

A New Linkage for the Assessment of Prior Learning

Citation for published version (APA):

Kalz, M. (2007). *A New Linkage for the Assessment of Prior Learning*.

Document status and date:

Published: 25/10/2007

Document Version:

Peer reviewed version

Document license:

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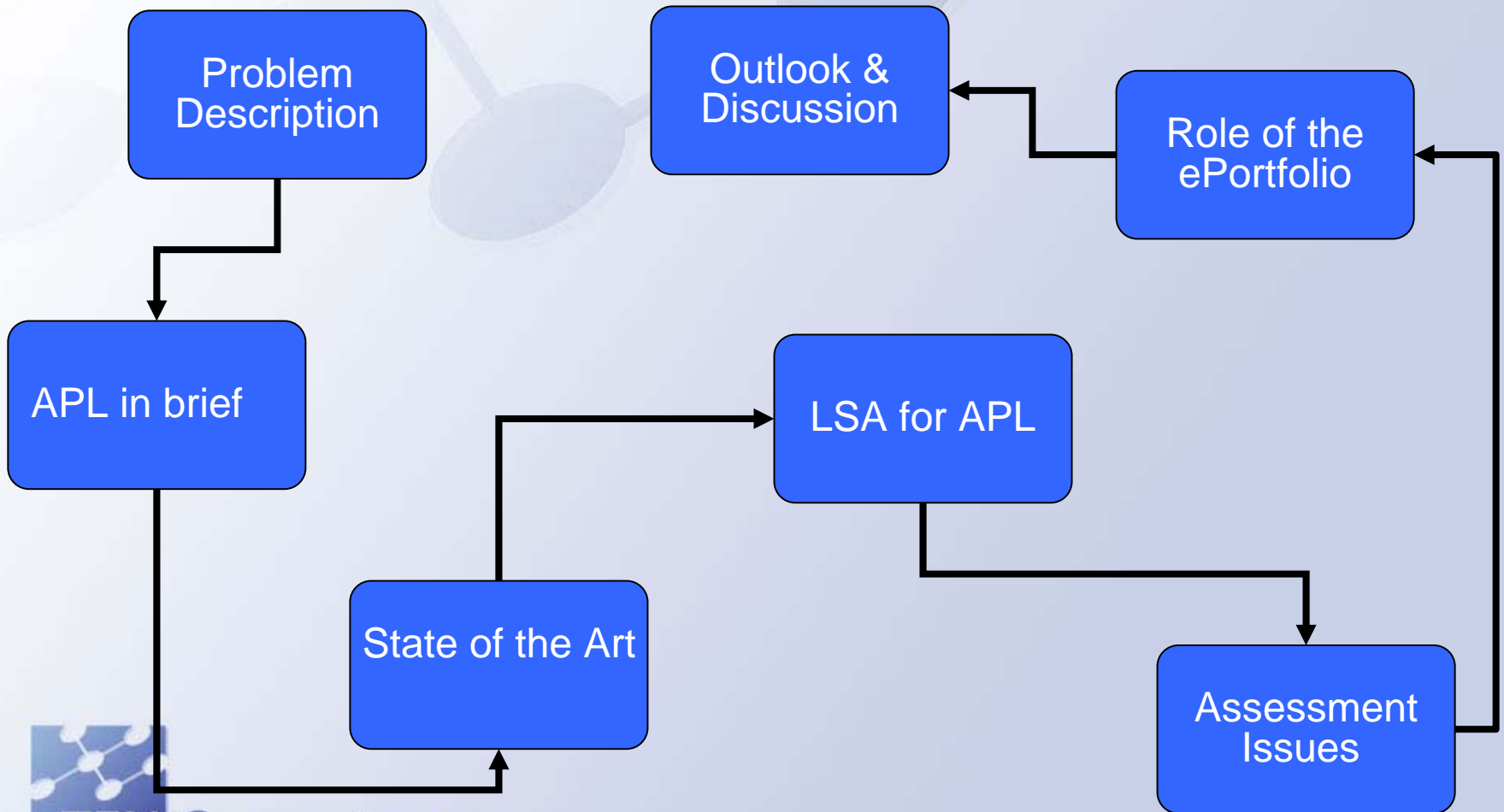
A New Linkage for the Assessment of Prior Learning

