

# Bringing a student-centered participatory pedagogy to scale in Colombia

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**Abstract** This paper presents the experience of going to scale of *Escuela Nueva*, an educational innovation that started in Colombia and has influenced educational policy in several countries around the world during the last 30 years. The paper is based on the experience of the leaders of the innovation and its expansion over time. As an insiders perspective, it relies on the knowledge of senior staff of *Fundación Escuela Nueva* and on the published evidence and experience accumulated during the decades following the creation of the innovation. The paper describes the context where *Escuela Nueva* was created and the practices of participating students, teachers, schools administrators and parents when undergoing learning and teaching. It presents the conceptual underpinnings of the innovation, and discusses existing evidence of impact of *Escuela Nueva* on students, teachers and parents. It then examines the experience of bringing *Escuela Nueva* to scale, using a three-stage framework: learning to be effective, learning to be efficient and learning to expand. The paper then discusses key factors for success, and the challenges of scale, impact and sustainability, and advances the argument that good design, adequate implementation and sustained support are essential to take an innovation to scale. To conclude, the following four key lessons of *Escuela Nueva* to the educational change field are discussed : (1) Teachers and students need to be the key actors of the change; (2) the proposed improvements have to be easily replicable within existing conditions; (3) the attitudinal change of teachers is positively affected as a result of demonstrating that the model was feasible, a good fit for its beneficiaries and that they could do it; and (4) a systemic approach is necessary to impact simultaneously on the critical factors of success.

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## Introduction

This paper presents the experience of going to scale of *Escuela Nueva*, a pedagogical innovation that started in Colombia in the mid 1970s in a small number of rural schools, was adopted by the Ministry of Education and expanded to 8000 schools in the 1980s and by the early 1990s had been established as a national policy and further expanded to 20,000 rural schools across the country. *Escuela Nueva* is credited for turning a first-class student centered participatory pedagogy often available only to the elites, into a technically feasible and scalable model for schools serving historically marginalized populations. Thanks to *Escuela Nueva*, by the 1990s Colombia was second only to Cuba in terms of the educational quality available to rural schools in Latin America, and students in *Escuela Nueva* outperformed their counterparts in urban settings (except for the mega cities of Colombia). *Escuela Nueva* has influenced educational policy in several countries around the world during the last 30 years.

This paper is based on the experience of the leaders of the innovation and its expansion over time, and draws on the published evidence, experience and knowledge accumulated during the decades following the creation of the innovation, in particular through *Fundación Escuela Nueva*, an organization that brought together the founding leaders of *Escuela Nueva* and former Ministers of Education to maintain *Escuela Nueva* alive after changes in the policy environment made it unviable to sustain *Escuela Nueva*'s movement of pedagogical change from within the Ministry of Education.

The paper describes in detail the design and implementation features that made *Escuela Nueva* technically, politically, and financially feasible and examines its process of going to scale using Korten's (1980) three stages of learning to be effective, learning to be efficient, and learning to expand. The authors identify eight key factors for successful scaling of the pedagogical innovation advanced by *Escuela Nueva*, namely: (1) Sufficient and sustained funding; (2) Political commitment and support; (3) A demonstration school model working in various regions simultaneously; (4) Intentional maintenance of the mystique associated with the original project; (5) Access to institutional power by key leaders of *Escuela Nueva*; (6) Availability of appropriate administrative methods and roles; (7) Timely and appropriate information about impact for people with decision making power; (8) Continuous learning through knowledge building and action.

The first section offers a glimpse into *Escuela Nueva* by describing instructional practice as observed in *Escuela Nueva* classrooms and offering a quick overview of the model. The paper then outlines the context of Colombia in terms of access to and quality of basic education at the time of the design of the innovation and how it responded to the needs of children in rural areas, particularly in multi-grade schools. Next comes the conceptual underpinnings of the innovation, particularly in relation to active and cooperative learning. The fourth section describes the training strategy

in *Escuela Nueva* in contrast with conventional teacher training. The fifth section presents existing evidence of impact of *Escuela Nueva* on students, teachers and parents. The sixth section presents the experience of going to scale in *Escuela Nueva* through three stages: learning to be effective, learning to be efficient, and learning to expand. The seventh section illustrates how good design, adequate implementation and sustained support are essential to take an innovation to scale. The final section presents the lessons of *Escuela Nueva* as a contribution to large scale instructional improvement.

### **A glimpse into *Escuela Nueva***

In the following excerpt, Schiefelbein (1991) offers a glimpse into classroom activities in an *Escuela Nueva*.

When entering a school that works with the New School model the visitor sees that it operates in a different way and special attention should be given to the children. Some children approach the visitor and ask with interest and tranquility what he or she comes to see while others continue working concentrated on their task or discussing in group. The teacher finishes giving some instructions to the group with which she is working and can then talk to the visitor.

Each one seems to know exactly what he or she is supposed to do and if the visitor asks they can tell what they are doing and, more importantly, how they are learning. They know they are learning with a method: they observe, reflect, write alone and then in group, compare with elements that allow self-evaluation, review and correct and write again to, finally ask the teacher for comments or suggestions. They can come to the teacher whenever they need or have a difficulty. Because in this school the teacher fulfills, truly, the role that is always recommended in the normal and pedagogical schools but that is almost never put in practice: to be the guide that facilitates the learning process of the learner, who is the student (p.16).

Behind the activities described above are deliberate strategies and structures put into place to operationalize a child-centered, participatory learning approach. The *Escuela Nueva* model includes a flexible promotion mechanism that allows students to advance from one grade to another and complete academic units at their own pace. It promotes processes as problem solving by teams which demands respect for other people's opinions and cooperative learning among students. *Escuela Nueva* also instills democratic behaviors in students with instruments like the School Government, which is elected by the students and organized in working committees. In turn, teachers interact with students by spending more time giving individual and group feedback, advising and guiding on tasks and identifying the learning needs and following the pace of each student to best support their learning.

Finally, learning guides produced by and used in *Escuela Nueva* have a methodological structure with a sequence of steps to guide students to resolve questions and problems individually, in pairs and in small groups. The concept of "interactive and dialogue-based" learning materials promoting collective

construction of knowledge is a prominent feature of the innovation. The learning guides deliver the national curriculum and are organized by subjects such as language, math, science, social studies, and ethics. They are designed to systematize the learning process and facilitate its replication. They follow a learning structure with three sections: exploration and discovery, practice, and application. They are a hybrid between a text book, a workbook and planning guide for the teacher. Also, the learning guides are reusable and systematically passed on to future cohorts of children, which make them cost-effective.

This is, in a nutshell, *Escuela Nueva*. Thanks to this model, by the late 1990s students in rural schools in Colombia were outperforming their urban counterparts, excluding the mega-cities. This paper looks at the strategies and the conditions under which *Escuela Nueva*'s pedagogy was brought to scale. But before that, we offer an overview of the context in which this model emerged and the problems it sought to address.

### **Regional and country background and context**

The Latin America and Caribbean region has made significant gains in access and enrollment to school but quality continues to be a great blight. While the region shows high rates of enrollment, it has one of the highest dropout rates in the world. Despite progress in access, inefficient and poor quality basic education persists, which leads to high levels of failure and incomplete basic education. In addition, large differences persist regarding access, academic achievement, termination rates and the quality of the learning and knowledge acquired among socio economic levels in most countries of the region (See Unicef 2015).

