

Modelo pedagógico de superación profesional para la gestión del desarrollo local rural

Pedagogical model of professional development for rural local development

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Resumen: El presente trabajo tiene como objetivo socializar un modelo pedagógico de superación profesional para la gestión del desarrollo local rural del profesor de Agropecuaria de los Institutos Politécnicos Agropecuarios de Montaña. Se utilizaron métodos teóricos para la fundamentación de la propuesta, y la modelación para su construcción. En su estructura sistémica se determinaron cada uno de los componentes de los subsistemas y sus relaciones con el fin de establecer la pertinencia del modelo propuesto para lograr el mejoramiento del desempeño del profesor en su vínculo con la comunidad rural.

Palabras clave: Superación profesional; Actores locales; Escenarios de convivencia local; Socioagroproductividad.

Abstract: The present work has as objective to socialize a model of the dynamics of professional improvement for the management of the rural local development of the professor of Agriculture of the Polytechnic Institutes model to achieve the improvement of the teacher's performance in its link with the rural community of Mountain. Theoretical methods were used for the foundation of the proposal and the modeling in its construction. In this investigation the components of the model are determined, developed with the use of functional structural systemic method; It has three subsystems and was employed in the professional improvement of the agricultural teacher of the province of Guantánamo. Each one of the components of the subsystems and their relationships was determined, in order to establish the relevance of the proposed.

Keywords: Dynamics of the professional overcoming; Local actors; Scenarios of coexistence local; Socioagroproductivity

Introduction

One of the challenges facing education in Latin America today is the ongoing training of professionals, which requires continuous processes of creation, dissemination, transfer, adaptation and application of knowledge to meet the demands that this demands, and create capacities to solve social, productive and cultural challenges.

In Cuba, the permanent training of education professionals encourages their preparation to turn them into a transforming social force that promotes the sustainable development of society. In the particular case of the agricultural professor of the Polytechnic Agricultural Institutes (IPA), one of the challenges that must be faced is the direction of the Technical and Professional Education Process (PETP) of the qualified workforce of medium and worker technical level qualified that demands the agricultural development of the country, characterized as a worker-producer, with high technical qualification, politicized, and immersed in the problems of his community and the culture of his country as an agent of change.

This demands of the professor of Agropecuaria of the mountain IPAs to assume an attitude of permanent formation that assures the PETP in relation with the current socioeconomic model, the scientific-technical development, and the productive processes that are developed in the rural and mountain areas, and that allows it to contribute to the transformation of the environment in correspondence with the potentialities of the territory, which demands not only knowledge and skills of the specialty but also community work.

Likewise, the need to organize the process of permanent training of the agricultural teacher of the mountain IPAs is raised from the potential of the job offered by the integration between the university, the polytechnic institute, the labor entity, and community. This integration allows the conscious participation of the decision-makers and / or local actors to establish the links between the socioeconomic policy of the territory and the professional improvement.

The training and improvement of teachers is one of the essential guidelines of the Economic and Social Policy of the Party and the Revolution since the school year 2010-2011, whose objective is aimed at increasing the quality and rigor of this improvement to meet the demand of educators that exist in educational institutions.

Universities, given their status as academic and research centers linked to scientific, technical and social progress, must contribute to the updating of contents and "offer improvement programs that meet the requirement to generate, from their intervention, new knowledge that guarantees sustainable human and social development through the coherent articulation of methodological, academic and investigative activities, oriented to professional development" (Horruitiner, 2008, p.238).

Within the university processes that most impact the territory is related to the postgraduate activity, aimed at improving, training, updating and preparing professionals so they can take on the challenges to which

the leadership of the Revolution focuses on the guidelines of the VI and VII Congresses of the Communist Party of Cuba, mainly in terms of local development.

