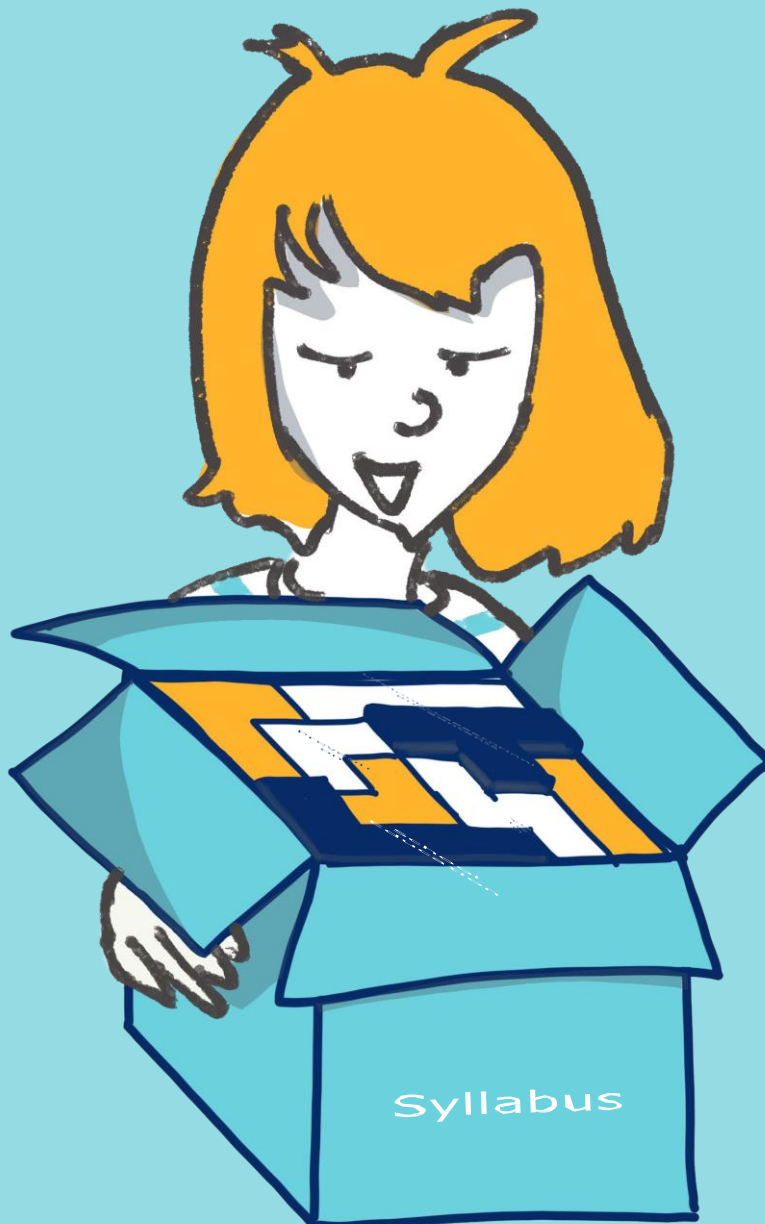




Toward the development of European Secondary School Syllabus on New Psychoactive Substances (NPS)





Co-funded by the
Erasmus+ Programme
of the European Union

2021-1-IT02-KA220-SCH-000032570 - Cooperation Partnership in School Education

This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein



Project background

New Psychoactive Substances (NPS) represent a large and expanding group of chemical compounds, mainly of a synthetic nature, characterised by pharmacological and toxicological properties that are particularly dangerous for the health of consumers. They appeared in the early 2000s, marketed as ‘legal drugs’ but offering poor to zero information about their toxicity. These so-called ‘party pills’ or “smart drugs” caused several hospitalisations and deaths, raising concern among governments, which in some countries have issued blanket bans to try to limit their availability (Bade *et al.*, 2021).

At a European level, it is estimated that around 5% of young people aged 15 to 24 have already consumed at least one of these new drugs (Eurobarometer, 2011). The ESPAD report (European School Survey Project on Alcohol and other Drugs, 2015) identified, for example, an increasing number (3-4%) of 15–16-year-old students in 24 European countries who frequently use NPS. In the EU countries involved in the INES project (Italy, Portugal, Romania), there is a stronger trend of NPS use among minors.

The use of these substances is a problem for individuals, but also for families and communities across the EU. The substance market is a factor in the spreading of criminal activities and has severe social and health implications (Tsochatzis *et al.*, 2021).