Photo by weegeebored@Flickr

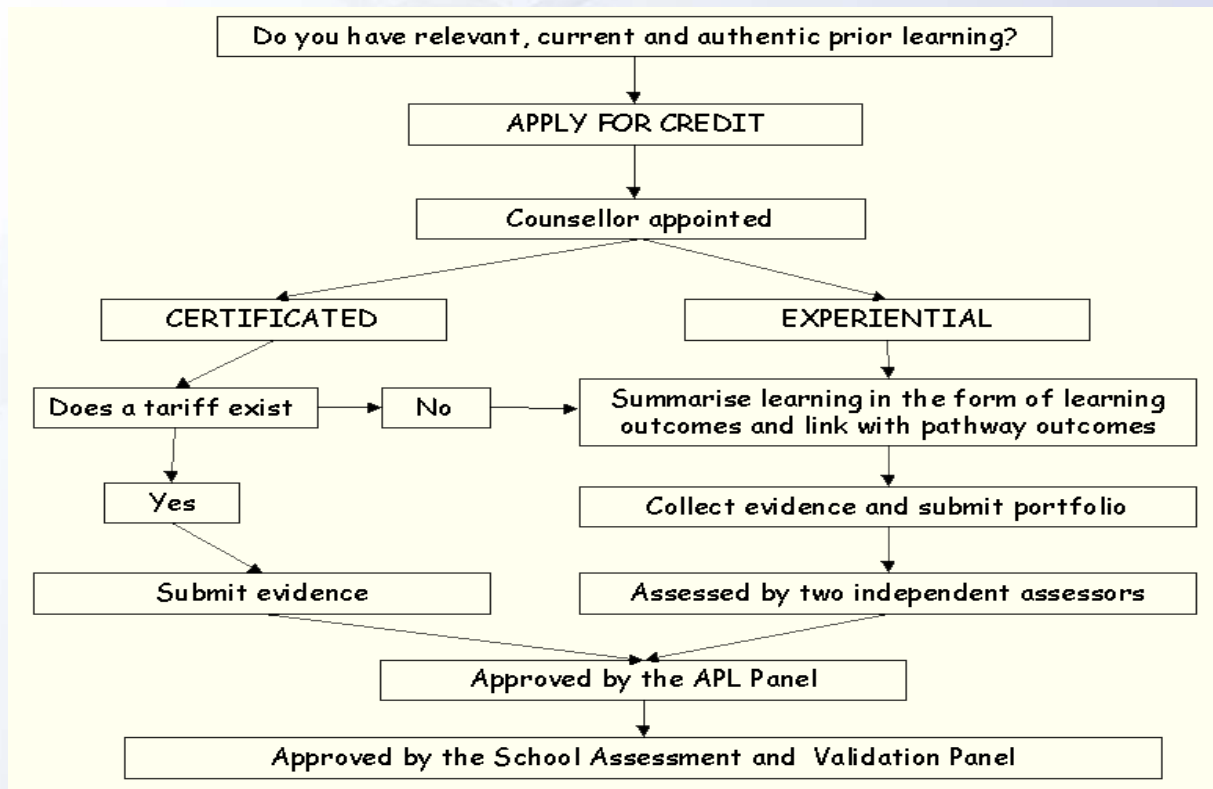
Eportfolio2007: Employability and Lifelong
Learning in the Knowledge Society

