THE EUROPEAN SOCIETY OF MEDICINE
Medical Research Archives, Volume 14 Issue 1

RESEARCH ARTICLE

# Teacher Training and Innovative Curriculum at the Faculty of Medical Sciences of the National University of Asunción: Strengths and Challenges of a Transformative Process

**Sandra Ocampos Benedetti [1]; Bernardita Stark [2]; María del Rocío Robledo [3]**

[1] Facultad de Ciencias Médicas. Universidad Nacional de Asunción, Paraguay
socampos@fcmuna.edu.py
http://orcid.org/000-0002-1763-2245
[2] Universidad María Auxiliadora, Paraguay
bernarditastark@gmail.com
http://orcid.org/0000-0001-8778-9574
[3] Centro para el Desarrollo de la Competitividad, Paraguay
rocio.robledo.y@gmail.com
http://orcid.org/0000-0002-5272-0910

OPEN ACCESS

**PUBLISHED**
31 January 2026

**CITATION**
Benedetti, SO., Stark, B., et al., 2026. Teacher Training and Innovative Curriculum at the Faculty of Medical Sciences of the National University of Asunción: Strengths and Challenges of a Transformative Process. Medical Research Archives, [online] 14(1).



**DOI**

**ISSN**
2375-1924

## ABSTRACT

The Faculty of Medical Sciences of the National University of Asunción undertook a significant challenge by implementing a competency-based medical curriculum through the Curricular Innovation Project and the development of the 2015 Curriculum. This initiative aimed to transform educational practices, institutional culture, and the role of teachers, supported by a comprehensive teacher training strategy and strong academic governance.

This study analyses the process of teacher training and development that enabled the Faculty of Medical Sciences of the National University of Asunción to implement the competency-based curriculum. It identifies key milestones, training models, results, strengths, obstacles, and challenges, aligning them with international standards of medical education.

The researchers utilized qualitative documentary analysis, employing thematic analysis with both inductive and deductive approaches. They examined institutional documentation from 2012 to 2023, including reports from the Department of Teaching Development, teaching profiles, minutes from the PIC, curricular evaluations, teacher training programs, scientific articles, conference reports, and regulatory documents. For comparative analysis, researchers incorporated international references from organizations such as the World Federation of Medical Education, the Royal College of Physicians and Surgeons of Canada competency model, and the Accreditation Council for Graduate Medical Education process.

A complex, participatory curricular governance structure, led by academic commissions and the Department of Teaching Development, guided the process. Continuous professional development for teachers progressed through programs, specializations, workshops, and international consultancy, mainly focusing on authentic assessment, use of technology, curricular integration, and active methodologies. The COVID-19 pandemic accelerated digital transformation, enhancing technological literacy and pedagogical support across the Faculty. However, structural challenges persisted, including cultural resistance, the lack of a formal teaching career, care overload, and varied appropriation of the new model across departments.

In summary, the article argues that the Faculty achieved national and regional distinction in competency-based medical education by establishing strong academic leadership, sustained teacher training, and effective curriculum governance. However, it emphasizes that ensuring the sustainability of this transformative process requires overcoming persistent challenges in policy, teacher career pathways, and the integration of research.

## Introduction

In the 21st century, medical education is undergoing profound transformations due to the growing complexity of health systems, digitalization, and the need for professionals equipped to meet diverse health demands. In this context, the shift to a competency-based medical curriculum (CMBC) has become the international standard, advocated by organizations such as the World Federation of Medical Education (WFME)[1], Royal College of Physicians and Surgeons of Canada (CanMEDS)[2], Accreditation Council for Graduate Medical Education (ACGME)[3], and the World Health Organization (WHO)[4].

This model emphasizes the progressive demonstration of observable competencies over merely transmitting content. It integrates knowledge, skills, and values while incorporating advanced constructs such as milestones, Reliable Professional Activities (EPAs, for its Spanish acronym)[5], programmatic evaluation, and progressive supervised practice. These vital elements rely on robust pedagogical foundations, including constructive alignment, as outlined by Biggs and Tang[6], and the performance-based approach developed by Harden[7] and Epstein[8].

