



Which facet are you?

KO at school with the MaVi method

Claudio Gnoli & Emanuela Valenzano



Knowledge organization

- Library and information science
- Computer science
- Philosophy of science
- Metaphysics
- Linguistics and terminology
- Education



KO in education

- Bliss 1929: “the pedagogic order”
- Soergel 2013: “KO for learning”
- Szostak 2024: “every idea [students] encounter fits within a broader whole”

Additional Purposes of Knowledge Organization

Rick Szostak

University of Alberta, Canada

Abstract

The field of Knowledge Organization should recognize additional purposes beyond classifying documents for retrieval. These additional purposes can in turn guide us in developing Knowledge Organization Systems. A synthetic phenomenon-based approach to classification mirrors ontological reality. It thus allows writers to better comprehend how their own ideas fit within the broader structure of human understanding. It also allows students (and others) to appreciate that every idea they encounter fits

Developing personal vocabulary

- Children hear a verbal definition of a new word
- Sometimes they list the word in an index book
- Its meaning is easily forgotten
- Even more in children with special needs (immigrant, dyslexic, deaf...)



Provide visual markers



- The MaVi (Marcatori Visivi) method uses gestures and coloured signs to mark:
- phonology
- morphology
- syntax
- ... and now semantics

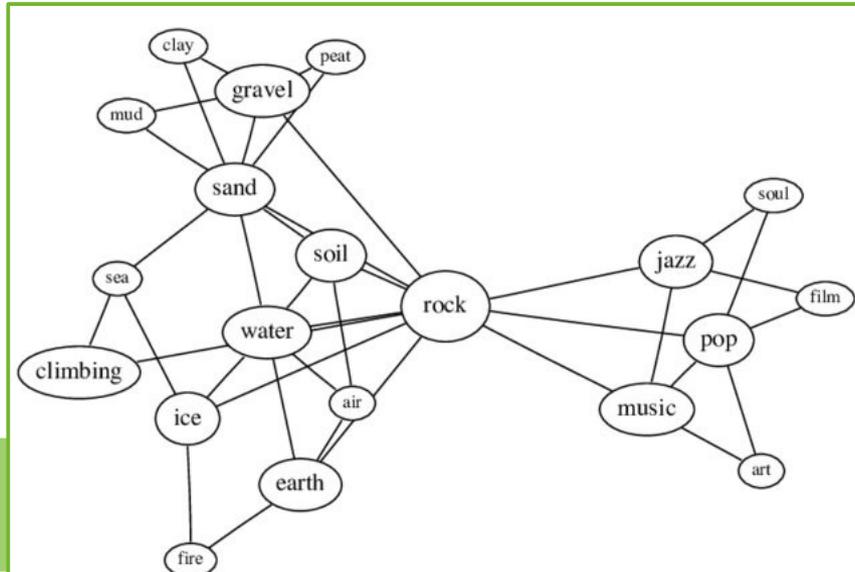


This is my new uniform
I'm wearing black shoes
a white shirt, a red jacket
a black and red hat
and grey trousers.

Semantic networks

- Words are related in many ways: hypernyms, hyponyms, homonyms, antonyms, associations, ...
- This is acknowledged in lexical semantics (Jezek 2011) and in language education (Vendrame 2014)

[source:
Dorow 2006]



Fundamental categories

- Things get simpler with a limited set of relationship types
- Aristotle identified 10 of them
- In KO, standard sets are available in faceted classifications and thesauri, since Ranganathan's PMEST:

Personality

Matter

Energy

Space

Time



Integrative Levels Classification (ILC)

- A classification of phenomena (closer to children's experience)
- freely combined by facets
- expressed by 10 categories (and colours)
- developed since 2004 by an international team

