

Rethinking Theoretical Teaching in the Medical Degree: Reflections from a Sample of Students from the Complutense University of Madrid.

Repensar la Enseñanza Teórica en el Grado de Medicina: Reflexiones desde una Muestra de Estudiantes de la Universidad Complutense de Madrid.

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Summary: Introduction: The adaptation of teaching methods to new generations has sparked considerable debate, focused on aligning pedagogical strategies with current students' expectations and preferences. The aim of this study was to explore medical students' opinions on theoretical classes, identifying areas for improvement in teaching methodology and proposing strategies for the undergraduate curriculum. **Methods:** An online survey was conducted among medical students at the Complutense University of Madrid (academic year 2023/2024). **Results:** 47.2% of respondents were dissatisfied with the current class format, with 87.3% reporting frequent boredom or lack of engagement. A majority (76.2%) preferred a hybrid model of in-person classes and on-demand videos. Perceived advantages of online teaching included flexibility and continuity, while in-person classes were valued for social interaction. A significant proportion (94.3%) appreciated clinical case discussions, and 67.8% desired increased interactivity. Students noted that information overload, topic repetition, monotony, and lack of practical application hindered assimilation of key concepts and efficient time management for theory. **Conclusions:** Our findings underscore the need for modernization to enhance class interactivity, practical relevance, and asynchronous availability, aiming to improve academic performance and student satisfaction.

Keywords: teaching, in-person, online, medicine, theory, on-demand, interaction, format.

Abstract: Introducción: La adaptación de los métodos de enseñanza a las nuevas generaciones ha generado un debate considerable, centrado en alinear las estrategias pedagógicas con las expectativas y preferencias de los estudiantes actuales. El objetivo del presente estudio fue conocer la opinión de los alumnos de Medicina acerca de las clases teóricas, para identificar áreas de mejora en la metodología de enseñanza y proponer tácticas para el currículo del Grado. **Métodos:** Se realizó una encuesta online entre estudiantes del Grado en Medicina de la Universidad Complutense de Madrid (curso 2023/2024). **Resultados:** El 47,2% de los encuestados expresó insatisfacción con el formato actual de las clases, y un 87,3% reportó aburrimiento o desatención frecuentes. La mayoría (76,2%) prefirió un modelo mixto de clases presenciales y vídeos bajo demanda. Las ventajas percibidas de la enseñanza online incluían flexibilidad horaria y no perder el hilo, mientras que la presencial se valoraba por el contacto social. Un 94,3% apreciaba la discusión de casos clínicos, y un 67,8% deseaba mayor interactividad. Los alumnos señalaron que el exceso de información, la repetición de temas, monotonía y falta de aplicación práctica dificultaban la asimilación de conceptos clave y la gestión eficiente del tiempo dedicado a la teoría. **Conclusiones:** Estos resultados subrayan la necesidad de modernización para incrementar la interactividad, la relevancia práctica y la disponibilidad asincrónica de las clases, con el fin de potenciar el rendimiento académico y la satisfacción estudiantil.

Keywords: docencia, presencial, online, medicina, teoría, bajo demanda, interacción, formato.

1. Introduction

Digital technology is essential in the lives of the new generations (1). According to UNICEF, 94% of adolescents have a mobile phone with internet, starting to use it at 10.96 years of age (2). In the field of learning, digital natives have a wide range of sources and media at their disposal, and have selected those that are most useful or attractive for their daily consumption (3).

Regarding formal teaching, the most recent generations have experienced both in-person and online teaching due to the COVID-19 pandemic (4). Technology has transformed access to and interaction with information in the academic field, integrating learning platforms, applications, and multimedia resources. This allows for personalized teaching, but also generates challenges related to distraction, information reliability, and technological dependence (5-6). Furthermore, digital natives are not homogeneous in their relationship with technology, so simplifications should be avoided when analyzing them (7-8). It is therefore essential to understand their opinions to create a beneficial and synergistic academic context.

This study seeks to understand students' opinions on theoretical classes in the Bachelor's Degree in Medicine at the Complutense University of Madrid (UCM) in order to leverage digital tools and effectively connect with them, improving academic outcomes and teaching. To this end, a detailed survey was designed on the presence, format, and content of classes.

