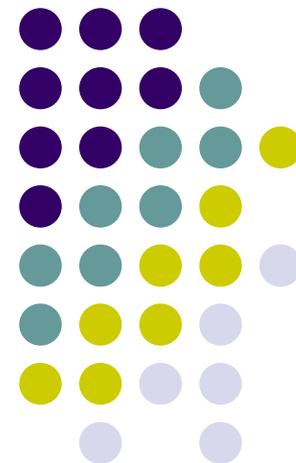




## New Bulgarian University

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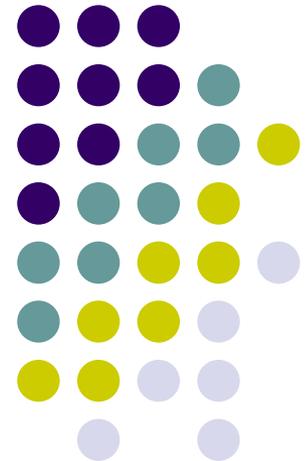
# INTENSIVE PROGRAMME: SPECIAL ABILITIES AND TALENTS - PATTERNS OF COGNITIVE PROCESSES IN PEOPLE WITH DISABILITIES



# Internet Literacy Test

**Pilar García-Carrión.**  
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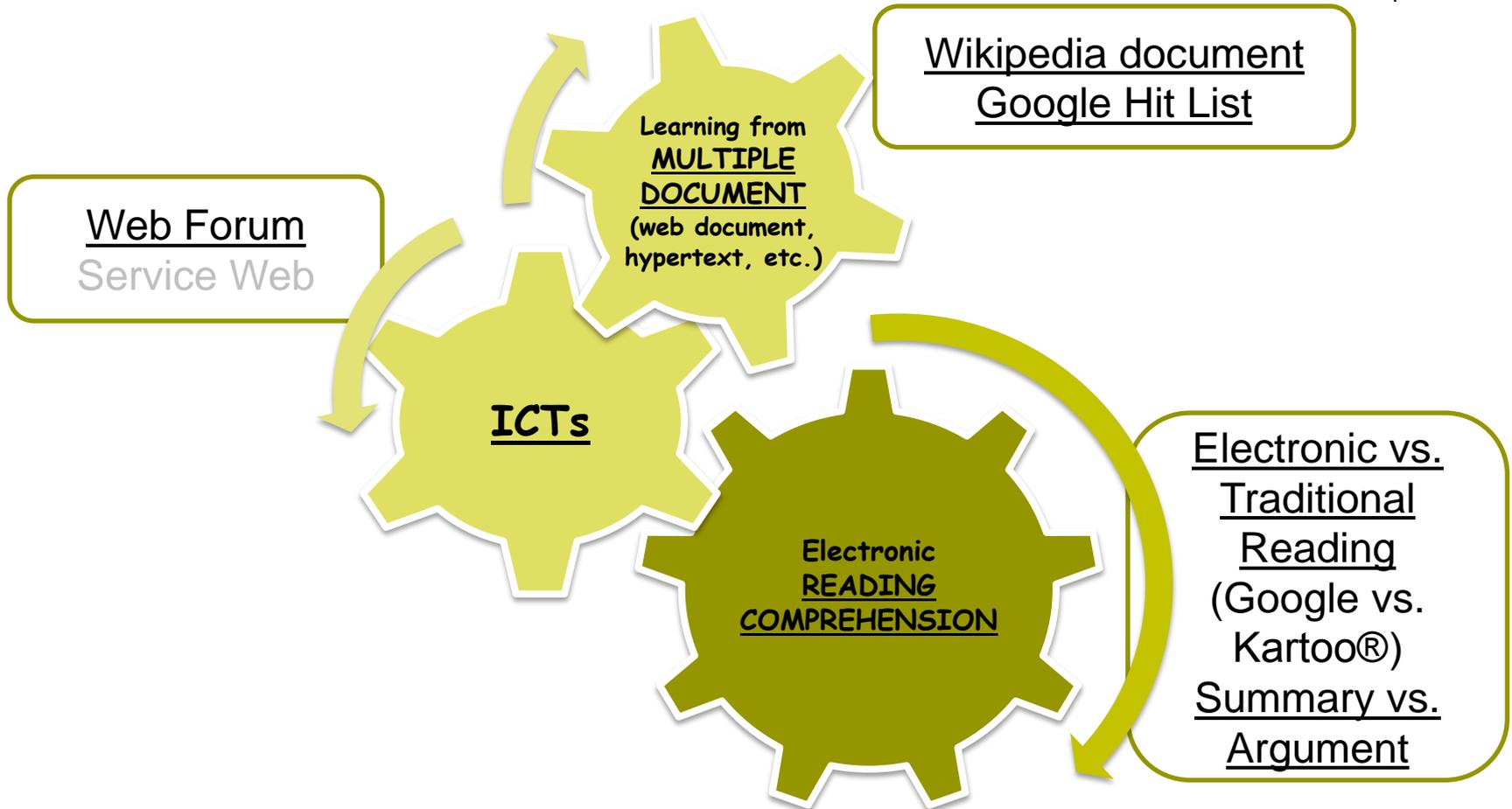
***\*This research was funded by the Spanish Minister of Science and Technology.***