Despite the growing international consensus on competency-based medical education, there is limited empirical evidence from public universities in Latin America on how teacher training and development processes enable sustainable curricular transformation. Published reports generally address curriculum design or learning outcomes, leaving the pedagogical, organizational, and cultural aspects of teacher education underexplored, particularly in resource-limited contexts.

In 2012, the Faculty of Medical Sciences at the National University of Asunción launched the Curricular Innovation Project (PIC)[9]. By 2015, it had implemented Paraguay's first comprehensive competency-based reform, transforming teaching, assessment, and institutional culture.

A crucial milestone in this journey was the establishment of the Department of Teaching Development (DDD)[10,11] in 2013. This unit took responsibility for teacher training, providing pedagogical support and guidance for curriculum implementation. The DDD became the backbone of this process, remaining essential amid administrative changes and integrating diplomas, specializations, international consultancies[12], and continuous training programs over the course of a decade.

Additionally, the Faculty introduced the Competency-Based Teaching Profile[13] in 2015, which set institutional standards for teaching performance and aligned them with the profiles of the entry and intermediate stages of medical education[9,14].

Added to this was the official approval of curricular redesign as a process of "incorporated training and appropriation"[9], granting academic legitimacy to teacher development.

Finally, the implementation of the model was strengthened through the Integrative Modules (MIN), teacher training workshops, the Master's Degree in Higher Medical Teaching[15], and the internal and external evaluation processes developed in the 2015 and 2023 period[16,17]. The COVID-19 pandemic accelerated teachers' digital literacy, forcing the institution to reconfigure its practices, strengthening resilience and pedagogical innovation[18].

In this sense, the experience of the Faculty of Medical Sciences of the National University of Asunción constitutes a valuable case study, since it illustrates how a long-term, institutionally integrated teacher development strategy can sustain a profound curricular change, beyond isolated training initiatives or externally driven reforms.

This article analyzes in depth the teacher-training process that enabled the implementation of the competency-based curriculum at the Faculty of Medical Sciences of the National University of Asunción, articulating documentary evidence, an international comparative analysis, and a historical-critical reconstruction of the institutional process.

## Methods

A qualitative, documentary, and analytical study was carried out, following hermeneutical approaches and thematic analysis, to reconstruct the historical-pedagogical process of teacher training at the Faculty of Medical Sciences of the National University of Asunción (Faculty of Medical Sciences of the National University of Asunción) during the period 2012–2023.

### STUDY DESIGN AND SCOPE

The study adopted an intrinsic case-study design, with the Faculty considered a critical case of competency-based medical education (CBME) implementation in a public Latin American institution. The unit of analysis was the institutional process of teacher development associated with the 2015 competency-based curriculum.

### DOCUMENT SELECTION AND INCLUSION CRITERIA

A documentary corpus was assembled using purposive sampling of institutional and academic sources directly related to curriculum innovation and teacher training. Documents were included if they:

- Were produced between 2012 and 2023.
- Originated from formal institutional bodies (Faculty governance, DDD, CCP, PIC commissions) or indexed/peer-reviewed academic outputs.
- Explicitly addressed at least one of the following: curricular governance, teacher professionalization, implementation of integrative modules (MIN), assessment reforms, or ICT-mediated teaching.

### DOCUMENTARY SOURCES

The revised corpus included:

- Reports from the Department of Teaching Development (DDD)[10,11,19,20]
- Competency-Based Teaching Profile[13]
- Minutes of the Nuclear Commission and local commissions of the Curricular Innovation Project (PIC)[9,15]

- Faculty of Medical Sciences of the National University of Asunción Institutional Academic Documentation[14]
- Implementation and evaluation documents for the Integrative Modules (MIN I–IV) [12,21]
- 2015 Mesh Internal Evaluation Reports[16,17,22]
- Institutional scientific publications, including editorials, articles, and reports in Anales FCM, Integración y Conocimiento, and papers presented at Ibero-American Conferences [16–18,23–25]
- ICT Teacher Training Documents, Especially During the COVID-19 Pandemic [18,25,26]
- Academic programs related to the Master's Degree in Higher Medical Teaching (MDMS) [27,28]

