

# **Scientific bases of prevention programmes in the school setting**

**Sonia Moncada**

**EU-DAP Conference**

**15-17 December 2005**

**Lisbon**

# What do we know about school prevention?

- More than 20 years of research in the drug prevention field.
- Possibility for establishing criteria and principles about drug prevention at schools.
- Frequently no evaluated programs are applied.
- Few European programs are included in revisions.

- Evaluation of programs
- Reviews of literature: systematic reviews; meta-analysis
- Model programs
- Criteria and recommendations ...

# Consulted Documents

- Reviews of reviews; Who: A Review Of What Works in Prevention, Nhs; Mike Morgan Foxcroft,...
- Meta analisis: Tobler; Hansen, Bruvold, White & Pitts...
- Proyect Syntesis: K. Winters:Minesotta Univ. Mentor Foundation. (Samhsa Model Programs).
- Criteria and Recomendations About Prevention:NIDA, ONDCP...
- Other UE documents: EMCDDA; CE .

# Problems related to evaluation

## Methodological problems: minimum requirements for program evaluation

- Sample size
- Treatment and control groups
- Randomization
- Pre-post measures
- Attrition: 77%
- Validity and reliability of measures
- Level of implementation (60/80%)
- Follow up.
- Assignment units: school/individuals.

# **Evaluated aspects**

Universal; structured, adolescents

- **Effectiveness of school prevention programs.**
- **General Objectives and placement in the curriculum.**
- **Target population.**
- **Drugs targeted**
- **Components.**
- **Methodology of implementation; Intensity.**

# Effectiveness of school prevention programs.

- Most programs included in revisions show positive effects.
- The effect size of school prevention programs is small and tends to be lower in the follow up

# Effectiveness of school prevention programs.

Tobler y Stratton, 1997. 120 programas (56 high quality)

	Interactive	Multi components
Effect size	(-0,02 0,33)	(-0,02 0,39)

- Content and methodology equal importance

# **Effectiveness of school prevention programs.**

- Some traditional programs can have negative effects**

# Effectiveness of school prevention programs.

Foxcroft, 2001. (56 surveys)

	Partially effective	ineffective	Negative
Short term	14	23	3
medium	13	19	2
Long Term	3	7	1

# Effectiveness of school prevention programs.

White & Pitts, 1998. (62 programs). Effects on illegal drugs

- Modern programs don't use to have negative effects
- Some circumstances may underestimate the effects of the programs.

# General Objective /place in the currículum

**Políticas  
globales**

•Health Promotion

**Prevención  
integrada**

**Intervenciones  
curriculares**

•Reduction of  
prevalence/  
Delay the onset

•Harm/Risk  
•Reduction

# Organización de la prevención

## Políticas escolares

Formular p.ej. reglas y normas sobre consumo de drogas en colegios. Pueden incluir actividades preventivas

## Prevención Integrada

intervenciones para incluir la prevención en todas las actividades de la vida escolar cotidiana. (políticas escolares o inclusión integral de temas preventivos en las materias escolares)

## Intervenciones Curriculares -

**(programas preventivos)** programas formales en las clases, con sesiones, materiales y temas definidos: la inclusión fija y estable de la prevención en la curricula escolar

Posibilidades de controlar y asegurar la calidad y la evaluación de los contenidos y de la implementación

# Target population:

- Age, developmental moment
- Level of risk of the target population
- Cultural characteristics

# Target population:

-Programs must be targeted to 3 critical developmental stages (WHO):

- Inoculation Phase: previous to experimentation.

- Relevancy Phase: Experimentation began to appear: possibility of practical application of the contents to real life situations.

