


Original article

## Drug prevention education in technical and professional industrial specialties





### La educación para la prevención del consumo de drogas en las especialidades industriales técnico-profesionales

### Educação para a prevenção de drogas em especialidades técnicas e profissionais industriais

Erick Diosny Lezcano Ferro<sup>1</sup>  0009-0001-8101-218X  [erickdiosny@gmail.com](mailto:erickdiosny@gmail.com)

Juan Alberto Mena Lorenzo<sup>2</sup>  0000-0003-3695-9451  [juan.mena@upr.edu.cu](mailto:juan.mena@upr.edu.cu)

Jorge Luis Mena Lorenzo<sup>3</sup>  0000-0003-1364-6524  [jorgemenalorenzo@gmail.com](mailto:jorgemenalorenzo@gmail.com)

<sup>1</sup> Polytechnic Center "1ro de Mayo". Pinar del Río, Cuba.

<sup>2</sup> University of Pinar del Río "Hermanos Saíz Montes de Oca". Pinar del Río, Cuba.

<sup>3</sup> Higher Polytechnic Institute "Gregório Semedo". Angola.

**Received:** 13/01/2025

**Accepted:** 13/07/2025

## ABSTRACT

Drug prevention education has been a problem in recent years due to its effects on the health and learning of children, adolescents, and young adults. In Technical and Vocational Education, this problem also has the connotation of negative effects on the training of future skilled workers and mid-level technicians. In response, the central objective of this article was to evaluate the current state of drug prevention education at the 1ro de Mayo Industrial Polytechnic Center in Pinar del Río. The search for information to address the problem was made possible through the use of theoretical (inductive-deductive and analytical-synthetic) and empirical (document review, observation, and questioning) methods. As key results, the evaluation identified the current state of drug prevention

education, primarily focusing on tobacco and alcohol as gateways for illegal drugs. The results also highlight the need to address the shortcomings of the process in order to effectively educate future mid-level professionals.

**Keywords:** gateway drugs; drug use; technical and vocational education.

## RESUMEN

La educación para la prevención del consumo de drogas ha constituido un problema durante los últimos años por los efectos que tiene en la salud y el aprendizaje de los niños adolescentes y jóvenes. En la Educación Técnica y Profesional este problema, además, tiene la connotación de los efectos negativos que tiene para la formación de los futuros obreros calificados y técnicos medios. Como respuesta, el objetivo central de este artículo fue el de evaluar el estado actual del proceso de educación para la prevención del consumo de drogas en el Centro Politécnico Industrial 1ro de Mayo de Pinar del Río. La búsqueda de información para dar respuesta al problema fue posible con la utilización de métodos teóricos (inductivo-deductivo y analítico-sintético) y empíricos (revisión de documentos, observación y métodos de interrogación). Como resultados fundamentales, la evaluación realizada permitió identificar el estado en que se encuentra el proceso de educación para la prevención del consumo de drogas, fundamentalmente el tabaco y el alcohol como porteras de las drogas ilegales. Los resultados también alertan sobre la necesidad de atender las carencias que posee el proceso en función de una educación efectiva de los futuros profesionales de nivel medio.

**Palabras clave:** drogas porteras; consumo de drogas; educación técnica y profesional.

## RESUMO

A educação para a prevenção do uso de drogas tem sido um problema nos últimos anos devido aos seus efeitos na saúde e na aprendizagem de crianças, adolescentes e jovens adultos. Na Educação Técnica e Profissional, esse problema também tem a conotação de efeitos negativos na formação de futuros trabalhadores qualificados e técnicos de nível médio. Em resposta, o objetivo central deste artigo foi avaliar o estado atual da educação para a prevenção do uso de drogas no Centro Politécnico Industrial 1º de Maio, em Pinar del Río. A busca por informações para abordar o problema foi possível por meio do uso de métodos teóricos (indutivo-dedutivo e analítico-sintético) e empíricos (revisão

documental, observação e questionamento). Os principais resultados da avaliação identificaram o estado atual da educação para a prevenção do uso de drogas, com foco principal no tabaco e no álcool como portas de entrada para drogas ilícitas. Os resultados também destacam a necessidade de abordar as deficiências do processo para formar efetivamente futuros profissionais de nível médio.