2. Methods

2.1. Study design

A cross-sectional survey was conducted at the UCM Faculty of Medicine between February and June 2024. The survey was reviewed and emailed to all students enrolled in the Medical Degree during the 2023/2024 academic year through the Vice-Rector's Office for Students.

2.2. Survey format

The survey was developed specifically by the authors for this study, based on their teaching experience. An anonymous online form using Google Forms was used, including the main objectives and characteristics of the study in the invitation email and the survey introduction. The complete questionnaire is available as Supplementary Material 1. The survey consisted of four sections: 1) General information (7 questions), 2) General opinion on the program (4 questions), 3) Format of the theoretical classes (23 questions), and 4) Content of the theoretical classes (7 questions).

In total, the survey included 41 questions, of which 40 were structured and 1 open-ended (age). Some questions allowed for additional responses via the "other" option. At the end of the form, two open-ended questions were included to gather suggestions on the content of the theoretical classes: "What would you add or remove from the theoretical content of the program?" and "Free comment." The survey allowed for skipping questions, going back, and exiting without the answers being recorded.

2.3. Data collection and analysis

Data were exported via Google Forms to an Excel spreadsheet. For structured questions, both raw responses and subgroups were reviewed when necessary to minimize misunderstandings. Responses to the "other" option were grouped into categories whenever possible. Open-ended responses were reviewed and organized into thematic blocks. Statistical analysis included a descriptive analysis, using percentages and frequencies for qualitative variables and means with standard deviation or median and range for quantitative variables. A comparative analysis was also performed by subgroups of responses to closed questions based on sex (male/female) and academic year. For the latter, students were divided into basic courses (first and second) and clinical courses (third through sixth). Data were analyzed using SPSS v27 for Windows, applying the Chi-square test and considering a level of statistical significance of $p \leq 0.05$.

2.4. General organization of the Degree in Medicine at the Complutense University of Madrid

To summarize the results, general data on the teaching organization of the Medical Degree and the theoretical classes throughout the program were summarized. This information is available in Supplementary Material.

3. Results

3.1. Participation

In the 2023/2024 academic year, a total of 1,836 students were enrolled in the Bachelor's Degree in Medicine at the UCM (9). Of these, 214 participated in the survey (11.7%), which represents a margin of error of 6.3% with a 95% confidence level. The partial non-response rate was minimal. The main questions received almost a complete response, with between 0 and 2 omissions for most items. The few cases with slightly higher figures were concentrated in questions linked to previous ones, which some students interpreted as not applicable. Overall, the magnitude of this bias can be considered very low.

3.2. Demographic data

The general data of the respondents are presented in Table 1.

Table 1. General data of the participants.

Characteristics (N ^a)		n (% valid)
Sex (214)	Women	149 (69.6%)
	Male	63 (29.4%)
	Non-binary	1 (0.5%)
	I prefer not to say it	1 (0.5%)
Age (212)	Median (range)	21 (18-54)
	Mean (SD ^b)	21 (5)
	18-23 years old	173 (80.8%)
Work in addition to studying (214)	No	171 (79.9%)
	Yes	43 (20.1%)
I don't work but I would like to be able to (171)	Not especially	105 (61.4%)
	Yes	66 (38.6%)
Current course (214)	First	57 (26.6%)
	Second	34 (15.9%)
	Third	45 (21%)
	Room	22 (10.3%)
	Fifth	22 (10.3%)
	Sixth	34 (15.9%)
Pending subjects (213)	No	167 (78.4%)
	Yes	46 (21.6%)
How many pending subjects (45)	1	19 (42.2%)
	2	8 (17.8%)
	3	7 (15.6%)
	4 or more	11 (24.4%)

^a N: number of participants who answered the question; ^b SD: standard deviation

3.3. General opinion of the career

6.5% of students stated they regretted choosing Medicine, citing stress (50%), unmet expectations, the difficulty of the program, and a perceived disparity between effort and reward as the main reasons. Furthermore, 50.9% indicated they were less enthusiastic than at the beginning of their studies, with stress being the main reason (34.2%), followed by the teaching method (28.1%), lack of free time (20.2%), subject content (7.9%), and the difficulty of the degree (7.9%).

3.4. Opinion on the theoretical classes

37.9% of students declared themselves somewhat satisfied with the lectures, 9.3% were not at all satisfied, and 36% were average/fairly satisfied. 15% and 1.9% of respondents declared themselves fairly and very satisfied.