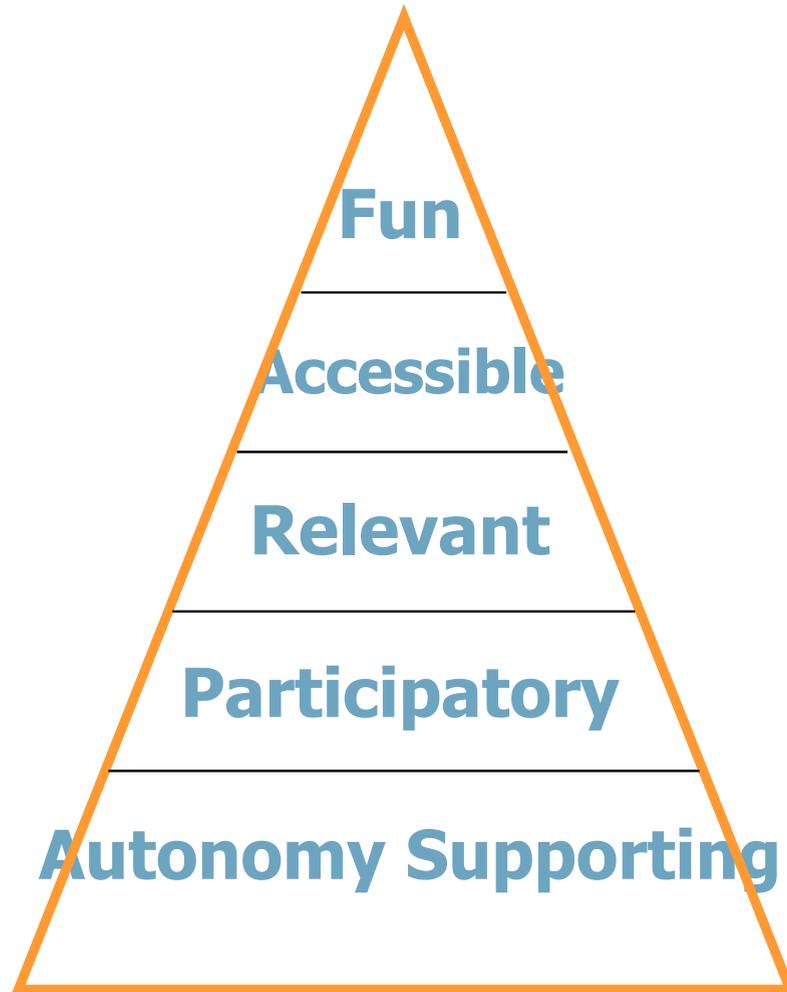
- Later relevancy: prevalence arise and the context of use, changes.

-Prevention programs should be designed to intervene as early as possible to address risk actors for drug abuser (aggressive behavior; academic difficulties...) (NIDA)

# Target population:

- Few revision with high risk populations at school.
- Anyway: Programs must be adapted culturally; formative evaluation is important to know the language,, the believes, the rules and norms....
- Programs must be interesting, relevant for target population.
- This means that delivers must be well trained to adapt contents, methods, etc.

# Youth Delivery



Adapted from Dr.  
Harvey Skinner

# Drugs targeted

- Many programs assumes the gateway hypothesis.
- Interactive tobacco programs three times more effective than generic (Tobler).
- Recommended to target generic to under 13 years old and specific ones to the older. (WHO)

# **Components:** programs typically organize their curriculum around psychosocial factors

- Knowledge.

- Affective education

- Social Influences :

  - Resistance Skills.

  - Normative Education.

- Harm Reduction.

- Others: parental/communitary...

