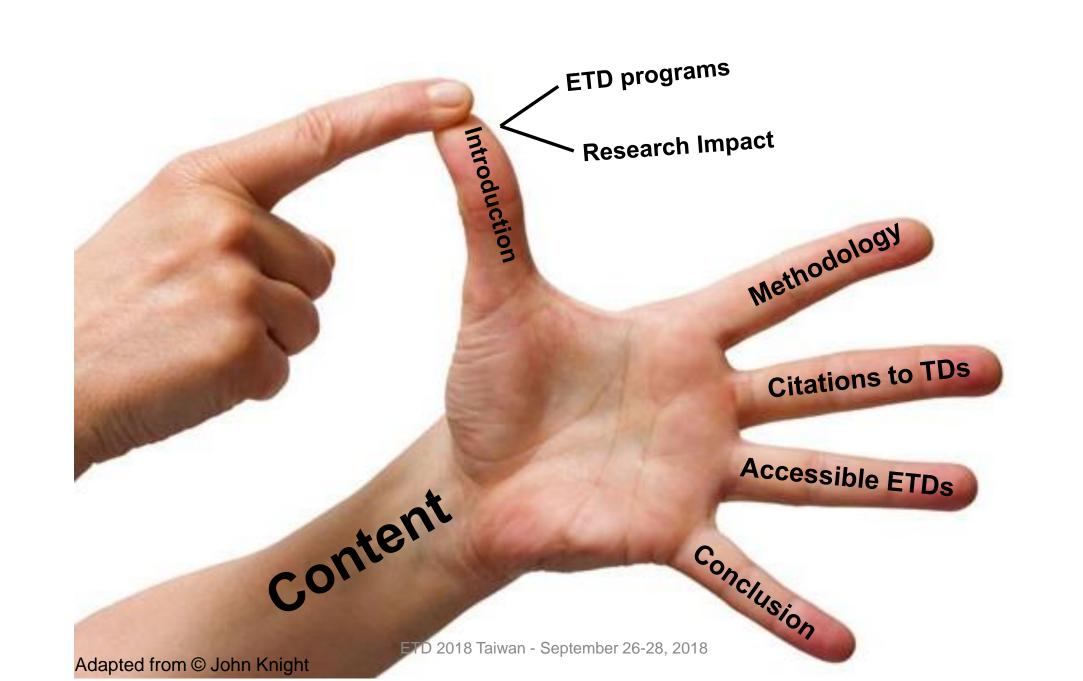


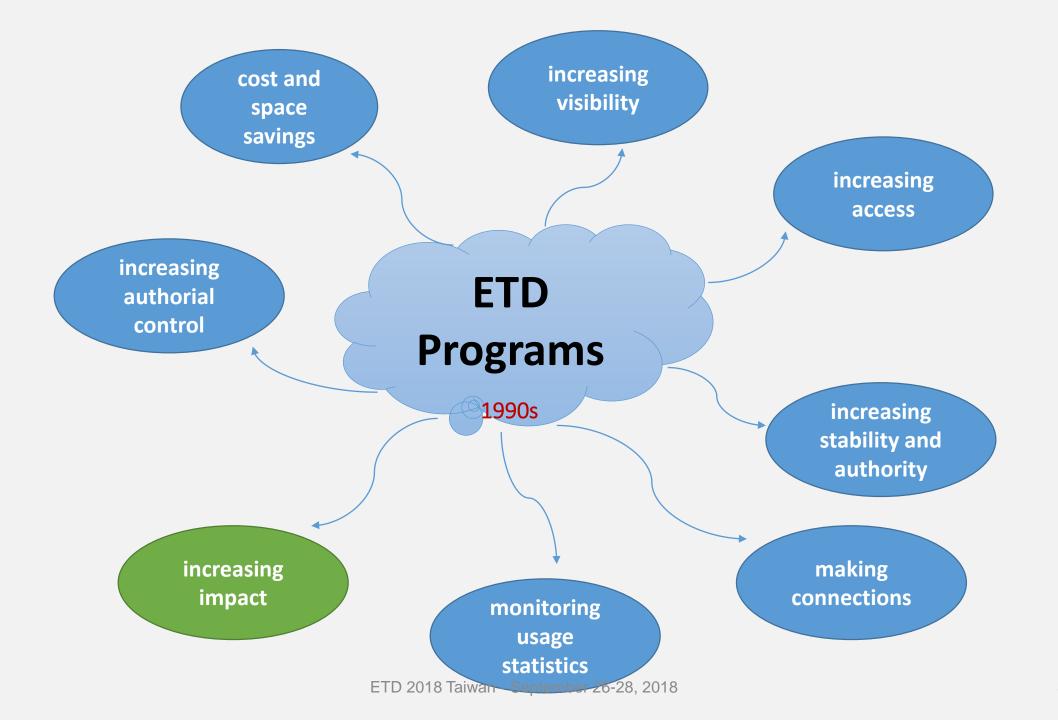




Iranian Res. Inst. Info. Sci. Tech. (IranDoc) University of Lille, GERiiCO laboratory

