Problem solving and intercultural dynamics in a PBL context: Challenges and solutions



Jan Vang*, Annalisa Brambini, Thim Prætorius, Atanu Chaudhuri & Anders P Nielsen, Sustainable Production, Department of Materials and Production, Aalborg University Copenhagen janvang@mp.aau.dk

Abstract

- Recent years has witnessed an increased internationalization of universities including AAU Copenhagen's study programs where 25% of the students are Non-Danish.
- This survey investigates if Danish and non-Danish students differ in their participation in the problem identification phase of group work.
- The study finds that non-Danish students face significant challenges in the forming phase primarily because they are less trained in 'out of the box-thinking', have less self-efficacy, are more concerned about speaking out, are more concerned about reputation effects.
- The student survey also indicates that group supervisors might be too task focused and that they need to pay more attention to group and intercultural dynamics.
- We propose several recommendations for students, supervisors and study boards, including among other things the need for identifying (or developing) appropriate pedagogical supervision. The supervision needs to focus explicitly on overcoming creativity constrains, limiting fear of speaking out, building up psychological safety etc.

Theoretical background

- From Organizational behavior we cover
 - Psychological safety
 - Implicit Voice theory
 - Self-efficacy
 - Cultural intelligence/strategies
 - Creativity
 - Personality
 - Power distance
 - Using the psychometric scales from this field, modified to PBL

Methods

- Questionnaire (psychometric Likert scales 1-5)
- Open ended interviews with supervisors
- Open ended interviews with students
- Focus group interviews

	Number	Percentage
Participants total	169	233
Danish	78	46.4
Non-Danish	90	56.6
Response rate	NA	22-25
Female	83	49.6
Male	85	50.6

• Only the most important background information is presented.

Study programs

Program	Number	Percentage
GRS	30	17.9
GDS	12	7.1
IS	2	1.2
MEDIA	3	1.8
OIM/GM	25	14.9
OIM/MM	26	15.5
OME	21	12.5
TOURISM	43	25.6
NONE	6	3.6

Satisfaction w Study	Number	Means
Danes	71	3.76
Non-danes	87	4.13

Some results

	Danish vs non-Danish	Mean
Thinking out of the box.	Dan	1,39
	Non-Dan	3,01***
Easy accomplishing my goals	Dan	3,01**
	Non-Dan	2,76
Self-confidence in unexpected events.	Dan	3,37***
	Non-Dan	3,10
Fear of offending experienced PBL students	Dan	1,81
	Non-Dan	2,20**
Silence fearing bad reputation	Dan	1,86
	Non-Dan	2,49***

Some results (continue)

	Danish vs non-Danish	Mean
Students from MORE	Dan	3,00***
hierarchical countries tend not to be active	Non-Dan	2,43
Supervisors should	_Da	1,44
decide	Non-Dan	1,95***
Psychological safety	Dan	1,60
	Non-Dan	1,92**
Cultural intelligence Enjoy cultural diversity	Dan	3,18
	Non-Dan	3,82***
Awareness of cult. difference in problem- solving	Dan	2,88
	Non-Dan	3,38**
To diverse groups.	Dan	1,81
	Non-Dan	2,28**

Conclusions

- Significant differences between Danish and Non-Danish students across almost all meta-dimensions
- Need to take action for supervisors
- E.g.need to design exercises related to intercultural awareness, psychological safety, easing speaking out
- Study board should make intercultural challenges mandatory in coordination meetings and evaluations
- Program coordinator should ensure cultural training of supervisors
- Pedagogical courses should be better integrated in our teaching/supervision courses