CONSTRUCTION OF A RESOURCE FOR RECOMMENDING PEDAGOGICAL STRATEGIES BASED ON SOCIO-AFFECTIVE SCENARIOS

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INTRODUCTION

Distance Education allows flexibility in time and place, although it is more difficult to recognize body language, facial expression or tone of voice and interactions between participants. However, there was a lack of studies that analyze students through these two aspects.

AIM

The present work aims to present the process of building a Socio-affective Map to recommend Pedagogical Strategies based on Socio-affective Scenarios of students in a Virtual Learning Environment (VLE).

MATERIALS AND METHODS

The planning and development of the Socio-affective Map was organized into five steps based on Beck *et al.* (2001):
- **Step 1 - Definition of the software process**: the steps, procedures, standards and delivery cycles.
- **Step 2 - Gathering and specifying requirements:** involved characterizing the functionality and describing the items.
- **Step 3 - Application analysis and design:** the purpose was to select the programming language, as well as to develop the database modeling.
- **Step 4 - Implementation of the Socio-affective Map:** aimed at codifying the models created in computer languages, in addition to creating the database for storing the Socio-affective Scenarios and Pedagogical Strategies.
- **Step 5 - Software testing:** the aim was to ensure that the software acted correctly.

RESULTS

The Socio-affective Map was implemented using the JavaScript programming language with the Chart.js library. The first graph has the percentage of students in each group of Socio-affective Scenarios, as shown in Figure 1.

Figure 1 – Initial screen of the Socio-affective Map.
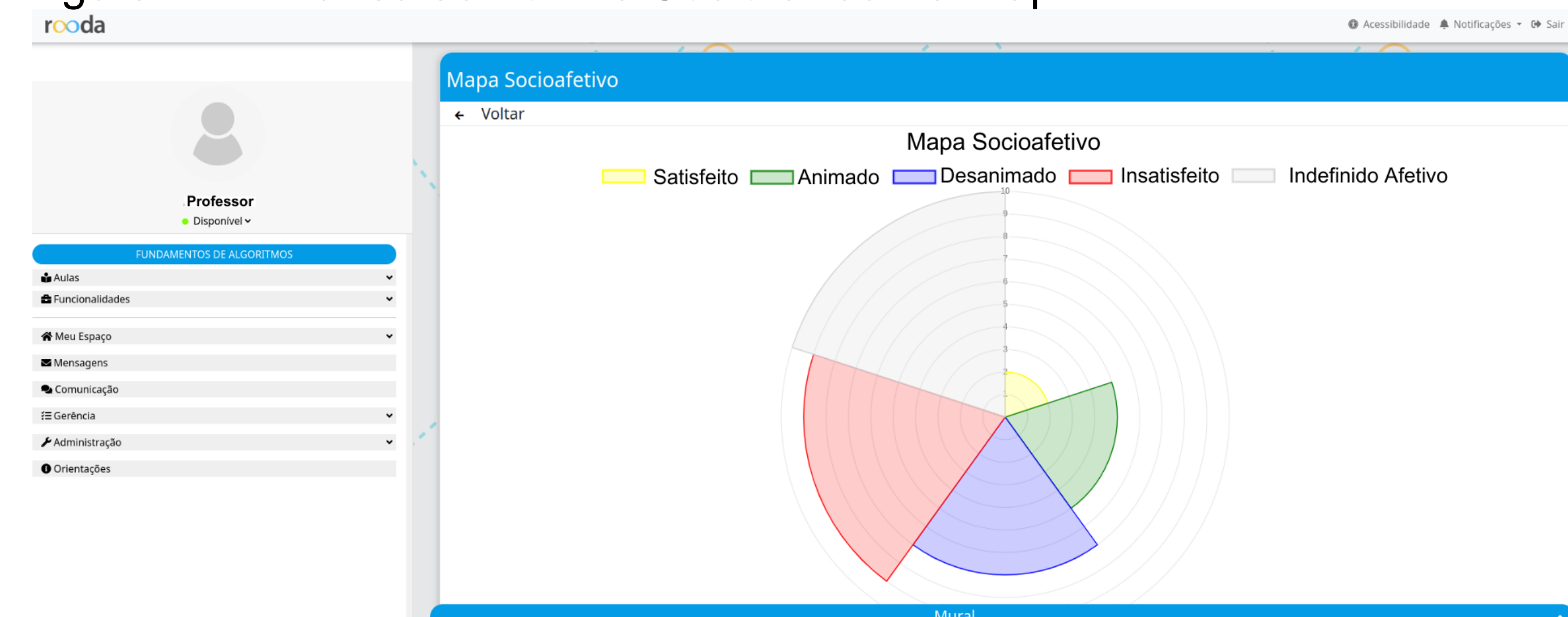
The second graph displays the percentages for each group of chosen Scenarios. Therefore, the teacher can analyze a category and see all the students present in it, exemplified in Figure 2.