Maastricht (The Netherlands)
17 – 19 October 2007

Stations of my talk



Current solutions: APL/RPL

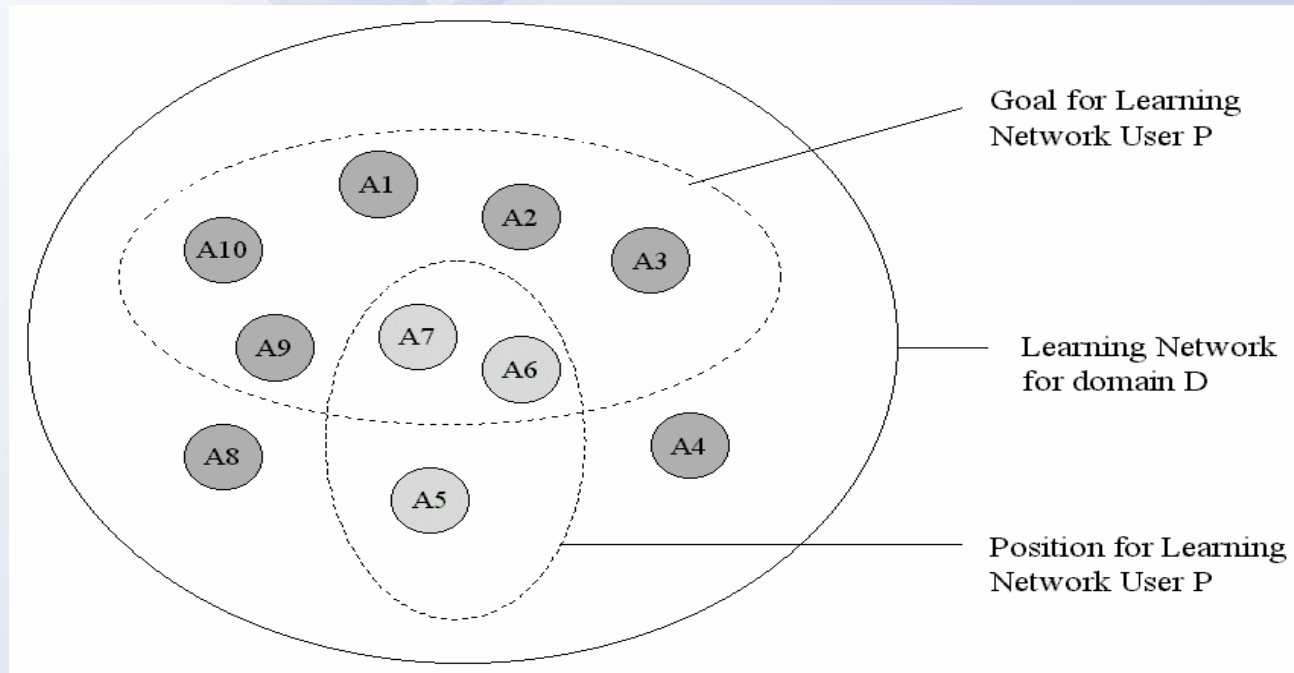


APL
Procedures
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...and current problems