COMPARATIVE AND THEORETICAL REFERENCES

For comparative analysis, key international frameworks were selected through theoretical sampling based on their global influence on CBME and explicit focus on teacher development and assessment: WFME standards, CanMEDS, ACGME milestones, WHO documents on transforming health professions education, and core texts on EPAs, constructive alignment, spiral curriculum, and performance assessment. These sources were not treated as data about the case but as analytical lenses to interpret and contrast the Faculty's trajectory:

- WFME Global Standards for Quality Improvement in Basic Medical Education[4]
- CanMEDS 2015 Physician Competency Framework[2]
- ACGME Milestones Guidebook for Residents and Fellows[1]
- WHO documents on the educational transformation of health professionals[5]
- Academic literature on EPAs[29], constructive alignment[30], spiral curriculum[7], and performance evaluation in medical education[6].

ANALYTICAL STRATEGY

Documents were imported into a qualitative analysis matrix and subjected to open coding, followed by axial coding. Initial open codes emerged inductively from close reading (for example: "curricular governance," "teacher identity," "authentic assessment," "digital transformation," "structural obstacles"). These codes were then related to deductively defined categories derived from WFME domains, CanMEDS roles, and the literature on CBME implementation (e.g., "faculty development," "programmatic assessment," "curriculum integration," "sustainability of change").

The triangulation of sources made it possible to contrast:

- Institutional evidence,
- Internal publications,
- Regulations and resolutions,
- International standards, and
- Ibero-American Comparative Experiences

This approach guaranteed hermeneutical validity, internal coherence, and conceptual saturation.
Triangulation involved:

- Comparing institutional reports with internal scientific publications and regulatory documents.
- Contrasting local evidence with international frameworks and Ibero-American experiences reported in the literature.
- Analytical memos were used to document interpretive decisions and to build a historical-critical reconstruction of four main stages of teacher training (2013–2015, 2015–2016, 2016–2019, 2020–2023).
- Hermeneutical validity was sought through internal coherence, saturation of categories, and the convergence of multiple documentary sources around key interpretations.

ETHICAL CONSIDERATIONS

The study used publicly available and institutional documents without directly involving human subjects. No sensitive personal data was analyzed, and all institutional materials were handled according to Faculty regulations.

## Results

CURRICULUM GOVERNANCE: ARCHITECTURE OF EDUCATIONAL CHANGE

The Faculty of Medical Sciences of the National University of Asunción implemented a competency-based curriculum grounded in sound academic governance, articulated through the institutionally approved Curricular Innovation Project (PIC) [9] in 2012. A Core Commission organized the PIC and took responsibility for the curriculum's conceptual design. This core body received support from seven local commissions (Admission, Basic, Clinical, Teaching, MSW, Evaluation, and Quality) and three auxiliary commissions, facilitating fluid communication among design, implementation, and feedback.

The governance structure produced five key profiles:

- Admission profile
- Intermediate Graduate Profile
- Final Graduation Profile
- Teaching profile
- Institutional profile of MSW

This process institutionalized teacher training as a structural dimension of change.
The institutional experience was documented at the Ibero-American Conference on Training in Health Sciences[31], which enabled comparisons of the Paraguayan process with experiences in Chile, Argentina, Colombia, and Spain, thereby validating their strategies and findings.

THE STRATEGIC ROLE OF THE DEPARTMENT OF TEACHING DEVELOPMENT

The DDD, created in 2013, became the operational axis of the curricular change, together with the Permanent Curricular Commission (CCP)[9]. This structure assumed leadership of the Teaching Development Program (PRODD)[11], coordinated courses, workshops, and international consultancies, and directly supported chairs in the design and implementation of competency-based learning activities.

Institutional reports[10,12,19] show a sustained growth in professionalization: more than 300 teachers participated

in training programs between 2013 and 2023, including the cycles of:

- Active methodologies
- Authentic Evaluation
- ECOE-OSCE
- Clinical simulation
- Educational ICT
- Curriculum Design
- Elaboration of learning outcomes
- Construction alignment
- Analytical rubrics
- Effective feedback

Likewise, the Master's Degree in Higher Medical Teaching strengthened the advanced training of leading teachers[27,28].

