

REVIEW

The assessment strategies in the classroom and their teaching in teacher education

Las estrategias de evaluación utilizadas en el aula y su enseñanza en la formación docente

Melvin Octavio Fiallos González¹  , Leocadio Fiallos González²  

¹Universidad Pedagógica Nacional Francisco Morazán, Tegucigalpa Honduras, Departamento de Educacion Tecnológica. Tegucigalpa, Honduras.

²Universidad Pedagógica Nacional Francisco Morazán, Tegucigalpa Honduras, Facultad de Ciencias de la Educación. La Esperanza, Honduras.

Cite as: Fiallos González MO, Fiallos González L. The assessment strategies in the classroom and their teaching in teacher education. *Seminars in Medical Writing and Education*. 2025; 4:709. <https://doi.org/10.56294/mw2025709>

Submitted: 29-05-2024

Revised: 10-12-2024

Accepted: 09-05-2025

Published: 10-05-2025

Editor: PhD. Prof. Estela Morales Peralta 

Corresponding Author: Melvin Octavio Fiallos González 

ABSTRACT

To identify the achievement of competencies, assessment must refer to the results, which requires the use of various tools and evaluation strategies. Alongside the reflection on results, this allows for the continuous improvement of the resources used. The research has aimed to provide a description of classroom assessment and how it is taught in teacher education. A quantitative study was conducted using a Likert-type scale, with Cronbach's alpha for validation and the KMO measure for factor analysis. It is emphasized that the development of classroom assessment enables learning and understanding of how assessment is linked to teaching as part of a continuous improvement process.

Keywords: Curriculum; Assessment; Teacher Education.

RESUMEN

Para identificar el logro de competencias la evaluación debe referirse a los resultados para lo cual se requieren diversos instrumentos y estrategias de evaluación, junto a la reflexión de los resultados esto permite la mejora constante de los recursos que se emplean. La investigación se ha dirigido a generar una descripción de la evaluación aplicada en aula y como se enseña en la formación docente, se considerado un estudio cuantitativo, utilizando una escala tipo Likert con validación de alfa de Cronbach, KMO para el análisis factorial, se resalta que el desarrollo de la evaluación de aula permite aprender y comprender como la evaluación está ligada a la enseñanza como parte de un proceso de mejora constante.

Palabras clave: Currículo; Evaluación; Formación Docente.

INTRODUCTION

Teachers at different educational levels are responsible for providing an education that complies with the different criteria and quality standards dictated in the other regulations,⁽¹⁾ university teachers seek to create learning spaces adequate to the various situations they face, which can only be sustained from the reflection⁽²⁾ adds that the teacher's performance has a significant impact on the students' results.

The relationship between evaluation and teacher training constitutes two more strategic cores in the field of education, far from being processes that are developed in isolation; both should be understood as a practice that allows for the articulation to promote the professional and continuous development of teachers

in training.

The evolution of teacher training has focused on performance linked to homogeneity standards without taking into account the contexts and particularities of the different didactic practices.^(3,4) The traditional model has been widely questioned for its insipient contribution to the improvement of teaching and learning,⁽⁵⁾ propose formative evaluation from the process of dialogue, contextualized, as the CIIP model, which allows arguing that traditional models have proven to be insufficient in current education.⁽⁶⁾

The evaluation processes are related to the official curriculum, and their organization is linked to the different competencies established for achieving the graduate profile. In teacher training spaces, pedagogical foundations are established that support the basis for curriculum design, didactics, and evaluation oriented to each specialty of study.

The establishment of a curricular model by competencies in the teacher training system, to guarantee the competencies, the evaluation system must be established according to the curricular model and the work in the classroom, the evaluations provide information about the competencies and how they can be evaluated.^(7,8)

The student must recognize the level of achievement and learning, for this there is summative and formative evaluation, therefore emphasis is made on formative assessment for all teaching, for this the student's participation in the organization of classroom work should be considered, from the learning methodologies and the different strategies that allow recording the student's progress.^(5,9)

According to ⁽¹⁰⁾ the current evaluation paradigms maintain an orientation to measure results in terms of percentages, in the case of formative evaluation.⁽¹¹⁾ In the case of formative assessment,⁽¹¹⁾ it emerges as an element that allows a permanent and reflective evaluation, based on the information gathered to strengthen the teaching-learning process, seeking quality teaching according to the characteristics of the students, which allows questioning the effectiveness of traditional evaluations. Supported by ^(12,13) this evaluation generates significant changes, seeking to overcome the limitations presented by classical approaches, and allows for an in-depth understanding of competencies as an essential element for learning throughout their academic path. With the vision of ⁽¹⁴⁾ and ⁽¹²⁾ formative assessment, collaboration improves education and the processes developed in the classroom and outside it, as it promotes feedback as a means for meaningful student learning.