Colombia, like other countries in Latin America, experienced an accelerated expansion in primary education beginning in 1950, increasing overall enrollment to 80 % by 1994. The distribution of this enrollment, however, revealed sharp differences between the various regions of the country and between urban and rural zones. While enrollment in urban areas reached 89 %, it was only 66 % in rural areas. The overall quality and efficiency of basic public education, at both the primary and secondary levels, were extremely poor. Students at the lowest income levels were the ones most seriously affected (See Ministry of Education 1998).

Selected national government programs, *Escuela Nueva* in particular, made significant contributions at the time to extend education to Colombian children living in poverty. During the period of the policy to universalize primary education (1988–1996) there was an overall increase of 45.6 % in rural schools while the increase in urban schools was only 7.6 %. Specifically, while in 1988 there were 816,368 students enrolled in rural schools, the number in 1991 went up to 1,188,677 students. About 60 % of the 34,000 Colombian rural schools were *Escuela Nueva* schools with 700,000 students enrolled.

### **The need for innovation in rural education**

In addition to precarious access to school, some of the main causes of the critical state of affairs for Colombian rural education identified in the mid-seventies were

cultural and organizational factors of conventional schooling that influenced the high failure rates in low income schools, (Colbert 1987) including:

- Traditional passive methodologies and lecture-like classes emphasizing rote learning to the detriment of higher thinking skills.
- Curriculum that was heavy in content and with no or little relation to the daily life of students in rural areas.
- Limited time allocated in the first grade to priming activities such as reading, writing and basic math.
- Difficulties in children's transition from home to formal schools.
- Lack of appropriate textbooks and material coherent with active and participative methodologies, adapted to the characteristics and needs of multi-grade schools.
- Rigid schedules, assessment, and promotion systems.
- Limited time focused on effective learning.
- Ineffective teacher training, particularly with respect to addressing the needs of multi-grade schools.
- Difficulty or impossibility to attract highly qualified teachers to schools located in geographically isolated areas.
- Constant migration of teachers to urban centers.
- Failure of the conventional schooling structure to adapt to the living conditions of children in rural areas, many of whom had to migrate from one area to another during the harvest season to take part in crop gathering, resulting in chronic grade repetition.

These problems and issues brought to the forefront the need to stop offering more of the same and to pursue a profound change in primary education in rural Colombia. A new educational model was needed that would offer rural children the knowledge and skills to respond to the demands of technological, social, economic, cultural and political developments.

Some attempts, most of them small-scale in nature, had been made in the past to deal with the situation just described. One of these attempts was the Unitary School approach promoted by UNESCO in the 60s and 70s in countries of Latin America and other emerging economies. The Unitary School offered primary education in schools where a single teacher worked with all the grades through the use of self-instructional materials and individualized learning cards. Colombia was one of the countries where this approach was tested, alongside other experiences that used a variety of methodologies initiated by other institutions to pursue a similar aim.

The Unitary School Program in Colombia started as a UNESCO sponsored pilot in the province of Norte de Santander, including about 150 schools. However, the program had core design features that constrained its ability to spread at scale, the most important limitation being the extraordinary time and effort that individual teachers had to make to prepare instructional materials on small cards with guidance to students as a tool to personalize learning. Moreover, the funding for the initiative came through a special project which was limited in scope and time. In addition to the key technical limitations of its design, the program was strongly opposed by

teacher unions. Opposition came from two key aspects of its design. First, designing self-instructional learning materials demanded too much additional time from teachers. Second, the reduced number of teachers required to carry on Unitary Schools was seen as a potential threat of decreased numbers of teachers in the country.

In summary, conventional schooling in Colombia was not responding to the needs of children in rural communities and the few initiatives that did had important technical, financial and political limitations that prevented their spread at scale. The initiators of *Escuela Nueva* set out to simultaneously address all the limitations of existing education services outlined above, rather than trying to tackle each in isolation. *Escuela Nueva* would build on the limited experience of the Unitary School and take it further. The basic idea was to transform the conventional teacher-centered schooling practices into a learning-centered model that would integrate curriculum, teacher training, community involvement and administrative strategies in a systemic and cost effective way. The expectation was that the new approach would guarantee access and quality education for all school-age children in rural communities.

*Escuela Nueva* first began in 1975, with the introduction of multi-grade strategies for the schools in rural areas where there were not enough students or teachers for complete schools. Drawing on research-based practices, the initiative incorporated peer tutoring, child-centered teaching methods and self-instructional interactive learning guides and textbooks. By design, *Escuela Nueva* shifted the conventional school model away from the transmission of knowledge to the social construction of knowledge. The new model was oriented by and promoted a child-centered active pedagogy, a new role of the teacher as a facilitator rather than a transmitter of information, and high involvement of crucial actors of this change—children, teachers and communities (See De Moura Castro and Verdisco 2002). Additionally, *Escuela Nueva* deliberately cultivated democratic behaviours and citizenship skills.

By the end of the 1980s, *Escuela Nueva* had proved that quantitative and qualitative improvements could be made in the most disadvantaged schools. This was evidenced in better academic scores and lower drop-out and repetition rates than in conventional schools as will be discussed later. The program evolved from a local and departmental innovation to national implementation in over 20,000 schools of the 34,000 rural schools across Colombia. In 1989, the World Bank selected *Escuela Nueva* as one of the three most outstanding social reforms in the developing world. Many countries have visited *Escuela Nueva*, and the model has inspired educational reforms in several countries, reaching more than 5 million children, mainly through partnerships with governments. This spread makes *Escuela Nueva* one of the longest lasting bottom-up educational innovations in the world.

### **Conceptual underpinnings of *Escuela Nueva***

The stated goals of *Escuela Nueva* are to promote certain attitudes and abilities in students, teachers, administrators and members of the community (See Colbert et al. 1993) .

1. *For students* the system seeks to promote: an active, reflective and participatory learning process; the ability to apply acquired knowledge to new situations; an improved self-concept; co-operative and democratic attitudes; and a set of basic skills in language, mathematics, science and social studies. These attitudes and skills are framed within a ‘child rights’ perspective.
2. *For teachers* *Escuela Nueva* promotes the desire to act as a guide and facilitator of learning rather than a presenter of facts, and to take an active role in the surrounding community. It cultivates a more positive attitude towards work in the rural environment and towards administrators and advisors. It fosters the development of skills in multi-grade instruction and instructional techniques of the system. *Escuela Nueva* seeks to promote a guiding and collaborative relationship with teachers, rather than a rigid and controlling one, and encourages professional development through action research.
3. *For administrative agents*—that is supervisors, heads of clusters of school or principals—their role was seen as orienting rather than controlling. Administrative agents are required to integrate pedagogical practices with their administrative functions. That way they become a resource person and a technical support to the teachers. This shift in the role of administrative agents served as a potent motivator for teachers to continue the innovation, as it conveyed to teachers that the new practices advanced by *Escuela Nueva* were endorsed by their immediate authorities.
4. *For the Community* it promotes new partnerships with teachers, children and the local community. *Escuela Nueva* offers parents, relatives and the community at large the opportunity to participate in school activities, ensures that their culture is fully valued in daily school activities and that they have opportunities to make key contributions.