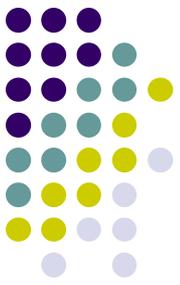
# Overview- ILT



Studies:



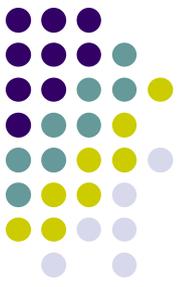
# Introduction: Digital Literacy Skills



- **ERA** (Electronic Reading Assessment) in PISA 2009 showed:
  - Success in ERA task depends on **students' accessing**, and the interaction of access processes with access demands.

**1st study → Wikipedia's document**

# I. Hyperlink Selections Strategies in a Wikipedia reading task: Literal vs. Semantic matching



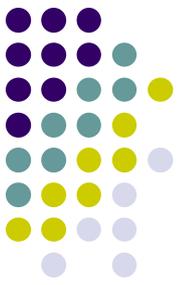
- SNIFT-ACT (*Fu & Pirolli, 2007*):
  - Propose that hyperlink selections are made on the basis of a semantic match between the person's goal and the link (i.e., selecting a page to buy a flight ticket).
- Matching Heuristic Model (*Cerdán, Gilabert & Vidal-Abarca, in press*):
  - Suggest that as an alternative mechanism students may select links based on a matching heuristic.

# Method:

## I. Participants



- 32 undergraduate students (psychology and pedagogy majors) from a large Spanish university.
- On average they have been using the Internet for 6.7 years, and they self-rated themselves low on their ability to use the Wikipedia (M = 3.15, scale 1-10).
- Mean 21 years old, mostly Caucasian, 81.8% girls.



## II. Materials

- Adapted Wikipedia materials on the topic of ‘French Revolution’ (main page 1,559 words; organized in 3 main sections, and 10 subsections). Each section included 1 relevant link, 1 irrelevant link and 1 distractor link.
- 16 multiple choice questions → 8 location + 8 integration (*OECD, 2009, Chapter 1*). The question was always located in a linked section.

# Example: Main Page



Wikipedia, la enciclopedia libre - Windows Internet Explorer

K:\Expe\09 - mismatching web\Exp1 uni\wikipedia 0.2\hypertext\index\_orden1.htm

Wikipedia, la enciclopedia libre

Wikipedia, la enciclopedia libre



## Revolución Francesa

La **Revolución Francesa** fue el cambio político más importante que se produjo en Europa, a finales del siglo XVIII. No fue sólo importante para Francia, sino que sirvió de ejemplo para otros países. Esta revolución significó el triunfo de un pueblo pobre, oprimido y cansado de las injusticias, sobre los privilegios de la nobleza feudal y del estado absolutista que habían existido durante la época del Antiguo Régimen.