HISTORICAL PROCESS OF TEACHER TRAINING (2013-2023)

**Stage 1 (2013–2015): conceptual installation**

In this stage, the Faculty developed the Competency-Based Teacher Profile[13], carried out the first systematic training, and consolidated the pedagogical language of the approach. Institutional reports show that this phase allowed teachers to understand the foundations of the competency model and to begin questioning traditional practices[10,11].

**Stage 2 (2015–2016): Structural consolidation**

The approval of Resolution CD No. 12/2016[9] reinforced the institutionalization of the process. PRODD became the axis of continuous training, and the Faculty initiated pilot integration experiences and authentic evaluation workshops, both of which were fundamental to progress towards the MIN.

**Stage 3 (2016–2019): expansion and internationalization**

Dr. Pilar Ruiz de Gauna's arrival marked this period, whose advice allowed the planning and execution of the Integrative Modules (MIN I–IV)[12,32]. This phase coincides with the expansion of the MDMS and the strengthening of interdisciplinary work.

The reports show a significant increase in training activities and improvements in the quality of assessment instruments, aligned with international standards[23,24].

**Stage 4 (2020–2023): digital shift and pedagogical resilience**

The COVID-19 pandemic forced the immediate virtualization of teaching, leading to accelerated digital literacy, deeper use of virtual platforms, and a redesign of training activities[18,25,33].

The Faculty of Medical Sciences of the National University of Asunción stood out for sustaining learning in this context, integrating psychological support tutoring during the pandemic[25], digital microlearning, and remote assessment.

IMPLEMENTATION OF THE INTEGRATOR MODULES

The Implementation Module (MIN, for its Spanish acronym) represented the most structural innovation in the curriculum. Technical documents and internal evaluations describe the MIN as integrating spaces that enable complex performances, articulate basic and clinical sciences, and assess transversal competencies in communication, clinical reasoning, ethics, professionalism, and university social responsibility [17,32].

The MIN consolidated interdisciplinary work, installed teacher-student reflection, and strengthened performance evaluation.

PROCESS STRENGTHS

Among the most significant strengths are:

- Sustained and growing teaching commitment[23,24]
- Technical-pedagogical leadership of the CCP and DDD[10,11]
- Structured and participatory curriculum governance[9]
- Real curricular integration through MIN[12]
- Innovation in Authentic Assessment, ECOE–OSCE[16,17].
- Systematic adoption of active methodologies
- Teaching digitalization accelerated by the pandemic[18,25,33]
- International consultancies that strengthened quality standards[10,12]

OBSTACLES AND TENSIONS

Institutional documents reveal persistent obstacles:

- Cultural resistances in teachers trained under the biomedical paradigm[16]
- Absence of a formal teaching career and lack of incentives
- Healthcare overload without protected teaching hours
- Budgetary and technological constraints
- Unequal appropriation of the competency-based approach in different chairs[24]
- Temporary weakening of the cultural installation during the pandemic[32]
- Accelerated teacher turnover, which required intensive induction processes[11]

CHALLENGES FOR THE NEXT DECADE

Institutional challenges include:

- Strengthening programmatic evaluation through longitudinal data-driven systems[1,2,4]
- Institutionalize the teaching career and provide training for progressive and natural teacher turnover
- To promote research in medical education as a strategic line of the Faculty
- Expanding the focus to graduate and medical residences
- Ensure stable funding for curriculum innovation
- Strengthening academic support and educational technology units

## Discussion

The experience of the Faculty of Medical Sciences of the National University of Asunción in implementing the competency-based curriculum shares similarities with processes developed in Latin American institutions[34]. These experiences highlight that curricular transformation depends more on teacher training, governance, and institutional culture than on technical curriculum redesign.

DDD's leadership was critical. Its role aligns with the principles set out by WFME[4] and CanMEDS[2], which underscore the need for teacher support institutions to ensure quality and continuity. The institutional documents show how the DDD functioned as a structural engine of change[10,11,20], generating pedagogical coherence and reducing dependence on personalistic policies, promoting spaces for the generation of a common language, and spaces for dialogue and reflection on teaching.

The implementation of the MINs enabled the operationalization of principles of curricular integration and authentic assessment, similar to those described by Harden[7] and Epstein[8]. The MINs promoted performance-oriented teaching, reinforcing essential communicational, ethical, and clinical competencies.