The six pillars of the INES project

1. Increase focus on developing targeted education and prevention activities by sharing scientific expertise and experience among all stakeholders;
2. Avoid training interventions in schools taking the form of episodic one-off events; instead, resort to teaching activities and experiments based on collaborative co-design processes involving academic partners, game design experts, teachers, and students in developing effective "learning pathways" on the topic of NPS, across all school disciplines;
3. Promote the agency and empowerment of teachers and students and support innovation at the school system level (and not only at the classroom level);
4. Involve teachers, students, and academic partners (e.g., academic staff and researchers) in defining and implementing content and instructional strategies to address NPS dangers;
5. Promote the educational value of games through the adoption of participatory working models, to support ordinary teaching-learning processes;
6. Design the school curriculum “around students to motivate them and recognize their prior knowledge, skills, attitudes and values” (OECD, 2018). Empower teachers to use their professional knowledge, skills, and competencies.



A proposal of European Secondary School Syllabus on NPS

The Syllabus was developed in the framework of INES project. It represents a methodological guide to incorporate the teaching-learning path developed during the project life-cycle into the secondary schools mainstream curriculum. It shows the results of the strong collaboration between researchers, teachers and students in the creation of didactic proposal to avoid the problem of NPS at school.

This work started from the creation of the training materials developed by INES university researchers and published in the **Short Blended Learning Course** (<http://ines.unibo.it/>) and continues through the design of Didactic Units co-designed by teachers, students and researchers.

The first part of the Syllabus introduces the five interdisciplinary learning Modules about the New Psychoactive Substances (NPS). The second part shows the teaching-learning paths and the game ideas. The final part presents pedagogical and didactic recommendations to make transferible the learning module out of the INES project.

This is the first version of the Syllabus. Subsequent versions will incorporate the next results of collaborative work among teachers, researchers and students: teaching-learning paths and recommendations.



Part I

MODULE 1

Classification and categorisation



Authors: Laura Mercolini, Stefano Girotti, Roberto Mandrioli, Michele Protti, Lorenzo Marincich



Date of release: September 8, 2022



Keywords: classification and categorisation of NPS; cannabinoids; cathinones



This module introduces the classification and the categorization of the following topics: the phenomenon of substance abuse, synthetic cannabinoids, analogs of cathinones, and phenethylamines. It has the purpose of introducing basic concepts regarding drugs of abuse in general and their possible classifications, based on different criteria.

Then, it defines the concept of “New Psychoactive Substances” and underscores their main points of similitude with, and difference from, “classical” drugs of abuse in terms of chemical characteristics and other possible means of classification. Finally, it highlights some key notions regarding the possible classification of the three most widespread classes of NPS, i.e., synthetic cannabinoids, analogs of cathinones, and phenethylamine.

Structure of the learning module

- DU 1. Synthetic cannabinoids
- DU 2. Analogues of cathinones
- DU 3. Phenethylamines



MODULE 1

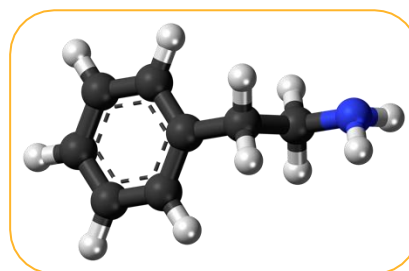
Classification and categorisation

Introduction: In order to better understand the NPS phenomenon and its many facets, general information is provided on drugs of abuse, their diffusion worldwide and their classification according to origin, mechanisms of action and chemical structure. Basic facts are provided on cannabinoids, cocaine, opioids.



NPS Classification: After a brief definition and overview of the NPS phenomenon and its prevalence all over the world, the concept itself of NPS classification is problematised and some possible solution/approaches (according to age, activity, chemical structure, and others) are proposed.

Synthetic Cannabinoids: The different chemical classes of synthetic cannabinoids are explained and their mutual relationships, and with natural ones, are explored. Some historical notes on the origin of synthetic cannabinoids and their names are also provided.



Analogues of Cathinones: Due to the strong chemical resemblance between cathinones, amphetamines and other synthetic stimulants, more chemical concepts in this space are explored and chemical resemblances and differences are underscored. Differences between natural and synthetic cathinones are also explained.

Phenethylamines: The controversial, pioneering work of the Shulgins in the synthesis of scores of different phenethylamines is discussed. Different groups of phenethylamines and their chemical relationships are explained. Basic concepts of structure-activity relationships are introduced to explain the different properties of substances belonging to different phenethylamine classes and how this relates to the key-lock model of drug-receptor interaction.