Competency-based training

The conceptualization of competencies emphasizes the ability to effectively utilize information in various situations.^(15,16,17) The competencies should be considered as enabling the organization of activities for learning, managing learning progress, involving students in planning, and fostering collaborative work to promote continuous training.

For teacher training,^(7,18) consider that they should develop and enhance competencies aimed at strengthening diagnosis, cognitive processes, ethics, together with logic, empathy, play, and didactics, to broaden knowledge, have the preparation to favor coexistence at school, promote autonomy, and work in multidisciplinary teams among co-workers. According to ^(19,20), it improves learning services, enhances teaching competencies, helps focus student learning, and strengthens the relationship between theory and practice.

Teacher training is a multifaceted process that involves the acquisition of theoretical knowledge, along with the construction of knowledge related to practice, ethics, and contexts, thereby emerging approaches based on reflection, criticism, and situated learning.⁽²¹⁾ By articulating evaluation with teacher training, it is strengthened by the socio-constructivist theory, together with the competency-based approach, supported by formative evaluation.⁽¹³⁾

Participation in the planning of activities

In the planning processes for classroom curriculum development, the competency-based model enables students to manage and develop their learning, autonomy, and center themselves at the heart of the learning process, allowing them to build and contribute to their formation.⁽²²⁾ With this, the teacher must develop methodologies that bring the student closer to the reality of the labor field, through the use of simulations, projects, practices in the labor field that allow him to put into action the knowledge he already possesses, and to face situations that have not been foreseen.^(11,15,23)

For the development of competencies, the linking of theory and practice must be established, previously programmed in the spaces of training, allowing the integration of experiences from the labor field in the classroom, relating teaching, learning and evaluation strategies, these elements are integrated in the planning of the micro curriculum and the organization of the teacher's classroom practice. To identify the achievement of competencies, the evaluation refers to the results, which requires a variety of instruments and strategies related to the purposes of training.⁽²⁴⁾

METHOD

For the development of the research, different aspects have been taken into account: the study is considered

a descriptive work as it is.⁽²⁵⁾ The intention of the study is to “identify characteristics of a group of people who belong to a certain population”, which allows generalizing the reality to be studied, the characteristics of the population have been taken into consideration, which has been a total of five thousand students from the regional centers of La Esperanza, Gracias, and the Central Campus, these have been enrolled in the first and second academic period of the year 2025, in the selection of the sample was done intentionally.^(26,27) The sample was selected for convenience.⁽²⁸⁾ The sample consisted of 570 students from the different areas of study, ranging in age from 17 to 50 years old.

A Likert-type questionnaire was used to collect the information, which was developed across four dimensions: evaluation planning, elaboration of evaluation instruments, reflection on the evaluation, results, and student participation, each with nine questions, totaling 36 questions.

Before application, a validation was carried out, the first step being a review by experts in research and item writing, the second step being statistical validation using exploratory factor analysis.^(28,29) The second step was the statistical validation using an exploratory factor analysis,^(28,29) which found a Cronbach’s alpha of 0.959 for reliability, with which a KMO and Barlett’s test were performed to determine the normality of the data, and thus carry out the factor analysis (table 1).

KMO and Bartlett’s test		
Kaiser-Meyer-Olkin sample adequacy measure.		0,956
Bartlett’s test of sphericity	Approximate Chi-square	9827,078
	gl	630
	Sig.	0,000

Note: Prepared based on the Validation

In the process, nine factors were identified in the total explained ANOVA, explaining 72 % of the values, with factors 1 and 3 having higher loadings of items. In the process after the validation of the scale, it was reduced to 4 factors, with factor 1 having higher loadings, factors 2, 3 and 4 presenting lower values. The correlation between factors is as follows considering what was mentioned by.^(30,31) Table 2 shows the factorial relationship in order to guarantee a reliable and valid scale for the context, for the process of analysis of the information has been inferential statistics.