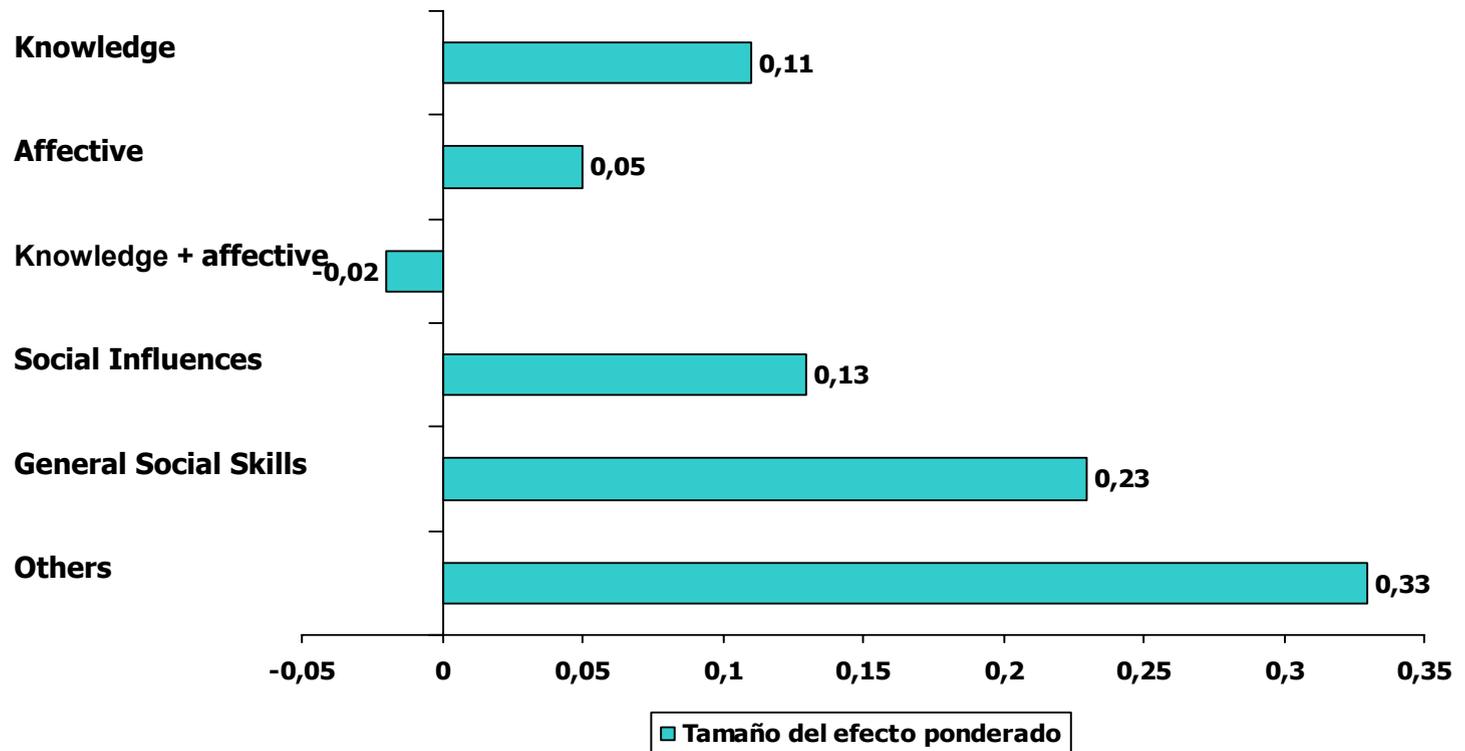
# Components

Hansen (1992): 41 programas:

	Positive %	Neutral %	Negative %
Informative	30	40	30
Affective	42	25	33
Sociales Influences	63	11	26
Comprehensive	72	28	