MODULE 2

Toxic effects and Risk assessment



Authors: Fernando Remião, Bárbara Poleri Silva



Date of release: September 8, 2022



Keywords: synthetic cannabinoids; new psychoactive substances; psychedelic phenethylamine



This module aims to introduce some basic concepts of toxicology and address the toxic effects that result from the consumption of these new psychoactive substances (NPS).

The effects of synthetic cathinones, synthetic cannabinoids, and phenethylamine designer drugs, which are the most representative groups of these NPS, will be addressed in more detail.

Structure of the learning module

- DU 1. Synthetic cathinones
- DU 2. Synthetic cannabinoids
- DU 3. Phenethylamine designer drugs



MODULE 2

Toxic effects and Risk assessment

New psychoactive substances (NPS) have completely changed the drug consumption pattern and the current panorama of addiction. NPS are used for their psychoactive properties but, although being drugs of abuse, they are not controlled under the international drug rules. NPS appear on the market as an alternative to the illegal drugs. The popularity of these drugs rapidly increased due to their easy availability on the internet. At the end of 2021, the EMCDDA was monitoring around 880 NPS. Synthetic cathinones and synthetic cannabinoids represent more than two thirds of the NPS available in the new drug market since 2005. By the end of 2020, around 209 synthetic cannabinoids and 156 synthetic cathinones had been reported by EMCDDA.

Synthetic cannabinoids are sprayed on natural innocuous herbs with the aim of mimic the euphoric effect of Cannabis. Desired effects of synthetic cannabinoids include relaxation, euphoria, and disinhibition. Compared with cannabis, synthetic cannabinoids are more potent and induce more serious adverse events, including hypertension, drowsiness, confusion, tachycardia, hallucination, agitation and seizures, that sometimes can result in death. Additionally, several psychiatric adverse effects have been reported, including paranoia, psychosis, and ideations of self-harm and suicide.

Synthetic cathinones, deliberately mislabeled and sold such as bath salts and plant feeders, are synthetic drugs chemically related to cathinone, a psychostimulant found in the khat plant. These drugs are available in the form of powder in small plastic packages labeled as “not for human consumption”. They exert psychostimulant and hallucinogenic effects, used to mimic the effects of controlled drugs such as cocaine and ecstasy, being much more potent than the natural product. One of the issues with the increase of synthetic cathinone use is the potential of these compounds to produce severe effects like tachycardia, palpitations, chest pain, hypertension, hyperthermia, hallucinations, paranoia, confusion, combative violent behavior, seizures and death. Chronic abuse of synthetic cathinones also cause major effects on the nervous system inducing acute psychosis, paranoid ideation, and delusions, similar to the effects of other better-known amphetamines.



MODULE 2

Toxic effects and Risk assessment

Psychedelic phenethylamine derivatives constitute a class of drugs that are chemically modified from phenethylamine and are also a representative group of NPS. Phenethylamines are stimulant and hallucinogenic substances that share similar chemical structures with amphetamine, catecholamines, synthetic cathinones, and other substances. Psychoactive phenethylamines use can induce stimulant and hallucinogenic effects, being also described effects as dizziness, nausea, vomiting, diarrhea, hyperthermia, hypertension, tachycardia, headaches, and body pains. Moreover, these drugs can induce severe neurological impairment by causing confusion, depression, acute psychosis, seizures, coma, cerebral edema.

Given the rapid increased use of these drugs and their potential to induce severe effects on health, there is a need to integrate in educational paths the research in the areas to their use and consequences. This module will address the mechanisms and the toxic effects of these three representative groups of NPS.



Source: © Shutterstock

MODULE 3

Diffusion channels



Authors: Dana Perniu, Maria Covei, Camelia Draghici, Maria Elena Cocuz, Cristina Salca Rotaru



Date of release: September 8, 2022



Keywords: NPS diffusion channels; information channels; NPS distribution



In order to address the big challenge posed by the big question “how do people make the informed decision to take or not to take NPS?”, there is the need to understand the complexity of the phenomenon coming from social, legal and economical areas.

This module gives a brief presentation of the NPS diffusion process into social groups, the channels allowing the NPS distribution, and also gives some support points for searching and identifying reliable information.

Structure of the learning module

- DU 1. NPS diffusion process: how can NPS penetrate into a group of young people?
- DU 2. Channels for NPS distribution: NPS markets - how are NPS spread/distributed?
- DU 3. Reliable sources of information: where do we get valuable information about NPS



MODULE 3

Diffusion channels

DU1: NPS diffusion process: how can NPS penetrate into a group of young people?