Factor	1	2	3	4
1	1,000	0,632	0,750	0,745
2	0,632	1,000	0,645	0,719
3	0,750	0,645	1,000	0,697
4	0,745	0,719	0,697	1,000

Note: Prepared from the results.
Extraction method: Maximum likelihood. Rotation method: Promax normalization with Kaiser.

RESULTS

For the development of the curriculum in the classroom from the different planning models, the competency-based model considers the participation of the student in the whole process from the organization, selection of learning strategies, together with the choice of the different evaluation strategies.^(32,33) When asked about their participation in planning learning spaces and the teacher’s explanation of the various methods to be used, 40 % and 32 % agree. In comparison, 10 % show indifference and are unaffected by this process, along with 18 % who disagree with the development of this moment at the beginning of the academic period. Additionally, 28 % do not engage in these minimum activities, which do not allow for participation in the planning processes.

Taking into consideration the evaluation strategies for the verification of competencies, process and product strategy have been identified, 40 % indicate indifference to the explanation of the different methods by the teacher, and 32,3 % and 27,7 % agree and agree with the development of these actions that seek the understanding of the instruments and types of evaluation to be used.

In addition, the understanding of the relationship between teaching and evaluation strategies aims to generate products that contribute to learning, considering that evaluation is subordinated to a model inferred from the official curriculum.^(5,19,34) In the competency-based model, emphasis is placed on the use of rubrics that allow the identification of descriptions for the evaluation of a process or a product, 34 % have participated in the elaboration of rubrics, 20 % have not done so, 22,8 % and 23,2 % show indifference or disagreement in the elaboration of this type of evaluation resource.

In the planning processes of the classroom curriculum, the teacher defines the type of evaluation strategy that best fits the competencies, characteristics of the group and resources, in the case of conceptual competencies, the use of written tests has been identified, 45% of the surveyed consider them useful to identify the comprehension and application of conceptual contents, there is an accumulated percentage of 63,9 % who think that this type of strategies seek the understanding of the topics addressed, but 26,1 % are indifferent to it.

For the teaching process, strategies have not been identified that enhance the organization of mental processes, elaborate schemes, highlight strategies focused on cooperative work, individual reading, research and exposition, which are recognized as evaluation strategies at the time of delivering a product, this is indicated by 55 % of those consulted, the remaining 45 % do not indicate any difference between them.

In the search for understanding the relationship between evaluation strategies and learning strategies, these are related to curricular approaches and models.⁽⁴⁾ To this end, we find that 65 % identify the relationship between assessment and learning strategies; 35 % do not determine the relationship and consider them to be separate. Figure 1 illustrates the use and emphasis given to evaluation from the students' point of view, with values evenly distributed.

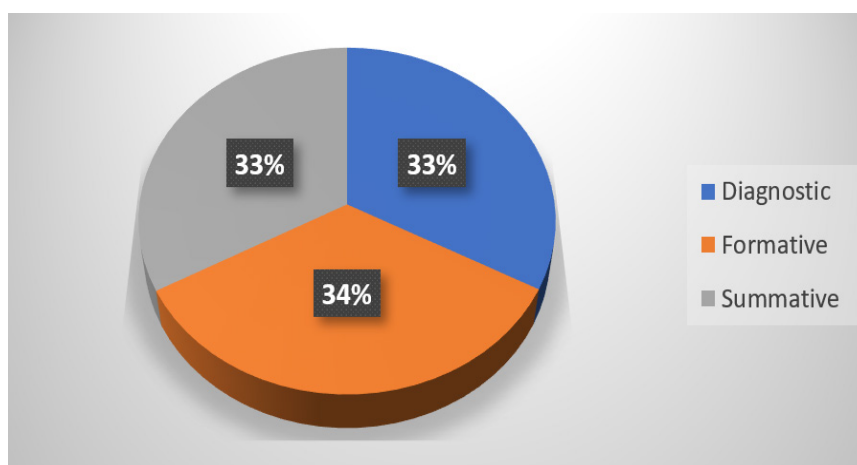


Figure 1. Use and emphasis of classroom evaluation

In the case of the diagnostic evaluation, it seeks student participation, in addition to identifying proposals that can be integrated into the micro-curriculum programming, to improve classroom dynamics based on the interests of the group, the quantitative percentage associated with the management of concepts, and long-term memory.