**Palavras-chave:** drogas de entrada; uso de drogas; educação técnica e profissional.

## INTRODUCTION

International challenges regarding drug use are becoming increasingly complex every day. The production of cocaine, amphetamines, and methamphetamine, among other narcotics, exceeds known figures and extends to all geographic regions. The consequences of COVID-19 mean that, compared to previous generations, more children, adolescents, and young people are using drugs, as stated by the United Nations Office on Drugs and Crime (UNODC, 2022).

Given this situation, the challenges facing education systems in all countries are greater, given their potential for preventive work. Schools and their ongoing educational work are essential to reinforce risk perception and address misconceptions or confusion about this scourge, based on ongoing analysis of the messages society sends to children, adolescents, and young people.

In his recent study *A probabilistic model of relapse in drug addiction*, Mao, Chou and D'Orsogna estimate that more than 60% of people who recover from a substance use disorder relapse within the first year; they emphasize that environmental and psychological factors play a key role in both initial dependence and relapse events (Mao *et al.*, 2024).

According to Topbaş *et al.* (2025), attentional bias-understood as the automatic tendency to direct attention toward stimuli related to the addictive substance-plays a significant role in the likelihood of relapse. Their systematic review of longitudinal studies demonstrates that this cognitive predisposition persists even after prolonged periods of abstinence, acting as a risk factor that compromises the effectiveness of treatments. These findings reinforce the need to address not only the physiological components of addiction, but also the psychological mechanisms that contribute to its maintenance and relapse.

Cuba, as a country with an open economy, is not exempt from these problems. In this sense, the National Education System takes on the challenge of prevention from the very beginning, with the aim of anticipating and reducing the impact of drug use. To this end, it promotes the systematic training of principals, teachers, students, and families (Silva *et al.*, 2018; Ochoa *et al.*, 2022).

In line with this policy, in 2019, the Ministry of Education (MINED) addressed the problem of drugs and addiction from a preventive and educational perspective, with a pedagogical and humanistic approach, based on the comprehensiveness of the educational process. The aspiration to develop citizens with healthy lifestyles, emotionally balanced, with appropriate habits, skills, motives, interests, and life plans, free from the presence of drugs, is a priority for both Cuban society and families.

Particularly, for the Technical and Vocational Education (ETP) subsystem, this challenge is more complex, since training takes place in two fundamental contexts: the Polytechnic Center (CP) and the labor entity, which share the process almost equally in responsibilities (Mena and Mena, 2020).

Adopting this criterion implies recognizing that ETP students, when trained in PC and workplaces, are exposed to the educational influences of teachers, student groups, specialists, tutors, and the workforce of these organizations; without neglecting the influence of families and their characteristics in this type of education. Therefore, directing preventive work based on drug-related education requires understanding the characteristics of the school, work, and family contexts in which students live during their initial ETP.

In relation to the work environment, production and service processes are an important part of workers' lives, decisively influencing the levels of health and well-being, not only of workers, but also of students located in work entities to fulfill with the principle of theory-practice integration (Astrés *et al.*, 2021).

This element is a permanent indicator when projecting the pedagogical process of ETP in labor entities, given the conditions and educational influence that will occur during the training of skilled workers and mid-level technicians. In this regard, the International Labor Organization (ILO) recognized in 2024 that the use of alcohol and other drugs has long affected a significant number of workers, influencing the relationship between the harmful effects of psychoactive substance use and job performance. This directly proportional relationship affects job security and impacts families in terms of loss of income, stress, and poor morale.

Cruz *et al.* (2021) and Astrês *et al.* (2021) highlight concerns about drug use related to occupational factors and the work environment. In this context, conditions related to stress, exhausting working hours, the socioeconomic commitment of workers, sleep deprivation, and the complexity of production and service processes act, making workers prone to the use of gateway drugs such as tobacco and alcohol, among others. Therefore, the prevention of these occupational risks constitutes a duty and a right of managers and workers; at the same time, it becomes the content of educational work in ETP (Francolino & Miller, 2008).

