

Online educational solutions for medical training in Internship and Social Service

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Introduction - Thoughts

Following the health emergency in 2020, Intersistemas undertook the task of creating educational digital content to cover the learning needs for interns and social service medical students through updated and recognized publications such as **MIP Competente and Exarmed**.

All content is structured with scientific, pedagogical, and technological foundations, using interactive and functional educative resources to enhance the student learning.

The challenge of competency-based education is to guide students to understand the interaction between the biology of disease and the social context of illness; individual and public health; human communication and medical technology and science; and clinical and community medicine.



Profiling & interview

Criteria

- Two in-depth interviews were conducted: one with medical interns and the other with social service students, who had previous context of the research.
- Two remote focus group sessions, lasting 45 to 60 minutes, were also held with participants who use different online platforms for their studies.
- A gender-neutral sample, consisted of students in their final two years of medical school.

Study objectives

- The study objectives were defined using the variables for each user profile.
- Participants were asked about the bibliography and tools for their study.
- Participants were asked about their choice of supporting materials or tools.
- It was explained that the collected information would be used to improve the interface and usability of the MIP C and EXARMED platforms.

Screeners

- Two sets of questions were prepared, focusing on the use of the MIP C platform for the Internship student group and EXARMED for the Social Service student group.
- Specific questions were asked about the materials offered by each platform for their respective year of study.

Closure

- Each participant was offered access to the platforms corresponding to their respective year of study.

Profiling & Interview- Focus Group



¡Bienvenido a este Focus Group!

Intersistemas agradece tu participación

¡Nos vemos jueves 29 de junio!



FOCUS GROUP

¡Bienvenido!

- ✓ Intersistemas agradece tu participación
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Pedagogical Model - Dreyfus y Dreyfus

Competency-Based Model

- The habitual use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and the community.
- Descriptors of people: Knowledge, skills, attitudes, and values.
- Competencies tend to be abstract, general, and difficult to assess.

Epstein RM, Hundert EM. Defining and assessing professional competence. JAMA. 2002 Jan 9;287(2):226-35.

Reliable Professional Activities (APROC)

- Allow for the evaluation of competence in action (performance).
- Involve knowing how to act in real-world situations and contexts, where people face problems and mobilize their internal resources: knowledge, skills, abilities, values, and experiences.
- Observable and measurable, both in the processes and in their results.

Performance levels

- Novice
- Intermediate
- Competent
- Proficient
- Expert

Methodology –Design Thinking (user centered design)



Empathize

The motivations and concerns of the students were observed in order to have a practical and functional study tool, with the necessary concepts that they will use during their Internship and Social Service period.



Define

The research findings were combined to identify the problems of online platforms and their different educational elements, updating all the information to know their study needs.



Ideate

Different solutions were proposed collaborating with medical editors, university coordinators, sales executives, programmers, and graphic designers in order to address the academic requirements and needs of the users.



Prototype

Graphic proposals were designed to provide a 360° solution focused on each group (Internship and Social Service): printed book, online platform and downloadable App.



Test

The solutions were implemented in medical universities during the 2023-2024 academic year. Usage reports are provided to the coordinators of each university.

MIPCO[®] competente

THE SOLUTION TO THE CHALLENGES OF INTERNSHIP



MIPC[®] competente

It is the tool for **accompanying** and developing skills for the undergraduate medical intern to improve clinical practice during their stay in hospital rotations, through the methodology based on **Reliable Professional Activities**.



Novice

Observation and demonstration. Requires direct supervision.

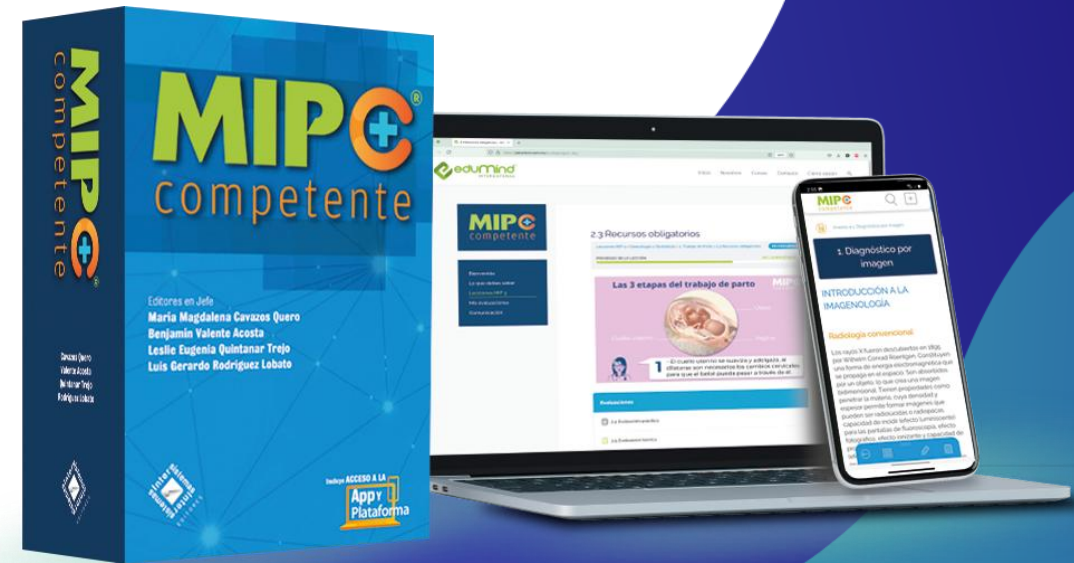
Intermediate

Demonstration and execution. Requires direct, indirect, or limited supervision.