- The professional improvement of the professor of Agricultural of the IPA constitutes one of the recommendations of the doctoral theses of Santos (2005), Fernández (2014), and Cabrera (2017). In spite of the efforts made in this sense and the discreet advances obtained in the professional improvement of the agricultural teacher of mountain IPA, our pedagogical experience and the perceptible factual diagnosis have allowed us to observe in the educational practice the following insufficiencies:
- Limited correspondence between the formative projection (permanent training), their learning needs, and the territorial development plans.
- Lack of intentionality in the preparation of the teacher for the management of rural local development from the conception and development of professional improvement plans and programs.
- Lacks in the application of viable theoretical-methodological alternatives for monitoring and controlling the expected changes in the teacher's pedagogical professional performance and in local rural development.

In order to contribute to solving the above problems, a pedagogical model of the dynamics of professional improvement for the management of rural local development of the professor of Agropecuaria of the mountain IPA is proposed.

Development

The theoretical methods used for the study of the process of permanent formation and its relationship with the dynamics of professional improvement for the management of rural local development were the historical-logical, analysis and synthesis, inductive-deductive, and the method of ascent of the abstract to the concrete, directed to the construction of the theoretical foundations of the proposal; while the functional structural systemic was used for the elaboration of the pedagogical model. Among the empirical methods used for obtaining and processing data statistically and knowing the fundamental facts that characterize the process that is modeled, the survey, the interview, the participant observation, the socialization workshops, and the experts' criteria stand out.

The present investigation has the peculiarity of elaborating a pedagogical model of the dynamics of the process of professional improvement for the management of the rural local development of the professor

of Agropecuaria of the mountain IPA, whose necessity is given by the exigencies to model the essential relations that propitiate the management of the local rural development from the PETP, which constitutes a challenge for the improvement of the professional improvement. On the other hand, the treatment of the subject from the pedagogical sciences is insufficient for this professional to participate as a manager of local development in rural areas in connection with the different contexts of Technical and Vocational Education.

The proposed pedagogical model assumes the general theory of the systems of Ludwib von Bertalanffy, and the functional structural systemic research method, which allows to express the logic of the procedures followed in the construction of the same, and to understand the essence of each subsystem and component from its systemic nature.

It is based on the theory of Marxist-Leninist knowledge, on the materialist dialectic of the unity of theory with practice, on the Marxist sociology of overcoming for life, on the active role of the agricultural teacher who works on the IPA of mountain, in the process of transformation of the social environment, and in the bidirectional influences that are established between society and the environment.

The pedagogical model is also based on the historical cultural theory of LS Vygotsky and his followers on the role of education and teaching in development, the role of the synthesis and generalization of thought in the transfer of learning to new situations, and the role of activity and communication in this process.

The starting point for the understanding of the proposed model is the explanation of the dialectical contradiction between agrotransformative managerial content and rural training contexts. (see fig.1).