It is to take into consideration that teacher training is divided into four blocks, in which a specific one is presented for pedagogical training, this includes learning spaces such as educational philosophy, pedagogy, didactics, evaluation and curriculum for each discipline of study, with this it has been identified that these spaces conceptualize evaluation, didactics and curriculum, demonstrating the conceptual relationship by elaborating examples on evaluation and planning instruments, allowing the association in the contexts.

DISCUSSION

It has been possible to identify a relationship between the different points of view of students in the regional centers of La Esperanza, Gracias, and the Central Campus, as well as the development of evaluation and its relationship with teaching strategies.⁽³⁵⁾ This makes it possible to consider the validity of the evaluation instruments in conjunction with the model that supports the curriculum.⁽³⁶⁾ This generates confidence in their use to be applied in different contexts; evaluation as a resource allows the gathering of information to verify the progress made in achieving the professional profile.

In the formative evaluation processes, teachers at the beginning of the academic period manage to integrate the student in the discussion, review and understanding of the results obtained in the learning process, allowing to learn and strengthen the concepts and procedures for the development of conceptual, procedural and attitudinal content from their discipline of study.⁽³⁷⁾ To achieve the integration of diagnostic, formative and summative evaluations, the analysis of the results obtained allows the understanding of the integration of achievement indicators in classroom work.

The revision and improvement of the evaluation instruments enable the establishment of validity for continuous improvement as the contexts in which they are used change.⁽²⁸⁾ Student participation in the review, planning, reflection on the results obtained, and the scope of the evaluation instrument strengthens initial

teacher training, highlighting the interrelation between the curriculum, didactics, and evaluation, thereby generating a cycle of constant improvement.⁽³⁸⁾

The changes presented in the curricular reforms of the study programs aimed at teacher training seek to enhance critical thinking, promote autonomous learning, and reflection on what teachers do and their influence on curricular development.

CONCLUSIONS

During initial teacher training, in various learning spaces, reflection on how to learn to evaluate should be encouraged. This forms the basis of an integral vision in the planning and development processes of the micro-curriculum, in the classroom, and its application in the workplace. A teacher is trained to identify, select, and apply evaluations that are coherent with the chosen teaching-learning strategies, and student participation strengthens their role as participants in their training.

It should be considered that an adequate planning allows teaching to teach and teaching to evaluate, with the examples developed in the classroom, being these diagnostics, formative, summative and their relation to the verification of the achievement of competences, allowing to identify the coherence and usefulness of the evaluation, for the improvement together with the discussion of the results that will enable to validate the results and the validity of these.

Finally, it is essential to consider the valuations that students develop when learning to evaluate through the practice that teachers conduct in the classroom, encouraging self-evaluation and co-evaluation, along with methodological coherence, which can be applied in the workplace.

REFERENCES

1. Cardoza-Batres F, Gurrola HA, García JIR. Desempeño de los formadores docentes en escuelas normales: opinión de los jefes de departamento. *Revista de Investigación y Evaluación Educativa*. el 2 de febrero de 2024;11(1):7-24.
2. Sacristan G. *El curriculum: una reflexión sobre la práctica*. Séptima Edición. España: Morata; 1998. 419 p.
3. Hernández AC, Salazar S, Martínez W, Montenegro ML. *Las estrategias didácticas en la formación de docentes*. Costa Rica: UCR; 2009.
4. Ruiz JM. *Teoría del curriculum: diseño y desarrollo curricular*. Primera. Madrid: Editorial Universitas, S.A.; 1996.
5. Stufflebeam DL, Shinkfield A. *Evaluación sistemática, guía teórica y práctica*. Madrid: Paidós Iberica; 1985.
6. Morales López S, Hershberger del Arenal R, Acosta Arreguín E, Morales López S, Hershberger del Arenal R, Acosta Arreguín E. Evaluación por competencias: ¿cómo se hace? *Revista de la Facultad de Medicina (México)*. junio de 2020;63(3):46-56.
7. Arreola Rico RL. Formación y evaluación docente basada en un perfil por competencias. Una propuesta desde la práctica reflexiva. *Rev Educación*. el 30 de mayo de 2019;43(2):30.
8. Huauya Huamaní LE, Vacas-Gonzales FA, Solís Trujillo BP. Evaluación formativa y desarrollo de competencias en el proceso educativo: Una revisión sistemática. *revistahorizontes*. el 24 de julio de 2023;7(30):2020-44.
9. Botía AB. Papel del profesor en los procesos de desarrollo curricular. *Revista Española de Pedagogía [Internet]*. el 17 de noviembre de 2023 [citado el 2 de abril de 2025];50(191). Disponible en: <https://www.revistadepedagogia.org/rep/vol50/iss191/2>
10. Paucar MNS, Álvarez CAV. Evaluación formativa en la educación. *Horizontes Revista de Investigación en Ciencias de la Educación*. el 10 de enero de 2024;8(32):334-47.
11. Morera-Castro M, Nieva-Boza C, Anchía-Umaña I, Herrera-González E. Percepción de la evaluación formativa competencial y satisfacción del curso virtual según el sexo y el nivel de carrera en estudiantes universitarios. *Revista Electrónica Educare*. el 15 de diciembre de 2023;27(3):1-22.
12. Cañadas L, Santos-Pastor ML, Castejón FJ. EVALUACIÓN EN LA FORMACIÓN INICIAL: ¿AVANCE O RETROCESO? *Bordón Revista de Pedagogía*. el 7 de noviembre de 2018;70(4):9-22.