According to educational research, organizing a multi-grade school requires a great degree of innovation (See Little 2006). In these schools there is a pressing need for modifying traditional teaching practices and developing a child-centered learning process. A teacher who handles several grade levels at the same time and deals with different learning paces and high heterogeneity in the classroom faces the need for methods and instruments such as organizing students in small groups, introducing cooperative learning and developing flexible, tailor-made strategies. However, these teaching strategies call for specially designed instruments for independent learning and cooperative work.

*Escuela Nueva* sought the same objectives as the Unitary School described earlier, but introduced new operative strategies to deal with issues of diversity of levels, age heterogeneity, different paces of learning, and the living conditions of rural children among others. These strategies were designed keeping in mind the importance of technical, political and financial feasibility. Thus *Escuela Nueva* introduced personalized and collaborative work strategies among children, supported by specially designed materials for independent learning and teamwork. (See Colbert 2000)

With this approach, *Escuela Nueva* sought to address the persistent problem of invisibility of multi-grade schools to educational planners. As stated by Little

(2006) “Those who design, sponsor and manage national school systems, training systems for teachers, development of curriculum or materials or consultancy systems, ignore this reality”. By addressing this reality seriously, the promoters of *Escuela Nueva* were also addressing a global educational issue as it has been recognized internationally (See Schiefelbein 1991).

Although the principles of *Escuela Nueva* are based on the pedagogic trends of the 1900's and inspired by pedagogues such as Decroly, Dewey, Montessori, Piaget and Vygotsky, among others, the designers of the model were able to apply these principles within operative strategies, transforming schools with the lowest economic resources into active, participatory and collaborative learning environments. Some of these principles, adopted by some elite schools in most countries but not in the poorest low income schools, represent an important feature of the Colombian innovation.

Table 1 contrasts key elements of conventional schooling principles and practices with key features of the *Escuela Nueva*.

The curricular elements that allow and facilitate the instructional practices described in this section are the following: learning guides for children, learning corners, a classroom library, a student government, and community participation. These are described briefly below.

*Self-study learning guides* are designed to promote cooperative and active learning, individually and in groups. They link learning experiences with family and the community and stimulate the development of higher thinking skills through flexible promotion mechanisms that allow students to make progress at different rhythms. The texts also serve as planning and curricular tools for the teacher and allow for changes or adaptations made by the teachers.

*Learning corners* facilitate the manipulation of concrete material to promote comprehension-based learning and help link the school and the community. The

**Table 1** Escuela Nueva versus conventional school

Features	Conventional school	Escuela Nueva
Teaching	Frontal Transmission	Facilitating Child-centered learning
Learning	Memoristic	Reflexive-Comprehensive
Student Involvement	Passive	Active
Classroom organization	Sitting in rows	Small groups
Content	Information overload	Process oriented, linked to children's everyday life
Books and materials	Scarce	Plenty Learning Guides
Learning Setting	Classroom only	Classroom and school environment, community
School-Community	Weak link	Strong link
Calendar-Schedules	Rigid	Flexible
Evaluation	Memory-based Summative Occasional	Formative On-going Qualitative Competency-based



*classroom library* complements and supports learning activities and encourages students to research.

*The student's school government* introduces children to civic and democratic behavior. It allows students to develop values such as solidarity, discipline, performance and fulfillment of duties, and protection of rights relevant to community life. The election of student government representatives and diverse members of varied committees; a suggestion box; self-monitored attendance; a participation book; a traveler notebook, among others, are tools that instill and motivate direct and active participation by students.

*Community participation* in school activities is another key curricular element of *Escuela Nueva*. Examples of some tools to support the work include a town plan-map of the village, family records and an agricultural calendar, all of them designed by the school community, that is, parents—who lead this activity-, teachers and students.

The curricular elements just described reflect learning that is in line with constructivism, that is, fostering the social construction of knowledge through dialogue and interaction. For example, teachers evolve from someone who imparts information or knowledge to someone who becomes a facilitator, interacts with the community, links knowledge with the local context and recognizes accomplishments in social behavior. In turn, a central role is granted to the child's thinking by supporting the construction of knowledge while working in small groups, establishing a direct relationship between learning and the physical and community environment, respecting the different paces and by fostering personal and social development in democratic and autonomous contexts.

More specifically, *Escuela Nueva* follows a constructivist approach on the ways learners actually generate understanding. This approach emphasizes that learning is a process of knowledge construction and that it is intimately connected to the situation in which it takes place (Resnick 1987). Individuals learn by actively interpreting information as opposed to simply recording it. And that learning is knowledge dependent suggests that it depends on elaboration and extension of prior knowledge. In this line of reasoning, *Escuela Nueva* promotes higher level thinking skills through the structure of the learning guides and assumes that learners are not alone in the learning process—rather, they are embedded in socio-cultural settings.

*Escuela Nueva* encourages collaboration through small groups. These learning experiences cultivate democratic attitudes and behaviors such as cooperation, solidarity and participation (Colbert and Arboleda 1989). The use of cooperative learning in *Escuela Nueva* promotes participation in the classroom and exemplifies the use of cooperation to cultivate achievement, self-esteem and civic conduct. The interactions between students and teachers, between students and other students and between students and parents are critical to learning.

From its inception *Escuela Nueva* emphasized both affective and academic outcomes, which are mutually reinforced. Accordingly, pedagogical practices within *Escuela Nueva* maintain a balance between cooperative and personalized learning, acknowledging the interdependence of both. This enables students to assist and support their peers and develop competencies critical to social cohesion.

In summary, the *Escuela Nueva* model is a basic education system which integrates curricular, administrative, community and teacher training strategies as outlined above. This system makes provisions for active learning, a close relationship between school and community and a flexible promotion mechanism adapted to the lifestyle of the rural-peasant child. Flexible promotion allows the student to make progress in a given grade and complete academic units at their own pace. Additionally, it promotes cooperative learning and personalized student-centered processes, it instills democratic behavior, a new teacher's role as advisor and facilitator, and a new concept of "interactive texts".

### **Teachers learn the same way they are expected to facilitate student learning**

The *Escuela Nueva* in-service Teacher Training Strategy was conceived and organized as a response to the most frequent and traditional problems related to teacher training in Latin America. The main problems, consistent with those of conventional professional development approaches around the world (See Bruns and Luque 2015; Hargreaves and Fullan 2012) include:

- (1) Excessive emphasis on theory without practical application. Despite the increase in the number of "trained" teachers, there is no evidence of progress towards improving student performance.
- (2) Contradiction between methodology suggested for the classroom (active and participatory learning) and that used in teacher training. Teachers are expected to promote active, participatory learning without engaging in active learning processes themselves.
- (3) Lack of coherence between children's learning materials, teaching methodologies and teacher training. Textbooks are an important vehicle for putting the curriculum into operation, but unfortunately, teaching practices and teacher training are rarely linked to children's learning materials.
- (4) The experience and knowledge of well trained teachers is rarely used to the advantage of others less experienced.
- (5) The potential advantage of using demonstration schools as places for direct observation is not optimally used. Training occurs outside the work place. Failure to observe an innovation in practice (preferably in a school) limits articulation between in-service training and the possibility of application in the classroom.
- (6) The involvement of educational administrative agents in training and teaching processes is limited which limits their potential support of the innovation.
- (7) Difficult replication of cost-effective training strategies. Many in-service training events for teachers try to compensate for weaknesses in their education or to remedy their conceptual and theoretical shortcomings.
- (8) Difficulties in articulating training with follow-up. In-service training is unlikely to be effective if it does not include a sequential strategy, gradually articulated with application in the classroom.