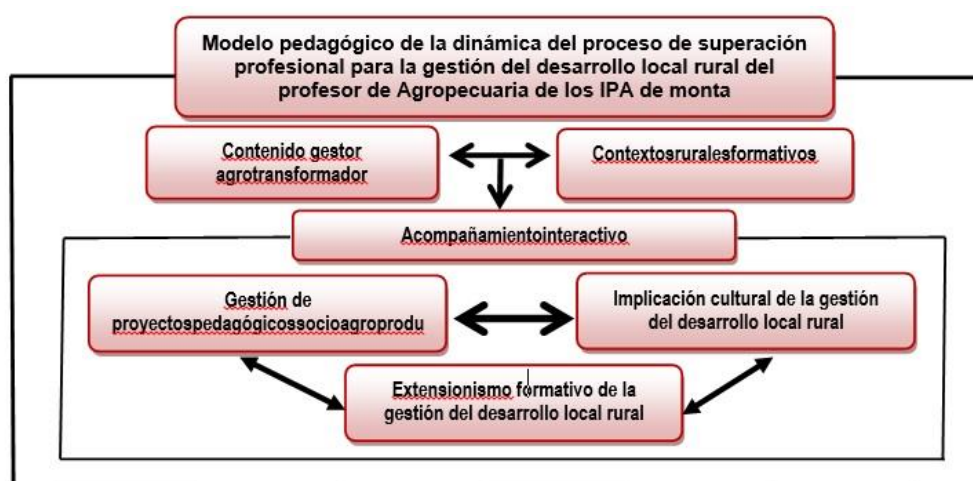


Fig. 1 Schematic representation of the Pedagogical Model of the dynamics of professional improvement for the management of the local rural development of the professor of Agricultural of the Mountain IPA.

Source: self-made

The professional improvement must equip the teachers of Agropecuaria mountain IPA knowledge, skills, values and experiences for the management of rural local development, so the content of the improvement is particularized in agrotransformador manager content, which we define as that part of the culture in which management, profession and rural local development come together, from the integration of diverse local managers as agents of change.

The integration of diverse local managers as agents of change obeys to the need for cooperative participation of decision-makers, local leaders, and relevant actors in the professional improvement to equip the teachers of Farming of mountain IPA with the necessary resources that contribute to the management of local rural development from the PETP they direct.

The volume, scope and depth of the agrotransformer manager content will depend on the results of the diagnosis of teacher overcoming needs, and the diagnosis of agro-transforming needs of the environment. This diagnosis constitutes an essential element for the design of the professional improvement actions and for the process of evaluation of the fulfillment of the objectives foreseen in the form of organization used as it is closely related to the formative diversity of the professors.

The professional improvement for the management of rural local development needs to be developed in diverse rural training contexts, which we define as a form of sociocultural organization where the agricultural teacher of the Mountain IPAs interacts with decision-makers, leaders and local actors starting from communication and individual and collective interests that pay tribute to the agroproductive transformation of the environment.

Rural training contexts are considered a form of sociocultural organization because they constitute a particular way of structuring professional improvement in correspondence with the demands of the context based on the relationships established between the participants. Currently they are identified as rural training contexts: the mountain farming company; the teaching, scientific and productive pole of the IPA; scientific institutions of the locality, and the Municipal University Center.

However, agrotransformer management content needs concrete socio-cultural conditions for its development with the necessary participation of decision-makers, agents, leaders and local actors, including representatives of the non-state sector, main drivers of agro-productive development in rural areas, and representatives of the government at the local level.

The aforementioned considerations allow us to determine an internal contradiction between the agro-transforming manager content of professional improvement and the rural training contexts that exclude the non-state sector.

This contradictory process is made dynamic through the interactive accompaniment that we conceptualize as a particular way of organizing professional improvement for the management of local rural development, mediated by the companion that interacts with the professor of Agropecuaria of the mountain IPA for the development of agrotransformer management content in different rural training contexts.

This interactive accompaniment is achieved through the network of local actors for the management of rural local development. This network is constituted as a municipal development initiative based on the participation of the University, specialists of the mountain agricultural enterprise, the Cuban Association of Agricultural and Forestry Technicians (ACTAF), agricultural production cooperatives (CPA), the National Association of Small Farmers (ANAP), the basic unit of cooperative production (UBPC), the Cuban Association of Animal Production (ACPA), leaders and local actors.

The interactive accompaniment has the following characteristics:

- The agricultural professor of the Mountain IPA considers himself a technical-pedagogue, this allows him to interact with the network of local actors in the construction of knowledge (see Fig. 2).
- Professional improvement is developed through the management of local development.
- The management of local rural development is carried out through the PETP