The pandemic, although a critical obstacle, drove a digital transition that accelerated teacher innovation[18,25,33]. This phenomenon of "pedagogical resilience" has also been reported in international experiences led by the WHO and by European universities.

In terms of evaluation, the Faculty of Medical Sciences of the National University of Asunción advanced toward observational and multimodal models, consistent with the ACGME standards[1]. Even so, programmatic evaluation requires institutional strengthening to become a longitudinal, integrated, and evidence-based system.

The absence of a formal teaching career, the overload of care, and the lack of academic incentives are structural challenges that the faculty must address to sustain the competency model. However, the experience of the Faculty of Medical Sciences of the National University of Asunción represents a relevant contribution to Paraguayan and regional medical education by providing concrete evidence of the elements necessary for curricular transformation.

In the case of the Faculty of Medical Sciences of the National University of Asunción, the Department of Teaching Development acted not only as a training provider but also as an epistemic and cultural mediator, facilitating the progressive appropriation of the principles of the competency-based approach by the academic body. This finding aligns with the WFME standards and the recommendations of the CanMEDS model, which emphasize teacher development as a core domain of educational quality rather than a complementary activity. However, this study has limitations. As it is a qualitative documentary analysis, based on institutional records and internal publications, informal practices or dissident perspectives could be underreported. Future research should incorporate qualitative interviews and longitudinal performance data to further assess the impact of teacher development on learning outcomes.

## Conclusions

The findings of this study reinforce the international evidence that the successful implementation of competency-based medical education depends less on formal curriculum architecture and more on sustained teacher training and strong institutional governance. Similar conclusions have been reported in experiences in Canada and Europe, where teacher development units serve as stabilizing structures that preserve pedagogical coherence amid changes in institutional leadership.

The implementation of the competency-based curriculum at the Faculty of Medical Sciences of the National University of Asunción is a paradigmatic example in the region. The institution moved from a traditional model to a reflective, interdisciplinary, and performance-oriented academic culture, thanks to the leadership of DDD[10,20], structured curricular governance[9,14], continuous teacher training[10,26], and curricular integration through MIN[12].

Teacher training served as the transformative axis, building a curriculum focused on teachers rather than merely accompanying them. This statement sums up the essence of the process.

Significant challenges remain, especially in programmatic evaluation, the teaching career, and institutional sustainability. Despite this, the Faculty of Medical Sciences of the National University of Asunción's experience constitutes a valuable contribution to institutions seeking to implement competency-based models in complex contexts.

## Recommendations

The transition to a competency-based curriculum requires a robust, progressive institutional strategy in which teacher training serves as the articulating axis of change. To this end, after the experience at the Faculty of Medical Sciences of the National University of Asunción, the following recommendations are proposed:

1. Create a Nuclear Strategic Committee and define a clear institutional vision. Curricular innovation must begin with a high-level, multidisciplinary committee charged with studying in depth Competency-Based Medical Education (CME), which, for us, was the Nuclear Commission of the PIC and later became CCP. The objective was to analyze successful experiences, define the guiding principles of the transition, and develop the curricular innovation plan. This committee must also evaluate the existing institutional capacity, establishing an initial diagnosis of governance, the regulatory framework, and the availability of trained teachers to assume the change.
2. Design the curricular and evaluation framework based on competencies, actively integrating teachers. All curricular design must involve the teaching staff, not only to define the graduation profile and key competencies, but also to ensure constructive alignment and authentic evaluation. The transition implies that teachers understand and can apply student-centered learning strategies, integrative activity design, and progressive evaluation systems with formative feedback. The revision of the regulatory framework must include clear criteria for teacher evaluation based on competence.
3. Systematically train academic staff and adapt educational infrastructure. Teacher training is the

central component of this phase. Organizational reengineering, such as DDD, is required to develop an institutional teacher development program that enables, trains, and accompanies teachers, training teachers, clinical tutors, and support staff in: fundamentals of the EMBC, in active methodologies: design of clinical cases, competency-based assessment instruments, use of ICT, and clinical simulation. At the same time, the institution must strengthen its physical and technological infrastructure, including simulation laboratories, learning management platforms, and high-quality clinical scenarios. Teacher training and infrastructure must move forward together.