13. Flores Pacheco JA, Llanes Gutierrez FJ, Noe Martinez RA. Relación entre la planificación y evaluación de aprendizaje en la educación a distancia virtual. *Revista De Educación De Nicaragua.* 2023;3(5):111-27.
14. Pasek E, Mejía MT. Vista de Proceso General para la Evaluación Formativa del Aprendizaje | *Revista Iberoamericana de Evaluación Educativa.* *Revista Iberoamericana de Evaluación Educativa.* 2017;10(1):177-93.
15. Bunk G. La transmisión de las competencias en la formación y perfeccionamiento profesionales en la RFA. *Revista Europea de Formación Profesional.* 1994;1(1):8-14.
16. Perrenoud P. *Construir competencias, desde la escuela.* México: Comunicaciones y Ediciones Noreste Ltda.; 2011.
17. Zabala A, Arnau L. *Métodos para la enseñanza de competencias.* México: GRAÖ, de IRIF, SL; 2014.
18. Frade L. *Desarrollo de competencias en educación desde preescolar hasta bachillerato.* 1era ed. México: Inteligencia Educativa; 2008.
19. Pascual-Arias C, Soria MM. *Evaluar para aprender en el Prácticum: una propuesta de Evaluación Formativa y Compartida durante la Formación Inicial del Profesorado.* publicaciones. el 8 de octubre de 2020;50(1):183-206.
20. Soria MM, Hortigüela-Alcalá D, López-Pastor VM, Pascual-Arias C, Fernández-Garcimartín C. Effects of the Implementation of Tutored Learning Projects and Formative and Shared Assessment Systems in Pre-Service Teacher Education. *Journal of Higher Education Theory and Practice [Internet].* el 10 de febrero de 2023 [citado el 3 de junio de 2025];23(2). Disponible en: <https://articlegateway.com/index.php/JHETP/article/view/5827>
21. Fernández JT, Gámez AN. Valoración de la Adquisición de Competencias Profesionales en el Prácticum a través del Contrato de Aprendizaje por parte de los Alumnos: Caso del Grado de Pedagogía. *Revista Iberoamericana de Evaluación Educativa.* el 28 de octubre de 2019;12(2):67-88.
22. Arza YF, Ceacero DC. Prácticas y estrategias de evaluación que desarrollan los mejores docentes en el enfoque de formación basado en competencias. *Revista EDUCARE - UPEL-IPB - Segunda Nueva Etapa* 20. el 26 de agosto de 2021;25(2):279-305.
23. Leliwa S. *Tecnología: apuntes para pensar su enseñanza y su aprendizaje.* primera. Córdoba: Brujas; 2015. 140 p.
24. Tobón S, Calderón CEG, Tobón B. *Evaluación del Desempeño Docente en México: Del Proyecto de Enseñanza al Proyecto Formativo.* 2018;1(41):1-9.
25. García Cabrero B. *Manual de Métodos de Investigación para las ciencias sociales.* México: Manual Moderno; 2009.
26. Bernal CA. *Metodología de la Investigación.* 3era ed. Colombia: Pearson Educación; 2010.
27. Sampieri R, Collado C, Lucio M del P. *Metodología de la investigación.* 6 ed. México: McGraw-Hill education; 2014.
28. Bermúdez EG, Rodríguez HYM, Arango JMZ, Quintero FEP. Proceso para validar un instrumento de investigación por medio de un análisis factorial. *Unaciencia Revista de Estudios e Investigaciones.* el 7 de septiembre de 2023;16(30):61-73.
29. González LF, González MOF. DISEÑO Y VALIDACIÓN DE UN INSTRUMENTO DE INVESTIGACIÓN DESDE LOS CONSTRUCTOS CUALITATIVOS HASTA LOS CUANTITATIVOS. *Revista Holón.* el 18 de diciembre de 2024;2(7):45-58.
30. Ledesma R, Ferrando P, Tosi J. *Uso del Análisis Factorial Exploratorio en RIDEP. Recomendaciones para Autores y Revisores.* *REV IBEROAM DIAGN EV [Internet].* julio de 2019 [citado el 29 de abril de 2025];52(3). Disponible en: <http://www.aidep.org/sites/default/files/2019-07/RIDEP52-Art13.pdf>

