

# Recommended readings for IMPDET-LE students

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## Info

This page includes recommended readings for doctoral students in different parts of the studies.

## General

1. [A Letter to Research Students](#) - Practical tips for conducting research by Duane A. Bailey, Williams College
2. [Getting Started in Computer Science Education Research](#) - resources for developing research knowledge by Mike Joy et al.
3. [Getting Started in Instructional Technology Research](#) by Steven M. Ross and Gary R. Morrison
4. [Repository of Resources about Research Methods in Computer Science](#) - collection of articles, websites, videos and other resources related to research methods in Computer Science

## Educational technology

1. [List of Seminal Papers in Educational Psychology](#) - by Paul A. Kirschner
2. [Essential Readings in Educational Technology](#) - list of books maintained by EduTech wiki
3. [Foundations of Educational Technology: Integrative Approaches and Interdisciplinary Perspectives](#) - J.M. Spector
4. [Teaching in a Digital Age: Guidelines for Designing Teaching and Learning](#) - A.W. Bates
5. [Emerge and Innovation in Digital Learning: Foundations and Applications](#) - G. Veletsianos (Open access ebook)
6. [The Theory and Practices of Online Learning](#) - T. Anderson (Open access ebook)
7. [Teaching in Blended Learning Environments: Creating and Sustaining Communities of Inquiry](#) - N.D. Vaughan, M. Cleveland-Innes, D.R. Garrison (Open access ebook)
8. [Designing and Adaptive and Personalized Learning Environments](#) - Kinshuk

## Design in educational technology

1. [Design-Based Research Methods](#) - Links and resources by Prof. Jan Herrington
2. [An Introduction to Design Science](#) - Johannesson and Perjons (2014). Springer.
3. [Design science research literature](#) - collection of articles related to design science research
4. [Handbook of Design in Educational Technology](#). Luckin R. et al. (2014) Routledge.
5. [Trends and Issues in Instructional Design and Technology](#) (3rd. Edition) - R.A. Reiser & Dempsey, J.V.

## Searching, reading and reviewing articles

1. [How to Read a Scientific Paper](#) - University of Arizona
2. [Guidelines for performing systematic literature reviews in software engineering](#) - EBSE Technical report
3. [Analysing the past to prepare for the future: Writing a literature review](#) - Article by about literature review in the field of Information Systems.

## Scientific writing

Recommended book for all doctoral students on how to write scientific articles.

1. [Scientific Writing: The Reader's and Writer's Guide](#) - by Jean-Luc Lebrun

# Conducting research: methods and procedures

The following books should provide you the basic knowledge about the various research approaches and methods that can be applied in your research. Please note, however, that some of the resources mentioned below are not directly written from educational technology perspective, but they originate from other fields, such as education or social science

## Generic guide books

1. [Research Methods Knowledge Base \(in Social Sciences\)](#)
2. [Research Design: Quantitative, Qualitative and Mixed Methods Approaches](#) - by John W. Creswell
3. [Introduction to Research Methods: A Practical Guide for Anyone Undertaking a Research Project](#) - by Catherine Dawson
4. [Multidisciplinary Methods in Educational Technology Research and Development](#) - by Justus Randolph
5. [Real World Research](#) - by Colin Robson
6. [Researching Information Systems and Computing](#) - by Oates

## Quantitative research

1. [Measurement and Evaluation in Psychology and Education](#) - by Thorndike & Thorndike-Christ
2. [The Survey Handbook](#) - by Fink
3. [Interpreting Quantitative Data](#) - by Byrne
4. [Statistics Explained: A Guide for Social Science Students](#) - by Hinton

## Qualitative research

1. [Qualitative Research Methods in Education and Educational Technology](#) - by Jerry W. Willis
2. [Qualitative Research: A Guide to Design and Implementation](#) - by Sharan B. Merriam
3. [Qualitative Data Analysis: A Methods Sourcebook](#) - by Matthew B. Miles, Michael A. Huberman, Johnny M. Saldana
4. [Using qualitative research methods in higher education](#) - by Savenye, W.C. & Robinson, R.S., *Journal of Computing in Higher Education*, 2005, Volume 16, Issue 2, 65-95.
5. [Qualitative Inquiry and Research Design: Choosing Among Five Approaches](#) - by John W. Creswell
6. [The SAGE Handbook of Qualitative Research](#) - by Denzin and Lincoln
7. [README FIRST for a User's Guide to Qualitative Methods](#) - by Richards & Morse

## Design science research/design and development research

1. [Educational Design Research](#) - by Jan Van Den Akker et. al.
2. [Design and Development Research](#) - by Richey, R.C., Klein, J.D.
3. [Conducting Educational Design Research](#) - by McKenney, S., & Reeves, T.C.
4. [Design Science Research Methods and Patterns: Innovating Information and Communication Technology](#) - by Vaishnavi, V.K., Kuechler, W., Kuechler Jnr. W.
5. [Design Science Research in Information Systems - Theory and Practice](#) - Hevner, A.
6. [Design Research: Methods and Perspectives](#) - by Laurel, B., & Lunenfeld, P.
7. [Design Research Through Practice: From the Lab, Field and Showroom](#) - by Koskinen I., Zimmerman, J., Binder, T., Redstrom, J., & Wensveen, S.
8. [An Introduction to Design Science](#) - by Johannesson, P. & Perjons, E.

## Case studies

1. [Case Study Research: Design and Methods](#) - by Robert Yin
2. [Quick Guide: Case Study Research](#) - by Dan Remenyi
3. Darke, Shanks & Broadbent (1998). [Successfully Completing Case Study Research: Combining Rigour, Relevance and Pragmatism](#). *Information Systems Journal* 8, 273-289 .

## Content analysis

1. [The Content Analysis Guidebook](#) - by Neuendorf

## Other resources

Updates to the literature can be found from Jarkko Suhonen's Zotero profile: <https://www.zotero.org/jsuhonen/items/collectionKey/E8C33114>

Additional resources can be found here: [Repository of resources - Research methods in Computing](#)

University of Eastern Finland library has full text access to books in EBSCO e-book and Sage Research Methods Online Service. The following e-books should be available at least inside the university network.

- [Focus Group Practice](#) - by Claudia Puchta and Jonathan Potter
- [Focus Groups](#) - by David Stewart, Prem Shamdasani and Dennis Rook
- [Research Methods for Community Change](#) - Randy Stoecker
- [The SAGE Handbook of Grounded Theory](#) - by Antony Bryant and Kathy Charmaz
- [Design Science Research Methods and Patterns: Innovating Information and Communication Technology](#) - by Vijay Vaishnavi and

William Kuechler.