However, the context of the CP is not immune to this problem either. Students arriving at the ETP are, mostly, adolescents who have received the basic educational influence of general education and aspire to become mid-level professionals. The Polytechnic Center fosters the comprehensive development of a personality oriented toward specialties and professions (Mena and Mena, 2020).

The CP, like the workplace, is an active part of the community and can reflect negative expressions of social behavior, including the increasingly early onset of use of legal drugs such as alcohol and tobacco. According to the new report by WHO/Europe and its partners, more than 57% of 15-year-old adolescents have already tried alcohol, and between 5% and 9% have experienced episodes of intoxication (WHO/Europe, 2024). These data highlight a worrying trend that tends to be replicated in technical school settings such as CP, where adolescents are at a stage of high vulnerability and exposure to such behaviors.

Similarly, the family context, along with the PC and the workplace, plays an essential role in drug prevention education. Children's education begins in the family, and most of the learning of positive values, attitudes, and behaviors occurs. The family must facilitate an appropriate interpersonal environment for children's well-being (Flores *et al.*, 2021; Castillo, 2021).

However, although the family is the one that can provide the greatest protection in risk situations (Castillo, 2021), in the case of ETP, the results of the pedagogical deliveries carried out during the last 10 years show how in a significant number (40%-60%, depending on the specialties) of the family nuclei of the students who arrive at the CP, alcoholism, smoking or both are present in at least some member of the families.

Thus, without excluding other contexts, it could be said that CPs, workplaces, and the family constitute ideal settings for eliminating or mitigating existing risk factors (individual, family, school, and social and occupational) and educating about drug prevention.

Particularly in the industrial branch of ETP, the issue of drugs goes beyond preventive work, managed through educational work and teacher advisors. Interestingly, however, information about alcohol and tobacco use among students, teachers, and families is not a sufficiently present indicator on the agendas of administrators, teacher advisors, and other teachers to foster preventive work.

This seems contradictory when one considers that, in the curricular context, the content studied, due to its influence on the training of future comprehensive professionals in occupational health and safety, is not the preserve of any particular subject, but rather the responsibility of all subjects. This makes drug prevention education part of the methodological work system, the development and research of managers, teachers, and specialists.

That is, addressing drug prevention education in the industrial branch of ETP means that students graduate, in each of their specialties, with the essential elements that prevent drug use from becoming a problem that limits their professional performance once they graduate.

All of the above undermines the situation of the 1st of May Industrial Polytechnic Center of Pinar del Río, which has been proven during the 2023-2024 academic year. The results show a lack of awareness, caused by shortcomings in the assessment of the educational program for drug prevention among students, teachers, and families.

Consequently, the objective of this article was to assess the current status of drug prevention education at the 1st of May Industrial Polytechnic Center in Pinar del Río.

## **MATERIALS AND METHODS**

The methods used were document review, observation, and questioning methods (interviews and surveys). Starting from the processing of the information, they allowed making the inferences and interpretations necessary to characterize the phenomenon investigated.

Five industrial specialties were studied: Electricity, Electronics, Industrial Mechanics, Maintenance and Repair of Transportation, and Refrigeration, which are studied at the 1st of May Industrial Polytechnic Center in Pinar del Río. In all cases, information was obtained from 3rd-year students (137), taking into account their experiences having carried out most of the practical teaching modalities in work entities. In addition, the opinions of 67 teachers, mainly of technical subjects,

were taken into account. Information was also requested from parents or representatives of the students involved (137).

Likewise, work was done with six (6) labor entities in the territory integrated into the ETP process, belonging to: Ministry of Transportation (MITRANS), Ministry of Commerce (MINCIN), Ministry of Energy and Mines (MINEM), Ministry of Industries (MINDUS), Ministry of Communications (MINCOM). In these entities, information was taken from 57 workers (instructor specialists) who are part of the teaching staff of the five specialties under study.

