Interview schedule

Opening activity
Brief introduction to learning analytics.

Interview
First part

> *To consider: Remember to encourage open and honest responses to ensure the gathering of accurate and useful data.*

Section A. What are students' perspectives on the affective-cognitive states that may influence their performance during an online class session? (RQ1)

> *To consider: Make sure that from question 1 they start to name their emotions.*

Question 1
What emotions do you commonly experience during an online class, and how do you think they may impact your performance?

Prompt: (What would you call those emotions?)

Question 2

> *Say:* I will refer to these emotions as affective-cognitive states.
>
> *Use Presentation (Question 2):*
> *(Brief explanation of ECAs Affective-Cognitive States).*
> *In the literature there exist six states that are supposed to represent several emotions that commonly occur in the educational context. I want to share those with you to compare your answer with these states.*
>
> *To consider: It is very positive to map affective-cognitive states with students' experiences.*
>
> *Question: Could you choose the cognitive-affective state that is closest to the emotions you described in the previous question?*

Question 3
Do you feel your affective-cognitive states are recognized and addressed during your online classes?
(How is it?)

Question 4
Do you think it may be beneficial that these affective-cognitive states are made visible to teachers?

Use Presentation (Question 4):
If so, would you help me rank these states, from the most relevant to the learning context to the least important.

Section B. What are students' perspectives on how evidence about their affective-cognitive states can be visualised for the purpose of self-reflection or shared with their teachers to adapt the lesson plan during an online class session? (RQ2)

To consider: Don't forget to use the ranking.

Question 5

Introduction: Imagine that it is possible to automatically obtain evidence of these affective-cognitive states that you've just ranked. (through a system or application)

How do you imagine this evidence about affective-cognitive states can be visualised or communicated to you or your teachers?

I'll give you one minute to think about it.

Prompt: Use it when students get stuck - Show them an example with a velocimeter that measures engaged-concetration and boredom from 0 to 100.

Activity 1: Crazy **4**

Explanation: It is a fast sketching exercise that challenges people to sketch four distinct ideas in four minutes.

Objective: These first 4 attempts are for self-reflection only (maybe they draw an interactive dashboard, a chart, different kinds of graphs, etc.)

To consider: Students may find this method intimidating at first, so it is helpful to reassure everyone that these are rough sketches. They do not need to be perfect or beautiful—sketches just need to communicate ideas about how they imagine evidence of the affective-cognitive states can be communicated.

Say: Remember that these are rough sketches. They do not need to be perfect or beautiful—sketches just need to communicate ideas about how you imagine evidence of the affective-cognitive states would look like.

- *Instructions: Fold a piece of paper into four equal parts.*
- *Warming up: You have 1 minute to reflect a quick idea on one of the divisions of your sheet of paper.*
- *Time to draw: Now, for each remaining division, you will have 1 minute to draw different ideas.*
- *Explain your ideas: At the end, you will be asked to explain each of your drawings.*

Activity 2: Solution Sketch

Explanation: The Solution Sketch is a Design method used to expand upon one idea. In this exercise, each student spends more time articulating one idea they are most interested in.

Objective: The goal is to create one fully fleshed out idea for the solution that is thought to be the best.

- *Instructions: Select one of the ideas you have just drawn to expand upon it, you can also sketch a new idea or a combination of ideas.*
- *Time to draw: You will have 8 minutes to create a better sketch that may be useful for teachers to help them improve their lesson plans.*
- *Extra time?: If you need 1 extra minute, just ask for it.*
- *Explain your final idea: At the end, you will be asked to explain your final result.*

Section C. What ethical, privacy, and cultural implications should be considered when capturing facial expressions as a means to model and visualise students' affective-cognitive states?(RQ3)

> *Introduction: Imagine that already exists a system that automatically obtains evidence of these affective-cognitive states, with that on mind answer the following questions:*

Question 6.
How comfortable are you with your emotional and cognitive states being monitored for the purpose of evaluating the classroom atmosphere? To answer this question use the scale below: where 1 is very uncomfortable and 5 is very comfortable

Likert Scale
1. Very uncomfortable
2. Uncomfortable
3. Neutral
4. Comfortable
5. Very comfortable

Question 7.
What concerns do you have regarding the potential privacy issues related to the collection and use of your personal data from your cognitive-affective states captured while attending an online class?

Question 8.
What ethical concerns do you have regarding the modeling and visualization of your affective-cognitive states being shared with your teacher?

Utilizar un prompt sin utilizar ejemplos.

Question 9. About cultural concerns.

Introduction: Emotion recognition based real-time learner facial expressions is starting to be used in online learning contexts in countries such as Russia [1], India [2], china [3] and other countries.

Yet*, perception of facial expressions differs across cultures [4, 5].*

Based on your own experiences as a student based at **a large, urban university in Mexico**, what cultural considerations do you think should be taken into account in the design of a tool that supports awareness of
affective-cognitive states in online learning classes?

I will end up saying: For your tranquility, your video/audio record will be kept only until the end of the week. While your facial expressions are processed into ECAs and other analytics. All this information will be anonymized, which means that every student will be assigned an ID, and there will be no reference to personal information.

Bibliography

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