During lectures, 76.6% of students experienced frequent time wasting, and 87.3% reported frequent boredom or inattention. The main reasons were long lecture duration and the fact that lectures were too short (55/189, 29.1%), the lecture format (PowerPoint presentations) (55/189, 29.1%), the large number of lectures in succession (21/189, 11.1%), the lecture content (12/189, 6.3%), or the length of lectures alone (4/189, 2.1%). A significant number of students indicated that the lecture style, rather than the format, was what caused them boredom and inattention, specifically the monotony of the explanations (27/189, 14.3%). They also claimed that they were also affected by fatigue from the number of consecutive theoretical and practical classes, that breaks between classes were not adequately respected, and that some practical sessions consisted of predominantly theoretical seminars.

3.4.1 The format of the theoretical classes

The responses related to the format of the theoretical classes are presented in Table 2.

Table 2. The format of the theoretical classes.

Question (N ^a)	Answer	n (% valid)
Duration should be reduced (214)	No Yes	123 (57.5%) 91 (42.5%)
How long should it last (207)	25-30 minutes 30-45 minutes 45-60 minutes More than 60 minutes	9 (4.3%) 81 (39.1%) 117 (56.5%) 0 (0%)
How many in a row (211)	1-2 3-4 5-6 7-8	74 (35.1%) 134 (63.6%) 3 (1.4%) 0 (0%)
With PowerPoint or on a whiteboard (212)	PowerPoint Board I don't care Others	83 (39.2%) 54 (25.4%) 47 (22.2%) 28 (13.2%)

^aN: number of participants who answered the question

It is worth noting that among the 28 students who answered "other" to the question about using PowerPoint or a whiteboard, 10 suggested using both a whiteboard and PowerPoint depending on the subject (or in the same class), 4 highlighted the need for more participatory or interactive classes, and 2 mentioned new technologies or a digital whiteboard.

3.4.2 Preferences regarding in-person and online teaching

Figure 1 presents a summary of the results to the questions related to this and the following sections.

Figure 1. In-person and online theoretical classes. Opinions of students from the Bachelor's Degree in Medicine at the Complutense University of Madrid.



Infographic created with free content from Canva (<https://www.canva.com>).

76.5% of students stated they could learn the theoretical content remotely. 43.4% preferred live online classes instead of in-person classes, and 94.8% supported uploading recorded classes to the virtual campus. If classes could be viewed on demand, 7.5% of students stated they would not attend in-person classes, and 3.6% would attend very rarely. 31.9% indicated they would attend some classes, 35.2% almost all, and 11.7% all.

The perceived advantages of online teaching were primarily flexible scheduling and not losing track of the class (38.8% each), followed by saving time to class (20.6%). The biggest disadvantage of online classes was not seeing classmates (62.7%).

Regarding in-person teaching, 85.4% of students said they liked it, and 14.6% said they did not particularly like it. Regarding the best aspect of in-person teaching, 72.6% said it was seeing their classmates, 11.3% said it was learning more or better, and 10.4% said it was spending time away from home. Among the "other" aspects, three students mentioned contact with the teacher as an advantage of in-person teaching. Among the disadvantages of in-person teaching, they highlighted the feeling of wasting time (34.1%), the commute to and from class (26.2%), the lack of flexible scheduling (14.5%), and boredom (13.6%). The majority of students surveyed took between 20 and 40 minutes to get to class (33.3%), followed by 40 and 60 minutes (29.1%), 5 and 20 minutes (21.6%), and more than 60 minutes (16%).

Finally, when asked about the ideal class format, 76.2% preferred a hybrid model (in-person and on-demand videos), 8.9% opted for in-person instruction, another 8.9% for on-demand instruction, and 4.2% for real-time online classes.

3.4.3. Socialization and free time

Data on socialization and preferences during leisure time are presented in Table 3.

Table 3. Socialization and free time.

