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LEUVEN

Information literacy in academic curricula

A case study of integration at the
biomedical faculties of
K.U.Leuven

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Once upon a time

Libraries were the only information providers





Now

A lot of information outside libraries:

- The internet is a big “data soup”
- Everybody produces, publishes, shares, tags, ... information
- The internet becomes a social environment



Information literate by nature?





An IL-person

- 1. recognises the need for information and determines the nature and extent of the information needed
- 2. finds needed information effectively and efficiently
- 3. critically evaluates information and the information seeking process
- 4. manages information collected or generated
- 5. applies prior and new information to construct new concepts or create new understandings
- 6. uses information with understanding and acknowledges cultural, ethical, economic, legal, and social issues surrounding the use of information

(ANZIIL-standard)



The library's role

Collecting information

Providing access to information

Training users to retrieve
and manage information
and knowledge, in short: to
make them IL



IL: why it matters

- Work in an efficient way = save time
- Lifelong learning: there is a “need for information and knowledge skills in order to succeed in a knowledge-based society” (Haines, Horrocks 2004)
- Link between IL and evidence-based practice
- Link between health literacy and public well being



EBP methodology and IL

- 1. translation of uncertainty to an answerable question
- 2. systematic retrieval of best evidence available
- 3. critical appraisal of evidence for validity, clinical relevance, and applicability
- 4. application of results in practice
- 5. evaluation of performance



IL in the medical curriculum

- Explicit and systematic integration
- Vertical integration
- Horizontal integration
- Shared responsibility
- Formal evaluation



Explicit and systematic

- No old wine in new bags
- No longer implicit integration
- Solve the prob of variety in levels
- IL is a competency that constantly needs to be worked on
- Explicit integration makes IL more accepted by students



Vertical line

- Minimum skills of IL for every year of the CV
- Progressive: broadened and strengthened from one year to another
- “Scientific education”, “competency line”



Horizontal line

- Making IL relevant to students' needs
- IL not only taught in typical classes (“preclinical informatics”, “computer and information literacy”, “applied medical informatics”), but also closely tied to other courses
- Making scientific methods explicit to students



Shared responsibility

- Library and academic staff: the benefit of collaboration = combining expertises
- Library teaches the first modules
- Academic staff takes over
- Academic staff receives support and training from library (lunch sessions)



Formal evaluation

- A necessity for being taken seriously
- Many students, so no detailed assessment
- Pass/fail system: failing = 9/20



Library modules

- Theoretical part (1h.):
 - newspaper article -> scientific article (methodology)
 - overview of the information resources
- Practical part (2h.):
 - hands on training
 - max. 24x2 students on a PC
 - PubMed, WoS, Cochrane



Objectives (1)

- The students are aware of the importance of reliable scientific information.
- The students are familiar with the variety of scientific information resources (e.g. reference works, manuals, journals, databases, internet).
- The students are familiar with the (electronic) information resources available in the biomedical library.



Objectives (2)

- The students are able to select relevant information resources.
- The students are able to actively find literature via a computer search.
- The students are familiar with biomedical databases (PubMed, WoS, Cochrane).



After the library modules

- making correct references
- structure and types of a scientific article
- basics of scientific reviewing procedures
- critical reading, making an abstract and discussion of a scientific article
- principles of scientific methodology
- presentation of an own abstract of a scientific article
- principles and application of EBM
- critical appraisal of literature
- writing a scientific article and making references in a correct way



IL in biomedical curricula

- Medicine: 7/7 years defined
- Pharmaceutical sc.: 2/5 years defined
- Biomedical sc.: 1/4 years defined
- Dentistry: 1/5 years defined
- Audiology and logopaedics: 1/4 years defined



Library personnel

- 2 years ago: 2 p. for training
- 1 year ago: 3 p. for training
- Now: 5 p. for training
- Redefine priorities within their tasks



A lot happened in 2 years

- Explicit and systematic integration of IL
- Vertical line
- Horizontal line
- Shared responsibility
- Formal evaluation



But we can do more

- Completing vertical/horizontal lines
- More support to academic staff, e.g. our lunch sessions, learning objects project
- IL in education PhD students
- Comparison with ANZIIL-standard in order to get full spectrum of IL
- Online tutorials and self-assessment
- Measuring our impact



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Thank you!

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