

Social Mobility And The Impact Of Training Projects In SENA's Integral Vocational Training Program

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Abstract

This article focuses on social mobility, an element discussed in depth in the study carried out about the impact of project-based training on the quality of comprehensive vocational training (SENA). For this purpose, qualitative research was carried out following the methodology called the most significant change, which among its inquiries supported the question of which factors, from the perspective of apprentices in the productive stage, instructors and graduates, contribute to or hinder the implementation of practices that favor project-based training in training centers? From this perspective, one of the intentions was to identify what enables or hinders, the training project strategy and from the implementation of comprehensive vocational training, social mobility. To this end, instructors were trained as research assistants, so fifty-three focus groups were carried out with them in fourteen training centers of the National Learning Service (SENA) distributed throughout Colombia. As the most relevant result, it is highlighted that the comprehensive professional training provided by this institution through the project-based strategy does achieve social mobility of the apprentices, since by basing the training on the training project and intertwining it with the life project and competencies, it empowers the person emotionally, occupationally and entrepreneurially; in addition, it moves him/her to become professional and continue studying, as an opportunity to improve his/her quality of life every day.

Keywords: project, empowerment, change, mobility, training.

Resumen

Este artículo centra su mirada en la movilidad social, elemento ahondado en el estudio realizado sobre: El impacto de la formación por proyectos en la calidad de la formación profesional integral Sena. Con este propósito se ejecutó una investigación cualitativa siguiendo como referencia la metodología “el cambio más significativo”, que entre sus indagaciones sustentó la pregunta de ¿cuáles factores, desde la perspectiva de los aprendices de etapa productiva, los instructores y los egresados, contribuyen u obstaculizan la implementación de prácticas que favorecen la formación por proyectos en los centros de formación? Desde esta perspectiva, una de las intenciones se enmarcó en identificar qué posibilita u obstaculiza, desde la estrategia del proyecto formativo y desde la ejecución de la formación profesional integral, la movilidad social. Para tal fin, se formaron instructores como asistentes de investigación; con ellos se llevó a cabo cincuenta y tres grupos focales en catorce centros de formación del Servicio nacional de aprendizaje Sena distribuidos a lo largo y ancho de Colombia. Como resultado más relevante se destaca que: la formación profesional integral que imparte esta institución a través de la estrategia por proyectos, si logra la movilidad social de los aprendices, pues al fundamentar la formación en el proyecto formativo y entrelazarla con el proyecto de vida y con las competencias, potencia a la persona emocional, laboral y empresarialmente; además, lo mueve a profesionalizarse y seguir estudiando, como oportunidad para mejorar cada día su calidad de vida.

Palabras clave: proyecto, potenciación, cambio, movilidad, formación.

Social mobility and the impact of training projects in SENA's Comprehensive Vocational Training program

Introduction

The ideal of social mobility is that social subjects reach a high socioeconomic status, but the problem it identifies is that society has a high number of social subjects in a state of vulnerability, poverty, and inequality. Vulnerability, poverty, and inequity are among the concerns of the Colombian State, through the National Learning Service (SENA-Servicio Nacional de Aprendizaje), with the mission of “investing in the social and technical development of Colombian workers” (SENA, 1997). This institution expects to respond to this governmental mandate through the project of professional comprehensive training since 2008.

Social mobility is related to the socioeconomic scale, which accounts for the movement of subjects within society, where the education factor is one of those that allow a person or his or her social group to move up. The theory has posited that the ways of moving on this socioeconomic scale are related to the improvement or not of living conditions (Madreña, 2013).

Thus, the intention of the research entitled The impact of project-based training on the quality of comprehensive vocational training SENA was interested in identifying: what

enables or hinders, the training project strategy and from the implementation of comprehensive vocational training, social mobility.

This article focuses on identifying whether the social subjects that are trained in the SENA have the opportunity to change their living conditions to improve their quality of life. In the first place, the promotion of social mobility is presented, given from the project strategy; here what is evident is how this link between the training project with the life project and competency-based training allows instructors to transcend the repetition of knowledge towards the empowerment of the apprentice. Next, the relationship between change and social reality is examined the need for trainees to transform their socio-economic reality is shown. Finally, the most significant changes that emerge from the implemented methodology are synthesized as conclusions.