The main principles that oriented the *Escuela Nueva* training strategy to address the problems stated above were experiential and practice based training with a strong component of attitudinal change. Teachers are trained with similar methodologies as those they will apply with their students through practical, experiential workshops. They exchange, support each other, and promote positive attitudinal change through teacher's learning circles, called microcenters. These principles are consistent with existing evidence on effective professional learning. In effect, as stated in Bruns and Luque (2015) mastery and professional growth is one of the key sources of professional rewards. They highlight "the emphasis on professional interaction and exchange of practice among teachers" as a feature of the highest performing education systems. "Within Latin America, the high-performing Cuban education system is exceptional in its strong emphasis on teamwork and exchange of experience among teachers. Every school has a teacher learning group for every discipline, and these meet every two weeks to discuss teaching methods, produce materials, and develop common homework exercises and assessment items".

This implies that teachers: (1) experience similar active methodologies to those they will promote with children, (2) reflect on their teaching practices, (3) learn and collaborate with each other, and (4) gain motivation and a positive attitude in their profession. These principles were materialized into three operational strategies:

1. Setting-up demonstrative schools to permit direct observation of the innovation and facilitate attitudinal changes. Demonstration schools also stimulated demand and served as empirical references for horizontal diffusion of innovations from teacher to teacher, from child to child, and from community to community.
2. Designing a teacher training curriculum organized through sequenced stages and experiential participatory workshops that facilitate the implementation of the innovation. Training consists in learning to apply the *Escuela Nueva* components and elements, articulating theory with practice. The curriculum is operationalized through a teacher's manual organized in units and learning guides that follow a similar methodology to that of the learning guides for children, ensuring that teachers are exposed to methodologies similar to those they will use with their students.
3. Establishing local *microcenters* as a mechanism for peer-to-peer support. The microcenters are periodic gatherings of teachers to discuss progress in implementation and solve problems together. These gatherings facilitate teachers' reflection on their pedagogical practice and a two-way relationship between teachers and teacher training institutions. They also provide a platform for future stages of more in depth knowledge, where distance education institutions can support continuous teacher development.

In the teacher-training component, teachers are trained to use and apply the *Escuela Nueva* curriculum elements, at classroom and community level, and to adapt student guides to the child's level and local environment when needed. The main objective is to improve the role of the teacher to guide, orient and evaluate the

learning processes, avoiding time spent in routine instructions. The key to promoting this objective is group discussion to motivate teachers towards the desired change and strengthen their commitment. These group discussion experiences also help teachers to work with small groups in their own classrooms.

Workshops for teachers are organized using the teachers training manual, which is designed in such a way that teachers apply the same active process they learned in the training workshop when they, in turn, work with children. These features make training easily replicable. The training strategy also establishes a sequence that permits gradual innovation and corresponding changes of attitude in children, teachers, community and administrative agents. Furthermore, training and implementation are interrelated. In effect, training consists of learning how to implement the program. Therefore, each component of the process has its own operative instruments to facilitate replication.

In the first stage of training, a one week “*Initiation workshop*”, teachers focus on practical implementation by organizing a child-friendly learning environment and establishing links between the school and community. The teachers’ *Escuela Nueva* manual systematizes the process and content of the workshops. The objectives of this workshop include: (a) to develop the capacity to adapt the school to the effective use of small groups and cooperative learning and activity centers; (b) to mobilize the human and material resources of the community for the improvement of the school; and (c) to gain an understanding of how to organize the school government in order to promote children’s socio affective development. For each objective a unit was designed in the training manual. These units consist of various specific objectives developed through learning guides following a similar methodology to that used by children. This way, the teachers approach the learning processes by doing and experimenting active learning themselves.

Given the fact that the programme encourages a relationship between the school and the community for mutual enrichment, it is expected that the teacher will create an adequate climate for innovation among community members before introducing changes in the school. Equally the teacher is encouraged to stimulate children and parents in order to increase the understanding of their rural community, its history and its place in the immediate environment of the locality.

The second stage of the training for teachers in *Escuela Nueva* emphasizes knowledge of subject matter, and teachers learn to use and adapt children’s learning guides and materials. This second workshop called “*study and adaptation of learning guides*” takes place once the school is organized and the community has been engaged. In the workshop teachers study the children’s materials, learn to use them correctly and link them with the national curriculum. The open ended nature of the learning guides permits flexibility for local initiatives. This means that teachers can introduce activities related to the local context making the curriculum more relevant. This workshop is designed to provide the opportunity for planning the use of classroom units in a flexible manner and adapt them to the local and children’s needs.

The third stage is a reinforcement of methods and practices for teaching basic literacy. This workshop called “*reading and writing*” was designed in response to the notable weakness of rural teachers in dealing with the student of the first grade

and their learning to read and write. This activity became very relevant because the application of the learning guides requires that children are able to read and write adequately.

The formation of teachers’ learning circles or microcenters is encouraged from the first workshop as part of the follow up strategy. Teachers are encouraged to come together periodically to reflect on their work, interact with other teachers and work on common problems. Since most of the schools have one or two teachers the microcenters bring together teachers from several schools to a convenient location, frequently one of the schools. Ideally, these gatherings should be monthly and this was the case during the first phase of large scale implementation of *Escuela Nueva*. However, distance and costs are factors that sometimes impede regular gatherings among schools, as has been the case in some regions. To overcome this obstacle, in some cases educational authorities decided to establish microcenters for teachers of neighbouring schools, strategically located to be at similar distance from each participating school.

Table 2 contrasts conventional teacher training with *Escuela Nueva*’s approach to teacher training.

The regional supervisors of schools were also part of the initial design of the *Escuela Nueva* model. Their participation in the innovation was crucial. These administrative agents were trained on the model and encouraged to take the role of trainers, thus legitimizing the innovations in the classroom. The intention was that they would change their traditional role of vertical, rigid inspectors to a more facilitating role to support teachers. By the late 1980s, *Escuela Nueva* had been adopted as *the* educational model for rural schools in Colombia. At that time, the

**Table 2** Teacher Training: *Escuela Nueva* Strategy vs Conventional Approach

Features	Conventional strategy	<i>Escuela Nueva</i> strategy
Approach	Theory without application	Practice focused. Learning to apply
Learning	Frontal, lecture based, seminars	Experiential, observation of demonstration schools
Materials	General reading documents	Specific manual with similar methodology as those of students
Change orientation	Knowledge and cognitive outcomes	Cognitive outcomes, practice and attitudinal change
Integration	Only teacher focused	Integrates teacher training, classroom methods and student materials
Time frame	One-time course	Several steps over time
Use of teacher experience	Experts knowledge; insufficient use of teachers’ experience	Peer to peer; role of experienced teachers
Collaboration	Individual learning	Collaborative learning
Follow-up	There is no follow-up; lack of reflection and feedback	Learning circles among teachers; reflection on learning
Replicability	Depends on experts’ knowledge	Systematized in specific instruments easy to apply

Ministry of Education was heavily centralized, which made it easy to convene and train regional supervisors to adequately support teachers in *Escuela Nueva*.