**Contenido**

- 1 Causas de la Revolución
  - 1.1 Nuevas ideas sociales
  - 1.2 Transformaciones sociales
  - 1.3 Crisis económica
- 2 Desarrollo de la Revolución
  - 2.1 Los Estados Generales
  - 2.2 La Asamblea Nacional
  - 2.3 Las Revueltas Populares en las ciudades
  - 2.4 Las Revueltas Populares en el campo
- 3 Consecuencias de la Revolución
  - 3.1 Nuevo sistema político
  - 3.2 Pérdida de poder de la Iglesia
  - 3.3 Pérdida de poder del Rey
- 4 Efectos externos

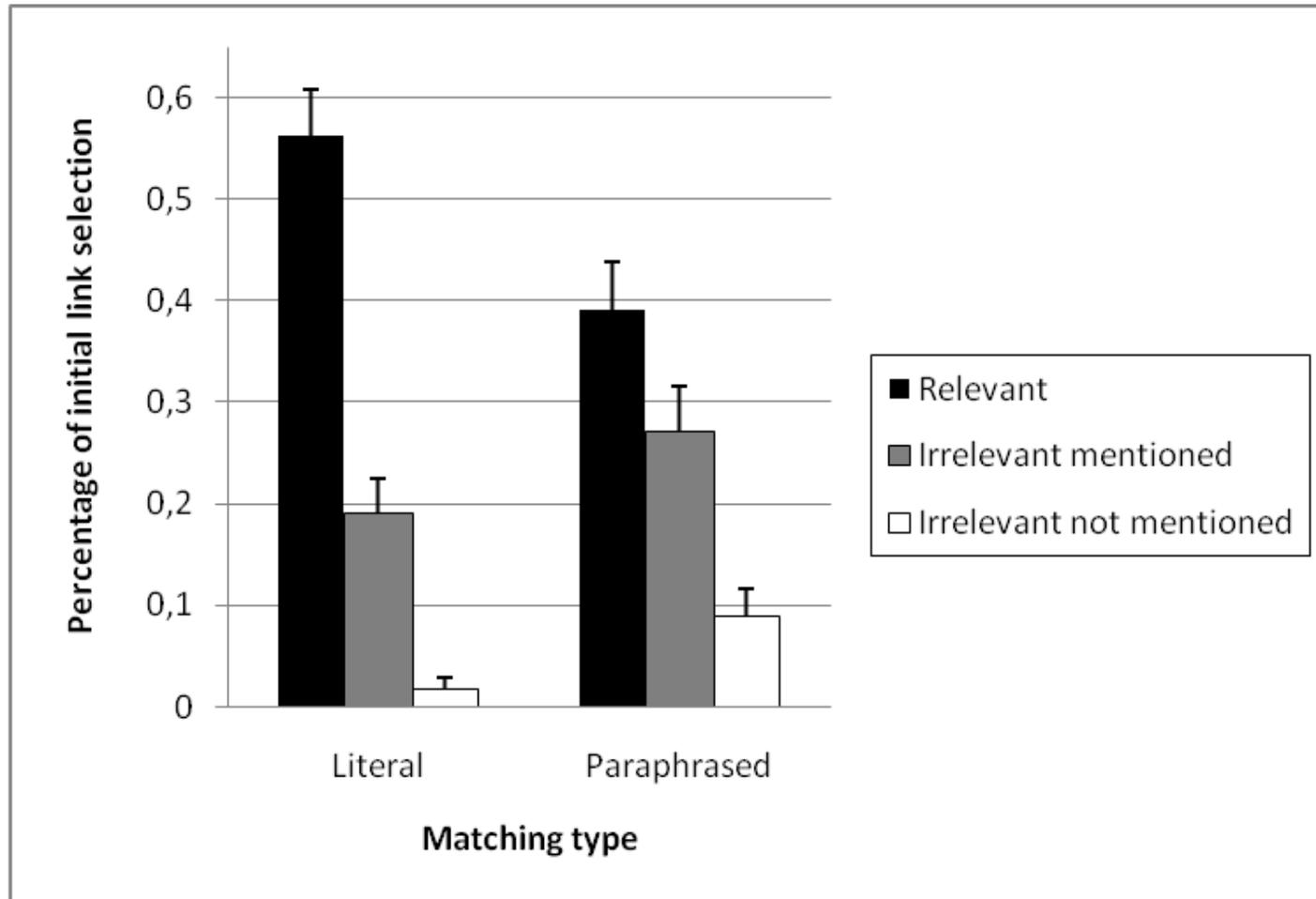


Toma de la Bastilla, 14 de julio de 1789.