Among the conclusions, it is highlighted that what makes social mobility possible through project-based training in the SENA is the relationship between the training project, the life project, and competency-based training. The most important result of this link between the three aspects mentioned is the self-empowerment that the apprentice

achieves and that empowers him/her to continue studying once he/she leaves SENA. It also highlights the improvement of the professional profile, which opens the doors to a world full of opportunities and challenges to be met. They also mention the improvement in their quality of life thanks to the change in working and economic conditions. On the other hand, the heterogeneous conditions of SENA training environments throughout the country are noted, which inhibits the empowerment of apprentices who develop training projects with a lack of materials and resources.

Social mobility theory

Understanding social mobility is important because of its relationship with the promotion of justice, efficiency, and social cohesion in a society such as Colombia's since there is a link between social mobility, socioeconomic inequality, and social development.

Social mobility refers to the ease with which a person, family, or social group can move up or down the socioeconomic scale; a situation that depends on several factors such as social stratification, income level, and available goods and services, including education (Vélez, Campos and Fonseca, 2015). The ease or difficulty for this to happen is closely related to the economy since it depends on the level of income, the social sector, and the economic activity in which the subjects are involved (Madruño, 2013).

When these dependencies change, they give rise to transformations, which ultimately structure the life trajectory of the subjects involved, as it leads them to move up or down the socioeconomic scale, especially under the educational process (Castillo, 2016). This trend of movement in the socioeconomic scale is related to the participation of the subjects in new social and power groups, which result in life changes (Brand et al., 2020).

Vélez et al. (2015) state that “social mobility can be approached from an intergenerational or an intragenerational perspective for different dimensions such as income, occupational status, social class or education, among others” (p.2). Intergenerational mobility poses a social

movement of the person, from birth and in the course of his or her working life, showing differences between parents and children. Intragenerational mobility, on the other hand, speaks of displacements for reasons of labor activity throughout their lives (occupational mobility); within these displacements, it accounts for ascending or descending ways of life concerning their predecessors and whether people live better or worse than them (vertical mobility upward or downward). Similarly, this type of mobility refers to changes in the socioeconomic position of parents and children, for reasons of education, effort, talent, or opportunities (relative mobility). This mobility also alludes to geographical displacements, or changes in jobs, but not in income, when these in no way affect the social status of the person (horizontal mobility) (Vélez et al., 2015; Dalle, 2016).

Understanding these displacements is not possible without considering social equalities and inequalities, since they are ultimately what include or exclude subjects and social groups from social justice, efficiency, cohesion, and development (Villa, 2016). These four conditions are called goods and services.

Social subjects are more aware of their access or not to goods and services that improve their quality of life and personal well-being when through education they can visualize the change in their way of life, but more than income, sometimes what is needed is an internal change that empowers them as subjects. In other words, what education can achieve is “to focus on the subject from his limits and potentialities without reducing him to the limits set by his historical determinations” (Zemelman, 2010, p. 2).

The challenge then is the social mobility of subjects based on leaving behind the conditions of socioeconomic inequality, but above all, knowing that it is possible to do so, entailing a change in the welfare of individuals and social groups, thanks to the improvement of their quality of life. Change here is understood as those ways of “thinking and producing knowledge that allows to recover the subject” (Quintar, 2015, p.187).

Methodological route

This study of social mobility asks about the change in the living conditions of SENA apprentices. These conditions largely depend on progress in the economy and in the education of social subjects (Dalle, 2016). The latter includes technical and technological training, which is part of education for work and human development and which SENA calls comprehensive vocational training.

Given this interest, the research entitled “the impact of project-based training on the quality of SENA's comprehensive vocational training” asked what factors, from the perspective of apprentices in the productive stage, instructors and graduates, contribute to or hinder the implementation of practices that favor project-based training? Among these factors was social mobility.

To this end and from the qualitative approach, the methodology of the most significant change was favored, which in synthesis is understood as learning that is the product of a social process that has advanced or progressed (Daves and Dart, 2005). This definition understands learning as follows: one learns what one selects and selects information, but the information that is selected is what “makes the difference” (Daves and Dart, 2005, p.11). That difference is defined as the most significant change from the point of view of the people involved.