However in 1991 Colombia started a nationwide decentralization process that devolved resources, authority, and the provision of services to local authorities. In the process of decentralization of the education sector, many of the supervisors' roles were eliminated and transformed into directors of school clusters. As a result, remote schools were seldom visited by the administrative agents, and despite efforts to train them in the *Escuela Nueva* strategies, the bottom line was that teachers ended up having more concrete knowledge and practice on the model than their superiors. In this new structural arrangement, microcenters became a vehicle to fill the gap of support by administrative agents through teacher collaboration across schools.

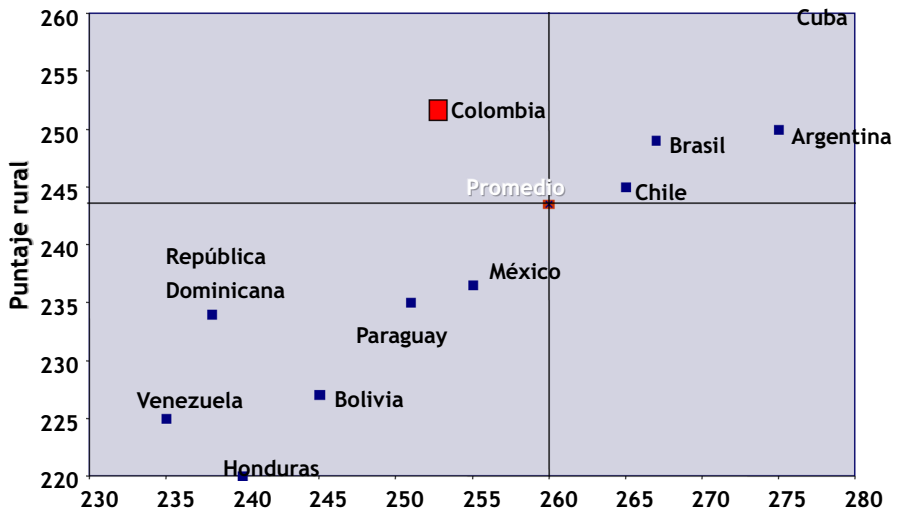
Currently in Colombia, retiring supervisors and directors of clusters are not being replaced. Their role was assigned by the Ministry of Education to the Principal of larger school districts that include small rural schools linked to the bigger school, which usually provides both elementary and lower secondary education. The small multi-grade schools are essentially for primary education and children then have the opportunity to enroll in the bigger school that their rural elementary school is linked to. A big challenge is to ensure that the school principals become more knowledgeable on the characteristics of multi-grade schools and are trained in the *Escuela Nueva* model. At present, *Escuela Nueva* exists within the Ministry of Education only nominally. *Fundación Escuela Nueva*, a Non-Governmental Organization formed by the founding leaders of *Escuela Nueva*, is making an effort to influence new local governments to organize regional events for school principals so that they can assume the administration and support to these schools. These efforts, however, are limited, as training of school principals requires significant financial resources and strong political will on the part of local authorities.

### **Evidence of impact of *Escuela Nueva* on student learning outcomes**

There is ample evidence of the impact of *Escuela Nueva* on student learning and social skills. Different evaluations carried out by national and international agencies and academic groups since 1980 show that *Escuela Nueva* significantly improves the academic achievement of children in rural and urban primary schools, as well as their self-esteem, social skills, civic and democratic behavior.

Several empirical studies conducted between 1982 and 1997 confirmed that children in grades 3 and 5 from *Escuela Nueva* achieved higher scores in language and mathematics than their counterparts not in the program (Psacharopoulos et al. 1993; McEwan 1998). Various statistical analyses also confirmed significant reductions in drop out and repetition rates, and noted that children demonstrated improvement in self-esteem and civic behavior.

According to a report by the Social Mission of the Colombia's National Planning Department comparing the educational achievement of children in schools from different socioeconomic backgrounds, "Escuela Nueva compensates for the initial limitations of the children caused by low socioeconomic status" (Departamento Nacional de Planeación 1997). Similarly, in a study of education in the Latin



**Fig. 1** Rural versus urban student achievement in Latin American Countries in 1998 Source: UNESCO (1998) First International Comparative Study of Education in Latin America and the Caribbean

American and Caribbean Region carried out in the late 1990s, UNESCO (1998) concluded that, “Colombia is the only country in the region where the rural school obtains better performance results than urban schools, except for those in mega cities..., primarily due to *Escuela Nueva*” (See Fig. 1 below). *Escuela Nueva* also instills civic values, peaceful coexistence and democratic behavior in children. In effect, as the literature shows, cooperative learning can trigger changes in democratic behavior and peaceful coexistence at an early age and can reduce prejudices and aggressive behavior to promote understanding of different perspectives, to bolster self-esteem and to encourage the development of solidarity, tolerance and acceptance of differences (Johnson and Johnson 1989). Collaborative learning in *Escuela Nueva* has confirmed these propositions, a matter raised by scholars in international forums. One of them states that “pedagogical routines aimed at group work, participation, and self-directed learning have a better chance to form a democratic ethos than those which are merely directive”.<sup>1</sup>

A study on democratic behavior and peaceful coexistence published by the University of London (Forero et al. 2006, p. 289) highlights the positive impact of classroom climate, the training of teachers, the interaction of students as they learn, and the participation of parents on the peaceful social interaction of children. In effect the result of “the comparison between *Escuela Nueva* and conventional schools shows that the use of *Escuela Nueva* methodologies has a significant positive impact on the peaceful social interaction of children” compared with the control group of children from other schools.

Similarly, the study of knowledge, attitudes and democratic behavior conducted in Guatemala by the Academy for Educational Development in 1994 shows how

<sup>1</sup> Conferencia en Congreso de Escuelas Nuevas, 2006.

children in the New Unitary Schools, a model that adapted *Escuela Nueva* to the context of Guatemala, offer more positive feedback and less negative feedback amongst themselves than those of the traditional unitary schools. Furthermore, they present a higher incidence in the frequency with which they take turns and lead processes within the school as well as democratic behaviors such as equality, interpersonal effectiveness, solidarity and the participatory leadership of boys and girls (Chesterfield 1994).

A more recent study on the effectiveness of multi-grade schools and the reforms of teacher training presents evidence about the positive effect of *Escuela Nueva* on student outcomes in Colombia. The main conclusion of the study is that in the national standardized test *Pruebas Saber* of 2005 “the schools that implement the *Escuela Nueva* model show statistically significant higher scores in Language (0.15) and Math (0.21) than students in conventional schools, controlling for municipality and other factors that may affect all schools in the same way” (Hincapié 2014: p.22).