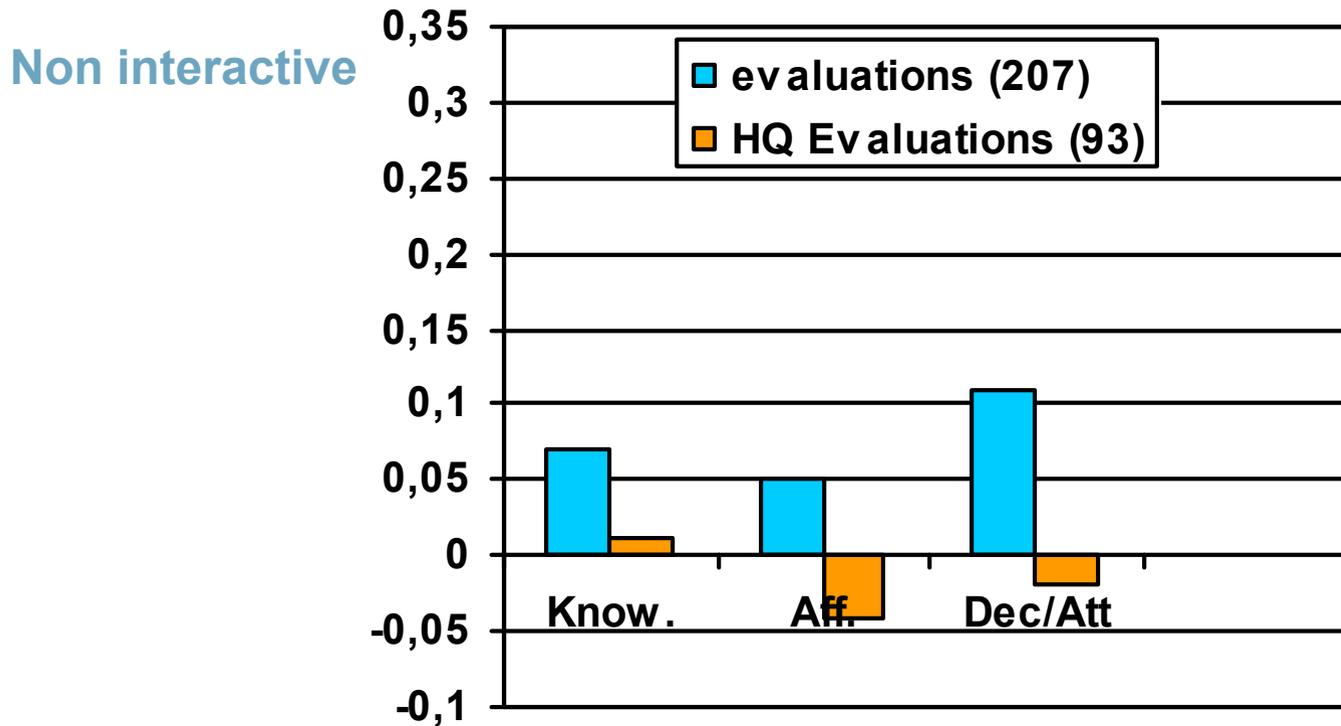
## Effects on drug use/ content of the programs

Tobler y Stratton, 1997. 