The application of this methodology made sense in this research, at the time of proposing the strategy to follow for the collection of information and to correspond to social learning. With this intention, instructors were trained as research assistants, under the mentoring technique and through two educational processes of the SENA: the research axis oriented within the Technological Specialization in pedagogical processes of professional training and the complementary course called “Methodological development of a training research project. Instructors from the department of Bolivar, located on the Colombian Atlantic coast, and from the department of El Valle, located on the Colombian Pacific coast, were trained through this specialization. In the complementary course, instructors were trained from three

training centers located in the Capital District of Bogotá, located in the center of the country, two training centers in the Department of Antioquia, located in the northwest of Colombia, and one training center in the Department of Huila, located in the south of Colombia.

The data collection technique chosen was the focus group, for which a protocol was designed to be followed and guides of questions oriented to instructors, graduated apprentices, and apprentices in the production stage. The latter were validated with expert instructors under the pilot and feedback system.

Using this technique, fifty-three focus groups were carried out in fourteen training centers, which focused the inquiry on the social mobility domain by asking: what do you think is the most significant change concerning the quality of life as a result of having been trained through projects? and why do you think this is the most significant change? This methodological framework made it possible that among the answers that emerged were: other possibilities for development, a subsequent higher university education, improvement of the professional profile for a better salary, new job opportunities, improvement of the economy, more time for the family and themselves: family and personal wellbeing were also mentioned.

The analysis of the information was made possible through the use of Maxqda software, for which each of the transcripts of the focus groups were related, the information related to social mobility was selected, the texts were coded, and the information was interpreted.

Information analysis

The methodology followed to analyze the data on “the impact of project-based training on the quality of SENA's comprehensive vocational training” interacted with the information provided by the Maxqda software with that proposed by the “most significant change” methodology.

The coding through the software was guided by the inquiry made in the data

collection about the most significant change in the quality of life as a result of having been trained by projects and the belief that this is the most significant change. Maxqda yielded at the end the code cloud, from which the analysis was directed, leaving social mobility and project-based training at the center of the analysis.

This result shows the relevance of the empowerment of the subject through vocational training for work, as a relevant condition for acquiring a decent job or setting up a business or enterprise. Empowerment also becomes another opportunity for change in their lives and their family reality, which through SENA they can visualize and realize through the training project.



Figure 1. Social mobility code cloud.

Source: own elaboration.

Findings

Social mobility and the project-based training strategy

Social mobility leads to changes in the living conditions of social subjects, thanks to the opportunity of access to goods and services, as a result of the economic transformation achieved through training processes. This is part of the mission of the Servicio Nacional de Aprendizaje (Sena, 1997), a Colombian institution that has developed comprehensive vocational training framed in education for work and human development, contributing to the technical and technological training of young people and adults with limited economic resources (Law 119, 1994). Its purpose is to provide this population with

quality and pertinent training, which serves as an instrument for social mobility for the transformation of lives.

The research entitled “impact of project-based training on the quality of comprehensive vocational training Sena” identified that social mobility, as a key factor, is promoted from the strategy of project-based training, with which training is provided, but contributes to or hinders social mobility through this strategy?

The promotion of social mobility from a project strategy

The project strategy has changed the way training is delivered in the SENA since 2008, a moment that also transformed the role of the instructor into that of the project's guide and the role of the apprentice into that of the protagonist of his or her learning process (Amorós, 2010).

With the project linked as a strategy to training competencies, SENA brings vocational training closer to the educational trend of the 21st century, proposing the “rupture of the paradigm of repetition and transmission of knowledge for another based on competencies that are built and transformed” (Oviedo, 2014, p.20).

The actors investigated narrate that it is from this training strategy that a trainee starts the process to relate the technical and transversal competencies that the program deals with. Thus, the training is at the service of the problematic situation posed by the project, and at the same time, it focuses attention on the areas of being, knowing, and doing that the competency-based training outlines. This makes it possible to understand that the SENA strategy is in line with the approach that says that learning is achieved by combining aspects such as problem-solving, information management, argumentation, practice, and project (Díaz, 2006).

