

STUDENT PERSPECTIVES ON INTERDISCIPLINARITY – Findings from an interdisciplinary two-year master program



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Interdisciplinary skills, so what?

- New conditions for the companies and organizations
- Intangible type of knowledge

Challenge and purpose

The challenge, for the universities, lies in teaching and to ensure that the students possess interdisciplinary knowledge and skills.

The purpose is to identify and analyze students' perceptions of learning interdisciplinarity in a two-year master program.

Program facts

- ✓ Three program syllabuses; Innovation through business (1), engineering (1), and design (1)
- ✓ Three faculties involved: the Faculty of Technology; the School of Business and Economics; and the Faculty of Arts and Humanities
- ✓ The program was initiated in 2011 and began in 2014
- ✓ Number of students;
 - 2014 – 15 students
 - 2015 – 19 students
 - 2016 – 24 students
 - MAX 30 students

Method

Focus groups and personal interviews with students enrolled in the interdisciplinary two-year master program named “Innovation through business, engineering and design” hosted by the Linnaeus University.

Questions asked

1. How do you define interdisciplinary? (This question was repeated in the end of the interview)
2. What does interdisciplinarity mean for you?
3. How does interdisciplinarity appear in the program?
4. Where/how does interdisciplinary take place?
5. Which stakeholders are involved?

Previously identified interdisciplinary activities within the studied program

- ✓ Student groups
- ✓ Problem/task for the student groups
- ✓ Faculty members, curriculum, and administrative task

Theoretical alignment

Disciplinar (deepening or broadening within the discipline)	Interdisciplinary (learning between disciplines)	Transdisciplinary (emergency of new/changed disciplines)
Disciplinarity		
Multidisciplinarity		
Cross-disciplinarity		
	Relational	
	Exchange	
	Pluridisciplinarity	
		Modification
		Transdisciplinarity

Empirical findings aligned with theoretical framework

Disciplinary

- ✓ *“you have to be really interested in your own discipline and be able to define your problems within the project” (design student)*
- ✓ *“stay in the box, but think outside the box”.*
(engineering student)
- ✓ *“I do not know which lecture was about interdisciplinary work?” (engineering student)*

Empirical findings aligned with theoretical framework

Interdisciplinary

- ✓ *“Working with different perspectives on the same goal.”
(engineering student)*
- ✓ *“From working in a team, we have learned ... not exactly the academic” (business student)*
- ✓ *“It’s about working together with an open mind. To...because to work together you need to be open, to learn from each other”
(design student)*
- ✓ *“What I see, each discipline has its unique language” (engineering student)*

Empirical findings aligned with theoretical framework continued.....

Transdisciplinary

- ✓ *“but for me when I learned during the project and what I liked about design has changed a lot with this program, is something that has not to be physical. It was more a strategy, a tool to design things” (design student)*
- ✓ *“I can’t explain it as working together as it is beyond it. Work in process with other disciplines towards the same goal, but also conversation.” (engineering student)*

Preliminary conclusion

- ✓ Important for the students to have a strong basis in their main discipline
- ✓ Communication skills is important
- ✓ Team work

***Interdisciplinarity appear to be
a process, where the main
learning takes place in the real-
life projects***