4. Implement a pilot program to evaluate teacher adaptation. A well-designed pilot enables observation of how teachers apply new methodologies, provide feedback, assess performance, and manage the pedagogical transition. The systematic collection of qualitative and quantitative data enables the identification of strengths and weaknesses of the teaching staff, the adjustment of training programs, and the generation of institutional evidence for decision-making.
5. Scaling up the model and ensuring sustainability, prioritizing continuous teacher development. The expansion of the competency model must be based on lessons from the pilot and strengthen governance mechanisms that ensure the ongoing review of the curriculum and teaching practice. Sustainability depends on:
    - Invest in Continuing Teacher Education
    - securing financial and technological resources
    - maintain stable academic teams
    - and promote a culture of continuous improvement

Consolidating an institutional policy of teacher development is essential for the EMBC to be maintained and evolve in the long term.

## References


1. World Federation for Medical Education. Global standards for quality improvement in basic medical education. 2020. Accessed December 12, 2025. https://wfme.org/standards/bme/
2. Stern DT, Wojtczak A, Schwarz MR. The assessment of global minimum essential requirements in medical education. *Med Teach*. 2003;25(6):589-595. doi:10.1080/0142159032000151295
3. Edgar L, Hatlak K, Haynes I, Holmboe E, Hogan S, Maclean S. The Milestones Guidebook: Competency-Based Medical Education Competency-Based Medical Education and Milestones Development. Published online 2025. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.acgme.org/globalassets/MilestonesGuidebook.pdf
4. WHO. Transforming and scaling up health professionals' education and training. World Health Organization. 2013. Accessed December 12, 2025. https://www.who.int/publications/i/item/transforming-and-scaling-up-health-professionals'-education-and-training
5. Stoddard HA, Brownfield E, Churchward G, Eley JW. Comités curriculares interconectados: Una nueva estructura para facilitar la supervisión y sostener la innovación. *https://www.researchgate.net*. Published online 2015. Accessed December 12, 2025. https://www.researchgate.net/publication/280998902_Interweaving_Curriculum_Committees_A_New_Structure_to_Facilitate_Oversight_and_Sustain_Innovation
6. Biggs J, Tang C. *Teaching for Quality Learning at University*. 4th ed. McGraw Hill; 2011. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://cetl.ppu.edu/sites/default/files/publications/-John_Biggs_and_Catherine_Tang-_Teaching_for_Quali-BookFiorg-.pdf
7. Harden RM. What is a spiral curriculum? *Med Teach*. 1999;21(2):141-143.
8. Epstein R. Assessment in Medical Education. *N Engl J Med*. Published online January 1, 2007. Accessed December 12, 2025. https://www.academia.edu/54940648/Assessment_in_Medical_Education
9. FCM-UNA. Resolución N° 12/2016 del Consejo Directivo de la Facultad de Ciencias Médicas de la Universidad Nacional de Asunción de fecha 21 de enero de 2016. Published online 2015. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.med.una.py/images/descargas/resoluciones/Manual_de_Organizacion_y_Funciones_Direccion_Academica.pdf
10. Departamento de Desarrollo de la Docencia. Informe del Departamento de Desarrollo de la Docencia. Primer semestre 2016. Published online 2016.
11. FCM-UNA. Programa de Desarrollo de la Docencia (PRODD). Published online 2014.
12. Ruiz de Gauna P. Informe del proceso de instalación de los Módulos Integradores en la FCM-UNA. Published online 2022.
13. Jiménez JT, Palacios M, Aparicio C, et al. PROPUESTA DEL PERFIL DOCENTE BASADO EN COMPETENCIAS DE LA FACULTAD DE CIENCIAS MÉDICAS DE LA UNIVERSIDAD NACIONAL DE ASUNCIÓN. *ResearchGate*. 2016;49(1):119-140. doi:10.18004/anales/2016.049(01)119-140
