Learning Transfer: does it take place in MOOCs?

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What is learning transfer?

Learning transfer is the application of knowledge or skills gained in a learning environment to another context.
Why do we care?

*Learning transfer* is a more important *measure of learning* in MOOCs than retention, success or engagement.
What did we do?

FP101x logs
3 months

surveys

coding activities
2.5 years + 0.5 years

email address
What did we do?

FP101x logs + surveys + coding activities

3 months + 2.5 years + 0.5 years

Are changes made in a functional language?

email address
Do your intuitions align with our findings?

— 7 hypotheses —
To what extent do engaged learners exhibit learning transfer?

- <5%
- 5-10%
- 10-30%
- >30%
To what extent do engaged learners exhibit learning transfer?

5-10%
Which type of learner is more likely to display learning transfer?

- Intrinsically motivated
- Extrinsically motivated
- Neither
Which type of learner is more likely to display learning transfer?

- Intrinsically motivated
- Neither
Which type of learner is more likely to display learning transfer?
Which type of learner is more likely to display learning transfer?

- Low self-efficacy
- High self-efficacy
- Neither
Which type of learner is more likely to display learning transfer?

- Low self-efficacy
- High self-efficacy
Which type of learner is more likely to display learning transfer?

High self-efficacy
Which type of learner is more likely to display learning transfer?

- Experienced
- Inexperienced
- Neither
Which type of learner is more likely to display learning transfer?

- Experienced
- Inexperienced
Which type of learner is more likely to display learning transfer?

Experienced
Which type of learner is more likely to display learning transfer?

- High personal capacity
- Low personal capacity
- Neither
Which type of learner is more likely to display learning transfer?
Which type of learner is more likely to display learning transfer?

High personal capacity
Which type of learner is more likely to display learning transfer?

- Low-spacing learning routine
- High-spacing learning routine
- Neither
Which type of learner is more likely to display learning transfer?

Low-spacing learning routine

High-spacing learning routine
Which type of learner is more likely to display learning transfer?
How does the transfer manifest itself over time?

- Steady decrease
- Steady increase
- Neither decrease nor increase
How does the transfer manifest itself over time?

- Steady decrease
- Neither decrease nor increase
How does the transfer manifest itself over time?

Neither decrease nor increase
Discussion time!
Brainstorm and present how to accurately measure (long-term) learning transfer in domains of interest to you.
PREPARE

1. Form groups of 4-5
2. Decide on a MOOC

DISCUSS

3. What data sources could potentially be used?
4. How can learning transfer be measured?
5. What other challenges could arise in this case?

SHARE

6. Write down the results and choose one group member to present your findings
Presentation time!
Thanks for your participation!