Equipo | Modo protegido: desactivado

100%

# III. Results



**Figure 1.** Percentage of initial link access by matching and hyperlink type. Standard errors are represented in the figure by the error bars attached to each column.

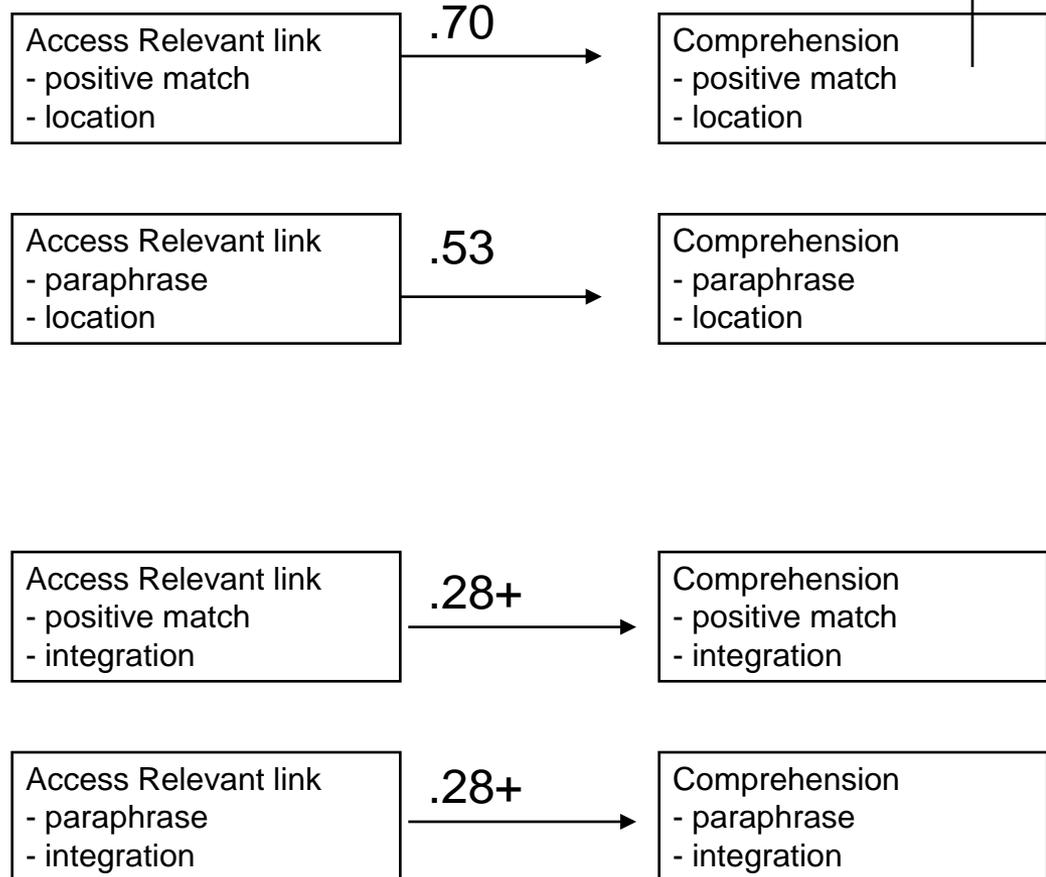
# Exp 1

exp1

21 year olds,  
N=31.

(zero order  
correlations)

