



## INTRODUCTION AND STATE OF THE ART



UNIVERSITIES  
LINK BETWEEN  
FIRMS + SOCIETY

DIGITAL COMPETENCIES  
+  
RESEARCH COMPETENCIES

LEAN STARTUP  
AS A LEARNING METHODOLOGY

FAVORS

- The contextualization of knowledge
- The development of entrepreneurial attitudes
- The development of soft skills

MAIN GOAL



## METHODS AND MATERIALS



SCHOOL OF EDUCATION SCIENCES (UNED)

Mixed-type sequential descriptive, explanatory and applied research (qualitative and quantitative data).

319 WOMEN + 212 MEN  
DIAGNOSTIC STAGE → 116 students and 3 teachers  
PROCESSUAL STAGE → 201 students  
FINAL STAGE → 33 students and 5 teachers

QUESTIONNAIRE  
DIAGNOSTIC STAGE → Likert scales 76 ITEMS  
PROCESSUAL STAGE → Likert scales 92 ITEMS  
FINAL STAGE → Interviews with teachers  
+ interviews with students and teachers  
+ observation using checklists

VALIDATION OPINIONS OF EXPERTS.

RELIABILITY OF THE INSTRUMENT

SPSS → Normal distribution in the behavior of variables  
KMO AND BARTLETT → High degree of correlation between factors 0,903  
CRONBACH'S ALPHA → high reliability 0,91 DIAGNOSTIC STAGE 0,94 PROCESSUAL STAGE  
ATLAS TI → Qualitative



## ANALYSIS AND RESULTS



INITIAL AND PROCESSUAL STAGE

STUDENTS → DIAGNOSTIC STUDY → GOOD TO VERY GOOD

ABOUT THE methodology in the subject  
Counseling (32,8%) · Follow-up (42%)  
Most often used ICT resources

Notice board (37,1%) · Academic forum (32,8%) · Platform mail (32,8%)  
Project-based learning technique (PBL) more used.

PROCESSUAL STAGE

2015-2016 → THE METHODOLOGY HAD NO VARIATIONS

FINAL STAGE

- + 50% Research competencies (information search and content analysis)
- 50% Problem solving, critical and reflexive thinking, ethical and social impact, and communication.
- + 50% Predisposition towards the use of technological resources and the utilization of some tools in the platform.
- 40% Communication and collaboration, the creation of digital content in problem solving

2017 - LEAN STARTUP

BUILD → Wiki, Videos, (PBL) technique, and collaborative work actions.  
MEASURE → Activities and monitoring of the learning achieved, self-evaluation, co-evaluation and one-way evaluation  
LEARN → Change with regard to the importance assigned to research for the improvement of its own didactic model

← BUILD  
← MEASURE  
← LEARN



## DISCUSSION AND CONCLUSIONS



THE RESULTS SHOWED  
THE EFFECTIVENESS  
OF AN INNOVATIVE METHODOLOGY  
SUCH AS LEAN STARTUP  
IN THE DEVELOPMENT OF  
DIGITAL AND RESEARCH  
COMPETENCIES, ALONG WITH THE CHANGE  
IN THE ROLE PLAYED BY THE TEACHER  
WITHIN THE TEACHING PROCESS.

Universities must strive to rethink the current learning methodology.