120 programs (56 high quality)



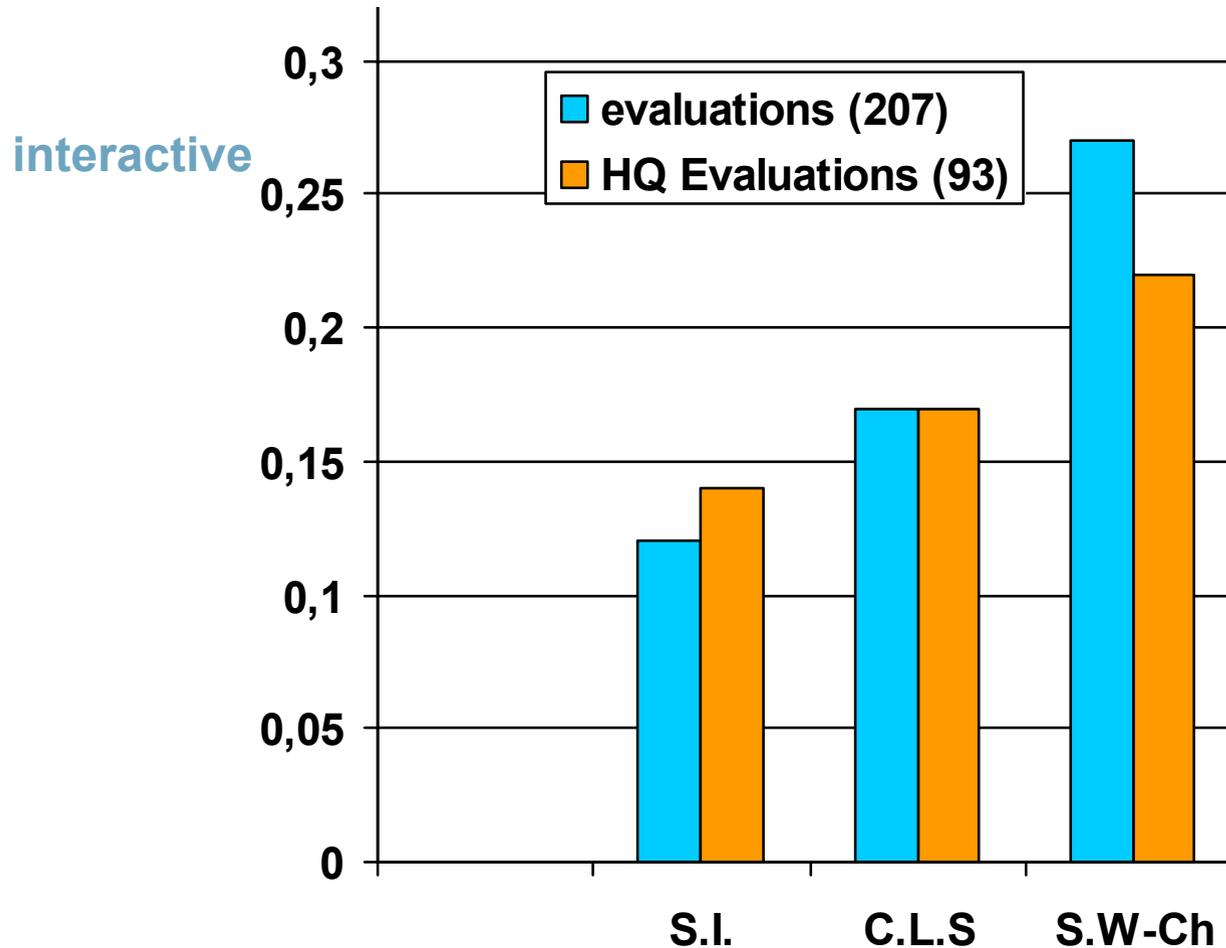
## Effects on drug use/ content of the programs

