The usage of chatbots as didactic material

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Different Applications of Chatbots In Education

- Administrative Assistant
- Chatbots as Learning Activities
- Teacher Assistant + Didactic Material
Is chatbot a FAQ?

Answering questions about assessment dates, documents, how to access systems and etc is important, but...

In this approach, chatbot is a didactic material that works as support to the teacher.

It delivers contents, but it can also recommend paths or sources of study.

Interactions serve as feedback to the teacher.
“Didactic material is all materials elaborated with the intent of facilitating the processes of teaching and learning”.

Graells (2000)
Chatbot created using Watson – IBM's cognitive services platform.

Responsive application (computer and mobile).

Hello Léo! I’m Katri, monitor of the course Teaching and Learning in Higher Education. You can ask me about the course or choose one of the suggestions below. If you wish to access the course’s platform, click here.
The Pedagogical Project has lots of phases. Do you want to know specifically about one of the items below?

- Dates of the Pedagogical Project
- Implementation of the Pedagogical Project
- Examples of Pedagogical Projects
- Pedagogical Project’s feedback
- What is a Pedagogical Project?
- Pedagogical Project proposal planning
- Final format of a Pedagogical Project
Chatbot creation steps

1. Mapping the course
2. Predict doubts
3. Teacher validation
4. Training of the chatbot
5. Student testing
6. Chatbot training

The cycle is repeated during the course.

5 people/6 months
- 1 Systems Developer
- 1 Designer
- 1 Anthropologist
- 1 Linguist
- 1 Teacher/coordinator responsible for the course
Chatbot design sprint

Monday:
- Mapping
- Goals
- Solving Problems

Tuesday:
- User's Journey
- Bot Persona

Wednesday:
- User Experience
- Main Messages

Thursday:
- Prototyping

Friday:
- Think Aloud
- Test
Training the chatbot

- Validated the first 5 options of the menu:
  - To-do this week
  - Academic calendar
  - Pedagogical Project
  - Activities
  - Content doubts

- Validated the importance of the function “to-do this week”, which was the item that interested the students the most.

- Validated Katri’s role as monitor (teacher or coordinator would constrain the students).
Think aloud test – 5 users

- Looked for an image in which Katri looks more adult-like.
- Options “group activities” and “individual activities” were not used.
- Information about webinars and contact sessions were used more often.
- Users considered the texts too long.
After implementing all the improvements, Katri went live on the 1st day of the course Teaching and Learning in Higher Education: March 13th, 2019.

- Class: 32 students.
- All students were adults and already working as University Teachers. This is a Pedagogic Specialization for professionals that already work in Universities.
Progression of Chatbot usage - Interactions

Total interactions: 204
Total identified students: 62.5%
Processing of natural language

- Assurance level: average of 67% in 204 responses.
- The more interactions happen, more information Katri will have to answer with certainty.

A human is necessary to work as a curator, in order to verify what Katri still needs to learn and if she is giving adequate answers.
Present moment – future steps

- We are collecting further information on the interactions with the chatbot.
- As questions that Katri does not know how to answer are asked, we create new answers and train Katri to answer them.
- Interviewing students in the end of the course – September/2019.

Thank you!

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