New psychoactive substances (NPS) are often described as innovations because they represent a new and rapidly changing class of drugs. Thus, the NPS penetration into groups can be described in the frame of the diffusion of innovation theory (developed by Everett Rogers in the 1960s) which explains the adoption and the spread of new ideas, products, and technologies. The theory helps to explain how these substances are introduced to a group of people and become more widely used over time. The process of NPS diffusion follows steps linked to awareness of the existence of new substances, their complexity, effects, risks, leading to the persuasion as development of an attitude towards the NPS; this is followed by the evaluation of NPS effects which conduct to the decision of trying or not the new substance(s). Then follows the decision implementation by trying the new substances or refusing them and, finally, the confirmation of behavior which may fall even into two extreme scenarios - addiction to the NPS (the worst case) or rejection of the NPS (the targeted case). By understanding the steps of the diffusion process, prevention actions can be conducted towards influencing the reducing and even rejection of NPS adoption.



Photo © www.laleggepertutti.it

DU 2. Channels for NPS distribution: NPS markets - how are NPS spread/distributed?

The NPS are diffused in a number of ways, but some of the most common methods of distribution include: the on-line marketplaces, often accessible through the dark web and which can be used to purchase NPS anonymously; social media platforms which may involve users posting about the substance, sharing links to online marketplaces, or creating online communities dedicated to discussing and sharing information about NPS; the street market, where the traditional drug dealers distribute the new and diverse substances; the “legal shops” (head shops), which are retail stores specialized in the drug paraphernalia; these may sell the new substances under labels such as “herbal incense”, “bath salts”, usually marketed as “legal highs”. It is to be noted that some individuals may create their own home laboratories where they create and produce new variations of existing substances or entirely new ones.

MODULE 3

Diffusion channels

DU 3. Reliable sources of information: where do we get valuable information about NPS from?

Approaching NPS in an educational context is a double-edged sword. The educational activities are oriented towards providing accurate information about the risks and potential dangers associated with NPS to help prevent their adoption by teenagers. Therefore, it is important for teenagers to be informed about NPS, as they may be vulnerable to their risks, due to curiosity, peer pressure, and lack of knowledge. Finding information about NPS can be challenging, given the constantly evolving nature of these substances and the lack of regulation and research surrounding them. Consequently, teenagers must be aware about the ways in which they evaluate how trustworthy an information source really is. There are several characteristics of a reliable source of information: credibility, objectivity, verifiability, relevancy, correctness, actuality. Generally, the most valid information focusing on NPS is provided by governmental agencies, scientific journals, non-profit organizations, academic institutions. Additionally, providing healthy outlets for curiosity and peer pressure, by participation in leisure activities such as sports, clubs, etc, can help to reduce the likelihood of experimentation with these substances.



MODULE 4

Meanings of consumption



Authors: Amélia Veiga, Fernando Remião, Eunice Carmo
Roberta Biolcati, Federica Ambrosini



Date of release: September 8, 2022



Keywords: consumer profile; meaning and motivation of consumption; psychological aspects; sociological perspective



The Module 4, Didactic Unit 1 and 2, aims to increase knowledge about the intrinsic and extrinsic motivations that lead people to engage in substance use. Understanding why people engage in psychoactive substances use (motives) is essential to know the complexity of the phenomenon and to intervene in NPS prevention and harm reduction activities.

Didactic Unit 3 aims to discuss the social causes of NPS consumption, through a lens of social responsibility and to use sociological imagination to reflect about potential solutions to the prevention and intervention in this phenomenon.

Structure of the learning module

- DU 1. SET (profiling of the consumer): Motives for classical and novel psychoactive substances
- DU 2. Focus on NPS consumers
- DU 3. Meanings of consumption using the lens of sociological imagination (UPORTO)



MODULE 4

Meanings of consumption



(DU1): SET (profiling of the consumer): Motives for classical and novel psychoactive substances

According to Norman Zinberg (1986), drug use can be conceived as a human behavior connoted by intentions, learnings and cultures. As in the case of alcohol, the spread of social norms and rituals allows most users to engage in a drug use that is defined as "controlled", that is, compatible with their social lives. Zinberg claims that to understand substance use, it is necessary to consider 3 factors:

1) the **drug** itself; 2) the **set**, which includes the individual's psychophysical characteristics, motivations and expectations of the person with respect to drug consumption, as well as related states of mind; 3) the **setting**, which refers to the context where certain social norms and rituals (which represent a regulatory element of consumption and make it "controlled", that means functional for the consumer's life) are born and socialized. With this new conception of drug use, Zinberg downgraded the centrality hitherto attributed to the characteristics of the substance alone, placing greater emphasis on the importance of the context and of the user. Thus, he shifted the axis of intervention, considering the person as holder of **decision-making power**, and considering the consumption as a behavior which is oriented by the beliefs, expectations, and motivations that the consumer has about drugs.