Tobler et al. (2000). 207 programs (97 programs high quality)



## Effects on drug use/ content of the programs

Tobler et al. (2000). 207 programs (97 programs high quality)



# Youth Skills Data

<b>Skill</b>	<b>%</b>
<b>decision-making</b>	<b>58</b>
<b>refusal skills</b>	<b>33</b>
promote protective factors	11
promote healthy values	8
promote healthy behaviors	2
<b>conflict resolution</b>	<b>6</b>
harm reduction	6
drug education	4

---

**not mutually exclusive**

Project Synthesis. Ken C. Winters Ph.D

# Components

- It is difficult to know the specific effect of each component.
- Combination of components get better results.
- Strong recommendation: to include social influence components, specially normative education (WHO).
- The relevance of normative education decrease when prevalence arise.

# Components

- The effectiveness of communitary components are not clear. Nevertheless, strong agreement in the importance of reinforcing messages from different settings relevant to youth ( specially family).

# Components

**PRINCIPLE 10 - Community prevention programs that combine two or more effective programs, such as family-based and school-based programs, can be more effective than a single program alone**

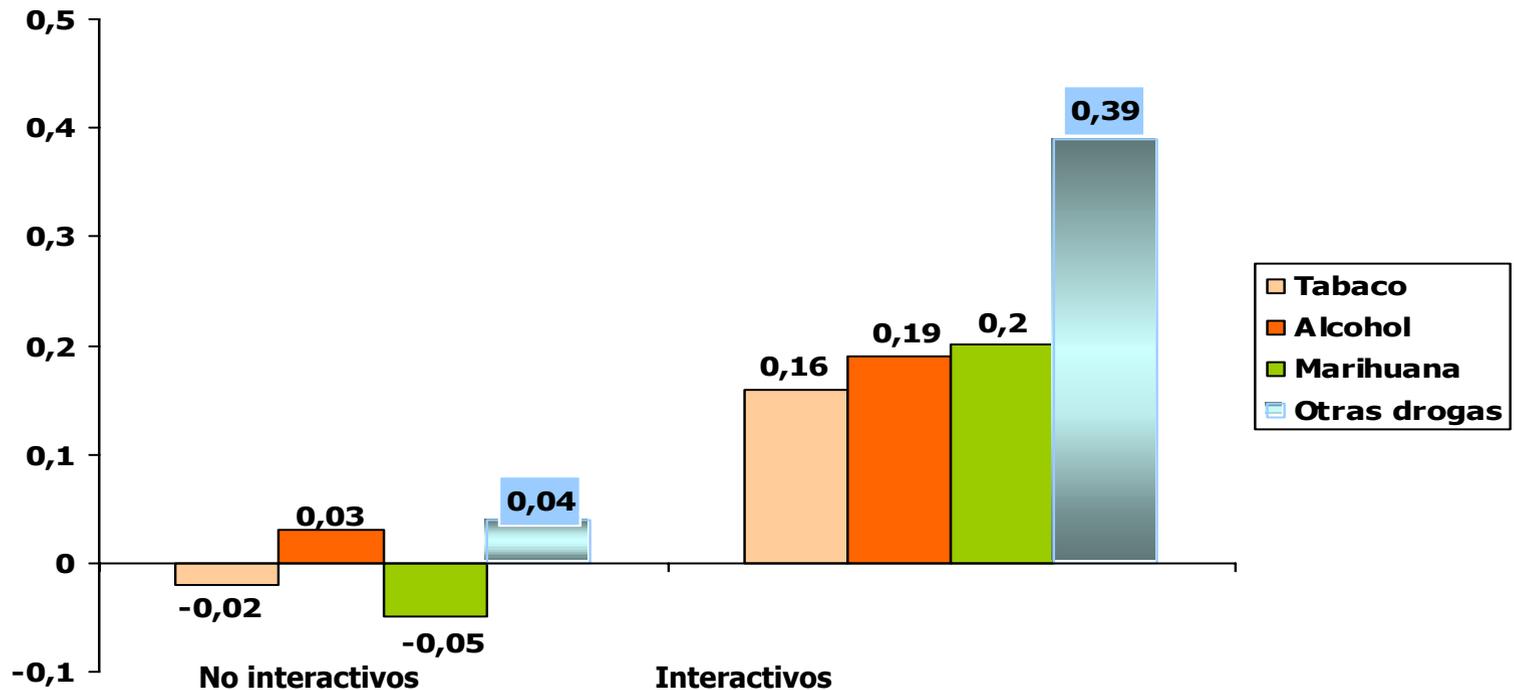
**PRINCIPLE 11 - Community prevention programs reaching populations in multiple settings—for example, schools, clubs, faith-based organizations, and the media—are most effective when they present consistent, community-wide messages in each setting.<sup>7</sup>**

# Delivery method

- Interactive/non interactive
- Leader: teacher; peers; police...
- Intensity .
- Fidelity .