The actors report that while the project is being executed, the apprentice develops through it the different skills that empower him/her for personal and working life or the business market. This approach is in agreement with Zemelman (2010) who says that the empowerment of the subject has reason to be when “the sense of being is not

exhausted in any structure of parameters, which is the guarantee of potentiality” (p. 4).

This empowerment that is achieved with SENA training could be traced in narratives that relate problem-solving with the application of knowledge, the link between theory and practice and with the real and productive world; also in the importance given to the “being” of the apprentice and the leading role in his or her learning process. These elements, according to the actors, allow the apprentice to “realize” that “it is possible” to transform what he/she dreams of.

From this point of view, awareness is important within the concept of empowerment, because the subject becomes aware of the need to change his/her reality while transforming him/herself (Hernández, 2021). This must be taken into account in the monitoring of social mobility since it underlies the interest of comprehensive vocational training: to train apprentices for “any social and productive environment” (MEN, 2003, p.5).

Concerning empowerment, one of the narratives expresses that the project is what “grounds the learner in the real world and a real problem, so that the construction of knowledge is related to reality, technological advances, and the world of work” (F. Quintero, personal interview, October 2021).

Interpreting the above, when the instructor guides the trainee during the project, he/she is empowering him/her for reality. It is here where some of the data collected, direct the scope of one of the most significant changes: the self-confidence that he/she can develop not only through the learning activity, through the use of the knowledge, skills, and abilities that he/she is acquiring, but whatever he/she proposes in life.

This confidence achieved in the training environment is what gives rise to the results and final products requested by the project, but it serves the apprentice at the time of transferring it to his personal life and the productive sector of society. He arrives at these spaces as a member of a social group, or as a worker or entrepreneur, and it is also there where he has the opportunity to deploy what he already knows about himself: his

capabilities, skills, and abilities. This confidence is what makes him a confident and responsible being. That is, he can become a productive and social environment, thanks to his “intimate security of a foreseeable future” (Castellanos and Suarez, 2009, p.391).

The narratives also show that this is how the project, from practice, which is the basis of performance, allows the apprentice to practice what he/she is studying from the learning process itself, and later on to enter the world of work without major difficulties. Thanks to this work performance, in these other spaces he/she is quickly recognized for his/her cooperation, communication, proposals, and solutions skills; all of this is learned during the execution of the training project in the learning environment and during the training process.

Consequently, the training project makes it possible to achieve the emotional well-being of the apprentice “as part of the theoretical-practical knowledge taught in the classroom” (Garcia, 2017, p.8). At the same time, the economic remuneration received by the apprentice once he/she is inserted into the world of work improves the quality of life of his/her family environment. The actors express that they now acquire elements of the family basket that they did not consume before, improve their housing, pay for public services that they did not have before, and enjoy family time. All this translates into personal well-being, as stress levels generated as a result of poverty and inequalities decrease.

Several apprentices report that they have changed their place of residence to be closer to work, a change that they support due to the adverse conditions of their previous place of residence. This is called territorial occupational mobility (Vélez et al., 2015). This human displacement also allows them better opportunities in goods and services such as a school for their children, recreational spaces, better transportation system, for example. Therefore, the socioeconomic inequality experienced in the previous space is one of the elements that are transformed as a result of improved economic conditions (Boniolo, 2020).

It is also gathered from the actors that the training process requires that the apprentice, at

the beginning of the training, write his/her life project concerning the chosen training program to idealize its materialization in the perspective of a possible future. This concept is understood as “to identify paths to follow, which support this project for them, based on the principle that they will be able to develop it” (Hernández, 2021, p.186).

The life project intends that the apprentice visualizes the learning that he/she will receive within the formative project with the change of the personal, family, and professional reality that he/she dreams of, by the time he/she completes the formative process. These learnings will be the “foundations that articulate the needs of the subject from different orders, such as the economic, social and cultural” (Hernández, 2021, p.186).