CNRS, GERiiCO laboratory





Social Health Economic



Academic Culture

Methodology

1 query Scopus[®]

(REFSRCTITLE("master's thesis" OR "MA thesis" OR "M.A. Thesis" OR "M. A. Thesis" OR "M.S. thesis" OR "M.Sc. Thesis" OR "MS thesis" OR "MSc Thesis" OR "doctoral dissertation" OR "PhD dissertation" OR "PhD diss." OR "PhD diss." OR "Ph.D. dissertation" OR "Ph.D. dissertation" OR "Gissertation" OR "Gissertation" OR "[dissertation]" OR "[dissertation on microfiche]") AND PUBYEAR < 2018)

= 869,969 records: 1.5% of all indexed documents in Scopus

2 Select 384 random samples containing 15,340 references

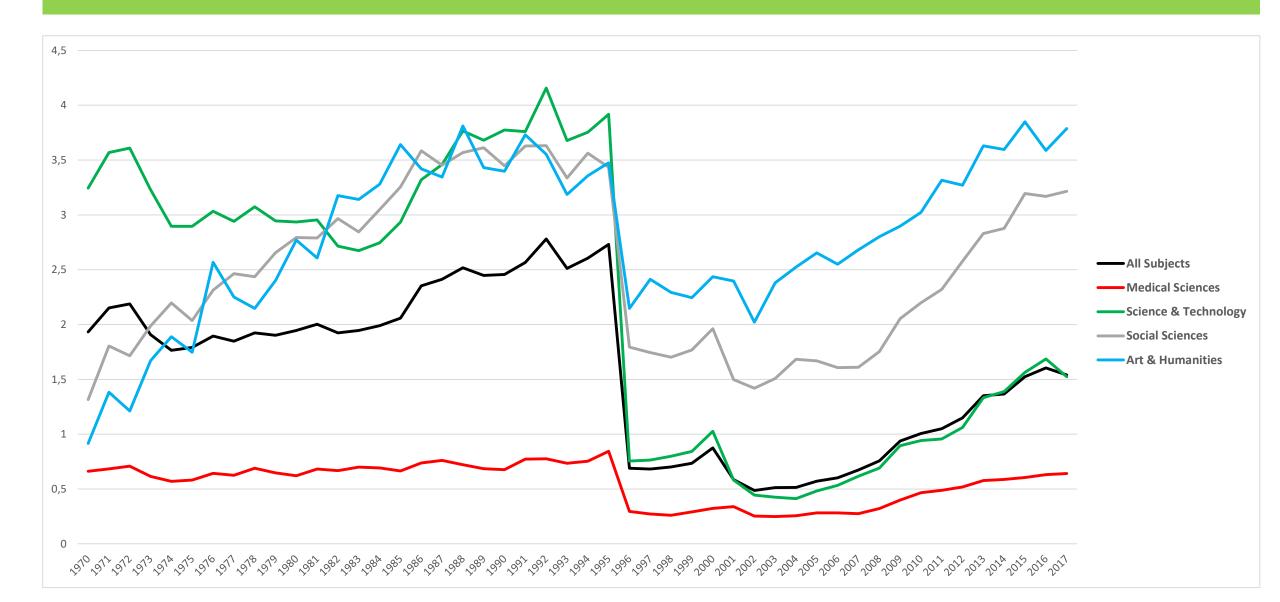
3 Search 705 references containing TDs in







Percent of documents citing theses and dissertations in Scopus (1970-2017)



Analysis

Random sampling

384

records

Error

(containing "synthesis", "synthesis", "pr ostheses", "hypothesis", "m aster plan", etc.)

17%

of 384 records.

Wrong citation

(reference with no title)

16%

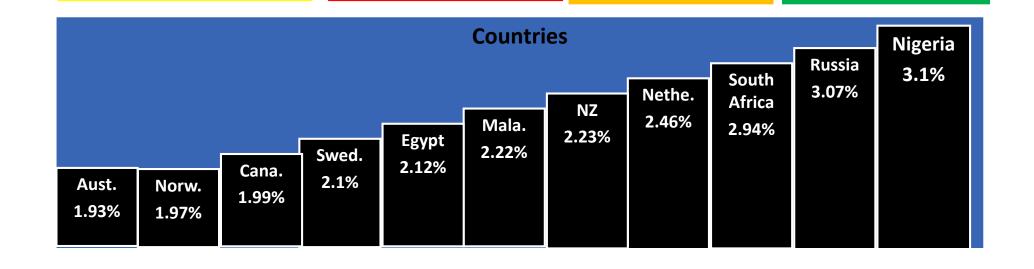
of 476 references.

