

# Bingo boosts:

## Enhancing fieldwork engagement through playful learning

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Not all students **take advantage of all opportunities** within the scope of the fieldwork

I don't know how to dress...

I cannot walk as fast as the others?

Will I get seasick?

Everyone else seem so confident...

The educational effectiveness of fieldwork depends on the **fieldwork's quality** and the **students' familiarity** with the fieldwork setting (Orion & Hofstein, 1994).

The **fieldwork bingo** addresses three components of **self-determination theory** supporting intrinsic motivation (Deci and Ryan, 2000).



**Competence**

Feeling capable of **mastering** new challenges



**Autonomy**

Feel that they have **choice** in what to do, when, and with whom



**Relatedness**

Experiencing **connection** and meaningful interaction with peers, teachers, and others

**1** Identify **learning outcomes** and formulate activities

**2** **Prioritize** and categorize

**3** Develop **umbrella categories**

**4** Don't forget the **free-choice** box!

**5** Encourage **competence, autonomy** and **relatedness**

Demonstrate your knowledge of the fjord fauna	Marine life 	Punch catch data into Excel	Care for your peers 	Learn from each other 
Understand how gears are operated 	Demonstrate how to sex fish	Care for yourself 	Calculate from subsample to total catch	Understand the environment 
Know how to length-measure all species	Interact with the crew 	<b>Your choice:</b>	Help with deck work 	Know dominating plankton species
Help with deck work 	Improve Animal welfare 	Understand how gears are operated 	Practice age reading	Marine life 
Know the different sampling gears on board	Understand the environment 	Be a station master	Interact with the crew 	Dissect big fish and observe stomach contents

### BIO325 Cruise-bingo

From student to teacher!

Combining new and old ways of assessment

Fisheries and Marine Biology Master's Programme

20 students studying the fjords for a week on a research vessel

...It works!

Not just for fieldwork!

**Could you use the bingo in your educational framework?**



Deci, E.L., and R.M. Ryan. 2000. The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry* 11(4):227-268, [https://doi.org/10.1207/S15327965PLI1104\\_01](https://doi.org/10.1207/S15327965PLI1104_01).

Glessmer, M.S., L. Latuta, F. Saltalamacchia, and K. Daae. 2023. Activity bingo: Nudging students to make the most out of fieldwork. *Oceanography* 36(2-3):225-228, <https://doi.org/10.5670/oceanog.2023.217>.

Orion, N., and A. Hofstein. 1994. Factors that influence learning during a scientific field trip in a natural environment. *Journal of Research in Science Teaching* 31(10):1,097-1,119, <https://doi.org/10.1002/tea.3660311005>.