Prior Learning Analysis with LSA



Current focus in TEL for APL

Focus on prerequisite structures

Only applicable for formal education

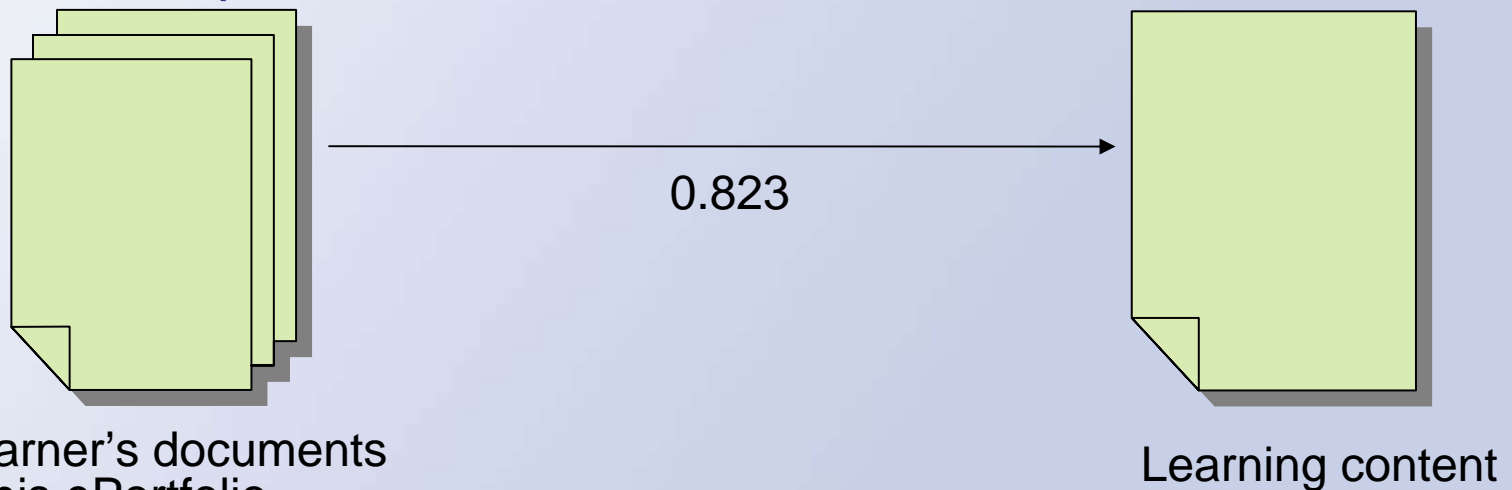
Learning from user's behaviour in adaptive systems