Analysis

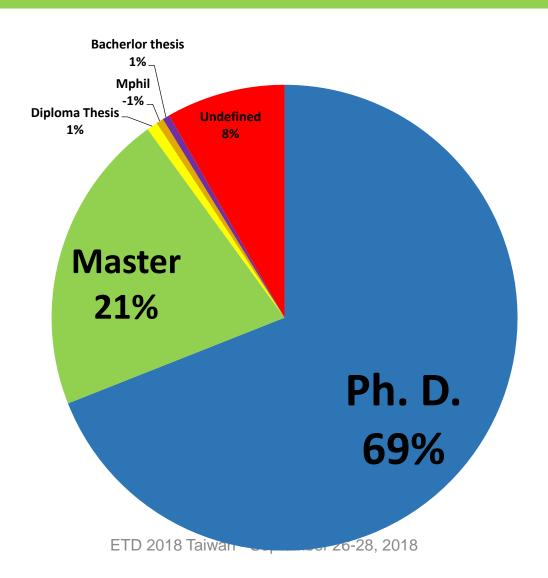
(correct references)

400

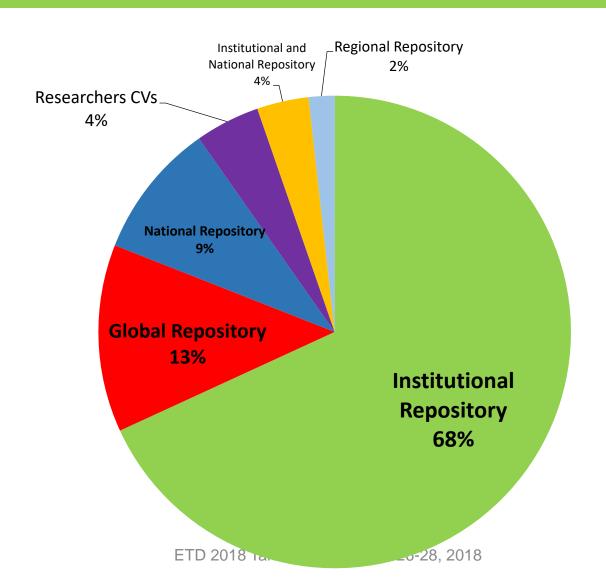
references



Citation to TDs of different educational level; Scopus (1996-2017)



Citation to TDs in different repositories types; Scopus (1996-2017)



Percent of accessible and open access references (ETDs) on the web; Scopus (1996-2017)



Periods of citation to TDs

-1992

- Increasing the number of academic institutes
- Easy access to scientific publications

1993-2002

- Development of information and communication technologies
- Access to academic journals

2003-

- Development of ETD programs
- The impact of ETD programs

French approach: methodology

Sampling

- Retrieve in Scopus bibliographic records of articles published between 1970 and 2017, in three domains, with at least one author affiliation in France and citing at least one doctoral thesis (reference)
- Obtain samples with 2,000 to 4,000 records in order to be able to export complete records, with references (limitation by Scopus)
- Research equation
 - REF ("Doctoral diss*" OR "doctoral thes*" OR "Ph.D. diss*" OR "Ph.D. thes*" OR "PhD diss*" OR "PhD thes*" OR "PhD. Diss*" OR "PhD. thes*" OR "Ph. D. diss*" OR "Ph. D. diss*" OR "Ph. D. thes*") AND DOCTYPE (ar) AND PUBYEAR < 2018 AND (LIMIT-TO (AFFILCOUNTRY, "France")) AND (LIMIT-TO (SUBJAREA, "MATH"))
- Extract all citations (references) with doctoral theses
- Analyse the accessibility of cited theses (ETD? open access? embargo? etc.)
- Analyse the ETDs' address (institutional repository? other server?)

French approach: results and problems

- The equation provides
 - 2,097 articles in mathematics (MATH)
 - 713 articles in social sciences (SOCI)
 - 1,375 articles in environmental sciences (ENVI)
- References related to doctoral thesis
 - 3,330 or 4,3% of all citations in the MATH sample
 - 1,567 or 3,8% of all citations in the SOCI sample
 - 2,501 or 3,5% of all citations in the ENVI sample
- Problems (time consuming)
 - Manual check of citations
 - Electronic thesis (URL...)?
 - Accessibility (open access, embargo...)?
 - Difficulties with Google Scholar API
 - Automatic analysis of references?

For example, analysis of the SOCI citations

- 97 references analysed
- 28 retrieved with GS
- 27 with PDF (open access)
- 15 in institutional repositories

Conclusion

- ☐ Measuring impact is not easy
- ☐ ETD programs are impactful on academia
- ☐ ETD programs' developers need to know impact of their impact
- ☐ Further research is needed for measuring actual impact of ETD programs

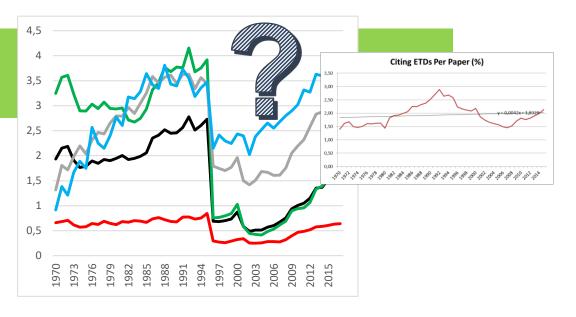
Perspectives

Long-term citation analysis

- Fix the problem with Scopus
- Large-scale sampling
- Automatic extraction and retrieval



- Domain-specific differences
- National/regional differences



We Need YOU





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