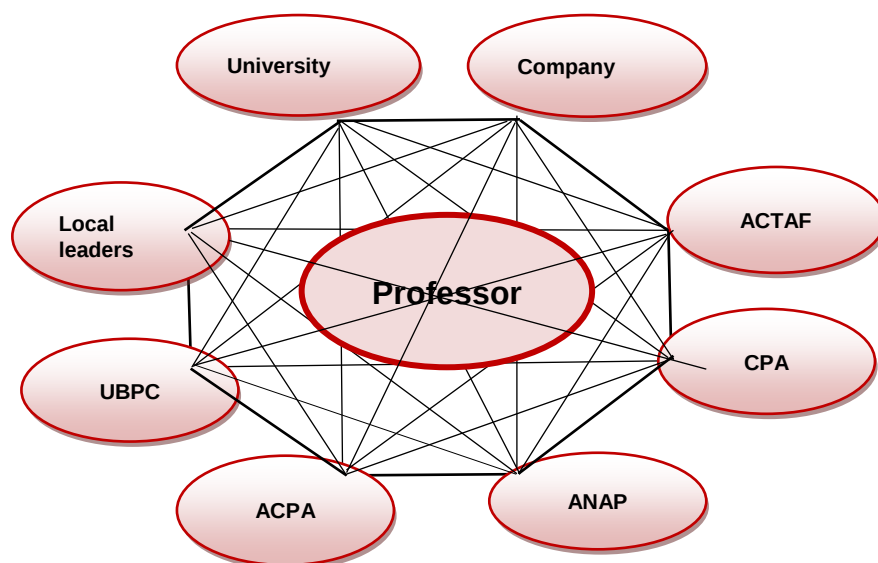


Fig. 2. Schematic representation of the Network of local actors for interactive accompaniment
Source: self-made

Based on the above elements, the dynamics of the process of professional development for the management of rural local development of the agricultural teacher of mountain IPAs is modeled, with interactive guidance as a form of organization, taking into account three fundamental subsystems: management of local socio-productive pedagogical projects, cultural involvement, and training extension of rural local development management.

For the elucidation of the proposed pedagogical model is part of the management subsystem of local socio-productive pedagogical projects, it has a projective guiding function, and constitutes a process of planning, recruitment, talent organization, and administration of resources needed from the educational institution to respond, from the PETP, to a local socio-productive need in a defined period of time that takes place in the dialectic orientation-projection of the management of rural local development, the management of endogenous knowledge, and the execution of local socio-productive pedagogical projects.

This allows the teacher to delineate the pedagogical actions for its incidence, in a committed way, in the local rural development. It also makes it possible for the teacher to execute pedagogical projects based on the local socio-productive reality that contribute to face and transform their environment according to the social demands of territorial development, which becomes a projective orientation as a resulting quality, understood as a way of acting that It allows the teacher to delineate the pedagogical actions for its incidence in a committed way in the local rural development.

Therefore, it becomes a tool for the management and application of alternatives that contributes to the change of the local pedagogical and socio-productive reality.

The subsystem cultural implication of the management of rural local development, from its cultural function, is conceived as a process of construction of meanings and meanings that generate commitments in the socioagroproductive managers with their locality, their traditions and customs, and is expressed in the dialectic between the sensitization of decision-makers and / or local actors, the coordination of scenarios of local socio-agro-productive coexistence, and the cultural formative integration.

This process facilitates the integration of knowledge about rural local development management that allows the teacher to reach a higher level of cognitive, motivational and affective development as a result of the coexistence experienced in the local socio-productive scenarios, which becomes a cultural significance of the

management of rural local development as a resulting quality that symbolizes the teacher as a cultural representative of the management of rural local development, expression of the commitment he acquires with his locality, traditions and customs.

The training extension subsystem of the management of rural local development, from its socializing function, constitutes an educational process in which agricultural teachers of the mountain IPA advise the local population for the improvement of rural local development management practices , and support them in the progress of their standard of living, of the educational and social norms of rural life that expresses the interactions between the subjects that develop the construction-demonstration of experiences, the generalization of good practices, and the systematization of the management of local rural development from the PETP.