Figure 2 – Socio-affective Scenarios Screen: Dissatisfied and Social Indicators.
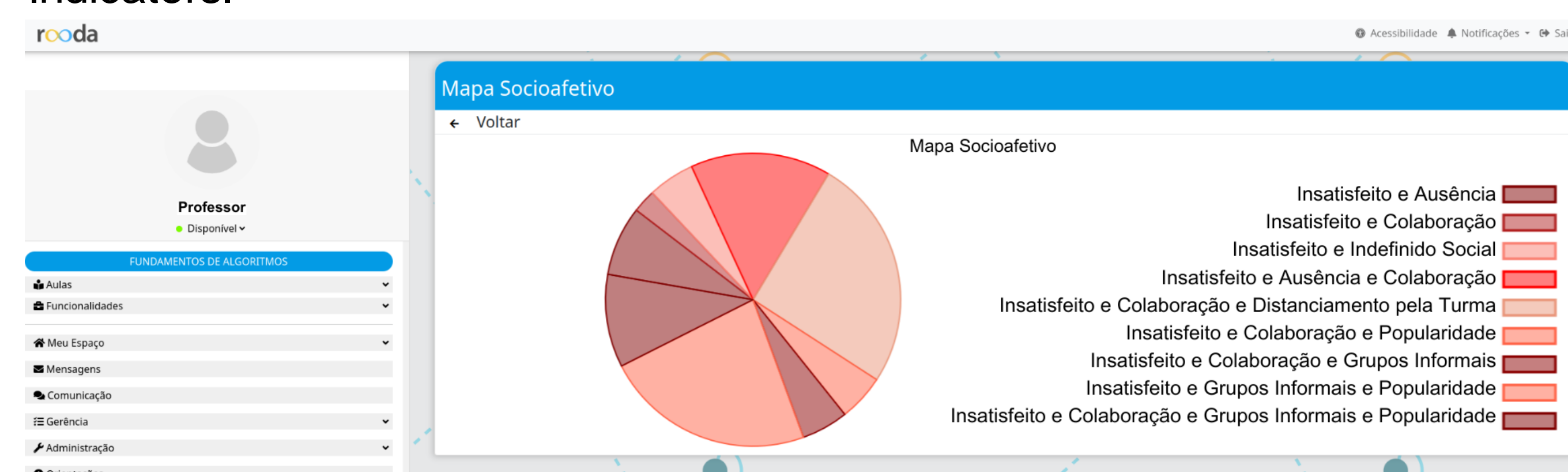
In this sense, if the teacher wants more specific research, he or she can examine the participants who are part of a certain Scenario, such as Dissatisfied and Absence and Collaboration, illustrated in Figure 3.