The *Escuela Nueva* experience leads us to conclude that large scale change within traditional systems requires a number of standard elements that are easy to understand, acceptable to the main stakeholders, and easy to put in practice. This is precisely the ability to translate complexity into manageable action. A more open-ended system that relies on the creativity of teachers and students might work in mature educational systems with highly trained, motivated and well paid teachers, but not in emerging economies such as Colombia and the larger Latin America Region, where solutions to improve educational systems should be found within feasible conditions.

### Going to scale: The process and why it worked

*Escuela Nueva* started with two fundamental assumptions. The first was that improving educational effectiveness would require creative changes in the training of teachers, in the administrative structure, and in relations with the community. Accordingly, the system offers an integrated response by developing four major components—curriculum, training, administration, and relationship to the community—and features concrete strategies for children, teachers, administrative officers and the community.

The second assumption was that it is essential to develop from the outset innovations that are replicable, decentralized, and viable technically, politically, and financially. In other words, the design of the system must include plans for going to scale. In effect, the most promising educational change innovations are those that have demonstrated not only positive empirical results, but also replicability and scalability. There are many great educational innovations on the ground, some academically and scientifically interesting, but many lack the potential to go to scale. Having good innovative ideas is a requisite for large scale innovations, another one is to know how to lead change and transform entire education systems.

By a technically feasible innovation we mean that it allows teachers to improve their teaching practices, improve learning environments and implement changes in their classrooms without needing top credentials in education. *Escuela Nueva*



promoted small but effective changes in the classroom. These small changes in the daily work and routines of teachers and students gave a real meaning to change at the bottom level. Teachers played a crucial role in carrying out the innovation.

Innovations also need to be politically feasible. This requires cultivating buy-in among key actors of change, that is, teachers, students, supervisors and parents, and having the support of educational authorities, particularly at the national level. One additional feature of political support quite relevant for Latin America is the acknowledgement of Teachers Unions who carry considerable influence and power.

Finally, innovations have to be financially feasible. This requires thinking about cost-effectiveness from the outset. An innovation may be really interesting, but if it is not cost effective, it would be nearly impossible to impact national policy, especially in a developing country. The next section describes how replicability, technical, political, and financial viability were addressed during the design, testing and implementation of the innovation in a trajectory of more than 15 years from one rural school to a national policy.

### **The evolution of *Escuela Nueva*: Going to Scale**

The 15 year period of the innovation from start in one school to full scale at the national level had a sequence of three steps or stages. The three stages were: local and departmental innovation, national implementation, and universal application. These stages correspond to the three stages proposed by Korten (1980) in relation to community organization and rural development: learning to be effective, learning to be efficient, and learning to expand.

Learning to be effective occurred with the support of the US Agency for International Development. This phase, from 1975 to 1978, consisted of the implementation of *Escuela Nueva* in 500 schools in three departments of Colombia. It included the design and production of materials for teachers and children; planning of the program, including its administrative and financial organization; development of delivery systems; implementation in the schools and the communities; and initial evaluations.

This is how it took place on the ground. As mentioned earlier, *Escuela Nueva* grew out of the UNESCO financed project Unitary School, in Colombia. At the time, Oscar Mogollón was the teacher in the demonstrative school of the project in Pamplona, in the Province of Norte de Santander. Oscar, a charismatic and creative teacher, was not only applying the techniques of Unitary School, but also creating his own innovations in the school. Vicky Colbert, one of the authors of this paper, was the first national coordinator of Unitary School in the Ministry of Education. In this role, she traveled throughout the country in an effort to identify and build on existing experiences and promote a national consensus among them. In one of these trips she met Oscar. Inspired by his leadership, Colbert started to wonder “How can what Oscar is doing in this school be done in the 34,000 rural schools of Colombia?” In the search for an answer, they concluded that multiplying what he was doing—which required extraordinary investment of personal time and effort—was extremely difficult and unrealistic. Together, Mogollón and Colbert decided to introduce major changes to the original Unitary School model.

The team found the interest and support of the Department of Planning at the Ministry Education and of USAID. Through this partnership, an innovation project was initiated in three regions of Colombia. The innovation built on the experience Oscar was leading, but introduced a more systemic approach, and went beyond just classroom organization for the multi-grade setting to include also the active involvement of administrators and the local communities. From the outset, the innovation was seen as an opportunity to challenge the teacher-centered approach and introduce a new pedagogy that was active and child centered. This is why the model was named *Escuela Nueva*, or ‘New School’. The leading team thought that in order to impact national policy they had to start thinking systemically and introduce strategies to facilitate replication and scalability. This required working with teachers, administrators and communities. Under the transition from *Escuela Unitaria* (Unitary School) to *Escuela Nueva*, the first challenge was to design and introduce a scalable intervention that was technically, politically, and financially feasible.

As a team, Beryl Levinger then USAID education officer, Oscar Mogollón and Vicky Colbert designed and coauthored the first manual of *Escuela Nueva* (Mogollón et al. 1974) where all the underpinnings of the model were made explicit and systematized to facilitate replication. As mentioned earlier, the manual used the same methodology teachers were expected to use with their students. In this manner, through a very experiential, practice-focused approach, the team started leading change in the country. They were aware that the attitudinal change they were seeking in teachers, in students and communities required a solid teacher training strategy that compensated the traditional and theoretical perspectives in most Schools of Education.

In 1976 Vicky Colbert was appointed the first National Coordinator of *Escuela Nueva* in the Ministry of Education. Her challenge was to build a national team composed of many of the talented rural teachers she had met in her travels around the country. They were the persons that really knew the context where *Escuela Nueva* would be operating. However, bringing and appointing rural teachers into the Ministry was not easy. Convincing high level decision makers that this was the best choice was one of the most important and crucial decisions that the leadership of *Escuela Nueva* fought for. Fortunately, the proposal was supported and Colbert and her team managed to appoint a mixed and small national team with the best teachers from the rural Unitary School and some experienced researchers and planners. The biggest challenge was working and “battling” within the bureaucracy to protect the innovation and the team so that *Escuela Nueva* could move to the next stage.

Another strategic step was to initiate a bottom up approach to change by organizing a network of rural teachers. The strategy was to set up demonstration schools in action, provide empirical results, and establish alliances with regional entities. In this situation, Colbert managed to get Oscar Mogollón appointed as the head of an important teacher’s college in Pamplona, Norte de Santander, where he could lead demonstration schools for the future training of teachers. They started bringing high level policy makers to visit demonstration schools and influencing high level decision makers from the Ministry. This way, what was developing at the bottom level served to define policy recommendations.

The second stage, learning to be efficient, took place from 1979 to 1986. It brought the program to 3,000 schools with the financial support of departmental governments, the Inter-American Development Bank and private organizations in Colombia such as the Coffee Growers Federation and the Foundation for Higher Education. This stage included replication of training at the national level, using existing materials. By then a strong national team had been assembled that could support the expansion of the new pedagogical model. Colbert was appointed Vice-Minister of Education, and Mogollón became the National Coordinator of *Escuela Nueva*. The access of key leaders of *Escuela Nueva* to institutional power enhanced their capacity to protect the team and the technical continuity of the process of consolidating pedagogical innovation on the ground and spreading it to a significantly greater number of schools. To facilitate replication of *Escuela Nueva* at the large scale in several regions simultaneously, the materials and instruments designed and tested in the first stage were used.