Not a useful approach when learners change their environments

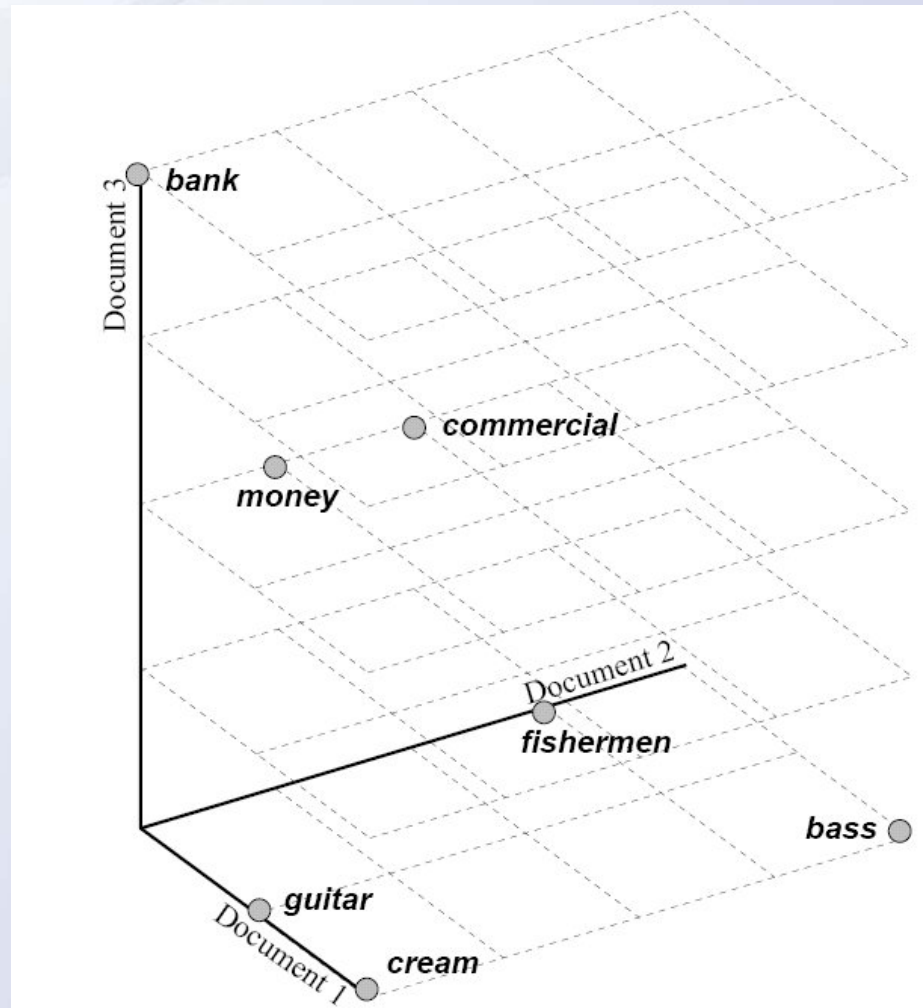


Prior Learning Analysis with LSA

- Latent Semantic Analysis (Landauer, et al. 1998) is a vector-based technique that is suited well to compare the similarity of documents (even if these do not share keywords)



Prior Learning Analysis with LSA



Widdows 2003



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Prior Learning Analysis with LSA

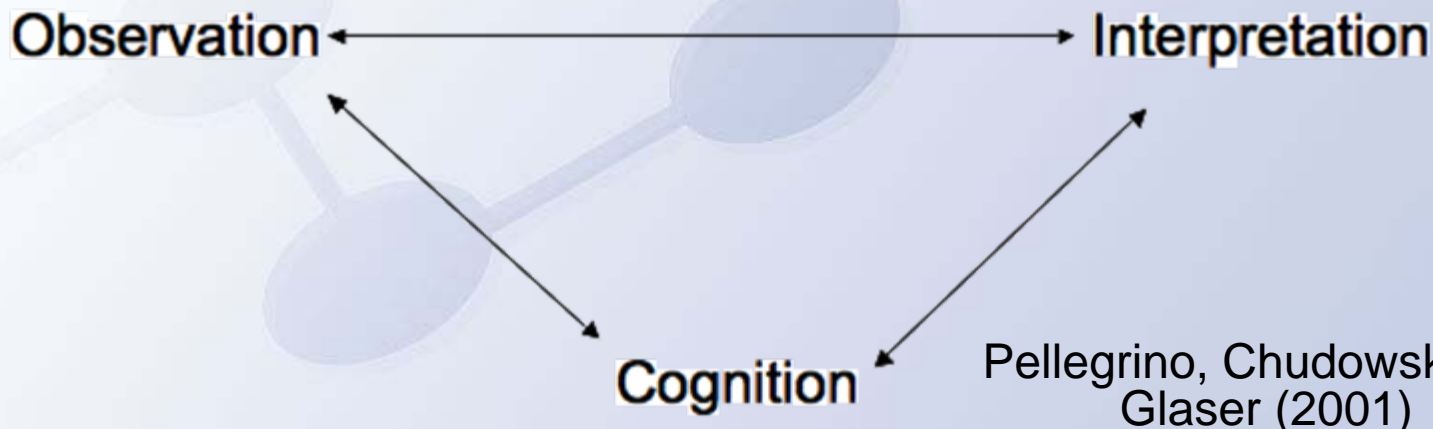
LA/Docs	Doc 1	Doc 2	Doc 3
Learning Activity 1	0,17	0,89	0,23
Learning Activity 2	0,74	0,02	0,56
Learning Activity 3	0,92	0,45	0,67



Prior Knowledge Analysis with LSA

- We have evaluated LSA and compared results with expert opinions about prior knowledge in the psychology domain
- Results look promising although we still need to test the influence of different corpus sizes on the results
- Current work focuses on comparison of different applications as core for a webservice

Assessment reflections



- This work can support the observation side of assessment
- The results still need interpretation and a definition of the underlying cognitive model
- Focus on low-stakes & formative assessment

