Asynchronous discussion groups as a tool for CSCL in internships

	RESEARCH 2002	RESEARCH 2003
Context	To promote student reflection during the 4 weeks of clinical rotation in peadiatrics at the Ghent University Hopspital, case based face to face discussions with the interns (students) are organised weekly. Expansion of this activity, highly wanted by the students, is not possible. Therefore we developed case based discussion groups, in which students can participate on line and in an asynchronous way.	
Central Question	Does the structure of the task have an influence on the extent of cognitive processing? **Structure of the task** → **Cognitive processing**	
Design	- 2 months, 6 students per month - case history and clinical examination provided at the start Defining the clinical problem (diagnosis) / Proposing further patient management Individually – Discussion – Individually – Discussion	- 12 months, average of 5 students per month - case history + results clinical examination + diagnosis provided Proposing further patient management, focus on treatment (farmacotherapy) Individually – Discussion
Structure	Structure of the task: Proposals for further patient management: - Open: students propose themselves - Closed: 2 different management options are proposed by the facilitator	Structure of the task: during the whole process: - Groups: alternatively docentmoderator / studentmoderator - Groups: alternatively with “alternative searcher” / without “alternative searcher”
Cognitive processing	Extent of cognitive processing: Interaction Analysis Model by Gunawardena, Lowe & Anderson (1997): - fase 1: sharing / comparing of information - fase 2: the discovery and exploration of dissonance or inconsistency among ideas, concepts or statements - fase 3: negotiation of meaning / co-construction of knowledge - fase 4: testing and modification of proposed synthesis or co-construction - fase 5: agreement statement(s) / application of newly constructed meaning	
Results	All transcripts were coded by three independent coders	Results of this research are not yet available. We expect that the operationalisation of ‘task structure” in this design (studentmoderator versus docentmoderator and “alternative searcher” versus “no alternative searcher”) will influence the cognitive processing. As a second component in this research, we will look at the different learning styles, in order to analyse their influence. As a third component, we want to control for “earlier achieved internship experiences”.
Conclusion	- Structure of the task influences cognitive processing - Closed form causes a shift towards higher levels of cognitive processing	

Cogn. Proc.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Total
Open	20%	15%	45%	15%	5%	100%
Closed	3%	3%	57%	33%	5%	100%

Bram De Wever*, Martin Valcke*, Myriam Van Winckel°
Ghent University
Department of Education*
Cell for educational research and development°

E-mail: Bram.DeWever@UGent.be
http://allserv.ugent.be/~bfdwever/web
Research funded by BOF
codenumber BOF2002/DRMAN/013