The internal relationships that occur in the training extension of the local rural development management facilitate the ways so that in the process of professional improvement the professor of Agropecuaria of the mountain IPA improves all the acquired knowledge on management of the rural local development, besides articulate it with the PETP of the mid-level technician and skilled worker in the specialty of Mountain Agronomy; all of which promotes the development of an agrotransformative formative management as a resulting quality.

The formative management agrotransformadora significant objective materialization of the interrelation between the pedagogical formative professional (PETP) and the challenges of agroproductive development object of transformation to act as an agent of change through the mechanisms of self-management and co-management.

Self-management allows the achievement of actions conducive to the improvement of local socio-productive conditions that have exit through the PETP. Meanwhile, co-management refers to initiatives for the achievement of joint actions with other actors to contribute to the transformation of local socio-productive conditions that come out through the PETP.

The agro-transformative formative management is accentuated by the level of social and professional equity reached by the agricultural teachers of the mountain IPA in the process of professional development for the management of rural local development, and by the materialization in the contexts of ETP of knowledge acquired endogenous, whose application will contribute to the rural local socio-productive transformation.

It also means the application in praxis of relevant knowledge associated with rural local development with the use of methods such as learning-doing, learning-using, and learning-interacting, associated with processes of integration, articulation, synergy, chaining, and participation in the solution of local agroproductive problems.

Operation of the model as a whole

The integrative logic of the proposed pedagogical model is expressed in the system of relationships established between all the elements that make up its structure, that is, the subsystems, components and relationships to establish the dynamics of professional development for the management of local development farm teacher of the mountain IPA. These relations of integration are classified as general, since they energize the entire functioning of the proposed pedagogical model. In the pedagogical model that is presented, the structural elements that form a single whole are integrated, and the relationships arise from the functioning of the subsystems.

Among the subsystems management of local socio-productive pedagogical projects and cultural implication of the management of rural local development, relations of double proportionality are established, because the former must occur in order for the second to occur and vice versa, that is to say, it must be promoted through the orientation-projection and the management of endogenous knowledge that teachers are in a position to execute local socio-productive pedagogical projects.

This requires the sensitization of decision-makers and / or local actors, and the coordination of scenarios of local socio-agro-productive coexistence that allow the cultural formative integration, which in turn produces greater assimilation of this knowledge by the teacher, hence the double proportionality and particularity.

Among the components of the management subsystem of local socio-productive pedagogical projects are cause-effect relationships that are classified as singular, in which and with the aim of making evident the links between them, the elements that made possible the orientation journey were determined. Projection to endogenous knowledge to execute local socio-productive pedagogical projects.

Among the components of the cultural implication subsystem of the management of rural local development relations of subordination and integration that dynamize their interaction, which makes possible through the unity of affective and cognitive transit to higher results in teachers for the management of local rural development from the PETP.

Among the components of the training extension subsystem of rural local development management, integration relationships are established that facilitate the construction-demonstration of experiences and the generalization of good practices, for the subsequent systematization of the management of local rural development in the PETP as a result of the principle of unity between the concrete and the abstract, and the linking of theory and practice.

The proposed pedagogical model provides a new integrating dynamic between the subsystems that make up its structure. They form an integrated system to enable the dynamics of professional development for the management of local rural development of the agricultural teacher of mountain IPA, whose application will be through the proposed pedagogical strategy, so as to ensure their preparation for these purposes.

Revealing the movement of the object implies recognizing its system of essential relationships, which allows the interpretation of its transformation and behavior.

The new relations that in the order of the pedagogical epistemology are revealed in the establishment of the dynamics of the process of professional improvement for the management of the rural local development of the professor of Farming of the mountain IPA, and that allow to delimit the character of the pedagogical model proposed as a contribution to theory in the pedagogical sciences are framed in:

- The significance of rural training contexts in the validity of professional improvement for the management of rural local development, with interactive accompaniment as a form of organization, which imposes a dynamic between the management of local socio-productive educational projects, cultural involvement, and the formative extension of the management of rural local development.
- The experiential character of the professional improvement in reconstruction of varied knowledge with meanings and positive senses for the transformation of the teacher and the agrotransformation of the environment according to the endogenous potentialities.
- The systematic integration of decision-makers and local actors for interactive accompaniment based on agrotransformative actions.
- The flexible and contextualized nature of the process of professional improvement in the adaptability and flexibility of the process in the face of changing situations in the rural cultural and social context, given by the scientific and technical development and ancestral knowledge possessed by local leaders and actors.