Questions (N ^a)	Answer	n (% valid)
You see classmates outside of class (213)	Frequently (several v ^b / week) Sometimes (1 v / week) Not much (2-3 v / month) Little (1 v / month) Generally not	60 (28.2%) 55 (25.8%) 46 (21.6%) 24 (11.3%) 28 (13.1%)
If you take online classes, you would still see classmates (183)	Yes, same frequency We would see each other less	55 (30%) 128 (70%)
If you take online classes, you would have more free time (211)	Not especially Yes	50 (23.7%) 161 (76.3%)
Free time preferences (171)	Other hobbies Study more See friends / family Rest Medical activities Travel All of the above Others	73 (42.7%) 37 (21.6%) 19 (11.1%) 12 (7%) 8 (4.7%) 4 (2.3%) 2 (1.2%) 16 (9.4%)

^aN: number of participants who answered the question

^bv: times

3.4.4. Content of the theoretical classes

Seventy-three percent of respondents believed the theoretical course load should be reduced and the practical part of the program increased. Furthermore, 64.5% preferred to reduce the theoretical information taught in lectures, focusing on more general information. A further 94.3% stated that they liked the presentation of clinical cases in lectures. Less than 50% of students would like to increase the amount of medical humanities or research taught during their degree (25.5% and 43.1%, respectively).

48.1% said they enjoyed interacting and participating in class, and 67.8% would prefer classes to be more interactive.

3.5 Subgroup analysis

3.5.1. According to the academic year

Dividing the students into basic courses (first and second) and clinical courses (third and above), significant differences were observed in some of the responses. Satisfaction with in-person classes was low in both groups: only 19.8% of first and second-year students, and 14.6% of third to sixth-year students, declared themselves fairly or very satisfied. In contrast, the proportion of students who were not very or not at all satisfied was higher in clinical courses (54.5% vs. 37.3%; p=0.046). Furthermore, clinical course students more frequently reported a feeling of wasted time (85.4% vs. 65.6%; p<0.001), greater support for reducing class length (52.8% vs. 28.6%; p<0.001), and greater demand for eliminating excessive information (83.3% vs. 56.2%; p<0.001). They were also less likely to say they like attending classes in person (81.1% vs. 91.2%; p=0.039).

3.5.2. According to sex

In the comparative analysis, women valued face-to-face attendance more (89.2% vs. 77.8%, p=0.030) and highlighted the saving in commuting time as an advantage of online teaching (26.1% vs. 10%, p=0.021), while men more frequently pointed out flexible hours (49% vs. 34.5%, p=0.021) and showed greater interest in increasing research training (67.3% vs. 45.8%, p=0.010).

3.6. Open questions

Regarding what content they would add or remove from the theoretical classes (93 responses), the most frequent responses were the following:

1) Too much information in each class: The majority of students (58/93, 62.4%) mentioned that the theoretical load is too extensive, with an excessive focus on rare diseases, theory of basic subjects

without clear practical orientation, and very specific details that they do not consider relevant to their future professional practice. This makes it difficult to assimilate key concepts. As some participants expressed: “*Very rare diseases that are not seen in clinical practice should not be taught in such depth*” or “*I would reduce the amount and time of theoretical classes: I think too much information is given, which instead of increasing our knowledge, decreases the level of retention of the most relevant aspects .*”

2) Repetition of content across different subjects: 14% (13/93) of participants indicated that certain topics are repeated across different subjects throughout their degree, creating an unnecessary theoretical burden that could be optimized. “*I would avoid repeating the same topics across multiple subjects. We often see diseases or irrelevant concepts in up to six different subjects ,*” noted one student. Another added: “*Many subjects repeat syllabus, sometimes contradicting each other. It would be great if professors coordinated this approach .*”

3) Greater interactivity in class: 16% (15/93) highlighted the need to make classes more dynamic through tools such as *Kahoot* (interactive quizzes), *role-playing* , clinical cases, or group discussions. They also suggested an approach similar to that of the MIR academy to better consolidate essential concepts. In the students' words: “*They should stop being lectures and become more of an informal chat where the student feels comfortable, with the freedom to stop and ask questions*” or “*I would make classes more student-friendly, like those at the MIR academy, which I have found to be more useful for studying than the degree classes .*”

Students emphasized that reducing the theoretical load would allow them to focus more on practice, review key points, have more time for independent study, and balance other personal and academic activities. Some comments illustrate this: “*We need more free time for independent study of the theoretical content and for rest*” or “*I would invest that extra time in reinforcing basic concepts, reviewing clinical cases, and seeing how the same disease presents in different contexts...*”