Expectancies are beliefs about the behavioral, physical, cognitive, affective, and emotional effects of the substance's intake. They answer the questions: "*What do I anticipate about the effects of the substance? What is my mental representation of the "after intake"?*"



MODULE 4

Meanings of consumption

Expectancies can be positive or negative. Considering alcohol, high positive expectancies correspond to higher alcohol consumption whereas high negative expectations are related to lower alcohol consumption. Expectancies are important because they are distal risk **factors** and play an important role in influencing the relationship with the substance, especially in people who are drug naïve and/or at ages when experience with substances is not yet stabilized.

Motivations are the evaluations attributed based on the particular affective states that people want to achieve, which may therefore motivate them to drink (or, conversely, may motivate them to avoid drinking). Much research confirmed that drinking motivations are stronger predictors of binge behavior than expectations about alcohol. Thus, they are **proximal risk factors**.

Cooper (1994) identified four categories of drinking motivations among young drinkers.

1. **Enhancement Motives**, which reflect the drinking in order to enhance positive affective states.
2. **Social Motives**, which refer to drinking for social facilitation and aims to enhance socialization and social aggregation, to create a “party atmosphere”.
3. **Coping Motives**, which refer to drinking in order to escape, avoid or regulate negative emotions.
4. **Conformity Motives**, refer to drinking in order to adapt to the peer group or to avoid social problems. Unlike social motives, these people drink because they want to fit in, not because it's a choice they would normally make.

Internal and psychological motives, especially **coping motives**, are related to higher risk.

Adolescents are often unaware of their motivations for substance use and, as a result, they perceive they have little control over this process. Bringing motivations to awareness is important because it allows them to focus on the fact that **use is a choice** and allows them to actually have a choice.



MODULE 4

Meanings of consumption

(DU2): Focus on NPS consumers

NPS users generally are individuals who show higher levels of sensation seeking and impulsivity; have more peers who use substances; have lower levels of risk perception; and show more risk-related behavior compared to non-drug users and even illicit drug users. Internet and social networking sites play a significant role in the marketing and distribution of recreational/prescription drugs. Thus, NPS consumers often are avid users of the web and use online sources to impact as minimally as possible on the work/professional status.

As mentioned above, expectancies and motivations play a key role in drug consumption, and this is also true for NPS. However, in the case of NPS, **specific types of NPS substances are associated with varying expectancies and motives.**

Considering **expectancies related to NPS use**, people who consume hallucinogenic NPS were found to have the expectation of achieving greater self-exploration or spiritual attainment. Consumers of synthetic cathinones expect that the consumption will lead them to increased self-esteem, sociability, empathy or energy. Consumers of synthetic cannabinoids expect as consequence of the intake euphoria, increased creativity, relaxation and well-being. Tryptamines, instead, are often chosen by those who seek and expect psychedelic sensations while piperazines are expected to produce increased energy, euphoria or mild hallucinations.

The **motives related to NPS use** are similar to the motives related to the use of other legal or illegal substances. Even for NPS, the psychological motives of use may represent the final decision whether or not to use different types of NPS and thus they might be the most **proximal factor** to use. The intrinsic motives of NPS consumption usually include curiosity, increasing pleasure, experimentation, self-exploration, and escapism. However, in addition to these motives, other motives related to the consumption of NPS were found to overlap with the four drinking motives identified by Cooper's model (see DU1).

Literature found that **each NPS type produces a specific pattern of associations with motives.** Synthetic cannabinoid use is associated with stronger coping motives and weaker enhancement and social motives. The use of NPS stimulant is associated with stronger enhancement and social motives and weaker expansion motives. The use of Psychedelics is more linked with higher expansion motives and lower of coping, social and conformity motives. Finally, the use of dissociatives is related to higher coping and expansion motives.

Users at **higher risk** are those who tend to be driven by high levels of coping and conformity motives and make an instrumental use of NPS to escape their daily problems.

Other reasons related to NPS consumption include the search for cognitive enhancement, creativity, pleasure, self-medication, the desire to seek a new and attractive experience. Other, more external motives associated with NPS consumption are lower costs, legal status, desire to avoid detection in drug tests, (online) easier accessibility.

Different motives may have **different trends over time.** People who use NPS for “opportunistic” reasons (e.g., lower costs, legal status) tend to decrease their use over time. Instead, when NPS are used for desirable qualities of the substance (value for money, short effect duration) or for the perception of a superior product (high/better purity), the consumption tends to increase over time.