# Further analyses

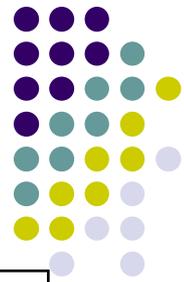
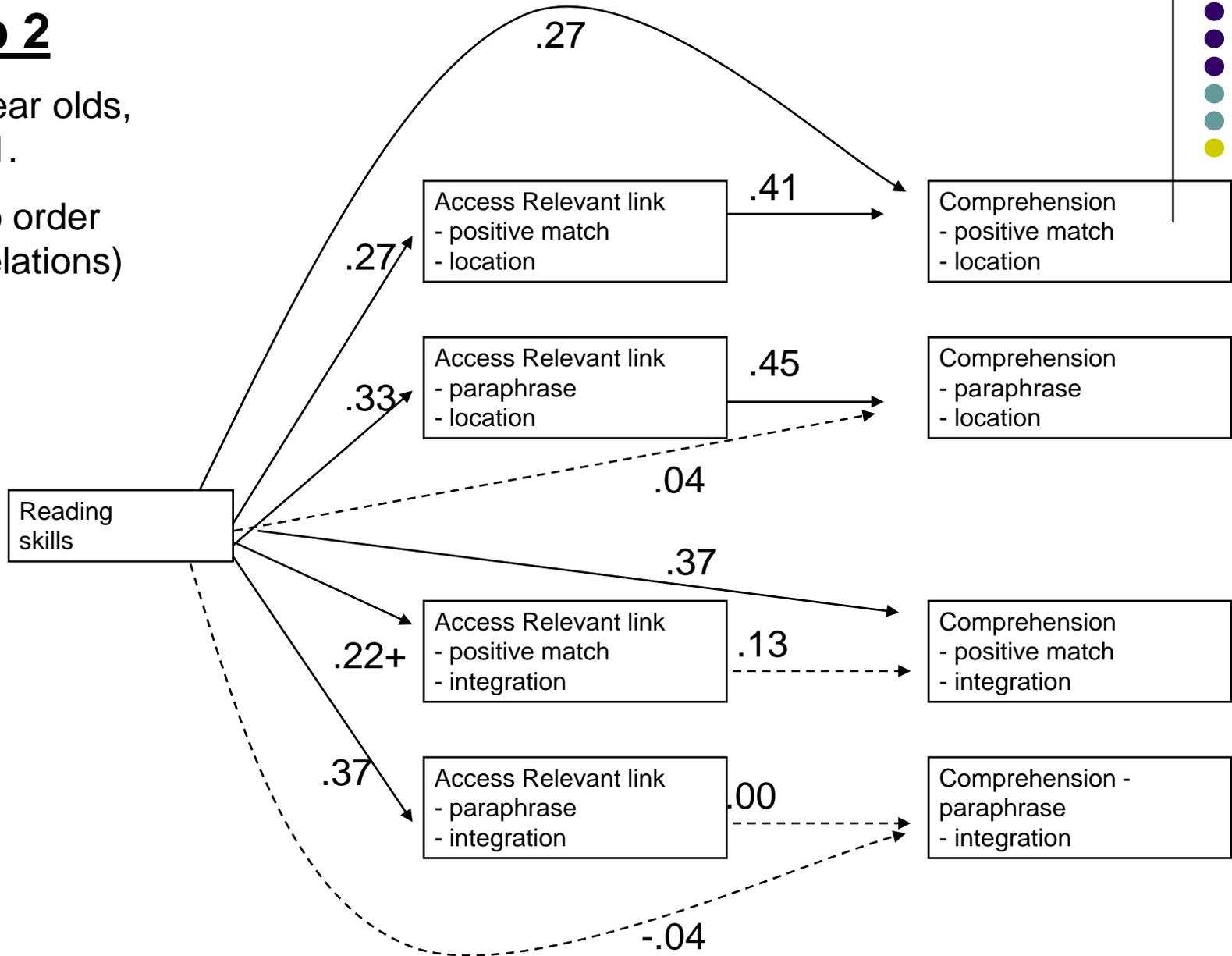


In sum, accessing the relevant link during the navigation session was positively related with hypertext comprehension, which corroborates prior results (OECD, 2011, Chapter 2).

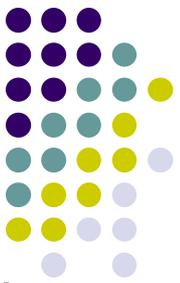
# Exp 2

14 year olds,  
N=41.