In the general comments (33 responses), the importance of increasing interactivity and the practical application of content was again highlighted, as well as facilitating study through more accessible formats. For example: “*We should try to have professors explain the lecture and not read the slides because it shifts the student's attention too much*” or “[*It would be useful to include] clinical cases at the end of each topic, or to upload them to Moodle so we can solve them .*” Furthermore, several students pointed out the need for teaching arrangements to take into account their personal lives and external responsibilities, an aspect that could be addressed with more flexible formats or recorded classes. As one student commented: “*Students who have sick relatives cannot dedicate themselves to studying with the same quality as under normal conditions. It would be very helpful if the option of balancing attending all classes with each individual's personal homework could be facilitated through online teaching.*” Another added: “*I'm aware that this—I work part-time—significantly reduces my chances of getting good grades compared to my classmates... I think teachers often fail to identify cases like mine and mistakenly assume that I don't go to class because I don't want to or don't show interest.*” As one student summed up, “*I hope our lives and our right to free time are taken into account.*”

4. Discussion

4.1. New generations and digital learning

Several studies have shown that the technological revolution of recent decades has significantly influenced the way young people learn. According to a recent report by the Open University of Catalonia (UOC), the human attention span has decreased from 12 to 8.25 seconds (10) . However, evidence supporting this shift in learning is limited, and there are inconsistencies and contradictions in the literature about the impact of the digital environment on memory, attention, and social relationships, which requires further analysis (11-12).

The digital world has provided useful tools for teachers, although they present both advantages and disadvantages. Among the advantages, they facilitate the achievement of learning objectives and the production and access to teaching. However, they decrease teacher-student interaction, social contact is lost, and creativity is limited (13-14). This last disadvantage has been questioned by other

authors, who affirm that the digital environment can foster creativity and the development of skills instead of the simple memorization associated with the traditional lecture model (15).

4.2. Students' perceptions of face-to-face and online teaching

The pandemic has digitalized teaching, allowing us to assess its impact on young people. A recent study indicates that 77.7% of Spaniards prefer face-to-face teaching (16). Furthermore, 61.3% of adolescents rated online classes as a "regular" or "poor" experience (2). On the other hand, 57% of Generation Z members prefer face-to-face activities and 30% prefer learning with a teacher who directs them, compared to 47% and 25% of *millennials*, respectively (10).

In the UCM Medicine Degree program, more than 90% of students wanted recorded lectures, although less than half would trade in-person classes for live online classes. Attendance would not decrease with recorded classes, but it would make students more selective with their schedule. 76.2% preferred a hybrid in-person-online model. Social interaction was a key factor in positively evaluating in-person attendance, and the most highly valued aspects of online teaching were the greater availability of time and the ease of keeping up with the lectures.

Previous studies have shown that flexible scheduling improves inclusive education, especially in contexts with widespread internet access, facilitating work-life balance (17,18). In our survey, students emphasized the need for more free time for personal activities, obligations, independent study, work, or caring for dependents. Furthermore, distance learning also improves accessibility. A report from the Ministry of Universities highlights that virtual learning allows for the inclusion of people with reduced mobility or who require more frequent revisions of materials (19).

However, online teaching is only effective if students have access to and technological skills (20-21). Furthermore, some students cautioned that the use of on-demand videos should not increase the total time spent in each class, as occurs with the flipped approach without restructuring the schedule, as this would reduce their free time.

4.3. Attention and structure of classes

87.3% of students reported boredom or frequent distraction in face-to-face classes. Although they attributed this to the length and number of consecutive sessions, they considered a time of 45-60 minutes per class adequate. In this regard, some researchers have stated that sustained attention can only be maintained for 15-20 minutes (22). To address this obstacle, one can propose restructuring theoretical classes into two 20-minute segments, interspersed with a 10-minute interval for rest or interactive activities. However, other authors caution about the lack of clear evidence regarding when exactly attention span decreases (23). Regarding class load, 98.6% of students believed that a maximum of four consecutive classes would be ideal, but the current medical curriculum has included up to six consecutive classes in recent years.

4.4. Teaching methods and interactivity

Students' open-ended responses indicated that monotony, excessive detail, and lack of interaction impair attention. Although PowerPoint is the preferred format, they suggested more dynamic methodologies, such as key questions, clinical cases, *quizzes*, or *role-playing*. Ninety-four percent valued the use of clinical cases in class, and 67.8% desired greater interactivity.