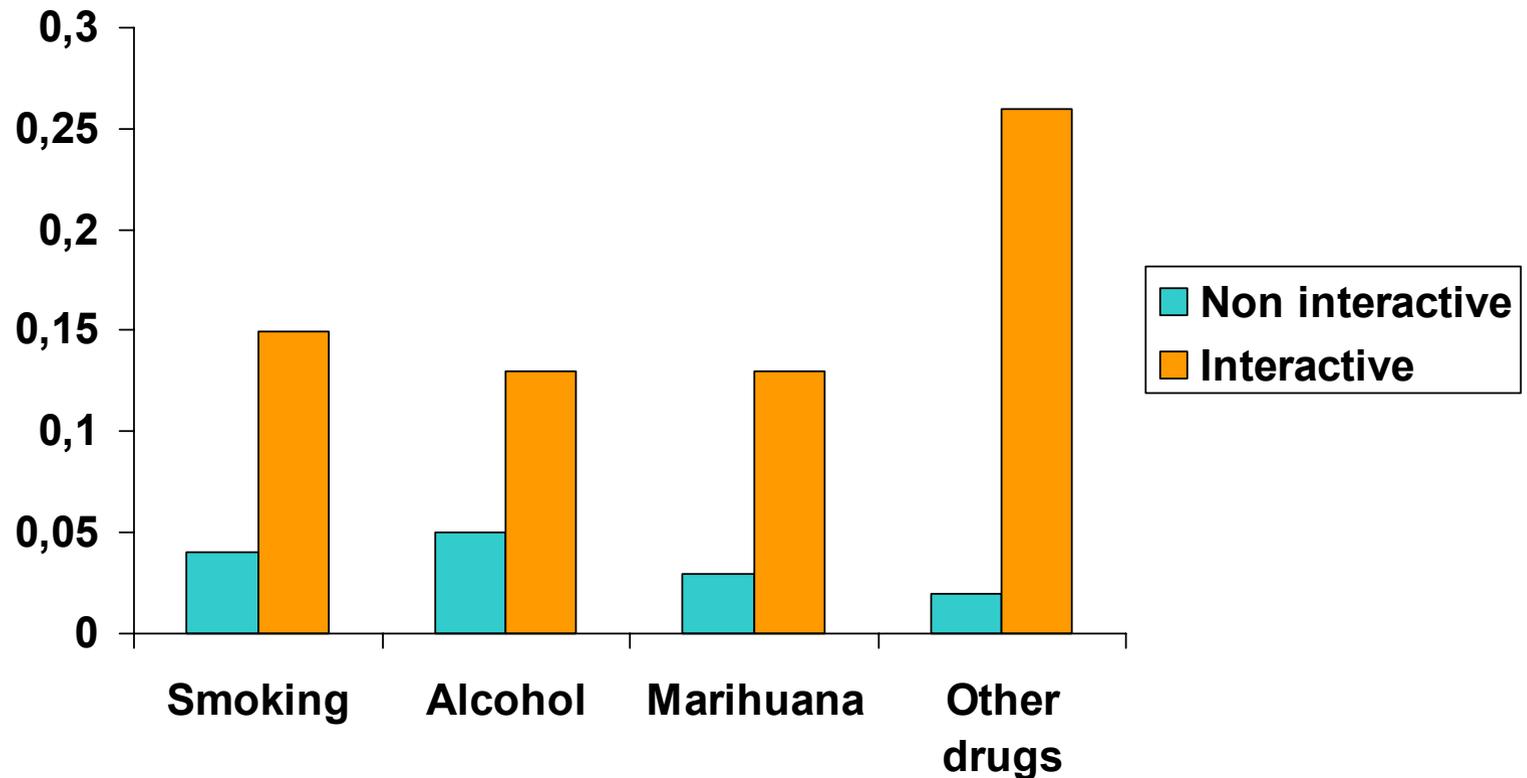
# Effect size of interactive/non interactive programs

Tobler y Stratton, 1997. 120 programas (56 high quality)

