UNIVERSITY OF MILAN

The University of Milan is one of the largest universities in Europe. It provides higher education in a complete range of disciplines, fostering high profile collaborations with the public and private sectors.

Challenge:

- Provide a deep understanding of complex human organs in large classrooms, with more than 100 students and relatively limited time (4 hours overall for Liver Anatomy).

Solution:

- Collaboration between academics and Area9 medical learning architects to develop a Liver Anatomy adaptive learning module.
- Replace 4 hours of professor-led lecturing with self-paced personalised e-learning using Area9 Rhapsode™, followed by teacher-led classroom interactions using analytics and insights from the Rhapsode platform.
- Final assessment of students’ actual competence levels.

Outcome:

- Reduction of the overall learning time, from 4 hours of professor-led lecturing to 2.5 hours of blended learning (less than 1 hour of adaptive learning and less than 2 hours of feedback and further learning in the classroom).
- The average time-to-competency for the adaptive module was 38.5 minutes.
- The average progress in the mastering of competencies was 98%, with 93.5% of the students reaching a complete mastery of the studied topic. These data were fully in line with what was subsequently tested via formative assessment.
More than 90% of students found the Rhapsode platform to be very or extremely helpful and were asking to extend this method to all their subjects and classes.

**ANSWER TO THE QUESTION:** HOW USEFUL DID THIS SYSTEM SEEM TO YOU FOR LEARNING THE MATERIALS PRESENTED IN THE MODULE?

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<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Extremely</td>
<td>39.2%</td>
</tr>
<tr>
<td>Quite</td>
<td>51%</td>
</tr>
<tr>
<td>Not very</td>
<td>9.8%</td>
</tr>
<tr>
<td>Not at all</td>
<td>0%</td>
</tr>
</tbody>
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“The students present in the classroom acquired much greater clarity on the topics addressed with respect to what is happening through normal face-to-face lessons.”

Maurizio Vertemati
Professor of Human Anatomy at the University of Milan

The University of Milan decided to extend the pilot to the creation of learning modules on all the main human organs, and to study the integration of Area9 technology in all their surgeon training programs.