During this period, the World Bank supported a Development Plan for Rural Areas, which included an assessment of challenges and opportunities for rural education in Colombia. As part of this larger plan, a study of the educational sector was designed to identify medium-term policy priorities. Since access to education in rural zones and the less developed provinces was still limited, the study recommended investing in more teachers and infrastructure and proposed examining new methods of delivering education. A consensus on priorities began to emerge, leading to the government's landmark decision in 1985 to adopt *Escuela Nueva* as a universal strategy in rural areas. By this time, the program had expanded to 8,000 schools throughout the country, and was supported through a combination of financial resources from the national and departmental governments and from private institutions.

These favorable conditions – access of *Escuela Nueva* leaders to key positions within the Ministry, and the adoption of *Escuela Nueva* as a government priority –, offered the opportunity to give full support to the innovation within the Ministry. A loan from the World Bank made it possible to get *Escuela Nueva* to full scale. The large scale expansion was possible because the effectiveness and efficiency of the model had already been demonstrated. The influence of the team in key positions at the Ministry helped to ensure financial, technical and political conditions and support. By the late 1980s, *Escuela Nueva* had been adopted as a universal strategy in rural areas.

The third stage, learning to expand, started in 1987. By 1992, *Escuela Nueva* had reached 20,000 rural schools and had become one of the five pillars of the national plan to eradicate extreme poverty. However, expansion to the remaining 14,000 rural schools (there were a total of 34,000 rural schools in Colombia at the time) coincided with the launching of a nationwide decentralization policy in Colombia. This policy included the decision that mayors and governors, previously appointed by the President or the Governors, would be elected by their constituencies. Also under this policy, the provision of basic services, including education, was transferred to local governments. One of the consequences was that the Ministry of Education lost its capacity to centrally implement programs in all territories. The new autonomy of the regions and cities demanded the negotiation of the programs to

be implemented with each territorial unit. Instead of dealing with a single national education authority, *Escuela Nueva* now had to deal with about 1,000 municipalities. This new situation created a stumbling block for the continued expansion of the *Escuela Nueva* national program.

The attention of the Ministry of Education diverted to its own reorganization to respond to the new decentralization policy. In this new policy environment, the leaders of *Escuela Nueva* were unable to maintain the stronger organizational capacity required to preserve *Escuela Nueva*'s quality and to create new decentralized structures at the local level. This new context removed from the innovation many of the required supports to continue its expansion.

And these supports are essential. A significant pedagogical innovation on a large scale requires that local management systems are in place to support it. In effect, effective expansion to the 20,000 schools and beyond would have required constant attention to ensure acceptable fits between organizations, programs and beneficiaries. But the numerous problems that emerged during decentralization resulted in losses in effectiveness and efficiency. While some of these issues are inevitable in going to scale, a host of new legislative, administrative and financial procedures amplified their magnitude. Despite these stumbling blocks, the *Escuela Nueva* schools continued to show better outcomes not only within Colombia, but also in comparison with other countries in Latin America (Fig. 1).

From the considerations discussed so far, it follows that a combination of factors is required to successfully bring pedagogical innovations to scale. Eight important factors for success in going to scale can be distilled from the *Escuela Nueva* experience: First, funds were available for the larger effort. Second, the political commitment was present. Third, the demonstration school model worked well in various regions simultaneously. Fourth, the mystique associated with the original project continued as the program grew. Fifth, the influence of the effective leadership of all the members of the team that accounted for the small scale success was expanded significantly within the Ministry of Education. Sixth, the appropriate administrative methods were in place, including the shift in the role of local supervisors as trainers of teachers, which legitimized the innovation in classrooms and the larger environment. Seventh, information about the results of the pilot project was timely and appropriate for the people with decision making power. And eighth, the transition from project to program was associated with a continuous learning process whereby a clear link was maintained between knowledge building and action. The roles of the researchers, planners and administrators were combined in a team, while the core leadership team remained together and moved to positions of leadership during the expansion period.

### **Challenges of scale, impact and sustainability**

Several conditions are necessary for large-scale instructional change to succeed and be sustainable. The experience of *Escuela Nueva* shows that these conditions are related to good design, adequate implementation and sustained support. In terms of design it is essential to guarantee the effectiveness and efficiency of the innovation, that is, the good fit and affordability described before. Adequate implementation

requires that the key elements of the “unassembled model kit” (Schiefelbein 1991: 29) be in place as well as the meaningful involvement of key stakeholders, namely, students, teachers and parents. The sustained support by government and non-State actors implies a process and strategy in place as well as financial, technical and political inputs as a matter of policy.

The experience of the *Escuela Nueva* innovation substantiates this assertion. In effect, the evidence shown above indicates that during the 80s the political, financial and technical support for the innovation were strong and the results on student achievement, social skills and democratic behavior were significantly higher in schools using the innovation than in conventional schools. In addition, the regions where strong support for the implementation of the innovation has continued have consistently shown, up until today, higher scores in the national tests of students in *Escuela Nueva* compared to schools that do not use the model. This is the case in nine of the 32 Departments of the country where political will and support to *Escuela Nueva* has continued. Some of the most prominent examples of continued provincial support include the Department of Antioquia, where the current government decided to implement the innovation fully in all rural schools; the Department of Caldas which has counted with the support of the regional government, the Coffee Growers Federation, Fundación Luker for urban schools and *Fundación Escuela Nueva*; and the Department of Quindío, which counts on the support of the staff and middle managers from the Secretary of Education and of *Fundación Escuela Nueva*.

Achieving and maintaining the three conditions of political, technical, and financial viability is a tough challenge. In the case of *Escuela Nueva*, as discussed before, the final phase of expansion to reach the universe of rural schools was seriously undermined by the new decentralization policy which mandated the provision of education as a responsibility of local governments. As a result, the priorities of the Ministry of Education changed and its focus became how to adapt its structure and organizations to respond to the new policy. In turn, the focus of local authorities shifted to how to assume the new responsibility.

In addition, the change of administrations, the turn-over of government officials, supervisors and teachers contributed to the weakening of the innovation within the ministry. This situation was aggravated by the common problem of public entities which is the loss of institutional memory by default or by design. There is no tradition of cumulative knowledge and practice and of building on what has worked in the past. The fever of changes to make a mark tends to prevail over the maintenance of programs or key staff from previous governments. Furthermore, there is turn-over of about 30 % of rural teachers in Colombia every year due to their desire to transfer to urban schools where they find better life opportunities for them and their families. As a result, training a new cadre of poorly qualified teachers every year becomes a big task which, again, demands a great deal of financial and technical support from the government.