31. Paniagua D, M. Alvarado J, Olivares M, Ruiz I, Romero-Suárez M, Aguayo-Estrem R. Estudio de Seguimiento de las Recomendaciones sobre Análisis Factorial Exploratorio en RIDEP. REV IBEROAM DIAGN EV. diciembre de 2022;66(5):127.

32. Pimienta Prieto J. Evaluación de los aprendizajes, un enfoque basado en competencias. primera edición. Mexico: Pearson Educación; 2008. 144 p.

33. Pimienta Prieto J. Estrategias de enseñanza.aprendizaje: docencia universitaria basada en comptencias. 1era ed. MExico: Pearson Educación; 2012.

34. Fraile J, Pardo R, Panadero E. ¿Cómo emplear las rúbricas para implementar una verdadera evaluación formativa? Revista Complutense de Educación. el 15 de marzo de 2017;28(4):1321-34.

35. Concha R, Barriga O, Henrriquez G. Los conceptos de validez en la investigacion social y su abordaje pedagógico. Revista Latinoamericana de Metodología de las Ciencias Sociales. 2011;1(2):91-11.

36. Zafra SL, Tamayo A, Diaz JE, Gama A, Sneider L, Soler G, et al. Curriculo y Evaluacion Criticos: pedagogia de la autonomia y la democracia. 1era ed. Bogota, Colombia: CIUP; 2013.

37. Freire Espinoza EE. La evaluación de los aprendizajes. Revista Conrado. 2022;18(85):120-7.

38. Rios Campos G, Ruíz JM, Daza GS, Mozo NV. La evaluación de competencias profesionales. Reflexiones sobre su aplicacion y casos multidisciplinares de acción. 1era ed. Puebla, Mexico: Benemerita Universidad Autonoma de Puebla; 2012. 213 p.

FUNDING

None.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTION

Conceptualization: Melvin Octavio Fiallos Gonzales.

Data Curation: Melvin Octavio Fiallos Gonzáles.

Formal analysis: Melvin Octavio Fiallos Gonzáles.

Research: Melvin Octavio Octavio Fiallos Gonzáles, Leocadio Fiallos Gonzáles.

Methodology: Melvin Octavio Fiallos Gonzáles, Leocadio Fiallos Gonzáles.

Project management: Melvin Octavio Fiallos Gonzáles, Leocadio Fiallos Gonzáles.

Resources: Melvin Octavio Fiallos Gonzales, Leocadio Fiallos Gonzales.

Software: Melvin Octavio Fiallos Gonzales, Leocadio Fiallos Gonzales.

Supervision: Melvin Octavio Fiallos Gonzales, Leocadio Fiallos Gonzales.

Validation: Melvin Octavio Fiallos Gonzáles, Leocadio Fiallos Gonzáles.

Display: Melvin Octavio Fiallos Gonzales, Leocadio Fiallos Gonzales.

Writing - original draft: Melvin Octavio Fiallos Gonzáles, Leocadio Fiallos Gonzáles.

Writing - proofreading and editing: Melvin Octavio Fiallos Gonzáles.