Some authors claim that digital natives have generated a particular scale of values and language, based on rapid information, interaction and visual learning, and teachers must adapt to find a common language (24). However, other researchers have refuted the terms digital native and digital immigrant, considering that they generate a false dichotomy between generations, an erroneous assumption that young people have digital autonomy and a message of abandonment of traditional teaching methods without evidence to support it (25,26). Furthermore, young people do not always possess academic digital skills and need guidance in the critical use of technology (27).

In our study, 47.2% of students were dissatisfied with the current lecture format, 76.6% felt they were wasting their time, and 87.3% were frequently bored or distracted. According to our results,

medical education should integrate more digital tools, interactive learning, and formats that combine information with entertainment, as the current generation seems to demand (10, 28).

4.5. Theoretical content

Seventy-three percent of students felt that theoretical content should be reduced in favor of practical content, and 64.5% called for a focus on general concepts rather than excessive detail. They noted that the excess of information makes it difficult to summarize and study later, and that content is repeated between subjects. Furthermore, "practical" hours sometimes consist of theoretical seminars.

Many students did not see the practical application of certain content, both in core and specific subjects. For example, less than 50% considered it relevant to increase training in topics related to scientific research, such as biostatistics, despite its great importance in medicine. To improve the connection with medical practice, we suggest integrating this knowledge into clinical contexts and/or demonstrating its usefulness in class. On the other hand, only 25% of participants supported expanding medical humanities, although the literature highlights its essential role in rehumanizing medicine and promoting a more comprehensive and empathetic approach to patients in a highly technological society (29).

4.6. Subgroup analysis

For this analysis, students were divided into basic courses (1st and 2nd) and clinical courses (3rd to 6th). Satisfaction with in-person classes was observed to be low at all levels, but was rated even more negatively in clinical courses. As students progressed through their studies, the perception of time wasted and the demand to reduce both the length and information overload of lectures increased. This worsening could be due to the fact that, at more advanced stages, students expected teaching more closely tied to clinical practice and found the repetition of theoretical content or its presentation in slow, dynamic formats less useful.

The analysis by sex showed that women expressed a greater preference for attending university in person, while men expressed greater interest in furthering their research training. However, no significant differences were observed in the other variables explored, so these findings should be interpreted with caution and may reflect specific trends rather than established patterns.

4.7. Limitations and future prospects

This study has some limitations. Although the estimated sampling error was 6.3%, the response rate did not exceed 12%, which may affect representativeness and promote self-selection bias. Furthermore, since it was limited to a single institution, the generalizability of the results is limited. The questionnaire did not undergo a formal validation process, although it was reviewed by the Vice-Rector's Office for Students before dissemination. The qualitative analysis derived from the two open-ended questions was partial and did not include triangulation with other sources, as this was not part of the study design. Finally, despite the anonymous nature of the survey, the possibility of social desirability bias, inherent in this type of study based on self-reporting, must be considered.

Beyond these limitations, future work could strengthen external validity through multicenter designs that include other medical schools, as well as strategies that increase response rates, such as the use of successive reminders or incentives. It would also be useful to apply more systematic qualitative methodologies (interviews, focus groups, data triangulation), which could complement the findings and offer a more complete view of student perceptions.

5. Conclusions

- Our results indicate that, although medical students value in-person learning, satisfaction with lectures was low overall and even lower in more advanced courses.
- The majority of respondents expressed interest in having recorded classes in a more dynamic format with clinical cases and interactivity.

- The main obstacles identified in relation to theoretical classes include excessive detailed information, monotony, lack of practical application, and repetition of content between subjects. These factors affect comprehension, motivation, and study efficiency.
- Therefore, implementing strategies that promote interactivity, practical relevance, and asynchronous access to lectures could contribute to improving the educational experience. A more dynamic and accessible approach would enhance learning and could potentially translate into greater student satisfaction and improved academic performance.

6. Key points

1. **Students prefer hybrid models and interactive formats:** Medical students value the flexibility of recorded lectures, but show a clear preference for in-person teaching when it is interactive and includes discussion of clinical cases.
2. **Information overload hinders learning:** Too much theoretical content and repetition across subjects limit students' ability to synthesize knowledge and apply it correctly.
3. **Implementing specific changes can improve satisfaction and performance:** Developing shorter, more interactive sessions and focusing on the practical applicability of theoretical content could increase motivation and academic efficiency.

Supplementary material: Annex 1, Questionnaire in Spanish: Annex 2, UCM Organization.

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