MODULE 4

Meanings of consumption

DU3 - Meanings of Consumption using the lens of sociological imagination

The sociological imagination is a concept that was coined by the American sociologist C. Wright Mills in 1959. Module 4 (DU3) presents 'sociological imagination' as a pedagogical strategy to help students draw connections between their life experiences and the broader social environment. The sociological imagination is a beneficial instructional strategy because it helps students build analytical and critical thinking abilities while helping them to make sense of their context, like the school. Using sociological imagination, exploring how students' unique experiences relate to the broader social situation will be possible. Through dialogues, students can understand the social world and how broader structural forces affect their experiences more fully. This strategy provides a secure environment where students can examine their ideas and views as well as have critical conversations with others. As such, sociological imagination enhances the capacity to think beyond one's own experiences and make connections between those experiences and broader societal dynamics.

By examining the societal factors that influence NPS abuse, the sociological imagination can help understand it. NPS abuse is a complex subject, and it's essential to consider the impact of poverty, and other societal problems. The elements that affect drug abuse at the individual level, such as mental health conditions, peer pressure, and a lack of resources, must also be considered. We can better understand how NPS abuse arises and how to effectively handle it by examining the interplay of personal, cultural, and structural elements. Finding alternatives to NPS abuse requires imagining a society that works for all of us.



MODULE 5

Representations of substances abuse in mainstream channels



Authors: Elena Pacetti, Alessandro Soriani, Luca Ferrari, Marco Nenzioni, Stefano D'Ambrosio



Date of release: September 8, 2022



Keywords: communication; mass media; media influences; prejudices and stereotypes; history



in this module, we introduce an educational perspective on the topic of the substance of abuse. Specifically, we will focus on the representation of such substances by first analyzing what meanings and mechanisms (prejudices and stereotypes) bring users closer to the consumption of such substances.

Moreover, it will briefly outline the historical evolution of the phenomenon related to substance abuse, considering the role of the mass media both in the 19 century and in the new Millennium.

Structure of the learning module

- DU 1. Representations: meaning, mechanism, prejudice: medium and audience (EDU)
- DU 2. Phenomenological and historical representation of substances abuse in literature, films, songs, videogames, and other mainstream channels - until 1999
- DU 3. Phenomenological and historical representation of substances of abuse, including NPS, in films, songs, videogames, and other mainstream channels - from the 21st century



MODULE 5

Representations of substances abuse in mainstream channels

Module.5 presents a pedagogical and educational perspective on the subject of substances of abuse.

The module is made up of 3 Didactic Units (DUs), each of which, contains useful references and extracts from some research in the sector capable of providing an overview of the subject in question from a more humanistic perspective.

The first DU, starting from the concept of Media, contains useful references for interpreting the dynamics of communication and the effects of mass communication on people. The parts that make up this DU, specifically, are: the foundations of communication; the meaning of Media; how people perceive media; media effects.

First of all, we propose an interesting work by Umberto Eco (1988), expert semiologist who theorized and defined a conceptual model through which we can interpret and explain interpersonal communication methods. Eco starts from the concept of "sign", useful for "transmitting information; to say or indicate something that someone knows and wants others to know as well" (Eco 1988, 27). Core of the model, the signs fits transversally into this communication scheme:

source – sender – channel – message – receiver

This model can be applied to most communication processes. However, a message can pass through a channel from sender to receiver without ever having meaning, if the sender and receiver do not share a common code. Another key element of this model is precisely the code, a fundamental component for preparing a common ground between people useful for the exchange of information. As Eco's model underlines, codes are not only fundamental for every communicative activity but, moreover, there are different linguistic and not, and they vary according to the context in which the communicative exchange takes place.

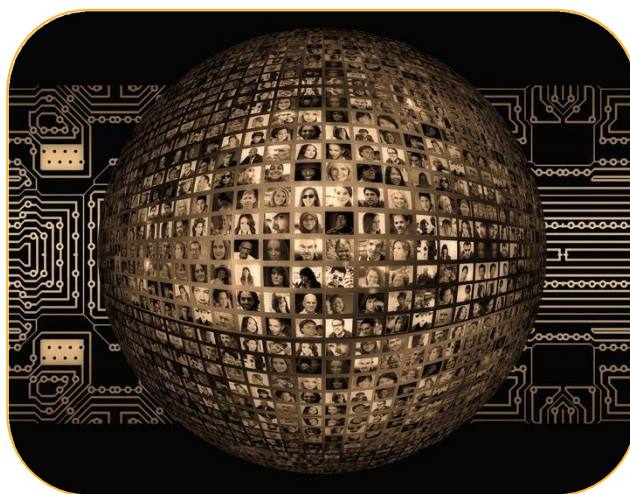


MODULE 5

Representations of substances abuse in mainstream channels

Taking this scheme proposed by Eco as a reference, one enters the de Cutting the meaning of Media and its communicative effects on people. First of all, Media can be defined as various ways we have to communicate inside a society. The term media (plural of medium) refers to the communication channels through which we disseminate news, music, movies, education, promotional messages and other data. It includes physical and online newspapers, television, billboards, radio, social networks etc.