> isko.org/ilc



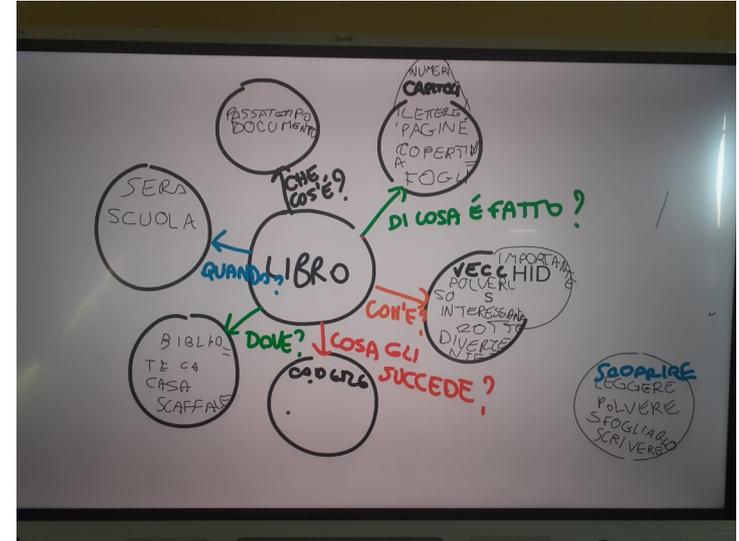
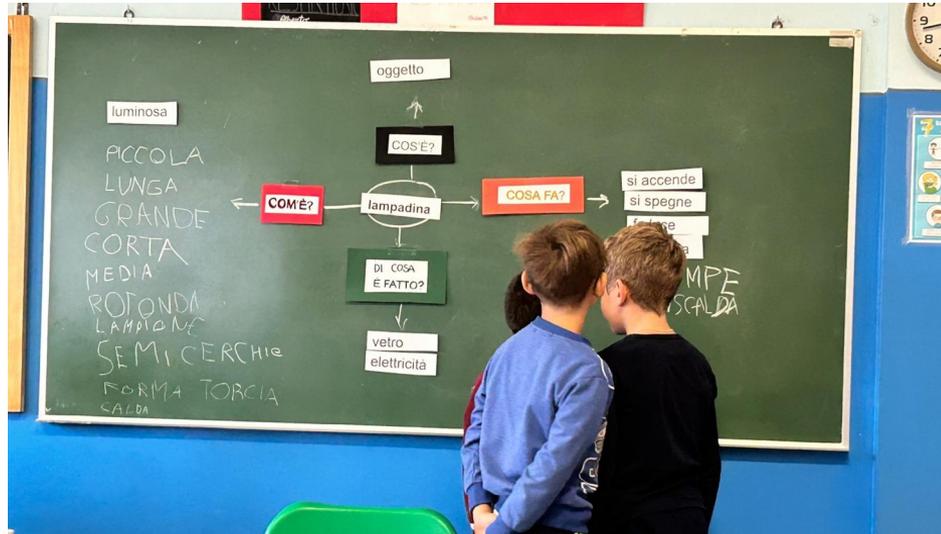
ILC categories

- identified by digits that control sorting + citation order
- equivalent to colours or prepositions or... questions:
 - 5 “what happens to it?”
 - 6 “how is it?”
 - 7 “what is it made of?”
 - a-z “what is it?”
- some are easier to be grasped

0 as for perspective
1 at time
2 in place
3 by agent
4 opposed to
5 undergoing change
6 having property
7 with part
8 in quantity
9 of quality



Work on board, on paper...



Become a facet !

- Children identify themselves with words,
- actively moving into circles:
- physical experience is known to help memory



First applications: May-Dec 2024

- Primary school, Buttigliera d'Asti
- Primary school "B. Damiano", Cuneo
- Primary school, Tigliole



- by teachers

Emanuela Valenzano, Lisa Borgogno & Rossella Buemi



Growing networks

Perspective

Time

Place

Opposition



Type

Part

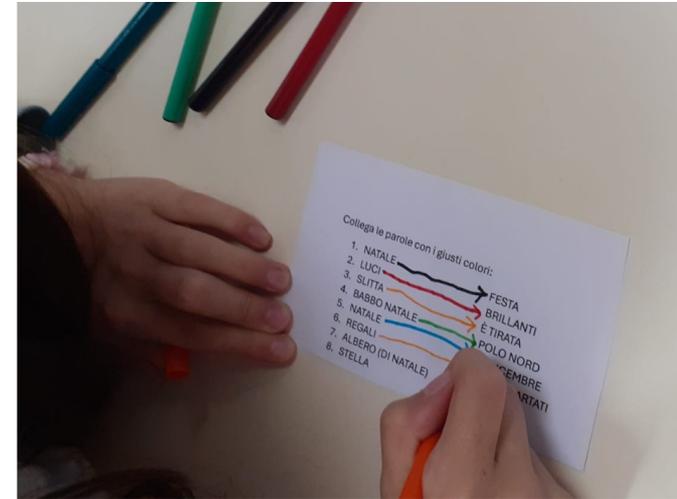
Property

Change



Developing a protocol of learning games

- introduction to semantic networks
- find words related to a given word by a facet
- identify the right facet between two words
- increase the number of facets
- learn new words by semantic networks
- understand asymmetry in facets
- connect several networks



Grazie :-)

ilc@iskoi.org

@gnoli.eu on BlueSky