The approach, adopted through a sequential process, allowed for the selection of the empirical method to be used for data capture. This made it possible to use the triangulation technique based on the sequential analysis and comparison of the data obtained. It was decided to begin the process with a review and analysis of official documents from the National Directorate and the provincial department of the ETP regarding education for the prevention of drug and addiction problems; information was also sought from pedagogical delivery reports. Based on the information obtained, it was then decided to conduct an observation of the CP's educational work, seeking the implications of the topic addressed in institutional and group educational strategies according to each specialty.

To obtain the information necessary for the research, three dimensions involved in student education were examined: school context, business context, and family context.

## RESULTS

A review of documents reveals the existence of guidelines related to the topic under study, primarily focusing on the necessary comprehensiveness of the ETP process. That is, drug and addiction prevention education is conceived as part of the comprehensiveness of skilled workers and mid-level technicians.

The emphasis is primarily on legal drugs (alcohol and tobacco) as gatekeepers for illegal drugs; however, these guidelines are general in nature, with no specifications for the ETP, given the shared nature of this process between the CP and labor organizations. It is worth noting that the guidance documents refer to the advisory work of external organizations such as the Ministry of the Interior and the Commission for Social Care and Prevention.

## General characteristics by dimensions, according to the data obtained

Triangulation of the information obtained through observation and questioning methods shows that, while the problem of drugs and addiction is addressed by the Educational Work System, the actions are very general and do not stem from a comprehensive institutional and group assessment (PC, workplace, and family). While two students during the past academic year were involved in the use of legal drugs, these actions were carried out only once and outside of the PC; that is, there have been no cases of illegal drug use at the PC. However, in both cases there was a history of cigarette and alcoholic beverage use.

Observation of the educational situation in schools revealed that advisory activities have been carried out at the CP by external agencies such as the Ministry of the Interior and the Social Care and Prevention Commission; however, these activities are not systematic, nor is there in-depth monitoring by the Provincial Education Directorate.

It was found that, in relation to the topic studied, the CP's educational work projections do not sufficiently take into account the results of the pedagogical delivery. There is no accurate understanding of the number of students with a tendency toward tobacco and alcohol; nor is there evidence regarding the families of students with a member addicted to these legal drugs.

These limitations mean that drug prevention education efforts, even with limitations, are the responsibility of the lead teachers, without the active participation of the other faculty members in each specialty. The impact of this educational work on the workforce is negligible.

## The students

More than 60% (82) of the students report irregularities in the preventive work against drugs and their consequences; 40% (55) do not recognize alcohol and tobacco as gateway drugs. As regularity, the majority affirm that, in work entities, where they have developed the modalities of practical teaching, it is common for many workers to smoke and drink alcohol. Finally, 64 (47%) students smoke regularly or admit to having tried cigarettes and/or alcoholic beverages at least once in the last two months (14 at school, 4 on the street, 17 at parties or socio-laboral activities, 16 at home and 13 in work entities).



42.4% (31) are habitual smokers. However, only 29.75% (21) arrived at the CP with this habit; the rest acquired it after entering the CP. As a regularity, the teaching and complementary activities they carry out during the ETP process do not address the consequences of drugs on their future professional performance.

## The Polytechnic Center

In relation to the CP, although the *Master Program for Health Promotion and Education of the National Education System* includes anti-smoking, anti-alcohol and anti-drug education as part of the content to be addressed at all educational levels, it does not distinguish the characteristics of the ETP process.

Observation of 18 teaching activities at the CP showed that, although preventive work on drugs and their consequences is a responsibility of all subjects as part of the Occupational Health and Safety curriculum, classes generally only emphasize the use of protective equipment and other health risks present in the production and service processes. From the above, it can be inferred that this educational work is additional, circumstantial, and secondary in the curriculum. Generally, insufficient emphasis is placed on addressing this scourge and its workplace consequences.