It emerges from the data that the apprentices finally “reach places that sometimes they did not believe they could achieve” (M. Agudelo, personal interview, August 2021). This means that the clarity of the life project and the contribution that the training project makes to it is what will allow the SENA apprentice to transform his or her past vulnerability, which, in the end, is the most significant change, since it is related to improving his or her quality of life.

In short, the promotion of social mobility from the project strategy, which gives importance to the leading role of the apprentice, enhances his or her capabilities and empowers him or her in the personal, social, and productive spheres.

Change and social mobility

It also emerges from the data that most of the apprentices who come to the SENA belong to low-income populations living in situations of vulnerability, poverty, and marginalization; socioeconomic extremes where the possibilities for development are few. This happens because in the real world of the apprentices and in the words of Dalle: “precarious employment and unemployment predominate, a sociability linked to the culture of poverty prevails, where the conditions of scarcity impose on the family logic shorter-term goals, oriented to solve basic needs” (Dalle, p.126).

If an opportunity to change these circumstances does not appear, the population that arrives at SENA will lack the means that will allow them to visualize a possible future. Experts call these “non-mobile” conditions, understood as being born in vulnerability and inequality and remaining in them (Campos, 2016). It is here where Sena training becomes a facilitating element, to change “concrete subjects in concrete realities, since it is in these realities where the future acquires presence and possibility” (Quintar, 2005, p. 251). Change in these circumstances is a “hope for a possible world” (Quintar, 2005, p. 252).

Transferring this to the narratives, it is evident that the apprentices, at the time of arriving at the institution for the first time, have not only lived in conditions of economic poverty, but the vast majority of them express feelings of absence, fear, lack, lack of opportunities, dissatisfaction, hopelessness, adversity, and low self-esteem. This scenario reveals the need to “create new possibilities for thought and action” (Krause, 2020, p. 187). This is the challenge of comprehensive professional training, through the formative project.

It is clear from the above that once in the institution, the commitment and discipline of the apprentices with their training process allows them to advance in their professional and working careers; going through SENA is to become aware that it is possible to achieve their goals. They express: “what would my life be if I had not joined Sena” (L. Solarte, personal interview, November 2021); “Sena, is the greatest opportunity for those of us who have few resources, thanks to Sena I have broken a family chain and today I will be the first technologist” (D. González, personal interview, October 2021); “I have been located in Quebec in Canada for 3 years now, since I left the Sena I have found different opportunities” (M. Mariño, personal interview, October 2021); “The SENA was, let's say, perhaps the greatest blessing I have had since I graduated when I was already in my 30s and that age here in Colombia influences” (M. Mora, personal interview, October 2021); “understand that one comes from a space where for many years one did not

study; I am 47 years old and have not studied for many years, I had already totally declined the desire to study” (L. Duque, personal interview, October 2021); “The most important thing for me is the change of paradigm, that is, the change of mental structure, what was true yesterday is no longer true today, yesterday we lived a different reality than today” (M. Mora, personal interview, October 2021).

This last phrase captures what for these trainees, who live in fear and despair, the passage through this institution means: change of life, overcoming powerlessness. Circumstances have inhibited them the moment of imagining that possible future, but experiencing from the training, what it is that they are afraid of, this affects that, when they experience it in reality, as is the case of arriving at a company to work, they do not only have clarity about what they have to do, but also that this allows them to feel self-confident because they experienced it in the entity as a training project and from the practice. Thus, adverse circumstances are transformed into empowering potentiation, which allows to face from the knowledge and practice the use of the elements required to achieve real results.

In the present of the training and the labor or business future, empowerment translates into the ability to express themselves, to lead processes and even other subjects, to use tools and technology, and especially to believe in themselves: “because many times fear, which is like that insecurity did not let me move forward until the day I decided, ready, I can and I will do it, from there I started to believe in those capabilities, in my abilities” (J. Jiménez, personal interview, August 2021).

This means that access to study becomes an opportunity to escape from vulnerability, which implies scarcity of what is humanly imaginable for the welfare of a person and his or her family, but it can also be understood as empowerment towards new paths of climbing in the company or continuing other educational processes. This is an example: “I hope to continue training and learning much more” (J. Vargas, personal interview, November 2021). This interest to continue

studying has led many to professionalization, undergraduate or graduate studies at the university, not only staying with the SENA studies, but it also allows them to improve their professional profile, climb the job ladder and improve economically each time.