This tendency of traditional educational systems is probably part of the rationale used in the Jomtiem Conference on Education for all in 1990 to state that education should not be left to governments alone, and to propose the involvement of new actors from non- State sectors such as business, Foundations and NGOs in the achievement of national educational goals. The realization of such a need was

perceived by the original team that developed and implemented *Escuela Nueva* well before the Jomtiem Conference, and led to the creation of *Fundación Escuela Nueva* (FEN) in 1987. Aware that innovations constantly face the risk of fading within bureaucracies and are very vulnerable to political and administrative changes, the leading team of *Escuela Nueva* and several ex Ministers of Education that supported its development created FEN to sustain the innovation, preserve its quality and integrity, build on it with continuous improvements, and disseminate it worldwide. Since then, FEN has further developed the original model and pedagogy of *Escuela Nueva* through four strategies: (1) adapting it to new populations and contexts; (2) seeking to impact pre-service training to complement the success of in-service training; (3) introducing new concepts through specialized manuals for teachers and learning guides for children; and (4) establishing a national and international community of practice. These four strategies are briefly summarized below.

### *Adaptation to new populations and contexts*

FEN in 1989 was the first to adapt the EN model to urban schools with the support of the Inter American Foundation, calling the new program *Escuela Activa Urbana*. In 2001, with USAID's support, FEN designed and piloted the *Escuela Nueva Learning Circles*, a program for migrant and displaced populations, an innovation that also has become a national policy.

In the urban adaptation FEN implemented the model in 20 low-income schools of Bogotá, identified as those with the poorest academic performance through a local standardized test. After two years of the intervention, an evaluation led by the National University of Colombia confirmed an increment in language skills of 40.36 % and in Math of 69 % in the scores of students in the low income schools in that test. These schools, with lowest ranking in the city among 2,500 centers evaluated, performed better than the city's average.

FEN has continued a gradual expansion in small and medium sized Colombian cities, including in public and private schools. In the Department of Caldas, FEN implemented *Escuela Activa Urbana* in 7 municipalities and gave technical assistance to a private Foundation, *Fundación Luker* which is leading this initiative in the city of Manizales with positive results.

Similar positive results were shown in the Learning Circles. "In 6 months, the *Escuela Nueva Learning Circles* program achieved a 100 % enrollment of out of school children, an 18.5 % increase in their self-esteem and significant improvements in both language and math, placing these children 13.9 and 17.3 points, respectively, above the national mean".<sup>2</sup> In addition, the Ministry of Education adopted the model as a policy to restore the right to education of displaced and high vulnerable children, based on the positive results of the pilot project. However, no formal evaluation of the results of the expansion of the innovation nationwide has been conducted yet.

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<sup>2</sup> Results of the application of UNESCO Tests 2004/2005 Pilot Project. Soacha, Colombia.

### *Pre-service training*

A current initiative of FEN is to impact the pedagogical practices of future rural teachers through the adoption of the *Escuela Nueva* model by teachers' colleges. The initiative seeks to improve the skills of students in teachers' colleges by strengthening their teaching and pedagogical practices. This outcome will be achieved by involving the students in the process of implementing *Escuela Nueva* strategies and instruments to improve classroom management and learning environments, reading (phonics-based approach) and effective activities for first grades in Mathematics. This includes provision of high-quality materials, experiential training workshops, and ongoing classroom-based and online support.<sup>3</sup>

### *Conceptual improvements*

New teacher training manuals and knowledge documents have been developed in areas such as social construction of knowledge, cooperative learning, peace education and the emphasis on 21<sup>st</sup> century skills which are acquired by students when the implementation of the model is adequate. (See Madhavan 2014; Colbert and Vasquez 2009). Learning guides for children have also been created, which introduce new content in the curriculum subject matters, including peace and citizenship education, critical areas of priority for Colombia today.

### *A community of practice*

FEN's community of practice (FEN CoP) has been conceived as a key strategy in the continuous improvement of *Escuela Nueva* teachers. FEN's CoP seeks to improve teachers' practice through an enriched conversation with colleagues and with other actors who have specialized expertise that support professional development processes. Thus, in FEN CoP teachers have access to expertise, find help to address different challenges of their practice, share their knowledge and experiences, and add value to their work.

The discussion of the last stage of going to scale of *Escuela Nueva* may raise the question of whether or not there was the required widespread cultural change at the system level as a requisite of sustainability. If the cultural change is expected nation-wide the answer in the case of *Escuela Nueva* in Colombia is probably not. However, the experience and the evidence shows that there is a transformation of instructional practices, beliefs and behaviors of teachers, students and education leaders, as well as a change of parents' attitudes towards education when the model is applied adequately. It happened with the thousands of teachers and hundreds of thousands of students and parents during the implementation of the policy in the 80 and 90s. It remains, as mentioned before, in regions, municipalities and educational institutions throughout the country that still implement the model correctly and count on the support of State and non-State actors.

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<sup>3</sup> The initiative is a joint effort between FEN and the Inter American Development Bank, which provides technical and financial support.

## Contribution of *Escuela Nueva* to knowledge on large scale instructional improvement

*Escuela Nueva* offers four key lessons to existing knowledge on large scale educational innovation i) teachers and students need to be the key actors of the change; ii) the proposed improvements have to be easily replicable within existing conditions; iii) the attitudinal change of teachers is positively affected as a result of demonstrating that the model is feasible, a good fit for its beneficiaries and that they can do it; and iv) a systemic approach is necessary to impact simultaneously on the critical factors of success. *Escuela Nueva* used a bottom up approach from the outset, the actors of change were teachers, children and parents. They were the bearers of the innovation and led the changes in the classroom and in the relationships between the school and the communities. In addition, all components of the system require the direct involvement of the stakeholders. In this respect, participation and engagement are not an activity but a way of doing things in the school. Thus, the training strategy, the learning materials, the use of resources such as the small library and the learning corners, and the school community relationships are based on interaction and social participation. This feature definitely makes a difference for success and sustainability.

Achieving and sustaining large scale innovations is directly linked to feasibility in the technical, political and financial dimensions. As stated before, the innovation needs to be easily replicable with features that would translate complexity into true manageable action, doable under normal conditions and appealing to teachers, students and parents. These dimensions need to be part of the design from the outset in order to enhance the chances of influencing policy at all levels.

A key feature for replicability is systematization. To that end, the design included manuals, learning materials and algorithms to facilitate the replicability of processes, not only of content. In this regard, the teacher manuals put in the hands of trainers of trainers facilitated immediately the expansion of the reapplication of model and the methodology with a degree of quality control. Thus, it was not an expansion through discourse or lectures but a rigorous systematization of all key processes.

A central strategic component of the innovation was the empowerment of teachers. The teacher was the first and main agent of change and therefore teachers had to be motivated and committed to making the innovation work. The design and implementation put emphasis on demonstration on the ground and immediate action in the classroom as the source of motivation and attitudinal change. The expected conclusion of the teacher after being exposed to the demonstration school was the feeling of “yes, it is possible, it can be done by any teacher”. The empowerment of teachers was nurtured through the development of their ability to reform their own schools and the observation of children as the center of the learning process. Personal gains by teachers and students range from increased self-esteem to the ability to work in teams and develop leadership skills.

Finally, the *Escuela Nueva* innovation has a comprehensive, systemic approach which was considered necessary to be able to impact large scale reforms. Figure 2





**Fig. 2** Escuela Nueva’s comprehensive, systemic approach

below illustrates the component of the system and shows how all of them are focused on the child who is the central actor of the learning system.

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