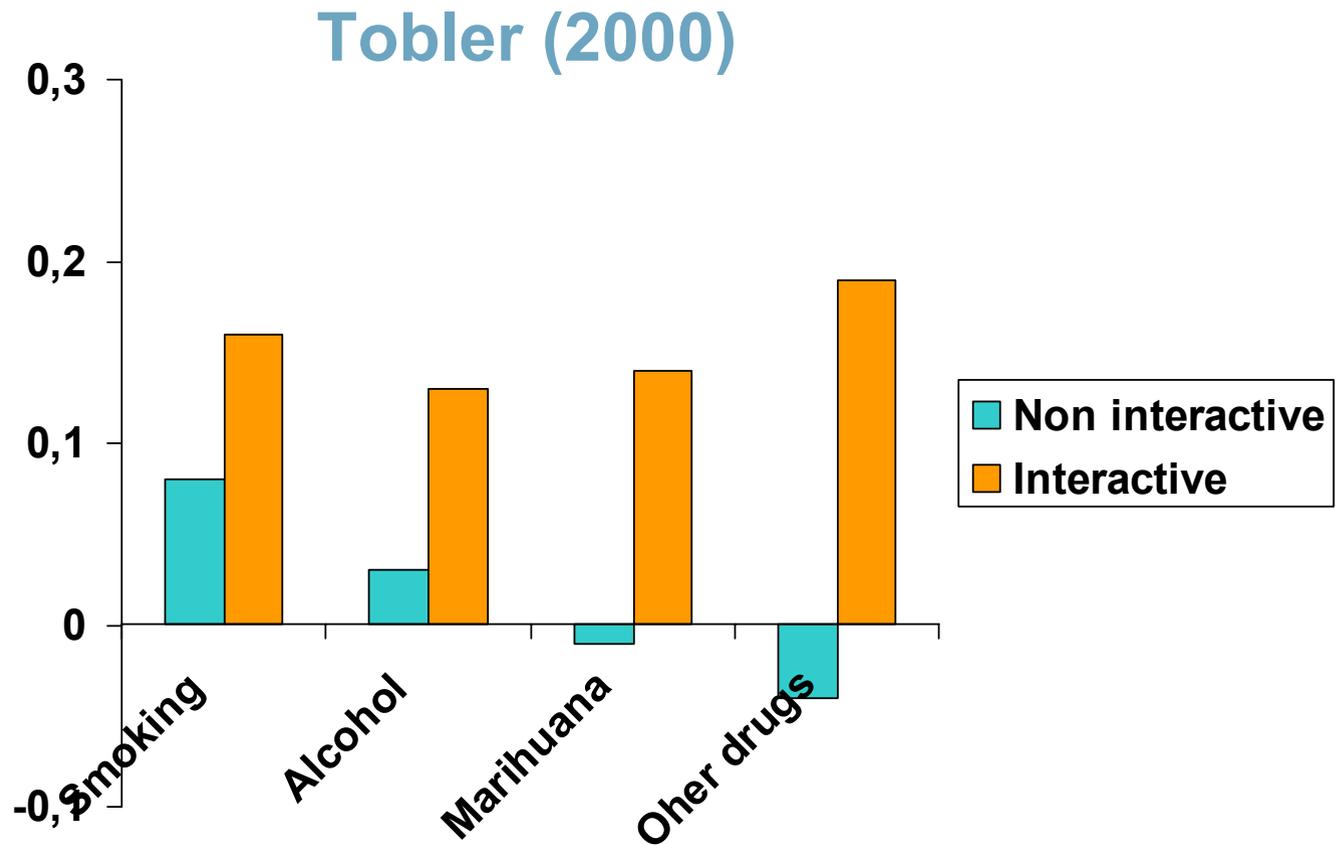


# Effect size of interactive/non interactive programs

Tobler (2000)



# Effect size of interactive/non interactive programs. High quality set



# Delivery method

## Interactivity/non interactivity

- Interactive programs have demonstrated twice the effect of non interactive ones.
- Some defends that this aspect is even more important than the content.
- They require specific training of delivers in the methodology of the program

# Delivery method

## Leader

- Teacher-led
- Peer-led
- Health Professional-led
- Police-led

# Delivery method

## Intensity of the program: N° of sessions

- It's recommended a certain level of intensity.
- The recommended intensity is variable: between 4 and 10 sessions .WHO; W & P: 10 sessions. 39-40 hours/year Health Promotion programs.
- Higher intensity is not related to best results.  
(differences between interactive/non interactive).

# Intensity Data

## High intensity

39 %

40-100 sessions “modal”

2+ years common

## Medium intensity

28 %

10-20 sessions “modal”

## Low intensity

23 %

5-8 sessions “modal”

# Intensity: booster sessions

- Booster sessions helps to maintain long term effects of the program.
- They should be included in subsequent years.
- The number of session recommended is variable (3-8. WHO).

# Fidelity

- Fidelity of the implementation is a crucial element that affect effectiveness (more than 60% of the original curriculum is needed).
- It's related not only to the content, but also to the methodology of implementation.

# In Conclusion....

–School prevention can impact the use of drugs.

–To get it, programs must:

- be delivered in an interactive way: this is a crucial element
- have sufficient intensity, booster sessions;
- capture the students interest.
- be delivered by well trained leaders.

# In conclusion....

- Fidelity to the original curriculum is needed (at least 60%).
- The more components, the best results. Specially important the normative education. When prevalence arises the normative education decrease the effectiveness. We need to investigate other alternatives.
- Structured curricular programs get more benefits when supported by other actions in the environment (school centers) this also helps their sustainability.