Although teachers of the specialties recognize tobacco and alcohol as gateway drugs, 43% (29) declare that the actions they carry out in relation to education for the prevention of smoking, alcohol and drugs and their consequences due to the occupational risks they can cause, are insufficient and superficial.

The diagnosis carried out by the CP in the labor entities linked to the ETP does not include indicators on the use of gateway drugs among workers, which can negatively influence students. This omission impacts the scarce or non-existent preparation that students receive on the subject in the teaching activities they carry out in these entities, as expressed by 56% (38) of the teachers surveyed. Furthermore, 59% (40) consider the methodological preparation and professional development actions offered to them to address this issue in their teaching work to be insufficient. Likewise, there are deficiencies in work with families, expressed in a limited understanding of their needs and a poor identification of their strengths, weaknesses, and possibilities to support the PC in preventive education on drug use.

## Labor entities

It was found that alcohol and tobacco consumption habits in the workplace are common. While not all workers engage in these practices, the data obtained show that those who smoke or consume alcoholic beverages have a significant influence on the workforce and students.

42.1% (24) of workers admit to having consumed alcohol at some point during the last three months. Regarding tobacco consumption, the figure is higher, with 29 (51%) identifying themselves as regular smokers; 21 (36.8%) of alcohol consumers also smoke regularly and accept the existence of a dependency between the two substances, as one leads to the other.

71.91% (41) of those surveyed stated that they were unaware or had doubts about the classification of tobacco and alcohol as gateway drugs. Likewise, 50 workers (87.7%), who act as teachers in practical teaching modalities in work entities, recognize that excessive alcohol consumption, in particular, can cause work fatigue, negatively affecting performance and productivity. All respondents (57) consider the consumption of both substances harmful and recommend that students do not initiate this harmful practice. In this sense, all agree on the importance of maintaining an adequate work environment, pointing out a directly proportional relationship between such environment, the health and safety of workers, and the educational influences that these exert on students.

All of the specialists from labor organizations interviewed stated that they had not received advice or training to undertake educational work on drug prevention and its consequences for the students they taught. This was confirmed by the fact that in 100% of the teaching activities observed, the Occupational Health and Safety content did not include the warning and need for knowledge about drug use and its effects on the production and service process.

## The family

The number of families with a member addicted to tobacco or alcohol (37 for 27 %) exceeds the number of students addicted; in all cases, the students who regularly consume alcohol belong to these families. The risk factors increase when one takes into account that, according to reports, in 51% (70) of the families, some of their members were smokers or drinkers or had engaged in these practices at some point in the last three months.

67.1% of parents or guardians (92) admit that they are not familiar with cigarettes and tobacco as gateway or legal drugs. In 87.5% (120), it was found that they have not received any advice or information from the CP that would alert or prepare them for prevention in drug use.

More than 85% (116) of the relatives report that the information provided on the subject in parenting schools lacks the educational-preventive nature required in these cases; they also refer to the lack of integration in the work with the CP.

Triangulation of the information obtained shows that, although the problem of drugs and addiction is included in the Educational Work System's projections, the actions are very general and do not stem from a comprehensive institutional and group diagnosis (CP, work entities, and family).

The information on drug and addiction prevention available to students, teachers, and specialists from labor organizations does not sufficiently reflect the educational strategies of the CP and its specialties; consequently, there is a lack of depth in the treatment of the topic in institutional and group educational projects. The subjects interviewed in all three cases stated that they had knowledge about the problem that they acquired spontaneously in some social groups outside of formal education.

Likewise, preventive work on drugs and their social and occupational consequences lacks the systematicity and coherence required for curricular planning. This work is additional, circumstantial, and secondary in the curriculum. Although this work is a responsibility of all subjects as part of the Occupational Health and Safety content, the discussion of this scourge and its social and occupational consequences is generally overlooked in classes.

## DISCUSSION

The study essential purpose was to assess the current state of drug prevention education and its consequences. Based on the criteria, the research results lead to the identification of three scenarios, although not the only ones, that are essential for achieving effective prevention education in ETP.