14. FCM-UNA. Documentos oficiales para el rediseño curricular 2013–2015 (Admisión, Básico, Clínico, Docencia, RSU, Evaluación y Calidad). Published online 2015.
15. FCM-UNA. Docencia Médica Superior – Dirección de Postgrado. Dirección de Postgrado. 2017. Accessed December 12, 2025. https://postgrado-fcmuna.com.py/docencia-medica-superior-2/
16. Ocampos Benedetti S, Vuyk I, Ortiz Galeano I. Al término de la primera implementación de la malla curricular innovada 2015. Cohorte de médicos egresados (2017-2023). FCM-UNA. Historia, fortalezas, debilidades y nuevos desafíos. *An Fac Cienc Médicas Asunción*. 2023;56(1):85-102. doi:10.18004/anales/2023.056.01.85
17. Ocampos SE. Revisión crítica de la experiencia de la Malla 2015. Published online 2022.
18. Ocampos SE. Formación docente en contexto de COVID-19. In: UNA; 2021.
19. FCM-UNA. Informe académico 2014. Published online 2014.
20. Departamento de Desarrollo de la Docencia. Plan Operativo Bianual del Departamento de Desarrollo de la Docencia (2022–2023). Published online 2023.
21. Soto-Aguilera CA, Robles-Rivera K, Fajardo-Ortiz G, Ortiz-Montalvo A, Hamui-Sutton A. Entrustable Professional Activities (EPA): an approach of competencies for medical curriculum. *FEM Rev Fund Educ Médica*. 2016;19(1):55-62.
22. FCM-UNA. Proyecto de Innovación Curricular: Marco Conceptual. Published online 2013.
23. Ocampos S. Reflexiones al egreso de la primera cohorte de profesionales médicos de la malla curricular innovada, 2017- 2023. Facultad de Ciencias Médicas, Universidad Nacional de Asunción. *An Fac Cienc Médicas Asunción*. 2023;56:13-18. doi:10.18004/anales/2023.056.01.13
24. Ocampos Benedetti S, Stark B, Robledo M del R. Formación para la docencia médica: resultados y desafíos. *Integr Conoc Rev Núcleo Estud E Investig En Educ Super Mercosur*. 2022;11(1):70-87.
25. Ocampos SE, Moreno M, Robledo M del R, Stark S. Facing psychological effects of the COVID-19 pandemic. A view from the perception of medical students from 1st to 6th year of the Faculty of Medical Sciences of the National University of Asunción. *Med Res Arch*. 2023;11(11). doi:10.18103/mra.v11i11.4651
26. Ocampos SE. Implementación de las TIC en la Facultad de Ciencias Médicas de la UNA. In: 2020.
27. McKenzie-White J, Mubuuke AG, Westergaard S, et al. Evaluation of a competency based medical curriculum in a Sub-Saharan African medical school. *BMC Med Educ*. 2022;22(1):724. doi:10.1186/s12909-022-03781-1
28. Hendricson W, Katz M, Hoy L. Survey on Curriculum Committees at U.S. and Canadian Medical Schools. *J Med Educ*. 1988;63:762-774. doi:10.1097/00001888-198810000-00004
29. Frank JR, et al., eds. (2015). Marco de Competencias Médicas de CanMeds. Real Colegio de Médicos y

Cirujanos de Ottawa, Canadá. - Referencias - Publicaciones de Investigación Científica. Accessed December 12, 2025. https://www.scirp.org/reference/referencespapers?referenceid=2312118

30. ten Cate O, Turner DA, Pusic MV, Schumacher DJ. Entrustable professional activities and transitions across the continuum of training and practice. In: ten Cate O, Burch VC, Chen HC, Chou FC, Hennus MP, eds. *Entrustable Professional Activities and Entrustment Decision-Making in Health Professions Education*. Ubiquity Press; 2024:183-194. Accessed December 12, 2025. https://www.jstor.org/stable/jj.21341670.21
31. FCM-UNA. Memorias de las Jornadas Iberoamericanas en Formación en Ciencias de la Salud. Published online 2018.
32. FCM-UNA. Evaluación Interna del Proceso de Implementación de la Malla 2015. Published online 2019.
33. FCM-UNA. Programa y Memoria del Curso Spot-TIC. Published online 2021.
34. Departamento de Desarrollo de la Docencia. Antecedentes institucionales 2023-2023. Published online 2023.