Competent

Execute the action with reactive supervision.

Dreyfus & Dreyfus Model



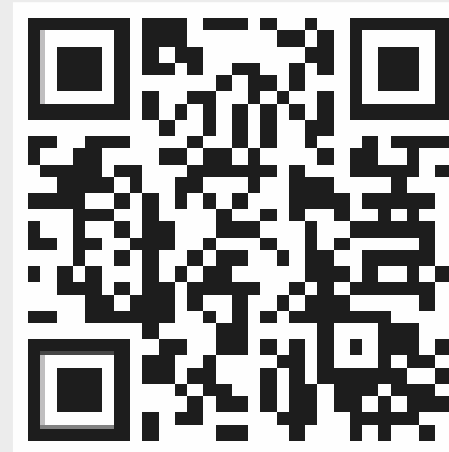
User Interface Design- MIP Competente

Platform



<http://bit.ly/3Z0jN50>

App



<https://bit.ly/4fKNC1A>

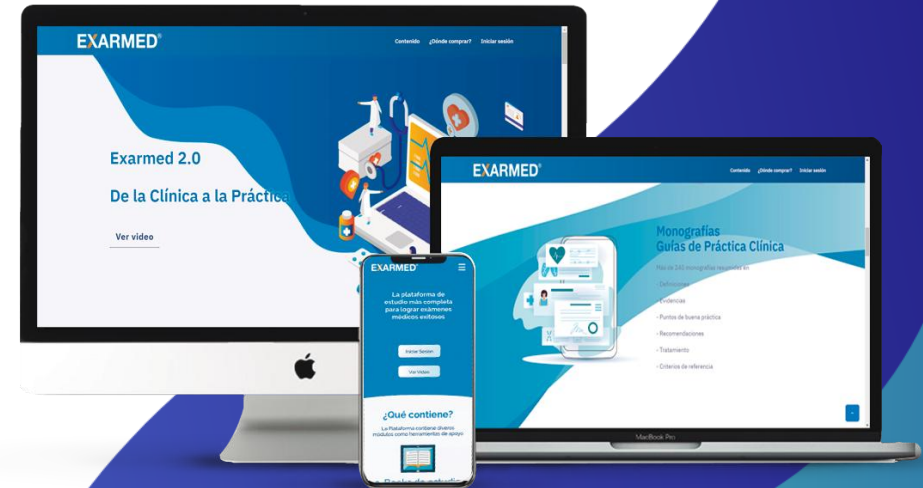
EXARMED[®]

FROM PRACTICE TO CLINIC



EXARMED®

It is the reference and support tool for the doctor in Social Service to go from the clinic to the practice, profiling the student in each competence and practicing autonomous exercise.



Competent

Execute the action with reactive supervision.

Proficient

Performs the action independently. Without supervision or distance. Feedback after the action.

Expert

Supervises and/or instructs other less experienced colleagues in the action.

Dreyfus & Dreyfus Model

User Interface Design- - EXARMED

Platform LMS



<https://bit.ly/3Zb7cgg>

App proposal



<https://bit.ly/3Z7cd9J>

Value proposition (Benefits for university & student)



Availability 24/7

Access to materials year-round without restrictions, *Off line* consulting



Multiplatform

Laptop, computer, mobile devices (website and app)



Continuous update

Written by the best specialist authors



Teaching aids

Infographics, videos, monographs, algorithms, clinical cases, interactive diagnostic challenges



Support

Implementation of administrator profile (backoffice)



Implementation & reports

Consulting for Universities, usage and performance reporting

Metrics (Source: backoffice MIP Competente / EXARMED)

MIP+
competente



- 11 registered universities
- 80 new App activations
- 8159 platform activations

EXARMED



- 8 registered universities
- 931 platform activations



How could the content be integrated into the bibliography and core tools for the Internship/Social Service?



How could the content be improved to make the student feel more satisfied with it as a study tool?



How could the content search be improved?



How could the study experience be improved compared to other platforms?



Which resource(s) are consider most valuable on the platforms?



Can the differences between the app and the platform be identified?



With what product or platform would MIP C/EXARMED be compared to?



What other educational resource(s) could be added to the platforms?

HOW MIGHT WE?