Nawi *et al.* (2021) state that preventing drug use in adolescents should focus not only on controlling risk factors, but also on strengthening protective factors such as developing social skills, self-esteem, and values education from an early age. This strategy allows children to reach adolescence with a

solid foundation of healthy beliefs and attitudes, reducing their vulnerability to risky behaviors such as substance use.

This work is significant considering that drug use begins in adolescence (Castillo, 2021). However, this education needs to be reinforced since, according to international results, drug use begins earlier each day, coinciding with the lack of information adolescent users have on the subject.

In Cuba, although this scourge does not reach significant levels, nor are its main manifestations found in educational institutions, prevention education still shows significant shortcomings. In response to this need, the National Education System has been guiding action in recent decades through regulatory documents such as the Educational Program, aimed at preventing drug use (MINED, 2019).

The World Health Organization generally classifies drugs based on their effects, danger, and legality, the latter being the most widely used (UNODC, 2022). Depending on their legality, drugs can be authorized or permitted (tobacco and alcohol) and illegal (marijuana, hashish, cocaine, encyclidine, ecstasy, heroin, and amphetamines, among others). Assuming this classification can be contradictory, since legality could be understood as non-dangerous substances. However, tobacco and alcohol, as easily accessible substances, are the most consumed despite the fact that they are dangerous and harmful to health due to the dependence they cause and their effect on the nervous system.

It's recognized that the adolescent brain is still maturing, especially in areas such as the prefrontal cortex, which is responsible for judgment and self-control. This neurological immaturity, coupled with the early activation of the reward system, increases vulnerability to drug use, the consequences of which can be long-lasting if the onset occurs at an early age.

Likewise, Steinberg (2008) and the ABCD study, led by Lisdahl, have shown that the imbalance between impulsivity and cognitive control favors risky behaviors in adolescence. Added to this is early access to substances, which increases the risk of developing addictive patterns. Therefore, prevention must begin in childhood, with a focus on values and attitudes that strengthen healthy decision-making.

Given these effects, most specialists consider tobacco and alcohol to be precursors to illegal drugs, considering them gateway drugs, opening the door to illegal drugs. Therefore, any program, strategy,

system of actions, etc., conceived as a drug prevention education must begin with education to prevent the use of gateway drugs.

For several researchers (MINED, 2019; Flores *et al.*, 2021), prevention education must have a community-based approach, involving all institutions, especially schools. However, according to these authors, schools and families, as the primary educational contexts, must play a leading role.

However, this criterion in ETP is exclusive if one takes into account that the current Cuban model of mid-level vocational training recognizes CPs and labor entities as essential contexts of the same pedagogical process; therefore, any process, object, or phenomenon studied in ETP must include both CPs and the labor entity with equal responsibilities. Therefore, when characterizing drug prevention education in the training of workers and technicians, not only the Polytechnic Center and the family, but also the labor entities and specialists involved in the training process must be included.

On the other hand, if we consider the category of education as a system of educational influences, we must not forget that students spend more than 50% of their training in workplaces, fulfilling practical learning modalities. Therefore, more than half of their training is influenced by specialists and the workforce of workplaces, who serve as role models, representing the profession or trade to which the student aspires. Therefore, the influence of existing habits within workplaces on students should not be ruled out.

It is agreed with Flores *et al.* (2021), that among the main reasons for starting to use gateway drugs are curiosity, imitating parents, peer pressure, social acceptance, anticipating adulthood, and rebellion. In this way, the family plays an important role in preventing alcohol and tobacco use. Treating the consumption of these substances, eliminating risk factors such as consumption by fathers, mothers, close uncles, older cousins, and siblings, replacing it with healthy lifestyle habits and exemplary behaviors, constitutes positive decisions that contribute to the formation of attitudes contrary to consumption.