In this way, project-based training becomes a factor that determines social mobility from the SENA, since its way of preparing for life and work, allows one to experience the future work environment and to imagine a possible future quality of life. The actors express that this becomes a reality by emphasizing cognitive and procedural skills and by centralizing learning in the person.

It is noted that learning focused on the learner is what allows changing personality elements, among which are risk aversion, impatience, impulsivity, stress, and distrust, which in short have diminished their: emotional stability, ability to interact with others, and ability to give and receive. The narratives express that this is achieved thanks to the teamwork required to carry out the project since tangible results are achieved through agreements and the assumption of responsibilities.

Once they leave the training process and enter the business or work world, what they learned about how to achieve results and work in a team becomes an indispensable condition for life. Now they experience acceptance as subjects and workers, which together with the economic retribution, not only improves economic conditions, but many of them state that the changes in their personality have allowed them to be promoted to positions of greater responsibility and even administrative positions, which means earning higher incomes.

The job advancement achieved by apprentices gives them access to more free time, which translates into time for family and enjoyment. It is possible to speak then, that they change their living conditions for their parents' or the ones they had before entering the SENA; this is known as intergenerational mobility (Vélez, Campos and Fonseca, 2015 and Dalle, 2016).

It is a change of life that occurs thanks to the opportunities, it becomes feasible when the

project allows conceiving learning in a multifaceted way, but the obstacle to achieving this objective is the conditions of many of the learning environments at a national level. It is expressed that not all SENA training centers have the tools or infrastructure to ensure that the learning environments are conducive to the development of the project in the procedural aspect: that the environment looks like a workshop, a laboratory, a simulator in itself, the apprentice must experiment with the elements of the world of work. This is an obstacle presented by the SENA to promote social mobility, since equal opportunities are needed regarding the quality of the environments, regardless of where the training center is located in Colombia.

The narratives mention that changes have been seen in how apprentices are taught; this is because the instructor is increasingly aware that the training project is executed from analysis, planning, execution, and evaluation, where his role as instructor is not that of transmitting knowledge, but of guiding learning.

In short, the change to social mobility makes sense if the apprentices grow personally and economically; this is the justification for the equal opportunities to which they have the right to aspire, to achieve personal well-being and that of their families, which in short is quality of life.

Conclusions

Among the factors, from the project-based training strategy and the execution of the F.P.I., according to this study, the factors that make possible or hinder social mobility and constitute the most significant change include the following conclusions.

Enabling social mobility

The foundation of the same training strategy by SENA projects, because by placing it in the perspective of the life project and linking it with the competencies of the programs, it empowers the trainees to make their dreams possible from the emotional, family, work, or business point of view, which ends up ensuring a change in their quality of life and is

the most significant change as a result of having been trained by projects.

The social mobilization that the project makes of them as apprentices, so that they continue their professionalization and pursue university studies, opens up a range of opportunities for them to improve their living conditions every day, because the more studies, the better the job opportunities, the better the salaries, the better the family economy, the more time with the family, thus “education becomes a door that opens doors”.

The daily improvement of the professional profile is an achievement of the training project, thanks to the fact that it makes the trainee “restless” in the face of problems and challenges, which leads him/her to be always in search of solutions and opportunities.

The family and personal well-being to which the apprentice can aspire once he/she passes through the SENA will be the result of improved economic conditions, which means that the places they can now live in or reach are better places to develop their life project. These are some of the new conditions: access to better transportation services, the better distance between work and home, and more family time, which means quality of life.

What hinders mobility

The least significant change found in this research, as a factor that, from the project-based training strategy, hinders social mobility, was the heterogeneous situation of the SENA training environments throughout the country. This means that not all apprentices can develop the training project linked to their training program in the best conditions, due to the lack of resources and materials associated with its implementation. Thus, the result of the empowerment achieved by the apprentices of the most privileged centers, thanks to the project, is not achieved by all SENA apprentices in the same dimension of empowerment.

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