Obviously, massive communication affects people's perception of the reality that surrounds them, influences their thoughts and, consequently, their choices and their behavior. To analyze this reality, the Theory of Uses and Gratifications (UGT) by Katz (1997) is proposed in the UD, which shows us how, as a whole, that the audiences (people) are active in choosing the media they consume and are aware of the reasons they want to consume those media and consciously use those reasons to make media selections that will fulfill their needs and desires. Indeed, Katz reports how the people always have a reason for consuming media, even if it's simply habit or entertainment. Mass communication, carried out by the media, according to the scholar, is characterized by some elements that are presented in the module; for example, Media use is motivated and goal-oriented, people select media based on their expectation that it will satisfy specific wants and needs, Media use is driven by individual social and psychological factors etc.



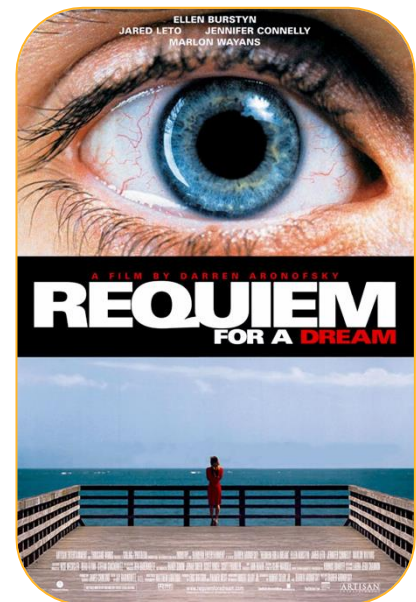
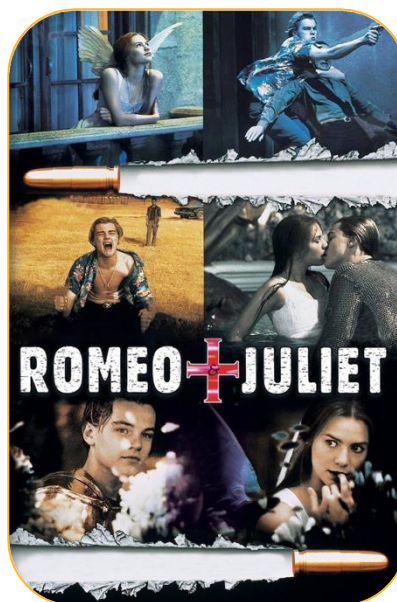
Obviously, this intricate communication system that characterizes today's society generates effects on people's behavior. To deepen the discussion on the impact of the effects of the media on our behavior, the theory of Shanahan is proposed, which starts from the assumption that the media do not affect audiences directly but they contribute to shape into the audiences the way they perceive the world. A broader theoretical introduction on the media, the methods of communication and the related effects on people - through the productions of well-known scholars in the sector - serves to give the users of the module basic references thanks to which they can rethink themselves, in a more contextualized way. Themselves and their relationship with today's society are increasingly characterized by mass media. Last but not least, it is also fundamental to understand how the effects of communication can offset and distort our perceptions regarding the NPS theme, of which a historical evolution will be presented in the DUs following this opening.

MODULE 5

Representations of substances abuse in mainstream channels

DU.2, stays centered on the concept of media, briefly outlines the historical evolution of the phenomenon of substances of abuse, considering the role of these substances within societies in various historical periods, up to the dawn of the 2000s. Specifically, it is highlighted how, through the mass media, substances that we can consider "of abuse" have been promoted and disseminated. For example, through some scientific productions (Gahlinger, 2004; Goode, 2008), we learn how drugs of abuse have always been inserted, in various ways, within societies. In fact, as Goode (2008, p.76) reports, «Humans have been ingesting drugs for thousands of years. And throughout recorded time, significant numbers of nearly every society on earth have used one or more drugs to achieve certain desired physical or mental states. Drug use comes close to being a universal, both worldwide and throughout history». Within the UD there are many historical references that show how drugs of abuse were welcome and integrated in many societies. For example, cocaine was long used as an antidepressant drug during the 19th and 20th centuries; or again, the myth of drugs, of marijuana has been widely cleared through customs and has garnered great consensus within the rock music scene in the second half of the twentieth century. Film production has also tackled the drug issue from various perspectives, from the most critical ones to others that seem to create consensus around the consumption of illegal substances.