Figure 3 – Socio-affective Scenario Screen: Dissatisfied and Absence and Collaboration.
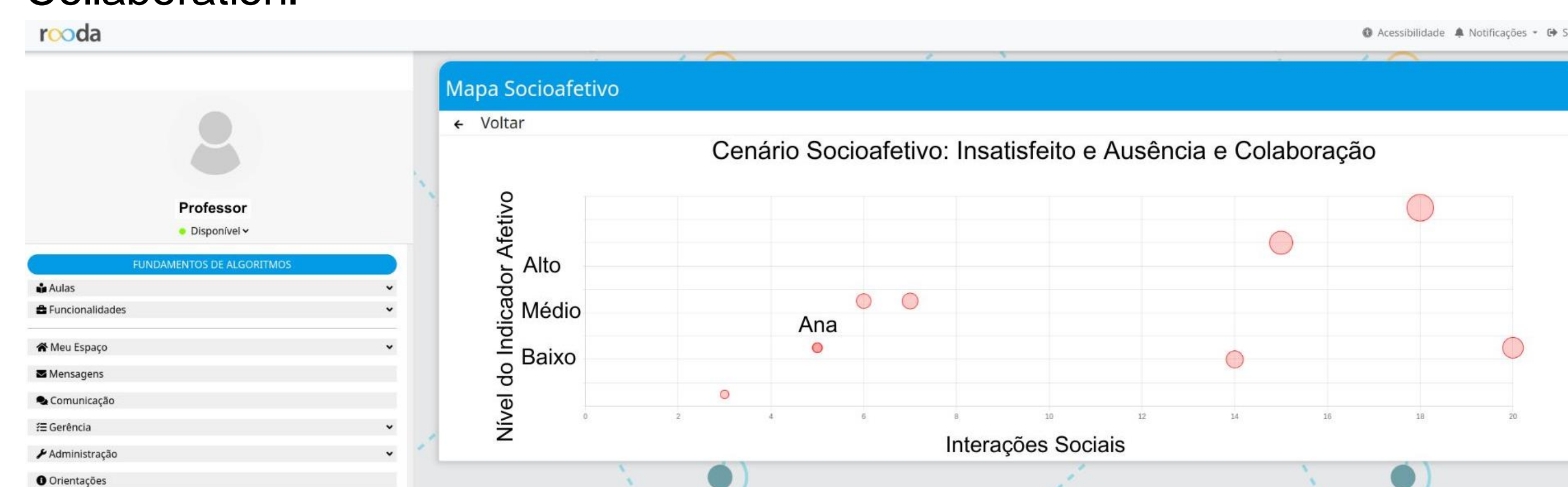
Next, the teacher can click on a student, in this case "Ana" and view her 6 Pedagogical Strategies that week, or close the screen. Furthermore, the teacher can click on the "Suggest new Pedagogical Strategy" button. Thus, he chooses one of the areas of the National Council for Scientific and Technological Development (abbreviated in Portuguese: CNPq) to link the Strategy and clicks on the "Write Pedagogical Strategy" button, shown in Figures 4, 5 and 6.
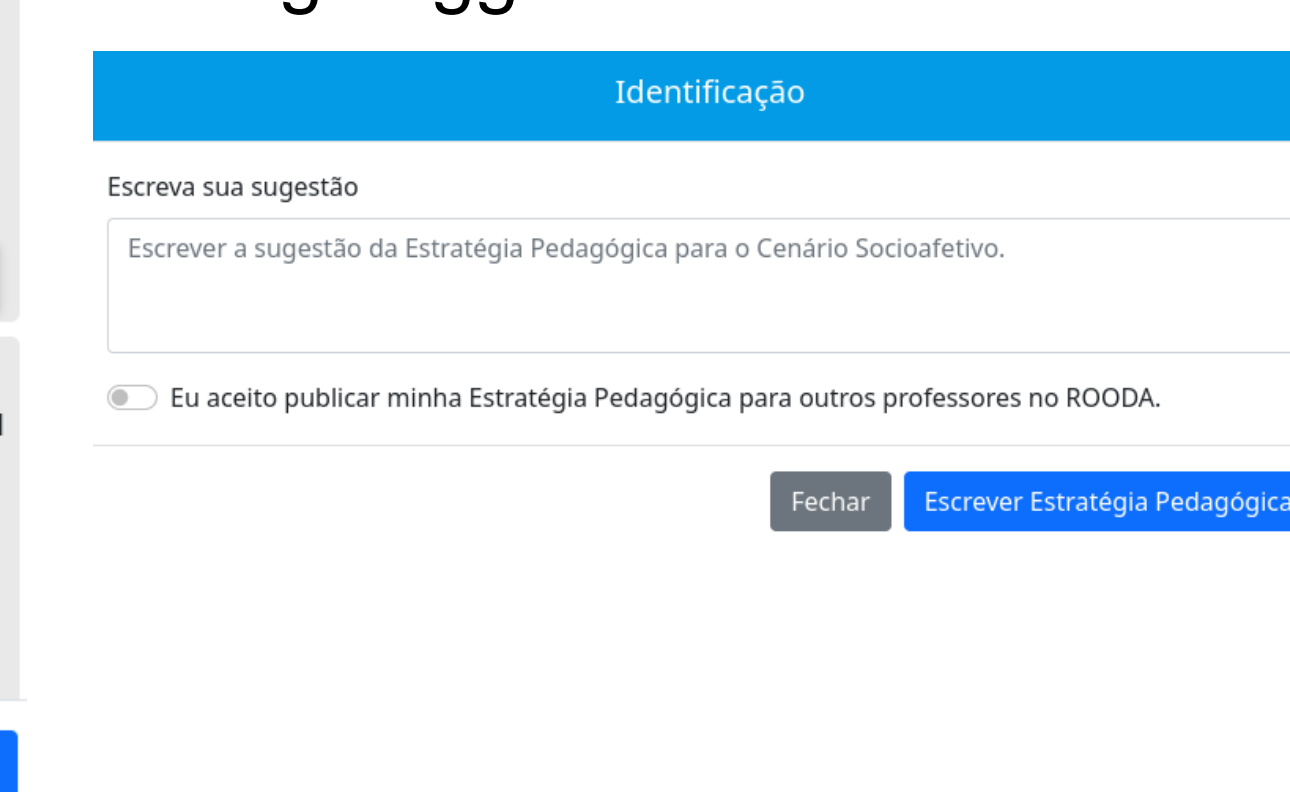
Figure 4 – Screen of recommended Pedagogical Strategies based on the Socio-affective Scenario: Dissatisfied and Absence and Collaboration.

Figure 5 – CNPq areas identification screen.

Figure 6 – Pedagogical Strategy writing suggestion screen.

Finally, the teacher can fill in the field, select the option "I agree to publish my Pedagogical Strategy for other teachers on VLE" or not and finish.

CONCLUSION

The importance of creating a resource in the VLE is related to the socio-affective information of their students, which the teacher can have visually and intervene pedagogically considering the needs and interests of their students. The Socio-affective Map is made up of 57 Socio-affective Scenarios and 342 Pedagogical Strategies.
As future work, the Socio-affective Map will be validated in subjects and extension courses.

ACKNOWLEDGEMENT

REFERENCE

Beck, K. et al. (2001). Manifesto for agile software development. Disponível em: http://agilemanifesto.org/.