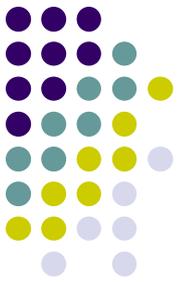
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correlations)



# References:

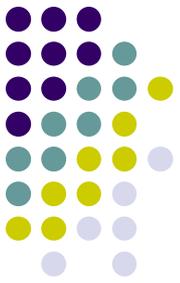


- **Coiro, J., Dobler, E.** (2007). Exploring the online reading comprehension strategies used by sixth-grade skilled readers to search for and locate information on the Internet. *Reading Research Quarterly*, 42, 214-257.
- **Brumby, D., Howes, A.** (2008). Strategies for Guiding Interactive Search: An Empirical Investigation Into the Consequences of Label Relevance for Assessment and Selection. *Human Computer Interaction*, 23, 11-46
- **Cerdán, R., Gilabert, R., Vidal-Abarca, E.** (in press). Estrategias de selección de información en tareas de contestación a preguntas. *Infancia y Aprendizaje*.
- [poster\\_sepex 2.ppt](#)



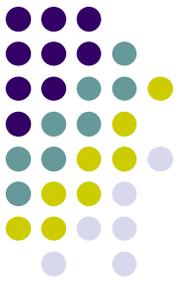
## II. Experiment 'Youngs Forum'

# General goals



- Which sources of information consider young children (11-15 years old) when discussing in web forums?
- Develop materials for a “bigger” Internet Literacy Test (which includes a service web, a wikipedia doc, and multiple docs retrieved from google)

# Specific goals



- Role of source: authority vs novice writer
- Role of type of message: didactic (e.g. ‘Your problem is a kind of X and can be solved by Y’) vs. experiential (e.g. ‘I had the same problem and I did X’).
- Role of support: a message receives others’ support or not.
- Developmental trend: 11, 13 and 15 years old.

# Example forum



- **Maria** at 13:34 h.
  - I have this concern: I get nervous when I go to a work interview.
  - -----
- **Dr. Smith** at 15:34 h. *[authority]*
  - *[didactic msg]* Your problem is probably due to anxiety, and is quite common. But don't worry, there are effective ways to deal with it. Check the link of this Hospital for effective and easy remedies.
  - -----
- **Nxrt\_23** at 17:34 h. *[novice-neutral]*
  - *[experiential msg]* I had the same problem, I know what you feel. Fortunately now I am ok. What I did is just to hold a pen in my hands during the job interviews, so that I could expel all my nerves through it.
  - -----

[optional]
- **Kid\_04** at 19:34 h.
  - *[support to novice]* Hello Maria. That's a tough problem, I also suffered it when I was younger. I totally agree with **Nxrt\_23**: holding something in your hand my calm you down.

## Foro Jóvenes (prueba)



Joma89

### ¿Qué asignaturas elegir en 4º ESO para estudiar periodismo?

Hola, quería preguntaros sobre un tema que me preocupa, y es que no sé muy bien qué asignaturas debería elegir si quiero estudiar periodismo. En mi instituto las troncales son las siguientes: Biología, Física y Química, Tecnología, Plástica, Música, Informática y Latín. ¡Muchas gracias!

Publicado: Mar 15 Oct 15:44



Carla Martín  
(profesora)

Hola Joma89. Según la guía de estudios universitarios para ser periodista tienes que saber expresarte con claridad, así que aplícate en lengua y literatura. Las ciencias sociales son útiles porque te dan cultura general y eso enriquece tu vocabulario. Espero que te haya servido.

Fuente(s): Guía de estudios universitarios

Publicado: Mar 15 Oct 22:31



Borler

Buenos días Joma89. Yo creo que puedes estudiar cualquiera de ellas, pues todas te van a servir para tener una buena cultura, que es imprescindible para ejercer el periodismo.

Fuente(s): Mi propia experiencia

Publicado: Mar 15 Oct 19:40



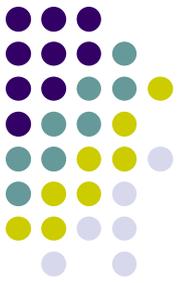
sonic12

¡Hola! Yo tengo la misma preocupación. Me gustaría hacer periodismo o empresariales. ¡Suerte!

Fuente(s):

Publicado: Mar 15 Oct 16:47

# Design



- 2 x 2 (source & type of message) (4 forums)

<b>Authority Didactic Novice Didactic</b>	<b>Authority Experiential Novice Didactic</b>
Authority Didactic Novice Experiential	Authority Experiential Novice Experiential

**Analyses on going...**



Thank you  
for your attention