This movement is achieved thanks to the dynamic interaction that occurs in the process of professional improvement between the cognitive and the evaluative, the agroproductive situation and the social meaning, and between the social meaning and the personal meaning. This allows the transformation of those involved in the process and the agrotransformation of the environment according to the development challenges and the endogenous potentialities.

As an expression of the relations manifested in the pedagogical model between the subsystems and the contradictions that occur in each of them, the following emerges as an essential regularity: the integrative logic between the management of local socio-productive educational projects, cultural involvement, and extensionism training of the local rural development management as a way to improve the professional pedagogical performance of the agricultural teacher in its link with the rural town.

The assessment of the main results achieved in the modeling of the dynamics of the process of professional improvement for the management of rural local development of the agricultural teacher of mountain IPA is carried out, at first, through the criteria of selected experts from a self-assessment test carried out with 25 professionals, of which 20 are finally chosen that fulfilled all the requirements according to the indicators to measure the competency coefficient. The total of experts assesses in a positive way the quality in the conception of the proposed pedagogical model.

In a second moment of exploration and analysis of the experience, socialization workshops were held with specialists, reflection workshops with actors of the process, in-depth interviews, and the quasiexperiment that corroborated the pertinence of the proposal, and made contributions for its improvement.

Conclusions

The proposed pedagogical model is based on the functional structural systemic approach and the assumed theoretical approaches. These revealed, as fundamental contributions, the pedagogical character that governs the management of rural local development, meaning the role of decision makers and local actors in the interactive accompaniment as a way of organizing the process.

The pertinence and feasibility of the pedagogical model is connoted from the results of the application of the consultation to experts, the socialization workshops, and the quasi-experiment.

Bibliographic references

- Alonso, A. & Bueno, R. (2013). *Desarrollo regional a escala local*. La Habana: Félix Varela.
- Bertalanffy, L. (1987). *Teoría general de los sistemas*. Barcelona: Herder.
- Cabrera, G. (2017). *La superación profesional del docente de la especialidad agropecuaria en la orientación profesional pedagógica*. (Tesis de doctorado). Universidad Central Marta Abreu, Villa Clara, Cuba.
- Fernández, M. (2014). *La superación profesional técnica de los profesores agropecuarios en los centros politécnicos de Pinar del Río*. (Tesis de doctorado). Universidad de Ciencias Pedagógicas Rafael María de Mendive, Pinar del Río, Cuba.
- Horruitiner, P. (2008). Formación y Currículo. *Pedagogía Universitaria*, 12(4), 61-78.
- Morales, M. (2008) *¿Qué es el desarrollo local? ¿Qué retos impone a la gestión del conocimiento y la innovación?* Universidad de Cienfuegos. Recuperado de http://vriep.uh.cu/CAB//index.php?option=com_remository&Itemid=33&func=fileinfo&id=103.
- Núñez, J. & Quiñones A. (2018). *La educación superior como agente del desarrollo local*. La Habana: Félix Varela.
- Santos, J. (2005). *Modelo Pedagógico para el mejoramiento del desempeño pedagógico profesional de los profesores de Agronomía de los Institutos Politécnicos Agropecuarios*. (Tesis de doctorado). Instituto Superior Pedagógico Enrique José Varona. La Habana.
- Vigotsky, L. S. (1987). *Historia del desarrollo de las funciones psíquicas superiores*. La Habana: Científico – Técnica.