This trend is also noticeable after the New Millennium. As can be seen in DU.3, in today's panorama the main means of mass communication such as films, music, reality shows, etc., play an ever greater role in influencing the choices of young people regarding the use of substances of abuse, offering them dangerous and misleading behavioral models. With the research referred to in this module, greater prominence is given - with the intention of aligning with the target of the INES project - to the aspects concerning adolescence, a phase of life in which the risks of resorting to substances of abuse increase and in which a large part of the media pushes are aimed at. The mass media, today, tend to create consensus around the use of substances of abuse and, moreover, through the large cinematographic, musical or television productions, the messages - more or less explicit - of conformity around the substances of abuse are increasing. abuse, from smoking to alcohol, including drugs.





Part II

Teaching-learning paths and the game ideas

TEACHING-LEARNING PATHS & PEDAGOGICAL PLANNER

Make the design visible!

In this section, you can find the teaching-learning paths created during the project at this link:

<http://ines.unibo.it/course/view.php?id=11>

Take inspiration! To make the experience of understanding the proposed teaching-learning activities deeper, you can use to design your own didactic experience the INES Pedagogical Planner:

<http://ines.unibo.it/course/view.php?id=16>

GAME PARADISE ON EARTH



Play with INES game and reflect with your students about the story...

<https://ines.swingtree.be/>



Part III

Pedagogical and didactic recommendations

Pedagogical recommendations to integrate the INES syllabus into the mainstream school curriculum

In the following page, we provide pedagogical recommendations for schools on effectively incorporating the results of the INES project into their mainstream curriculum.

Point 1: The importance of collegial dimension in the curriculum design

Curriculum design should not be an isolated task carried out by individual teachers but rather the result of a collaborative, collegial process. Teachers, students, families, and stakeholders must engage in collective discussions to create a curriculum that shares clear values and pedagogical goals that reflect the school's vision and identity. This approach ensures that different perspectives are considered, fostering a richer, more inclusive educational environment.

Point 2: Emphasizing interdisciplinary approaches

Teaching design should not be limited to single-subject expertise but must emphasize interdisciplinary approaches. This broadens the learning experience by connecting concepts from various fields, allowing students to see how knowledge interrelates across disciplines. By fostering such connections, students can develop a more comprehensive understanding of the world around them, preparing them for complex real-life challenges.

Point 3: Centering the student in curriculum design

At the heart of every curriculum design should be the student, their needs, learning styles, motivations, etc. Thus, the curriculum should be designed around students to motivate them and recognize their prior knowledge, skills, attitudes, and values. Curricular design should focus on creating flexible teaching-learning processes that cater to these individual and group needs. To actively participate and contribute, the goal is to foster a democratic knowledge society, where education empowers learners.

Point 4: Translating curriculum into active learning experiences

Curricular proposals should be translated into teaching-learning models that emphasize participation and collaboration. These models need to integrate the ideas of both teachers and students, as well as members of the broader community, promoting the agency and empowerment of teachers and students and supporting innovation at the school system level (and not only at the classroom level).

Point 5: Integrating Syllabus into the mainstream curriculum

Any educational activities, including those developed through the INES Syllabus, should be integrated into the regular curriculum rather than treated as separate or extra-curricular. It is fundamental to avoid training interventions in schools represented by episodic one-off events, resorting instead to teaching activities and experiments based on collaborative co-design processes. The assessment phase should be meaningfully linked to the curricular goals.

Implementation process

Starting with the INES Syllabus, teachers:

collaboratively discuss how to integrate NPS topics into the mainstream curriculum. Reading the INES book is recommended.

1. Use the INES Pedagogical Planner to analyze the developed teaching-learning paths and draw inspiration from the experiences of other teachers and students. Collegially, share ideas and tools to monitor and evaluate the implementation of the didactic experiences.
2. Use, reuse, and remix the module contents, including didactic units and teaching-learning resources.
3. Implement the modules and didactic units by engaging students in collaborative learning processes and fostering active learning strategies.
4. Modify and enhance (with the student's engagement) the available didactic resources, building on the INES experience.
5. Individually and collectively, plan how to evaluate teaching experiences with a particular emphasis on formative and summative evaluation. Students' activities are to be evaluated in terms of curricular experiences.
6. Reflect, during the entire process, about the quality and the effectiveness of the didactic experience to improve/modify the curriculum integration about NPS topic