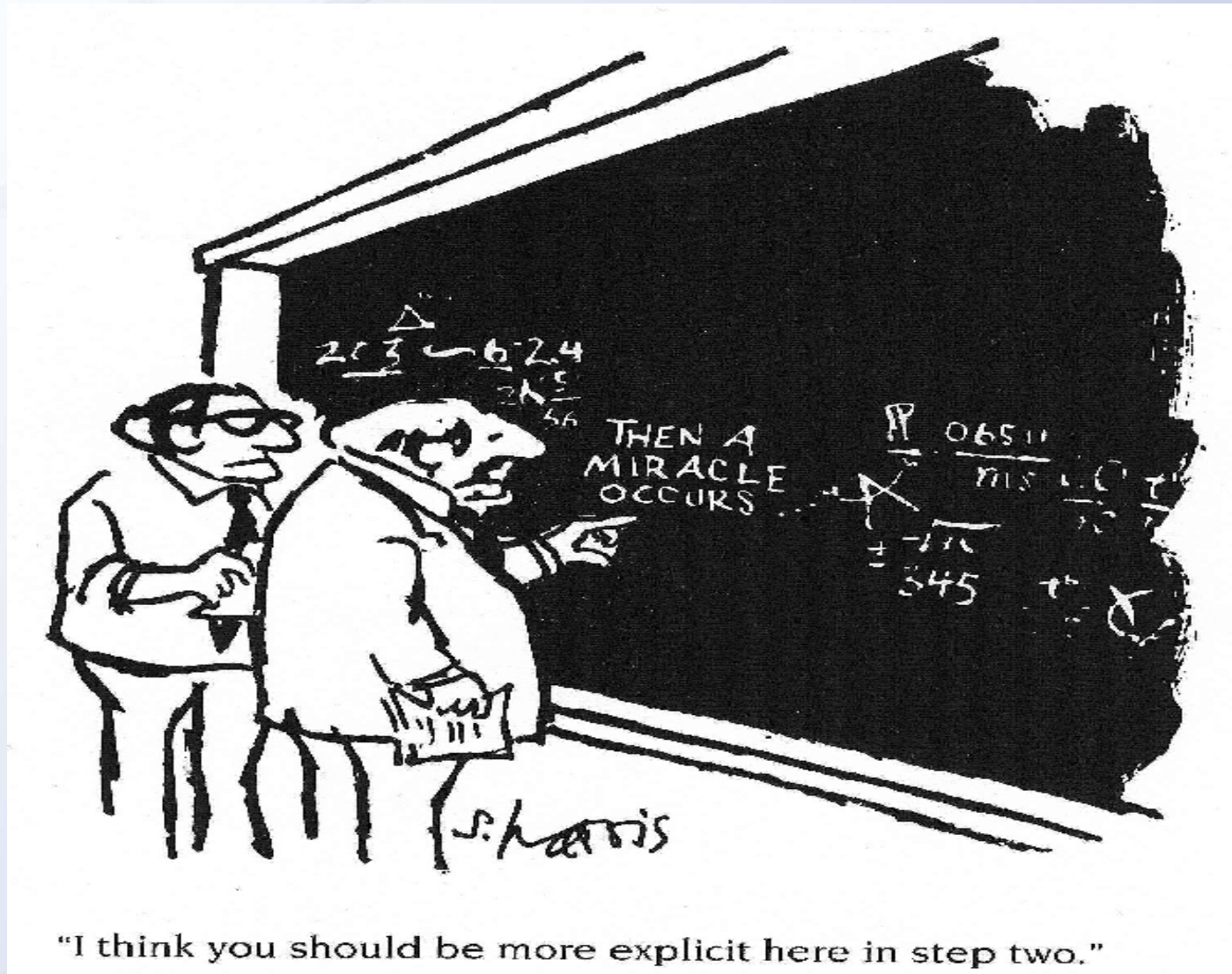
Role of the ePortfolio

- Current focus: Dossier-type of portfolio
- Future scenario: Tracing the cognitive development of learners through a personal development portfolio
- The ePortfolio as the basis for personalization of learning content for lifelong learners

Outlook & Discussion

- The presented technique has several limitations (e.g. limited to textual content)
- Results are based on trust and to some extent uncertainty
- Focus on a purely semantic technique does not cover all knowledge representations in learner documents
- Research needs to be extended to other domains to see the domain-dependence of the current implementation

Thank you!



"I think you should be more explicit here in step two."



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