Risk factors, such as smoking and alcohol, can be controlled when the family has prevention education (Cedeño, 2015). Parents, guardians, and other family members older than the adolescent, in addition to not being role models of addiction, must monitor and follow up on their social and school life. This is especially true in the ETP (Educational Program), where students experience and receive positive and negative influences from both school and work environments throughout their

education, a factor not considered by Flores. *et al.* (2021), by leaving out the conditions under which the shared vocational training process between CP and labor entities takes place.

It is vital that the families of ETP students be part of prevention education. The CP can contribute by providing the necessary levels of support, guiding parents or guardians to improve their interactions with their children based on specific behaviors displayed in assigned roles, while also keeping in mind shared family concerns and priorities.

In line with the above, the education that the CP, through teachers, must provide to families, according to their needs, plays an essential role as part of prevention education. Therefore, it is considered essential for the Polytechnic Center to strengthen integration with the family and its updated diagnosis, considering this institution as a unique, complex social system, dependent on its community environment and influences, which allows the educational institution to design the necessary levels of support.

Through prevention education, students must learn that tobacco and alcohol use, in addition to being harmful to health, also constitute a gateway to other types of narcotics that can impact the quality of their future social and work performance. Even without the use of illegal drugs, tobacco and alcohol dependence is a risk factor for workers due to the effects it has on their mental and physical health.

The Polytechnic Center, the labor entity, teachers, specialist instructors, and tutors are responsible for preparing them in this direction. It is the CP's responsibility to be clear about the characteristics of the labor entities in which students will carry out their practical teaching modalities, so that they are trained in an adequate work environment favorable to the development of positive attitudes toward love of work and profession as fundamental macrovalues of professionals (Francolino and Miller, 2008; Cruz *et al.*, 2021).

The CP and the workplace can be settings that reflect negative expressions of social behavior that, as educational influences, can also affect students (MINED, 2019). In contrast, they are also ideal educational settings for conceiving and developing the necessary actions to counteract any harmful influence, as their curricula focus on productive work, which takes up most of the time.

In terms of the curriculum, the concept of ETP has changed in recent years (MINED, 2019); content related to drugs and their effects on professional performance is now considered part of worker

health and safety, moving from being the responsibility of one subject to the responsibility of all subjects.

As the diagnosis revealed, in practice, there are deficiencies in the treatment of these topics. Preventive work on drugs and their consequences appears to be additional, circumstantial, and secondary in the curriculum. As a result, drug and addiction prevention education for students, teachers, and specialists in labor organizations does not sufficiently correspond to the educational strategies for the CP and its specialties. Therefore, educational work addressing this important topic lacks the systematicity and coherence required for curricular planning.

In this sense, the fundamental role played by the preparation of CP teachers and specialists from labor entities is recognized, for the curricular output, as part of the preventive work, to the contents related to education to warn about drug use and its impact on the development of capacities in students.

Considering the preparation of teachers in both educational contexts as a fundamental element in education for the prevention of drug use and its consequences in the training of mid-level professionals, implies a review of the methodological work and improvement strategies governed by the CPs.

In this sense, an integrated methodological work and a system of improvement are required that includes all teachers of the specialty and the specialists and tutors of the labor entities, whose actions prepare them to give output to the contents related to drugs and their socio- labor consequences as a priority.

This methodological preparation must include methods and ways of working and guide the family so that it contributes to the CP and the work entity, based on sound professional training for the benefit of students.

Education for the prevention of drug use and its social and occupational consequences in ETP is a challenge that requires addressing a social and occupational health problem, starting from the initial vocational training process itself. This requires the participation of all community stakeholders and agencies, primarily the CP, the employer, and the students' families.

Achieving this goal means anticipating drug use in time and space, starting with the gatekeepers, by guiding, informing, and preparing teachers at the Polytechnic Center, specialists from labor entities, and students of Technical and Vocational Education in general so that they understand the essence and risks of drugs, their consequences, and how their use can affect their personal and professional lives after graduation, as well as the productive and service processes in which they are trained.

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### Conflict of interest

Authors declare no conflict of interests.

### Authors' contribution

The authors participated in the design and writing of the article, in the search and analysis of the information contained in the consulted bibliography.



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